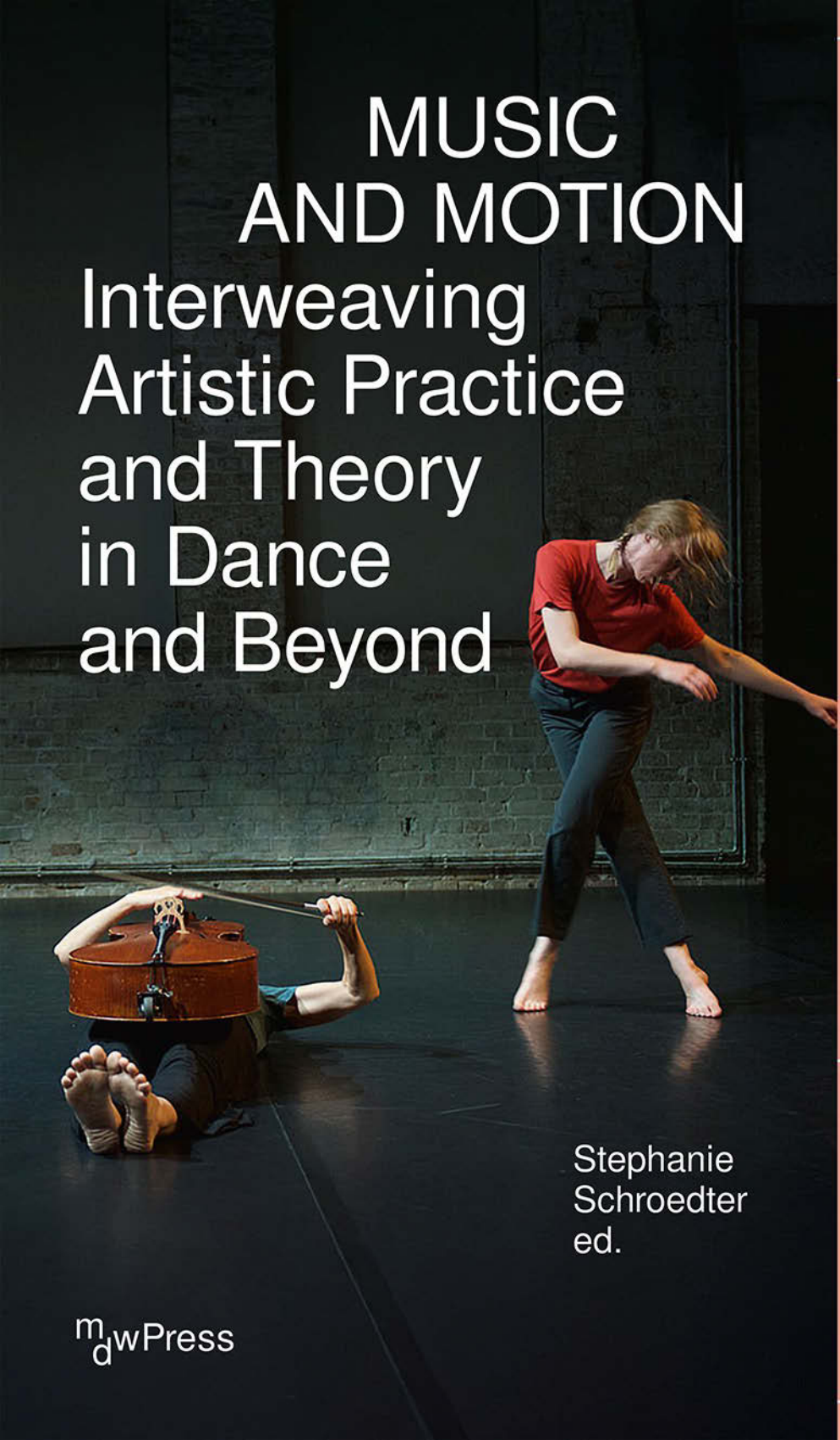
MUSIC AND MOTION

Interweaving Artistic Practice and Theory in Dance and Beyond



Stephanie Schroedter ed.

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Stephanie Schroedter (ed.)
Music and Motion – Interweaving Artistic Practice and Theory in Dance and Beyond

Stephanie Schroedter has been working at the intersection of music, dance and theatre/performance since completing her doctorate in musicology with a focus on dance research at the University of Salzburg (awarded with the "Dance Studies Prize North Rhine-Westphalia"). In addition to designing and conducting research projects funded by Austrian, German and Swiss Research Foundations (FWF, DFG, and SNF), she has held professorships in musicology, dance studies, theater and media studies. She habilitated at the Freie Universität Berlin ("venia" for music and dance studies) and was appointed to a professorship for the development of transdisciplinary theories/aesthetics in the field of music and movement at the University of Music and Performing Arts Vienna in 2021.

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Preface

Stephanie Schroedter

This anthology is resulted from of a research project funded by the German Research Foundation (DFG) entitled *Bodies and Sounds in Motion*, which started in fall 2017 at the Freie Universität Berlin and was completed in summer 2024 at the University of Music and Performing Arts Vienna (mdw).

A symposium entitled *Music as a Field of Experimentation for Movement* that took place in September 2020 in a stimulating atmosphere in Strobl at the Wolfgangsee (a lake near Salzburg/Upper Austria) provided a significant initial spark. This spark ignited the decidedly broad spectrum of approaches to the analysis of interrelations between music/sound and dance/movement (on and off stage) presented here. Due to the initially unforeseeable restrictions stemming from the drastic tightening of measures against the increasing number of corona infections, the symposium had to be significantly condensed and was held as a hybrid event: only a few of the invited speakers were able to join discussions on site, the others had to be connected via remote access. Ultimately, a virtue was to emerge from the pandemic's necessity: as numerous other symposia could only be held online in the following months, it was possible to establish an unprecedented range of participants within the international community on this topic.

The "Music and Dance Study Group" (MDSG) of the American Musicological Society (AMS) created the context in which a further symposium on this topic was held in November 2020. This symposium, which was co-initiated by the editor of this anthology–as co-chair of this study group–, was a key pivotal point in the growth of the project. Against this background, a polyphony of approaches to the interweaving of music/sound and dance/movement emerged, the appeal of which lay precisely in the representation of different, even very divergent positions. It became a declared goal to define a broad range of topics in a field that studies music choreographic phenomena as well as sound-performative phenomena at striking points in order to open up further research perspectives.

I would like to thank all the authors for their valuable contributions to this kaleidoscope of extremely multifaceted approaches to this field, approaches

which tend to be more theoretical or more practical, more historically or more analytically accentuated. Stefanie Acquavella-Rauch, Rainer Bayreuther, Jan Hemming, Andreas Münzmay and Melanie Unseld were members of the scientific advisory board for the conception of this anthology and provided valuable advice. A further big thank you goes to those who actively supported the editing of this volume, which was quite challenging due to its scope: Sabine Bayerl, Lisa Gonnella, Michael Schnack and Johannes Daniel Taljaard. Also, I would like to thank the German Research Foundation very emphatically for their generous support of my research project and for their cooperative agreement that allowed me to continue this work in Austria. Another heartfelt thank you goes to the Rectorate at of the University of Music and Performing Arts Vienna under the direction of Ulrike Sych for funding the translations of the German-language contributions into English, to the Department for Research Promotion under the direction of Therese Kaufmann and the Board of Trustees of mdw-press for the benevolent acceptance of this volume into the newly founded university publishing house, as well as Max Bergmann and Christian Keitel for the conscientious coordination of all publishing agendas.

In its inter- and transdisciplinary orientation, this volume addresses in particular performing arts at the interface of music, dance and theater. In addition to artists, scholars and art-mediators working in these fields, it is also aimed at students of music and movement education/(eu)rhythmics, whose professional expertise—in composition, choreography and improvisation—is particularly focused on the interweaving of music and movement. Their expertise brings people of all ages, sometimes in cross-generational and inclusive groups, into direct exchange with what is probably the most primal artistic-cultural expression: *Bodies and Sounds in Motion.*

Introduction: Music for/into/as Motion – and Vice Versa
Exploring the Field in Artistic Practice and Theory

Stephanie Schroedter

At first it seems self-evident that music has something to do with movement: it is unavoidable and unmistakable that we move when we make music. On the one hand, we make movements that are required to produce a sound: for example, the pressure that must be exerted on a key in order to make a string vibrate. On the other hand, we use movements to implement a certain sound idea or to create nuances of expression and thus further above all our artistic intention. To the extent that it makes sense at all to distinguish between primarily functional and expressive-formative motions, movements that are intended for sound production can be described as motion *for* music.[1]

Apart from these movements, music stimulates us almost involuntarily to make small gestures such as rhythmic rocking or tapping (even if only with the tips of the feet or fingertips) or movements with the whole body such as dance in the most primordial sense (i.e. independent of specific forms or styles). Music moves us—but not always visibly. It also triggers invisible, "inner" motions such as imagination,[2] an indispensable source of artistic and creative work, and

1 Although "movement" and "motion" are often used as synonyms, I will use "motion" as an umbrella term that also includes invisible motions, while movements refer primarily to visible (body/physical) motions. In this respect I roughly follow Clarke, who takes "motion" "to denote the abstract category of spatial displacement in time, and 'movement' to denote specific examples of particular spatial displacements." Eric Clarke, *Ways of Listening. An Ecological Approach to the Perception of Musical Meaning* (Oxford and New York: Oxford University Press, 2005), 209 (note 1 of chapter 3).

2 For further reading on this subject: David Hargreaves, Dorothy E. Miell, and Raymond A.R. MacDonald, eds., *Musical Imaginations. Multidisciplinary Perspectives on Creativity, Performance, and Perception* (Oxford and New York: Oxford University Press, 2012), and for a comprehensive overview: Mark Grimshaw-Aagaard, Mads Walther-Hansen, and Martin Knakkergaard, eds., *The*

emotions[3] that sometimes literally drive us (cf. Latin *emovere*: to move out, to set in/to motion). While listening to music not only our sense of hearing is activated, but sometimes also our sense of sight, touch, or our sense of taste and smell,[4] and above all our (often overlooked) sense of movement, also known as kinesthesia.[5] In this respect, music is directly linked to motions that do not primarily relate to music production, but above all to music reception—and which in turn allow valuable insight into our music perception, i.e. our hearing/listening. From this perspective music is set and/or heard *into* motion, whereby these motions can express themselves (more or less) spontaneously (in improvisation) or can be consciously designed (in choreography)—or remain hidden (in our imagination), especially since we have learned to sit still at concerts.[6]

Oxford Handbook of Sound and Imagination, 2 vols. (Oxford and New York: Oxford University Press, 2019).

3 The extensive field of musicological research into emotion cannot be discussed at this point. For an overview, see: Patrik N. Juslin and John A. Sloboda, eds., *Handbook of Music and Emotion. Theory, Research, Applications* (Oxford and New York: Oxford University Press, 2010), or especially for an "enactive" approach to this aera: Dylan van der Schyff, Andrea Schiavio, and David J. Elliot, eds., *Musical Bodies, Musical Minds. Enactive Cognitive Science and the Meaning of Human Musicality* (Cambridge, MA and London: The MIT Press, 2022), 91–108 (chapter "Music and Emotion").

4 For an introduction to this phenomenon cf. for example Solange Glasser, "Synesthesia and Performance", in *The Oxford Handbook of Music Performance*, vol. 1, ed. Gary E. McPherson (New York: Oxford University Press, 2022), 670–88.

5 The term "kinesthesia" goes back to the British neurologist Henry Charlton Bastian (1817–1915) and is derived from the Greek κινέω meaning "to move" and αἴσθησις "sense/perception". Confusion surrounding the term "kinesthesia," sometimes referred to as the "sixth" sense, continues, ultimately creating a broad inter- and transdisciplinary field both within the humanities/social sciences, the arts/cultural sciences, and within the natural sciences as well, cf. among others: Mark Paterson, *How We Became Sensorimotor. Movement, Measurement, Sensation* (Minneapolis and London: University of Minnesota Press, 2021); David Howes, ed., *The Sixth Sense Reader* (Oxford and New York: Berg, 2009); Nima Rezaei and Amine Saghazadeh, eds., *Biophysics and Neurophysiology of the Sixth Sense* (Cham: Springer, 2019). Below, this field will be narrowed down through discussion of approaches relevant to the interaction between music and movement (see note 31 and my contribution to chapter 3 of this volume, especially note 14).

6 The development of an advanced musical culture largely decoupling itself from movement took place over the course of the eighteenth century and became a hallmark of a specifically bourgeois musical culture in the nineteenth century. For this phenomenon illustrated by the example of Paris, see: James H. Johnson, *Listening in Paris* (Berkeley: University of California Press, 1995); Stephanie

In addition, gestures and motions are also inscribed in music, so to speak–be it because composers refer to dance models that they musically abstract, i.e. stylize,[7] or be it because they (more or less consciously) take up ideas of motion that provide a metaphoric basis for their compositions.[8] Pursuing this approach, one can speak of an "inner motion" of the music itself, of a motion *in* music or (from the perspective of perception) of music *as*

Schroedter, *Paris qui danse. Bewegungs- und Klangräume einer Großstadt der Moderne* (Würzburg: Königshausen & Neumann, 2018).

7 Such phenomena are linked to research on musical gesture. This branch of research received a significant impetus in Anglo-American musicology through Wye Jamison Allanbrook's monograph *Rhythmic Gesture in Mozart. Le Nozze di Figaro and Don Giovanni* (Chicago and London: University of Chicago Press, 1983), in which she impressively demonstrates the influence of eighteenth century ballroom dance practice on Mozart's musical compositions. Following up on this came Mary Ann Smart's, *Mimomania: Music and Gesture in Nineteenth-Century Opera* (Berkely, Los Angeles, and London: University of California Press, 2004). Robert Hatten's *Interpreting Musical Gestures, Topics, and Tropes. Mozart, Beethoven, Schubert* (Bloomington: Indiana University Press, 2004) deals with this phenomenon in instrumental music and led to overarching reflections on Western music: *A Theory of Virtual Agency for Western Art Music* (Bloomington: Indiana University Press, 2018). Also insightful for this topic are the two anthologies edited by Anthony Gritten and Elaine King: *Music and Gesture* (Farnham: Ashgate, 2006) and *New Perspectives on Music and Gesture* (Farnham: Ashgate, 2011). Further publications are more oriented towards a) performance practice as e.g. Gertrud Meyer-Denkmann, *Körper, Gesten und Klänge am Klavier. Improvisation, Interpretation und Komposition Neuer Musik* (Saarbrücken: Pfau Verlag, 1998) and *Mehr als nur Töne. Aspekte des Gestischen in neuer Musik und im Musiktheater* (Saarbrücken: Pfau Verlag, 2003), Alexandra Pierce, *Deepening Musical Performance through Movement. The Theory and Practice of Embodied Interpretation* (Bloomington and Indianapolis: Indiana University Press, 2010) and with an emphasis on artistic research in the field of performance art with music the contribution of Winnie Huang to this volume; b) historiographical aspects as e.g. Arne Stollberg, Jana Weißenfeld, and Florian Besthorn, eds., *DirigentenBilder. Musikalische Gestik–Verkörperte Musik* (Basel: Schwabe, 2015); c) perspectives from music theory and aesthetics as e.g. Katrin Eggers and Christian Grüny, eds., *Musik und Geste: Theorien, Ansätze, Perspektiven* (Paderborn: Wilhelm Fink Verlag, 2018); or d) pedagogical contexts as e.g. Constanze Rora and Martina Sichardt, eds., *Gesten Gestalten. Spielräume zwischen Sichtbarkeit und Hörbarkeit* (Hildesheim: Georg Olms Verlag, 2018).

8 Cf. for an example Christian Thorau, *Vom Klang zur Metapher. Perspektiven der musikalischen Analyse* (Hildesheim: Georg Olms Verlag, 2012) and also, but explicitly with regard to experimental music, Drake Anderson's contribution in this volume.

motion, which therefore also has a specific audible but not visible physicality.[9] Considerations in this regard focus on our cognitive understanding of music,[10] analyzed by a music theory, which springs from linguistic research and is trained in metaphor theory,[11] or by music psychology.[12] Both fields are

9 While the relationship between music and the body has recently received increased attention from a variety of perspectives, the fact that music itself also has a certain physicality has tended to remain neglected. For an overview of this far-reaching and by no means exhausted field of research, see: Stephanie Schroedter, "Körper und Klänge in Bewegung–Körperliche Dimensionen von Musik zwischen Embodiment und Enaction," in *Music in the Body–The Body in Music. Körper an der Schnittstelle von musikalischer Praxis und Diskurs*, ed. Christine Hoppe and Sarah Avischag Müller (Hildesheim: Georg Olms Verlag, 2021), 29–56; and "Musik, Körper und Bewegung. Konturen eines musikalisch-bewegten 'Body Turn'" in *Körper(lichkeit) in der Musik des 20. und 21. Jahrhunderts*, ed. Nadine Scharfetter and Thomas Wozonig (Bielefeld: transcript, 2023), 11-41 and also my contribution to chapter 3 of this volume, especially note 2.

10 See Arnie Cox, *Music & Embodied Cognition. Listening, Moving, Feeling, & Thinking* (Bloomington and Indianapolis: Indiana University Press, 2016), who defines "cognition" as follows: "I am taking cognition to be the sum of the process of coming-to-know and coming-to-understand and to thus subsume all forms of perception, comprehension, and conceptualization" (15).

11 Significant impulses in this area came from the linguists and philosophers George Lakhoff and Mark Johnson, who first presented their "Conceptual Metaphor Theory," which is still influential today, in their publication *Metaphors We Live by* (Chicago: University of Chicago Press, 1980); for a more up-to-date status cf. Ezequiel A. Di Paolo, Elena Clare Cuffari, and Hanne De Jaegher, *Linguistic Bodies. The Continuity between Life and Language* (Cambridge, MA: The MIT Press, 2018). With reference to specific musical issues, see among others Lawrence M. Zbikowski, *Conceptualizing Music. Cognitive Structure, Theory, and Analysis* (Oxford and New York: Oxford University Press, 2002) as well as his *Foundations of Musical Grammar* (Oxford and New York: Oxford University Press, 2017). Further, cf. Steve Larson, *Motion, Metaphor, and Meaning in Music* (Bloomington and Indianapolis: Indiana University Press, 2012); Cox, *Music and Embodied Cognition* (see note 10); Jonathan De Souza, *Music at Hand: Instruments, Bodies, and Cognition* (Oxford and New York: Oxford University Press, 2017); Mariusz Kozak, *Enacting Musical Time. The Bodily Experience of New Music* (Oxford and New York: Oxford University Press, 2020); Mark Reybrouck, *Musical Sense-Making. Enaction, Experience, and Computation* (London and New York: Routledge, 2021).

12 In this context, but from a music systematic/psychological approach, the focus lies often on rhythm and musical gestures. Cf. for example Rolf Godøy and Marc Leman, eds., *Musical Gestures: Sound, Movement, and Meaning* (New York: Routledge, 2010) as well as Leman's monographs *Embodied Music Cognition and Mediation Technology* (Cambridge, MA: The MIT Press, 2008), *The*

influenced by cognitive sciences, especially the so-called 4E cognition or enactivism (see below), which goes far beyond primarily musical issues, additionally investigating relations to our everyday world of experience in order to be able to draw conclusions about our "conceptualization" of music.[13] This approach seems to me fundamental for a praxeological and/or theoretical-analytical approach to the interweaving[14] of music/sounds[15] and movement/dance[16].

Expressive Moment. How Interaction (with Music) Shapes Human Empowerment (Cambridge, MA: The MIT Press, 2016). Furthermore Wilfried Gruhn, *Musikalische Gestik. Vom musikalischen Ausdruck zur Bewegungsforschung* (Hildesheim: Georg Olms Verlag, 2014); Christoph Wöllner, ed., *Body, Sound and Space in Music and Beyond: Multimodal Explorations* (Abingdon/Oxon and New York: Routledge, 2017); and an anthology that brings us even closer to dance: Christoph Wöllner and Justin London, eds., *Performing Time. Sychrony and Temporal Flow in Music and Dance* (Oxford: Oxford University Press, 2023).

13 For an comprehensive overview cf. *The Oxford Handbook of 4E Cognition*, ed. Albert Newen, Leon Bruin, and Shaun Gallagher (Oxford: Oxford University Press, 2018); and especially with regard to music: van der Schyff, Schiavio, and Elliot, eds., *Musical Bodies, Musical Minds* (see note 3).

14 The term "interweaving," which refers to an organic structure with relational connections, is intended to offer an alternative to the terminology of "interactions" that is prevalent in Anglo-American research and which refers to models of communication theory (see: Erving Goffman, *Interaction Ritual. Essays on Face-to-Face Behavior* [New York: Anchor Books, 1967]) and ultimately actions of input and output. Accordingly, this terminology has also become firmly established in technological contexts (see, among others: Micheline Lesaffre, Pieter-Jan Maes, and Marc Leman, eds., *The Routledge Companion to Embodied Music Interaction* [London and New York: Routledge, 2017]). For artistic-pedagogical issues that are central to music and movement pedagogy/rhythmics and also for choreomusical and sound-performative performance analyses (see below), this terminology seems to me to be misleading.

15 The concept of sound in this context stands for an expanded concept of music which also includes sound art/design/installations and is aimed at a primarily auditory perception which is therefore not necessarily dependent upon musical scores or notation. This concept of sound has undoubtedly become significantly more important since the beginning of the twentieth century. See Makis Solomos, *From Music to Sound. The Emergence of Sound in 20th- and 21st-century Music* (London and New York: Routledge, 2020). Nevertheless, for the present context I would like to retain the term "music" as a denotation of musical phenomena in the broadest sense.

16 In contrast to everyday movement, dance as artificially designed movement does not have to fulfill any function and does not necessarily have to be goal-oriented. Conversely, everyday movement does not have to, but can meet

And yet, in these discussions, one phenomenon is mostly neglected, one that is an important prerequisite for that rich interweaving of music and motion—right up to its analogization on the level of perception. What I mean is our already mentioned sense of movement, alias kinesthesia and its (also physiologically justified) proximity to our sense of hearing/listening (see below). This phenomenon was given particular attention by Émile Jaques-Dalcroze (*1865 in Vienna, †1950 in Geneva), who, as a teacher of ear training and harmony, founded the field of "(eu)rhythmics,"[17] the basis of the current music and movement pedagogy program of the University of Music and Performing Arts in Vienna. This aspect will be explained in more detail in the following.

From Émile Jaques-Dalcroze to a Kinesthetic Listening

The pianist, composer, and music educator Jaques-Dalcroze, trained in his hometown of Vienna but also in Geneva and Paris, presented the first drafts of his movement-emphasized music lessons at what was then Vienna's "K & K Academy for Music and Performing Arts" as early as 1909. They were received

creative demands or aesthetic criteria (e.g. in Performance Art). Regardless of this important difference between movement in general and specifically dance movement, it is advisable to define the topic more broadly at the outset, that is, to start primarily from movement/motion and to understand dance (in artistic or socio-cultural contexts) as a specific performative movement. In this sense, the relationship between music and movement can be explored anew, regardless of specific forms, styles, genres or aesthetic concepts—without however categorically excluding dance as an artistic and creative form of movement.

17 "Rhythmik" as a pedagogical-didactic concept founded by Jaques-Dalcroze is usually referred to as "eurhythmics" in the Anglo-American community (cf. the contribution of Dorothea Weise in this volume). This often leads to confusion with the "Eurhythmie" resp. eurythmy developed by Rudolf Steiner, which in turn has no connection with Jaques-Dalcroze's approach. After all, many representatives of the life reforms of the early 20th century were in search of a "good rhythm" (greek: εὖ ῥυθμός) – which makes it all the more urgent to critically question this term. I would therefore prefer "rhythmics" as translation of the German term "Rhythmik", even if this entails the danger of reducing rhythmics primarily to rhythmic components in a narrower musical understanding. However, rhythmic parameters are only one aspect of Dalcroze's concept of "rhythmics". He included all musical parameters in his teaching method and used the term "Rhythmik" to describe a holistic understanding of music.

extremely positively: people sought to incorporate his method (deemed groundbreaking throughout Europe) of experiencing the shape and essence of music and thereby at the same time releasing psychological and creative forces through "body rhythms" into training for instrumental classes, opera singers, and actors.[18] Gertrude Wiesenthal (1890–1981) was appointed as the first teacher of "Rhythmic Gymnastics according to Dalcroze" at the Vienna Music Academy in 1914/15 (until 1952)—after she had received a scholarship from the Board of Trustees for an eighteen-month training course at the newly founded (1911) "Educational Institute for Music and Rhythm" in Dresden-Hellerau (later to become the Festspielhaus Hellerau and today's European Center for the Arts Dresden). Soon afterwards she was supported by her sister Grete Wiesenthal (1885–1970), who, having enjoyed an international dance career on stage, was appointed to a professorship in dance from 1934. Against this background, it is hardly surprising that right from the start there was, especially in Vienna, a strong affinity between Jaques-Dalcroze's "rhythmic gymnastics" and dance. But to what extent did this connection also correspond with Jaques-Dalcroze's theoretical conceptualization? Is it not just due to fortunate circumstance?

Certain early writings of Jaques-Dalcroze, which surprisingly, but perhaps understandably (due to their primarily theoretical orientation), have so far received little attention, seem to contain an answer to this question. These are Jaques-Dalcroze's early, almost manifesto-like lectures from 1907, which were published under the title *Rhythm as a Means of Education for Life and Art*,[19] and

18 After Lynn Heller (unpublished manuscript from 1994) quoted by Eleonore Witoszynskyj, "Auf dem Weg zum Studium der Musik- und Bewegungspädagogik/Rhythmik an der Akademie, späteren Hochschule und gegenwärtigen Universität für Musik und darstellende Kunst Wien," in *Leben ist Bewegung ist Musik. Entwicklungen und Konzepte der Wiener Rhythmik an der Universität für Musik und darstellende Kunst Wien*, ed. Angelika Hauser-Dellefant and Eleonore Witoszynskyj (Wiesbaden: Reichert Verlag/zeitpunkt music, 2016), 10 (english edition: *Life Is Movement Is Music. Education in Music and Movement at the University of Music and Performing Arts Vienna*, ed. Angelika Hauser-Dellefant and Eleonore Witoszynskyj [ibid., 2023:11).

19 Émile Jaques-Dalcroze, *Der Rhythmus als Erziehungsmittel für das Leben und die Kunst. Sechs Vorträge zur Begründung seiner Methode der rhythmischen Gymnastik*, published in German by Paul Boepple, Basel 1907, quoted here from the first lecture, hereafter abbreviated as J-D, *Rhythmus* [lecture number in Roman numerals]/[page number in Arabic numerals]. According to Kugler, the original text, a handwritten French manuscript, has been lost. This circumstance is all the more regrettable as some of the German formulations are misleading if not incorrect. See Michael Kugler, *Die Methode Jaques-Dalcroze und das Orff-Schulwerk. Elementare Musikübung. Bewegungsorientierte Konzeptionen der Musikpädagogik* (Frankfurt am Main, Berlin, and Bern etc.: Peter Lang Verlag,

which are extremely informative for understanding his conception of "rhythmics," both in terms of the historical dimensions of this subject as well as in terms of the innovative potential for holistic musical education that is still inherent in this field today.

When reading these early writings, it is immediately noticeable how excessively one phenomenon is discussed that was barely researched at the time: a "muscular sense" ("Muskelsinn") that Jaques-Dalcroze considered essential for nuanced musical expression. For example, he posits the cause of an immature sense of style in the interpretation of a piece of music to be a "lack of muscular sense," ultimately a lack of feeling "for the relationships between movement and sound, between cause and effect, goal and means."[20] In this context he emphasizes: "The knowledge of the relationship between muscular effort and tone production is generally valid and applicable to every instrument,"[21] whereas "particular attention must be paid to uniform dynamic development of each muscle with a constant increase in strength, [to] bring the organs into the correct relationship of dependency to the activity of the will."[22] At this point he continues:

> In this way, the player is trained to know exactly which muscles are required for each movement he wants to make based on the energy of will triggered in the brain. He is able to estimate the degree of effort with absolute certainty and does not initiate passive or sometimes contrary activity in carefully modulating the muscles which are directly involved.[23]

2000), 352. For a more detailed discussion of these lectures, see Stephanie Schroedter, "The Mind Is a Muscle—Or: The Muscle Is a Mind" on the digital platform of the Universität der Künste Berlin https://doi.org/10.25624/kuenste-1951 or in the *Altas of Eurhythmics* (https://www.kmh.se/in-english/atlas-of-eurhythmics.html, accessed 8 February 2024) under the column "Results From the Project/Verbs: A Glossary" with cue word: "Interweaving."

20 J-D, *Rhythmus* I/9: "Dieser Mangel an Stil hat seinen guten Grund; er ist allmählich aus Mangel an Muskelsinn entstanden, aus Mangel an Verständnis für die Beziehungen zwischen der Bewegung und dem Klange, zwischen Ursache und Wirkung, Ziel und Mittel."

21 J-D, *Rhythmus* I/10: "Die Erkenntnis der Beziehung zwischen der Muskelanstrengung und und [sic] der Bildung des Tones ist allgemein gültig und für jedes Instrument anwendbar."

22 J-D, *Rhythmus* I/17: "Ausführliche Muskelbewegungen, wobei besonders auf gleichmässige dynamische Entwickelung jedes Muskels mit steter Steigerung der Kraft zu achten ist, müssen die Organe in das richtige Abhängigkeitsverhältnis zur Willenstätigkeit bringen."

23 J-D, *Rhythmus* I/17f.: "Der Spieler wird auf diese Weise dazu erzogen, bei jeder Bewegung, die er zufolge einer im Gehirn ausgelösten Willensenergie vornehmen will, die hierzu nötigen Muskeln genau zu kennen, den Grad

Ultimately, it is precisely these "muscles" that not only become the center of a fitting musical interpretation practice, but also form the nucleus of Jaques-Dalcroze's concept of "rhythmic gymnastics" with which he sought to develop this (as we put it today) sensorimotor ability:[24] "The study of rhythm is the study of muscle strength, of the dimensions of time and space, and the influence that the amounts of these three factors exert on each other."[25] He then justifies this "study" again from a broader perspective:

> Rhythm is physical in nature. It is the movement of matter in time and space in a logical and constantly proportional division. The life task of every muscle is to produce movements of a certain strength [= force/dynamics, note St.Sch.] and a certain length [= time, note St.Sch.] and within a certain space. By logically arranging the relationships between these three elements of movement, each muscle creates a rhythmic impression within the brain; the brain converts the sum of these impressions into will, i.e. into regular habits, into constant spontaneous readiness for action and into complete freedom of imagination. In these way, the movement forces of the mind are formed.[26]

Such and similar statements about the "muscular sense" run like a common thread throughout Jaques-Dalcroze's discussions of his concept of "rhythmics" as a teaching method "for life and art"—as he emphatically emphasizes. This "method" for training a subtle dosage of "muscle strength" as a prerequisite for nuanced sound creation initially emerged from a pianistic seed which

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des Kraftaufwandes mit absoluter Sicherheit abzuschätzen und die passive oder zuweilen entgegengesetzt wirkende Tätigkeit der nicht direkt beteiligten Muskeln sorgfältig zu modulieren."

24 Cf. for this topic and to place Jaques-Dalcroze's ideas into a larger, also historically grounded context: Paterson, *How We Became Sensorimotor* (see note 5).

25 J-D, *Rhythmus* I/22: "Das Studium des Rhythmus ist das Studium der Muskelkraft, der Zeit- und Raummasse [gemeint ist: Maße, Anm. St.Sch.] und des Einflusses, den die Grössen dieser drei Faktoren gegenseitig aufeinander ausüben."

26 J-D, *Rhythmus* I/22f.: "Der Rhythmus ist physischer Natur, er ist die Bewegung der Materie in Zeit und Raum in logischer und verhältniswahrender Einteilung. Die Lebensaufgabe eines jeden Muskels besteht darin, Bewegungen von gewisser Stärke [= Kraft/Dynamik, Anm. St.Sch.] und gewisser Länge [= Zeit, Anm. St.Sch.] und in einem gewissen Raume hervorzubringen. Indem man die Verhältnisse dieser drei Bewegungselemente logisch ordnet, ruft jeder Muskel einen rhythmischen Eindruck im Gehirn hervor und dieses setzt die Summe der Eindrücke um in Willen, d.h. in regelmässige Gewohnheiten, in stete spontane Aktionsbereitschaft und in gänzliche Freiheit der Vorstellung. So werden die Bewegungskräfte des Geistes gebildet."

was then generally applied to practical instrumental and vocal challenges and finally to whole-body or holistic movement exercises. These latter, which were also referred to as "plastiques animées,"[27] no longer served to produce sound; instead, sounds were transferred into (body) movement–modeled by the whole body, so to speak, as training for a differentiated use of the very muscle strength that Jaques-Dalcroze considered elementary for the development of musicality.[28] In this way, Jaques-Dalcroze lent his theses on the "muscular sense" temporally/spatially augmented contours which were even more clearly recognizable because they were expanded. Against this background, the "movements for music" on which Jaques-Dalcroze initially concentrated resulted in "music for movements," sometimes very demanding movement exercises for which specific music was composed (initially, of course, by Jaques-Dalcroze himself).[29] At the core of these two areas is the "muscular

27 Though Jaques-Dalcroze pursued a pedagogical-didactic or eductional context for musicians, "plastique animée" as a secondary field of rythmics can also be used for musical training for dancers, who, as it is well known, also attended Jaques-Dalcroze's courses in large numbers. See Gunhild Oberzaucher-Schüller, "Auftauchen lassen. Über das körperliche Fundament des Modernen Tanzes in Mitteleuropa," in *Zum immateriellen Kulturerbe des Modernen Tanzes*, ed. Claudia Fleischle-Braun, Krystyna Obermaier, and Denise Temme (Bielefeld: transcript, 2017), 61-94; as well as the music visualizations that were popular at the time and also find their echo in Jaques-Dalcroze's rhythmics: Stephanie Jordan, *Moving Music. Dialogues with Music in the Twentieth-Century Ballet* (London: Dance Books, 2000), especially 15.

28 At this point, it should be strongly emphasized that Jaques-Dalcroze intended primarily to reform music education and didactics. In no way did he intend to develop a musically-oriented method of dance training, even if numerous dancers, especially those with an art reformative or avant-garde orientation, attended his classes in the short term, then to turn away from him because they felt his "method" restrictive for their choreographic freedom. See the insightful discussion of Jaques-Dalcroze's concept of "rhythmics" by Daniel Zwiener: *Als Bewegung sichtbare Musik. Zur Entwicklung und Ästhetik der Methode Jaques-Dalcroze in Deutschland als musikpädagogische Konzeption* (Essen: Die Blaue Eule, 2008). A valuable, source-based documentation of rhythmics according to Jaques-Dalcroze can be found here: Joachim Gobbert, *Zur Methode Jaques-Dalcroze. Die Rhythmische Gymnastik als musikpädagogisches System. Wege und Möglichkeiten der plastischen Darstellung von Musik durch den menschlichen Körper*, 2 vols. (Frankfurt am Main: Peter Lang, 1998).

29 Composing or improvising "music for movement" is an integral part of music and movement pedagogy/rhythmics studies, be it as music for "accompanying" movement (which aims at supporting or illustrating a movement expression) or as a music in "dialogue" with movement (which seeks a direct exchange with the movement/dance).

sense" on which Jaques-Dalcroze very perceptively insisted, although it was hardly researched at the time and its importance obviously continues to be underestimated.

From an almost diametrically opposed perspective—namely issuing from dance and from there arriving at an intersection of a philosophically based anthropology and phenomenology—the more than ninety-year-old American dance scholar and philosopher Maxine Sheets-Johnstone has spent her entire academic life researching what Jaques-Dalcroze described as "muscular sense"—the "sense of movement" also known as kinesthesia.[30] "Why is there such opacity and even avoidance of the sense modality of kinesthesia and its experiential reality and why is there so much confusion of kinesthesia with proprioception?" she asks at the beginning of her "extended critical overview," thus drawing attention to this (unfortunately) still under-researched sense[31] with which we perceive ourselves and others as moving, living beings, and more importantly, without which we could not live. The essential meaning of kinesthesia, "the original source of our concept of force," is according to Sheets-Johnstone so evident that, as she emphasizes, "the real-life, real-time significance of the 'muscle sense' can hardly be doubted."[32] Sheets-Johnstone

30 Cf. note 5.

31 Maxine Sheets-Johnstone, "Kinesthesia: An Extended Critical Overview and a Beginning Phenomenology of Learning," in *Continental Philosophy Review*, 52/2 (2019), 143–69, here 144, https://doi.org/10.1007/s11007-018-09460-7. It is hardly surprising that dance studies in particular have recently shown increased interest in the importance of kinesthesia. See for example: Mary M. Smyth, "Kinesthetic Communication in Dance," in *Dance Research Journal*, vol. 16, no. 2 (fall 1984), 19–22; Jeroen Fabius, "Seeing the Body Move. Choreographic Investigations of Kinaesthetics at the End of the Twentieth Century," in *Contemporary Choreography. A Critical Reader*, ed. Jo Butterworth and Liesbeth Wildschut (London: Routledge, 2009), 331–45; Matthew Reason and Dee Reynolds, "Kinesthesia, Empathy, and Related Pleasures: An Inquiry into Audience Experiences of Watching Dance," in *Dance Research Journal*, vol. 42, no. 2 (winter 2010), 49–75, as well as their anthology *Kinesthetic Empathy in Creative and Cultural Practices* (Bristol: Intellect, 2012); Susan Leigh Foster, *Choreographing Empathy. Kinesthesia in Performance* (Abingdon/Oxon and New York: Routledge, 2011); Gabriele Brandstetter, Gerko Egert, and Sabine Zubarik, eds., *Touching and Being Touched. Kinesthesia and Empathy in Dance and Movement* (Berlin: Walter de Gruyter, 2013); Irina Sirotkina and Roger Smith, *The Sixth Sense of the Avant-Garde: Dance, Kinaesthesia and the Arts in Revolutionary Russia* (London and New York: Bloomsburg Publishing, 2017, [2]2019).

32 Sheets-Johnstone, "Kinesthesia: An Extended Critical Overview" (see note 31), 148.

points out again and again that even in the most recent research (in cognitive science) there is fundamental confusion in this regard, which ultimately leads to the continued and fatal underestimation of this sensory modality.

Kinesthesia refers primarily to the perception of our own movements (i.e. the spatial position of our body limbs in relation to one another) as well as to our orientation of movement in space (through the control of the direction and speed of our active and passive movements as well as the amount of force which is necessary when executing a movement or using resistance in order to either maintain our balance or ensure stability). Here we see established the existential necessity of this sense. In contrast to our sense of hearing, sight, smell, taste, and touch, we are dealing with a sense that cannot (more or less) clearly be localized to an organ, but rather to a sense that is based on a receptor system extending through muscles, tendons, and joints. As a sense whose workings are hidden from us, it controls our everyday movements so naturally that we often only notice it when this naturalness is restricted or fails—for example, due to an accident or with advancing age, and particularly in diagnoses of Alzheimer's or Parkinson's. However, kinesthesia not only includes the perception of our own movements, but also our self-perception through movement, i.e. it is also generally responsible for our sensations of body and movement, and ultimately for our self-perception as (independently) moving beings. According to Sheets-Johnstone, the (self-)consciousness of being able to do something (in the sense of mastering something) is primarily due to this awareness of movement. "I can" would therefore be synonymous in the most elementary sense with "I move," based on kinesthesia as a "pan-human ability to learn one's body and learn to move oneself." After the sense of movement was already established at the center of her "Phenomenology of Dance,"[33] she continued building upon this base to found a "Phenomenology of Learning."[34]

Without at this juncture being able to go into the far-reaching (pedagogical) consequences of this approach, I would like to point out a very insightful comment from Sheets-Johnstone with regard to Jaques-Dalcroze's writings. Referring to Eckart Scheerer's study on the historical origins of the "muscular sense" and "innervation feelings,"[35] she states that the author, theater director,

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33 This is the title of her dissertation, which appeared in print in 1966 and is still considered a foundational work: *The Phenomenology of Dance* (Madison: University of Wisconsin Press, 1966/Philadelphia: Temple University Press, 2015 [Reprint]).

34 Cf. her monograph: *The Primacy of Movement* (Amsterdam and Philadelphia: John Benjamins Publishing Company, 2011).

35 See Scheerer, "Muscle Sense and Innervation Feelings: A Chapter in the History of Perception and Action," in *Perspectives on Perception and Action*, ed. Herbert

and philosopher Johann Jacob Engel (1741–1802), who was well known in the German-speaking world at the time and worked in Berlin and other cities, was probably the originator of this term. It seems that Engel found it important to emphasize that we perceive our environment differently through our "muscles" (with which he seems to mean deep sensitivity, which at the time was still largely unexplored) than through our sense of sight. If we now remember that Jaques-Dalcroze also mentions "muscular innervation"[36] or "muscle innervation"[37] several times, it becomes obvious that, in relation to his comments on the "muscular sense," he is referring to older sources which he does not name. Further research in this area would undoubtedly be an informative undertaking in order to place his concept of rhythmic training also in the context of medical history.[38]

However, Jaques-Dalcroze was not concerned with muscle sense or deep sensitivity as such, but, as we have seen above, with sensorimotor skills to increase musical expression. For him it was not kinesthesia per se that was important, but rather a rhythmically and dynamically differentiated training of the sense of movement in order to be able to implement subtle sound ideas/imaginations (on the instrument or vocally)—that is, a rhythmic and dynamic way of being able to perceive and/or shape differentiated sound events with the entire body. In technical language, this is also referred to as a musical embodiment.[39] At this point we can build a bridge to Edmund Husserl,

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Heuer and Andries F. Sanders (Hillsdale, NJ: Lawrence Erlbaum Associates Inc., 1987), 176.

36 J-D, *Rhythmus* II/28: "die muskuläre Innervation."

37 J-D, *Rhythmus* II/36: "Muskel-Innervation."

38 In this context, Kugler refers to the Geneva psychophysiologist Éduard Claparède (1873-1940), with whom Jaques-Dalcroze actively exchanged ideas and who received his doctorate in 1897 with a thesis on the *Sens musculaire* and, in 1905, published his highly acclaimed *Psychologie de l'enfant et pédagogie expérimentale*. Kugler, *Die Methode Jaques-Dalcroze und das Orff-Schulwerk* (see note 19), 49. For further information from the perspective of natural sciences cf. E.G. Jones, "The Development of the 'Muscular Sense' Concept During the Nineteenth Century and the Work of H. Charlton Bastian," in *Journal of the History of Medicine and Allied Sciences*, vol. XXVII, issue 3 (July 1972), 298-311, https://doi.org/10.1093/jhmas/XXVII.3.298.

39 See Marja-Leena Juntunen's dissertation, *Embodiment in Dalcroze Eurhythmics* (Oulu: University of Oulu, Faculty of Education/Department of Educational Sciences and Teacher Education, 2004), and further publications by her as e.g. "The Dalcroze approach: experiencing and knowing music through embodied exploration," in *Approaches to Teaching General Music: Methods, Issues, and Viewpoints*, ed. by Carlos R. Abril and Brent M. Gault (New York: Oxford University Press, 2016), 141–167; or others from the field of Rhythmics after

who dealt with kinesthesia in detail in the course of his development of a phenomenology and also emphasized a direct connection between the sense of movement and the sense of hearing: "In moving myself, I bring the ear closer in order to hear."[40] Here we see, from another perspective, a reinforcement of the assumption that Jaques-Dalcroze knew and referred to ideas circulating at the time, and sought to use them to explain his empirical observations in music teaching which he integrated into his concept of music education with movement.[41]

Dalcroze like Karin Greenhead and John Habron, "The Touch of Sound: Dalcroze Eurhythmics as a Somatic Practice," in *Journal of Dance and Somatic Practices*, vol. 7/1 (June 2015), 93–112, https://doi.org/10.1386/jdsp.7.1.93_1.

40 "Mich bewegend nähere ich das Ohr um zu hören." Husserliana (Edmund Husserl, *Gesammelte Werke*), vol. IV (= *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie* [1913]), 56–here cited by Daniel Schmicking, *Hören und Klang. Empirisch phänomenologische Untersuchungen* (Würzburg: Königshausen & Neumann, 2003), 116 (chapter "Die kinästhetische Organisation des Hörfeldes im Vergleich zum Sehfeld"). See also: Edmund Husserl, *Ding und Raum. Vorlesungen 1907* (Hamburg: Felix Meiner, 1991), 155–63.

41 For futher information cf. Rainer Bayreuther, "Die Rhythmusbewegung im frühen 20. Jahrhundert und ihre Grundlegung in der empirischen Ästhetik," in *Die Musikforschung*, issue 69, vol. 2 (2016), 143–56; as well as a continuation of this discussion by Rolf Großmann, "Zur Aktualität der Rhythmusbewegung im 21. Jahrhundert. Eine Respondenz," in ibid., 157–60. For a corresponding artistic context, especially concerning correspondences of music and dance, see: Stephanie Schroedter, "Musik als Bewegung. Transformationen musikalischer Energetik in Tanz", in *Energie! Kräftespiele in den Künsten*, ed. Katrin Eggers and Arne Stollberg (Würburg: Königshausen & Neumann, 2021), 369–81, as well as: "Als die Musik im Film das Laufen lernte …–Musikalischer Kinetismus im Umfeld von Gestaltheorie, Kinästhesie und künstlerischem Experiment," in *Laute(r) Bilder. Musik in Manga, Comic & Co. Jahrbuch Musik und Gender*, ed. Melanie Unseld and Akiko Yamada (Hildesheim: Olms, 2024), 147–64.

This brings me to a concept of kinesthetic listening[42] which I initially tried to develop from the perspective of music and dance studies and ultimately from performance analysis,[43] in order to understand firstly why music (apparently) continues to be naturally associated with movements/dance across time and cultures, and secondly to understand the diverse efforts initiated by choreographers at the beginning of the twentieth century to emancipate themselves from music, efforts which have since increased but ultimately not (yet?) been able to gain widespread acceptance.[44]

In the course of my research into the rhythmics developed by Jaques-Dalcroze, I came across two articles that also focus on a close connection

42 So far I have come across four concepts of kinesthetic listening, two of which originate in the fields of dance studies/dance pedagogy. Despite the insightfulness of these discussions, the term "listening" is not used to refer to musical/sound issues in a narrower sense in the following contributions to this topic: Gabriele Brandstetter, "'Listening …'–Kinaesthetic Awareness in Contemporary Dance," in *Synaesthesia and Kinaesthetics*, ed. Fingerhut, Flach, and Söffner (see note 5), 51–68; Kimberly L. Oliver and Jim Garrison, "Reflective Writing and Kinesthetic Listening: The Other Half of the Dance," in *Journal of Physical Education, Recreation and Dance*, vol. 67, no. 6 (1996), 37–9. Two other concepts of kinesthetic listening stem from musicology. In their article "Formulating a Revised Taxonomy for Modes of Listening," in *Journal of New Music Research*, vol. 41, no. 2 (2012), 137–52, https://doi.org/10.1080/09298215.2011.614951, Kai Tuuri and Tuomas Eerola build upon David Huron's concept of kinesthetic listening, published on a handout entitled "Listening Styles and Listening Strategies," which was distributed as part of his talk at the Society for Music Theory in Columbus/Ohio 2002, and which was available on the internet for many years. Huron used this term to describe movements that relate solely to rhythm (such as rhythmic tapping; this means a hearing which I would call "kinetic listening"). Tuuri and Eerola subject Hurons draft of "Listening Styles and Listening Strategies" to a fundamental revision, adding significantly expansion and differentiation (see below). In addition, John Toenjes mentions "auditory kinesthesia" in his contribution to this volume with reference to the PhD dissertation of Ryan Ingebritsen (see note 5).

43 See, among others: Stephanie Schroedter, "Neues Hören für ein neues Sehen von Bewegungen […]," in *Bewegungen zwischen Hören und Sehen. Denkbewegungen über Bewegungskünste*, ed. Stephanie Schroedter (Würzburg: Königshausen & Neumann, 2012), 43–110; as well as her, "Musik erleben und verstehen durch Bewegung," in *Musik und Körper. Interdisziplnäre Dialoge zum körperlichen Erleben und Verstehen von Musik*, ed. Lars Oberhaus and Christoph Stange (Bielefeld: transcript, 2017), 221-43.

44 Cf. from a contemporary of Jaques-Dalcroze: Fritz Böhme, *Der Tanzende Mensch. Vom musiklosen Tanz* (Leipzig: Kunstverlag Wilhelm Backhaus, 1921), which here becomes a mouthpiece for a tendency withing expressive dance that was very strongly represented at the time.

between listening and kinesthesia, which similarly consider his approach to music and movement education to be particularly forward-looking. The Hanover-based music physician and music physiologist Eckart Altenmüller[45] describes the close interweaving of "auditory perception, somatosensory and visual experience and movement structuring" practiced in rhythmics from a neuroscientific perspective as a form of "multisensory-motor integration" which leads to "audiation," that is "the ability to think in sound, i.e. to recognize, remember and manipulate complex musical patterns mentally." Jaques-Dalcroze's "embodied approach"[46] means that the musical experience is also embedded[47], enacted[48], and extended[49]. Altenmüller sums up:

> […] perception and action are not separated entities somehow encapsulated in autonomous and independent modules. Rather, they are always mutually integrated through a complex network of sensorimotor connectivity, involving anticipatory mechanisms that enable the system to respond adequately to the demands of the environment. […] [Jaques-]Dalcroze anticipated in theory and practice the neuroscientific findings of multisensory-motor-integration, he based his ear-training on audiation and brain plasticity and he developed the concept of embodiment long

45 This article, entitled "Émile Jaques-Dalcroze as a Visionary of Modern Brain Sciences. His Anticipation of Multisensory-Motor Integration, Audiation and Embodiment" was created as a written version of his keynote address at the *2nd International Conference of Dalcroze Studies*: *The Movement Connection*, Vienna 26–29 July 2015, and was published in: *Le Rhythme*, ed. Fédération Internationale des Enseignants de Rhythmique (FIER), vol. 2015, 70–81, https://fier.com/documents/le-rythme/.

46 "[M]usical acting is embodied" because "[m]usical acting does not depend solely on brain processes, but results from structures widely distributed across the whole body," ibid., 79. For more detailed information to a 4E cognition approach to music cf. Schyff, Schiavio, and Elliot, eds., *Musical Bodies*, *Musical Minds* (note 3) and my contribution to chapter 3 of this volume, especially the section "Music, Motion, and Cognition."

47 "[M]usical acting is embedded" because "[m]usical acting arises from interactions with the social and physical environment; it is actively immersed in the world," ibid.

48 "[M]usical acting is enacted" because "[m]usical acting is sense-making, understood as an emergent, skilful 'knowing-how' that consists in interactions between the individual and its environment. Through this dynamic interplay, the individual enacts (or brings forth), its own domain of meaning," ibid.

49 "[M]usical acting is extended" because "[m]usical acting can reach beyond the boundaries of skull and skin, integrating resources internal and external to the individual," ibid.

> before it became a fanciful new paradigm of understanding our being in the world.[50]

Although he attaches great importance to the "kinaesthetic sense" in this context, he unfortunately does not go into it in more detail.[51] The only point he emphasizes is the control function of kinesthesia in order to adapt the (music-making) movements as precisely as possible to the sound ideas–a connection that Jaques-Dalcroze repeatedly points out in the context of his discussions of the "muscular sense." However, Altenmüller does not go so far as to describe an instantaneous feeling of "music as motion," which to me seems the distinguishing element of kinesthetic listening in terms of pointing out its importance not only for music practice/pedagogy, but also for the importance of movement/dance/performance within the field of rhythmics (in the sense of Jaques-Dalcroze), not least for a musically ambitious dance/performance practice/pedagogy.

The neuroscientifically trained psychologist Jay A. Seitz also refers several times to the importance of kinesthesia in his discussion of rhythmics according to Jaques-Dalcroze.[52] Even if he only vaguely suggests physiological connections pertaining to this sense, he still attributes Arnie Cox's "mimetic hypothesis"[53]–a hypothesis that (in short) states that we learn primarily through visible or invisible imitation[54]–to a combination of "kinesthetic, visual,

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50 Ibid., 80.

51 "Here, the kinaesthetic sense, which allows for control and feedback of muscle and tendon tension as well as joint positions that enable continuous monitoring of finger, hand, or lip position in the frames of body and instrument coordinates (e.g., the keyboard, the mouthpiece), is especially important." Ibid., 73.

52 The article appeared with the title "Dalcroze, the Body, Movement and Musicality," in *Psychology of Music*, ed. Society for Education, Music and Psychology Research, vol. 33, no. 4 (2005), 419–35, https://doi.org/10.1177/0305735605056155.

53 "We thus understand and relate expressively to music because of our own previous experiences in making similar sounds and engaging in similar movements as a result of correspondences (largely unconscious) arising among our kinesthetic, visual, and auditory experiences." Seitz, "Dalcroze, the Body, Movement and Musicality" (see note 52), 426. See further: Arnie Cox, "The Mimetic Hypothesis and Embodied Musical Meaning," in *Musicae Scientiae*, vol. 5 (2001), no. 2, 195–212, as well as his monograph which continues this discussion, *Music and Embodied Cognition* (see note 10).

54 See Cox, *Music and Embodied Cognition* (see note 10), 11f.: "By imitation I mean not only the overt behavior of 'monkey see, monkey do' but also covert imitation that occurs only in imagination. These forms of imitation occur whenever we attend to the behavior of others, whether in the performing arts or athletics,

and auditory experiences." Finally, he also builds a bridge between music and dance[55] based on kinesthesia: "A number of observers have suggested that movement is predominant in all forms of human intellectual activity (e.g. Rudolf Laban), […] that dance as well as many aspects of music originate in a distinct bodily kinesthetic 'intelligence' (e.g. Howard Gardner) […]."[56] Unfortunately, he does not expand on this far-reaching statement; this important remark remains "en passant."

In comparison to these music-physiological and (cognitive) psychological interpretations of Jaques-Dalcroze's conception of rhythmics, which unmistakably revolves around the phenomenon of kinesthesia in relation to a musical performance practice, Kai Tuuri and Tuomas Eerola focus on kinesthesia from the perspective of perception and explicitly speak of "kinaesthetic listening" in the context of "action-sound couplings"—again with an approach grounded in cognitive science, but now based on research into human-technology interactions.[57] Although their "taxonomy" is certainly contestable, as the individual 'taxons' overlap and cannot be clearly distinguished from one another (besides the debatable distinction between a "connotative listening" and a "denotative domain of listening"), it is nevertheless remarkable that they link kinesthetics directly to listening. Tuuri and Eerola basically distinguish between three domains for "modes of listening":

1) *an experiential domain of listening*, which is further divided into three subareas: *reflexive listening* as spontaneous, intuitive listening, *kinesthetic listening* as movement-based listening, *connotative listening* as listening that

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or in learning a particular skill from someone else's demonstration, or in merely taking an interest in what others are doing. When we imitate overtly or covertly, in effect we are responding to two implicit questions: *What's it like to do that*? And its twin question, *What's it like to be that*? We answer these questions in part by overtly and covertly imitating the behaviors of others." Cf. for this topic also my contribution to chapter 3 of this volume, especially the section "Listening to Music with our Sense of Movement—Understanding Music Kinesthetically".

55 He refers specially to rhythmic influences (but unfortunately only very unspecifically): "Ruth St. Denis, Doris Humphrey, Bessie Sch[ö]nberg, and Meredith Monk, among others," ibid., 425.

56 Seitz, "Dalcroze, the Body, Movement and Musicality" (see note 52), 431. Apart from the global reference to Rudolf [von] Laban Seitz refers here to Howard Gardners *Frames of Mind. The Theory of Multiple Intelligences* (New York: Basic Books, 1983, [2]1993).

57 Tuuri and Eerola, "Formulating a Revised Taxonomy for Modes of Listening" (see note 42). I would like to thank Jin Hyun Kim for critical discussions on this topic—far beyond her comments on this taxonomy.

tends to focus on "action-sound objects," "action-sound intersubjectivity" or "action-sound-habit[s],"

2) *a denotative domain of listening*, in which listening is either more "[sound] source oriented" or "more context oriented," and is accordingly further divided into four modes: *causal listening*, more specifically *empathetic listening* or *functional listening*, more specifically *semantic listening*
3) *a reflective domain of listening*, which either as *reduced listening* tries to refer exclusively to the music (itself) or as *critical listening* consciously takes a position on the listening event, "constantly judging the appropriateness of listening-based interpretations."[58]

For their definition of a "kinaesthetic mode of listening" Tuuri and Eerola start from a "sensorimotor view," which states that "perceptual invariants are action-dependent in a motor-specific way, and thus need to be conceived of as referring to co-occurring regularities in both motor and sensory patterns […]."[59] Against this background they conclude that "sound perception essentially has a certain haptic or kinaesthetic character, and requires sensorimotor skills."[60] They summarize:

> Kinaesthetic action-sound couplings refer to kinaesthetic affordances of a perceptual experience; an imaginative sense of motor-movements on the basis of sound perception. This gestural character of sound perception is arguably based on ideomotoric processes that manifest innate or early developed structures of kinaesthetic schemata concerning bodily movements, coordination and postures.[61] In the light of vitality

58 This "taxonomy" is based on a in-depth examination of previous approaches to distinguishing between different modes of listening (especially those of Pierre Schaeffer's and Michel Chion's contributions to this field). See further: "Revised scheme for listening modes," in Tuuri and Eerola, "Formulating a Revised Taxonomy for Modes of Listening" (see note 42), 147ff.

59 The authors refer to: Matteo Mossio and Dario Taraborelli, "Action-dependent perceptual invariants: From ecological to sensorimotor approaches," in *Consciousness and Cognition*, vol. 17, no 4. (2008), 1324–40. Cf. further for this approach: Ezequiel A. Di Paolo, Thomas Buhrmann, and Xabier E. Barandiaran, *Sensorimotor Life. An Enactive Proposal* (Oxford: Oxford University Press, 2017).

60 Tuuri and Eerola, "Formulating a Revised Taxonomy for Modes of Listening" (see note 42), 146.

61 The authors refer to: Marc Johnson, *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason* (Chicago: University of Chicago Press, 1985) and Maurice Merleau-Ponty, *Phenomenology of Perception* (translated by Colin Smith) (London: Routledge, [1945] 1962).

> affects,[62] kinaesthetic perception can also be seen as bodily resonated contours (or patterns) of feeling. These dynamic patterns may concern, for instance, sensitivity to the haptic and tactile feelings relating to movement (e.g. tensions and textures), sensitivity to gestural signatures of an interpersonal affect [...], and in general, sensitivity of coping with the physical world. It has been suggested that musical involvement in listening strongly comprises different levels of imitative effort, which relate to the experience of corporeal movement in accord with music.[63] The gestural dimension of sound perception is also discussed in the present author's previous article.[64]

It is immediately apparent, that Tuuri and Eerola do not concentrate exclusively on music produced by conventional instruments and certainly not on a movement practice intended to increase musicality (as with Jaques-Dalcroze), but rather they use their "taxionomy" to search in particular for criteria for the analysis of electronic music and sound design. Rhythmics can certainly benefit from this, as (starting from Jacques-Dalcroze) musical advancement since the second half of the twentieth century–especially in the areas of so-called new music, electro-acoustic and electronic music, as well as the emergence of sound art/sound installations and sound design–has been increasingly included in this field's teaching spectrum. Tuuri and Eerola's final summary of the intentions of their "Taxonomy for Modes of Listening" also explicitly suggests pedagogical fields of application–though they mostly omit dimensions of bodily movements in space which are ultimately the starting point for kinesthetic listening.[65]

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62 In reference to Daniel Stern, *The Interpersonal World of the Infant: A View from Psychoanalysis and Development Psychology* (New York: Basic Books, 1985) as well as Mark Johnson, *The Meaning of the Body: Aesthetics of Human Understanding* (Chicago: University of Chicago Press, 2007). On this topic, cf. also the contributions by Dorothea Weise and myself in this volume.

63 In reference to Marc Leman, *Embodied Music Cognition and Mediation Technology* (see note 12).

64 This is in reference to Tuuri, "Gestural Attributions as Semantics in User Interface Sound Design," in *Gesture in Embodied Communication and Human Computer Interaction*, ed. Stefan Kopp and Ipke Wachsmuth (Berlin and Heidelberg: Springer Verlag, 2012), 257–68.

65 At this point it should be emphasized that Dorothée Legrand and Susanne Ravn discuss in their contribution "Perceiving Subjectivity in Bodily Movement: The Case of Dancers," in *Phenomenology and the Cognitive Sciences*, 8/3, 389–408, "how they [dancers, note St.Sch.] 'listen' to the 'kinaesthetic logic' of the musculoskeletal dimension of the body to perform movement and to use movement to investigate corporeality." It is precisely this perspective that

> Besides developing the methodology for empirical studies on listening, further work could also extend to the other putative listening dimensions of attention and disposition. We also want to bring forward the idea that, to some degree, the sensorimotor integration and the imaginative nature of experiential meaning-creation provide a basis for cross-modal applicability to the presented taxonomy—beyond the auditory domain of listening. We consider that the taxonomy presented could be applied at least to the sense of touch, as many studies have demonstrated perceptual integrations between the auditory and tactile/haptic domains […]. It also intuitively seems that, for example, causal, empathetic and functional perceptions could be plausible via the sense of touch.
> Finally, we see that an ultimate practical implication of the taxonomy of listening modes concerns the awareness of our sonic interactions with an environment at the personal level. By understanding the processes of knowing about the world and how meanings become coupled with sounds, we fundamentally understand more about ourselves as a part of our natural and sociocultural environment. From an educational perspective, such understanding would permit a broader repertoire for expressing ourselves either musically or in any other sound-mediated way.[66]

Although this is not the place to expand on Tuuri and Eerola's "ideas" with concrete examples and further discussions, their explanations should nevertheless be emphasized as a stimulating starting point for research into the interweaving of sound and performative movement as a field for rhythmics—to explore perceptual phenomena praxeologically, that is, linking practice and theory to one another in a meaningful way for analysis or reflection.

Research Into the Interweaving of Sound and Performative Movement

While in music and dance ethnology, music and movement analyses have been carried out in close proximity since the middle of the twentieth century in order to analyze different dance practices on the basis of "thick descriptions,"[67] it was only in the 1990s that "choreomusical research," also known as "choreomusical studies" or "choreomusicology" became established, aiming to develop research methods for analyzing the interrelationships between music and dance in

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should also be taken into account in a research perspective that combines music and movement/dance.

66 Tuuri and Eerola, "Formulating a Revised Taxonomy for Modes of Listening" (see note 42), 150.

67 Following up on Clifford Geertz, "*Thick Description: Toward an Interpretive Theory of Culture*," in *The Interpretation of Cultures: Selected Essays* (New York: Basic Books, 1973), 3–30.

choreographies, be it from a primarily historical or (empirical) analytical perspective, but preferably on the basis of "close readings."[68] The now numerous publications within this field of research focus on the one hand on Western stage productions that were created for commissioned compositions or for pre-existing music (also primarily of Western provenance), and on the other hand on dance practices, particularly in areas of Western influence.[69] Recently, there has been an increasing tendency not to distinguish between ethnochoreomusical and choreomusical studies in order not to emphasize the separation between Western and non-Western music-choreographic phenomena, but instead to focus on overarching connections.[70] Very promising is also the increasingly growing interest of popular music studies and pop musicology in (physical) movements in the context of a performance (both on stage and in the auditorium)—and vice versa: popular dance studies concerning musical phenomena.[71] These studies in particular reveal areas that have so

68 Paul Hodgins provided a significant impetus to this branch of research, which oscillates between music and dance studies, with the publication of his dissertation, entitled: *Relationships Between Score and Choreography in Twentieth-Century Dance: Music, Movement, and Metaphor* (Lewiston, New York: The Edwin Mellen Press, 1992). Further developments were significantly influenced by Stephanie Jordan's publications, especially by the following monographs: *Moving Music. Dialogues with Music in Twentieth-Century Ballet* (London: Dance Books, 2000); *Stravinsky Dances. Re-Visions Across a Century* (Alton/Hampshire: Dance Books, 2007); and *Mark Morris. Musician, Choreographer* (Binsted/Hampshire: Dance Books, 2015). She also fundamentally addressed the methodological challenges of this field of research: Jordan, "Choreomusical Conversations: Facing a Double Challenge," in *Dance Research Journal*, vol. 43, no. 1 (2011), 43–64; and general developments and tendencies of the field: Jordan, "Choreomusicology and Dance Studies—From Beginning to End?," in *The Routledge Companion to Dance Studies*, ed. Helen Thomas and Stacey Prickett (Abingdon/Oxon and New York: Routledge, 2021), 141–56 as well as her contribution to this volume.

69 For examples in this aera cf. the contributions by Anja Arend with Mathias Geuting, Jeremy Coleman, Barbara Dobretsberger, Christoph Flamm, Stephanie Jordan, Adrian Kuhl, Daphne Leong, Amy Ming Wai Tai, Dorothea Weise, and Leila Zickgraf in this volume.

70 See further: Elina Seye and Kendra Stepputat (Guest Editors), "Choreomusicology I. Coporeality and Social Relations" as well as "Choreomusicology II. Translocalities, Local Ontologies," in *The World of Music (New Series). A Journal of the Department of Musicology of the Georg August University Göttingen*, ed. Birgit Abels, vol. 9, issues 1–2 (2020). See further the contribution by Birgit Abels in this volume.

71 See further the contributions by Florian Heesch and Daniel Suer in this volume as well as—in the opposite direction, so to speak—on musical aspects from the

far been largely excluded from choreomusical analyses, too: spontaneous dance movements (beyond specific forms or styles) to live music events. Ultimately, contemporary dance performances do not only refer to scores that require a reading understanding of music—alongside the increased use of new music since the second half of the twentieth century, up to contemporary commissioned compositions.[72] In addition, in this area—as in theater music in general[73]—music improvisations and sound design has also become widely accepted along with electro-acoustic and electronic music,[74] the analysis of which requires not only media-specific contextualizations but also (at least some) knowledge of programming technology and therefore goes far beyond the previously defined scope of "choreomusical research." And while film, TV and video productions at the interface of music and choreography have already expanded the stage perspective,[75] sound installations that specifically work with movement impulses and choreography completely eliminate the traditional separation between stage and auditorium.[76]

Against this background, it seems advisable to expand the so far established concept of choreomusical research and, with regard to these more recent tendencies, to speak of research into the interweaving of sound and performative movement, in which scholarly debate must no longer be interdisciplinary, that is, changing between individual disciplines, but transdisciplinary, that is, drawing upon different disciplines with regard to the object of investigation (as was outlined above using the example of kinesthetic listening). This field of research would focus on analytical reflection on the various phenomena surrounding music for/into/as motion—and vice versa: motion for/into/as music—both on stage and beyond.[77]

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perspective of popular dance studies: Sherill Dodds and Susan C. Cook, *Bodies of Sound: Studies Across Popular Music and Dance* (Surrey and Burlington: Ashgate Publishing, 2013), among others.

72 For an example see Gerald Siegmund's contribution in this volume.

73 See further, for example: David Roesner, *Theatermusik. Analysen und Gespräche* (Berlin: Theater der Zeit, 2019) as well as this author's contribution in this volume.

74 For an example see Gerko Egert's contribution in this volume

75 For examples see further Sophie Benn's and Leo Dick's contributions in this volume.

76 For an example see Julia Schröder's contribution in this volume.

77 In addition to Fabian Czolbe's contribution to this volume see for further collections of very different approaches to this aera: Wolf-Dieter Ernst, Nora Niethammer, Berenika Szymanski-Düll, and Anno Mungen, eds., *Sound und Performance. Positionen · Methoden ·Analysen* (Würzburg: Königshausen & Neumann, 2015); Sabine Karoß and Stephanie Schroedter, eds., *Klänge in Bewegung.*

It is precisely this expansion of choreomusical research towards a research into the interweaving of sound and performative movement that the project "Bodies and Sounds in Motion–Between Choreomusical Research and Sound Related Performance Analysis", founded by the German Research Foundation (DFG), instigated, and from which (among other projects and publications) the present anthology has emerged.[78] The results of these investigations move–within the context of music and movement pedagogy/rhythmics–in the direction of a specifically sound-performative artistic research.[79] Questions about the relationships between visible and audible motions remain key: How are music/sounds and (body) movements/dance–beyond established routines–related to one another in artistic creation (including rehearsal processes)? What kinds of models can be identified in this regard and to which aesthetic intentions do they correspond? What consequences do these results

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Spurensuchen in Choreografie und Performance (Bielefeld: transcript, 2017); as well as Patrizia Veroli and Gianfranco Vinay, eds., *Music-Dance, Sound and Motion in Contemporary Discourse* (London and New York: Routledge, 2018).

78 After my appointment as professor of transdisciplinary theories at the interface of music and movement at the University of Music and Performing Arts Vienna, I was able to transfer this project to Austria and continue it there. At this point I would like to thank the German Research Foundation (DFG) very emphatically for their generous support of my research project and for their cooperative agreement to allow me to continue this project in Austria. Another heartfelt thank you goes to the Rectorate at of the University of Music and Performing Arts Vienna (mdw) which financed translations of the German-language contributions into English.

79 For a groundbreaking concept of artistic research cf. Robert Nelson's *Practice as Research in the Arts. Principles, Protocols, Pedagogies, Resistances* (Basingstoke, Hampshire: Palgrave Macmillan, 2013); and more recently Falk Hübner, *Method, Methodology and Research Design in Artistic Research. Between Solid Routes and Emergent Pathways* (London and New York: Routledge, 2024) in addition to a flood of other publications that have appeared on this topic in recent years. Especially for collaborative constellations within this aera cf. Martin Blain and Helen Julia Minors, eds., *Artistic Research in Performance Through Collaboration* (Cham: Palgrave Macmillan as imprint of Springer Nature CH, 2020); and with a focus on choreographic/dance movement issues: Susanne Quinten and Stephanie Schroedter, eds., *Tanzpraxis in der Forschung–Tanz als Forschungspraxis. Choreographie–Improvisation–Exploration* (Bielefeld: transcript, 2016), as well as with very different approaches to practice-oriented music/movement-research the contributions by Ivo Berg, Ulrike Brand, Philip Feeney, Keir GoGwilt with Bobbi Jene Smith, Winnie Huang, Barbara Lüneburg, Hannes Pilgrim with Adrian Artacho Bueno, Leonard Horstmayer and Markus Kupferblum, Simon Rose with Ingo Reulecke, John Toenjes, and Jan Schacher in this volume.

have for perception, that is, listening and watching motion, as well as for their analysis?

In the course of the research to date, three basic aesthetic models emerge from these questions which dramaturgically refer not least to developments in media technology–from film collages and montage processes to the virtual worlds of modern computer technologies. In general, these models can be described as:

a) *interruptions* or *alienations* between music/sound and movement/dance, causing "V-effects" ("Verfremdungseffekte" after Bertolt Brecht)
b) *breakthroughs* or *estrangements* (as increased alienations) between these two arts, causing "D-effects" (experiences of difference, "Differenzerfahrungen")
c) *interdependencies* with the special case of *interferences*, changing between "EM-effects" (experiences of emergence, "Emergenzerfahrungen"), if not even "IM-effects" (experiences of immersion, "Immersionserfahrungen"), as well as V-effetcs and D-effects[80]

For example, the model of interruptions or alienations took on particularly striking forms in Pina Bausch's early dance theater productions which were obviously influenced by Bertolt Brecht's epic or dialectical theater that used the so-called alienation or distancing effect ("Verfremdungseffekte" or "V-effects"). It is obvious that Bausch dealt intensively with this impactual device, which particularly suited her early dance theater aesthetics,[81] in the course of developing the dance evening *The Seven Deadly Sins* (1976) to music by Kurt Weill. In the immediately following "play" *Bluebeard: While Listening to a Tape Recording of Béla Bartók's Opera "Duke Bluebeard's Castle"* (1977), the original music was intensely "alienated" by being stopped and repeated again and again; ultimately (as an analogy to the "drama" of the piece) it is literally

80 In my further development of Bertolt Brecht's concept of alienation effects I would like to retain the term "effects" in order to emphasize their derivation from V-effects. In principle, however, it makes more sense to speak of experiences rather than effects in order to, on the one hand, exclude any associations with mechanistically conceived effect models and, on the other hand, emphasize the perspective of perception.

81 Even in their early choreographic opera productions, the so-called dance operas, an alienating approach to the scores is noticeable. For example, in Christoph Willibald Glucks *Iphigenie auf Tauris* (1974) and *Orpheus und Eurydike* (1975), the dance melodies are choreographed remarkably sparingly (if they have not been deleted at all) in order to strongly highlight the arias through dance.

"fragmented."[82] Against this background, Bausch arrived at a collage technique (on a dance and musical level) that would remain decisive for her further productions. The resulting and often striking re-contextualization or new connotation of music pieces became a "trademark" of her "Tanztheater" and as such not only contributed significantly to her international breakthrough, but also profoundly changed the use of music in dance theater since the late 1970s.[83] However, with the advent of digital music editing programs, which Pina Bausch accepted openly in order to make the musical spectrum of her productions even more diverse, these collages changed into sophisticated montage processes in which the transitions between the decidedly very divergent music pieces are increasingly concealed. The originally intended clear breaks between selected pieces of music and their new contextualization through the choreography, which was often perceived as a provocation, was largely leveled out in these montages. In this way, music and dance (regardless of their artistic independence, which still had to be preserved) come closer together again in Pina Bausch's later pieces—right down to a fusion of music and dance with "EM-effects," if not "IM-effects," which are particularly inserted

82 See further: Petra Maria Meyer, "Der audio-visuelle Raum. Pina Bauschs Choreographie *Blaubart—Beim Anhören einer Tonband-Aufnahme von Béla Bartóks Oper 'Herzog Blaubarts Burg*,'" in *Die Kunst und der Raum—Räume für die Kunst? Raumerkundungen und Raumentwürfe in künstlerischen, kunsttheoretischen, medialen und pädagogischen Feldern*, ed. Sabine Autsch and Sara Hörnak (Bielefeld: transcript, 2010), 29-52.

83 In analogy to the (German) concept of "music theater" ("Musiktheater") the term "dance theater" should (in a broader sense) refer not only to productions that are based on Pina Bausch's aesthetics (which is just a special form of "Tanztheater"), but in general to plays in which the dramaturgy and drama (narratives in the widest sense) are largely conveyed through dance/choreography.

in centrally positioned solos.[84] They form, so to speak, a diametrically opposite pole to the alienation effects ("V-effects") of her early pieces.

The model of breakthroughs or estrangements of music and movement/dance represents an intensification of the alienation model and was unmistakably created in the spirit of postmodern aesthetics which champions experiences of difference ("D-effects").[85] In contrast, in the model of mutual dependencies (interdependencies) between music and dance, there are permanent exchange processes. The currently most prominent representative of this approach is Anne Teresa de Keersmaeker,[86] who already worked with choreographic interference in her early pieces with music by Steve Reich. In doing so, she created dance movements that "interfere" with the movements of one or more bodies as well as with (the motion of) the music.[87] Under this condition, audible or visible motions become intertwined, which in turn leads to emergence effects ("EM-effects"): new artistic figures/events arise that are more than the sum of their individual components (in this case music/sound

84 While the music collages of the early pieces were primarily constructed by the "classically" trained but ultimately comprehensive and cross-stylistic musician Mathias Burkhard (who worked for Tanztheater Wuppertal beginning in 1979), the music montages were mainly made by the sound engineer Andreas Eisenschneider (he joined Tanztheater Wuppertal in 1995). These montages can at least partly be considered independent compositions based on pre-existing musical works. For more informative see: https://www.pinabausch.org/de/person/matthias_burkert as well as https://www.pina-bausch.de/de/person/10/andreas-eisenschneider, accessed 5 September 2023. For general information on this topic, see: Gabriele Klein, *Pina Bausch's Dance Theater: Company, Artistic Practices and Reception* (Bielefeld: transcript, 2020) (German first edition: *Pina Bausch und das Tanztheater: Die Kunst des Übersetzens*, Bielefeld: transcript, 2019).

85 See for example the installation performance series *Eadweard's Ear–Muybridge extended. Environment für Tänzer, Musiker und Interface* (in four editions, which were performed between February 2017 and Oktober 2018): Penelope Wehrli and Vera Pechel, eds., *Eadweard's Ear–Muybridge extended. Envirnoment für Tänzer, Musiker und Interface. Gespräche, Überlegungen, Notizen* (Basel and Berlin: Edition Achsensprung, 2022); Stephanie Schroedter, "Permanent Negotiations of Translation Processes–Interactions and Correspondences between Music/Sound and Dance/Movement," in *Music, Dance and Translation: Intersectional Practice in Music-Dance Works*, ed. Helen Julia Minors (London: Bloomsbury, 2024), 49–62.

86 See further Daphne Leong's contribution in this volume.

87 For more information, see: Stephanie Schroedter, "Audio-visuellen Bewegungen auf der Spur. Zum Konzept eines klangperformativen Spurenlegens und Spurenlesens," in *Klänge in Bewegung. Spurensuchen in Choreografie und Performance*, ed. Karoß and Schroedter (see note 77), 25–44.

and movement/dance). On the level of perception, this can create experiences of immersion as well as difference, that is, one can be absorbed by these artistic creations just as they can be highly offputting. Likewise, in the case of interferences in which music/sound and movement/dance overlap each other synchronously and then move away from each other again, there can be a permanent oscillation between these two modes of perception–an challenging alternation between experiences of immersion ("IM-effects") and difference ("D-effects").[88]

Starting from such considerations, which also take into account intendent effects and possible perceptions, a key concern of the present publication is to take an analytical approach to the diverse interweavings of music/sounds and artistically designed movements/dance (of human and non-human bodies[89]). A decidedly broad spectrum of productions across genres and styles has been assembled–including genres that transcend stage boundaries such as installations or film, TV and video productions. First, case studies after the historical avant-garde of the early twentieth century to contemporary practices are discussed in detail (Chapter 1). Then, specifically artistic and praxeological research approaches are presented (Chapter 2). Finally, (and still including concrete examples), research methods and theories are developed, spanning the spectrum from choreomusical research to cross-cultural, performance analyzes focussing interweaving of sound and performative movement that also incorporate current media technologies (Chapter 3).

88 A further example of this is Elisabeth Schilling's choreography to the eighteen Piano Etudes of György Ligeti (composed between 1985 and 2001), premiered in 2020 with the title *Hear. Eyes. Moves*. On the basis of these compositions, Schilling developed a choreographic concept that, on the one hand, reflects the polyrhythmic structures of music in dance and, on the other hand, draws upon synesthetic associations to create dance movements (for further insights into this choreography, see my contribution to chapter 3 of this volume). Continuing on this project, she worked with students of music and movement pedagogy/rhythmics at the University of Music and Performing Arts Vienna to develop the first etude from the first book ("Désordre"), into a choreography which was performed as part of my inaugural lecture there in Oktober 2022.

89 See further the contribution by Rainer Nonnenmann in this volume.

If, as Jin Hyun Kim suggests,[90] we were to understand as "musical" all those phenomena which are based on dynamic, moving forms of vitality (with reference to Daniel Stern)[91] then dance (even without music) would be a fundamentally musical phenomenon.[92] For just as we can experience music "as" motion, we can perceive motion "as" music. A basis for this is the kinesthetic listening that Émile Jaques-Dalcroze attempted to train in the context of his concept of rhythmics as a pedagogical-didactic "method" "for life and art" (see above).

The task of contemporary music and movement pedagogy/rhythmics could be to develop an artistic research combined with a cross-generational and inclusive mediating practice at the interface of music and motion, which also theoretically reflects dimensions of our existential, yet far too little noticed, sense of movement, alias kinesthesia, as a key to comprehensive musical experiences. A challenge for this approach would be to understand kinesthesia as a basis for lifelong learning "with and through movement" (according Sheets-Johnstone) "to and through music" ("pour et par la musique" according Jacques-Dalcroze),[93] whereby music (in the sense of "musical practices" according to Kim) encompasses all phenomena that are based on dynamic, moving forms of vitality as such performative movements or dance (in the broadest sense).

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90 Jin Hyun Kim, "Musicality of Coordinated Non-Representational Forms of Vitality," in *Journal of Comparative Literature and Aesthetics*, *Special Issue–Contemplating Music Across Cultures and Contexts: Philosophical Perspectives*, vol. 46, no. 1 (2023), 59–69, open access: https://jcla.in/wp-content/uploads/2023/03/JCLA-46.1_Spring-2023_Jin-Hyun-Kim.pdf. See further the contributions by Jin Hyun Kim with Marta Rizzoneli and myself in this volume.

91 Daniel Stern, *Forms of Vitality. Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development* (Oxford and New York: Oxford University Press, 2010). For this topic cf. also note 62.

92 Analogous to this, it could also be formulated that music (even without the implementation of dance) can be understood as a fundamentally dance-related phenomenon. This analogy can also be applied to the relationship between composition and choreography. For example, compositions can be designed choreographically (as is clearly demonstrated by sound art) as well as choreographies can be based on decidedly (music) compositional processes, as seen in the work of dancer/choreographer Jonathan Burrows together with the the musician/composer Matteo Fargion (see: https://www.burrowsfargion.com with recordings under: https://vimeo.com/showcase/burrowsfargion, accessed 5 September 2023).

93 See further: Marie-Laure Bachmann, *La rythmique Jaques-Dalcroze. Une éducation pour la musique et par la musique* (Genf: La Baconnière, 1984).

Case Studies from the Historical Avantgarde to Contemporary Practices

Music, Dance, and Agency in Early French Comic Film

Sophie Benn

Abstract: *In early twentieth-century France, a trend emerged of films that relied on comic dancing, often through the portrayal of choreomania. This chapter examines the role of dance and music in such films, arguing that the medium of silent film allowed for an expansive, playful relationship between music and gesture that augmented the humor of these works. The relationship between film and comedy in early twentieth-century aesthetics is defined through reference to writings by Henri Bergson and Georg Lukács. The chapter then examines how depictions of dance could be used to generate a unique form of active viewing for unsynchronized film, building on Dominique Nasta's theory of subception, considerations of musical accompaniment in film screenings, and period accounts of filmic spectatorship. A close reading of* Le Piano irrésistible *(Gaumont, 1907, dir. Alice Guy Blaché) illustrates these arguments regarding music, humor, and disordered movement. Finally, this chapter considers the role of sound in forwarding the racial and political valences of choreomania, examining how music-dance disunion in silent film could further the subversive effects of choreomaniacal movement.*

The film *Le Piano irrésistible* (1907), produced by the studio Gaumont and directed by Alice Guy Blaché, depicts a situation that would have appealed to working-class Parisians grappling with an increasingly dense and noisy city: two movers set down an upright piano in an empty apartment, guided by its new occupant.[1] The tenant takes off his top hat and begins to play. While the movers continue their work, their motions are transformed. They no longer walk with gruff, workaday purpose, instead adopting the fancier footwork of a skip as they move chairs around (figure 1a). Downstairs, a middle-aged genteel couple are

1 An earlier version of this chapter appeared as: Sophie Benn, "'… humble marionettes / The wires of which are pulled by fate': Visuomusicality in Early French Comic Film," in *La Méthode graphique: Dance, Notation, and Media, 1852–1912* (PhD dissertation, Case Western Reserve University, 2021), 144–190.

having a meal, served by their maid. They hear the music upstairs. At first, they are outraged, but then, seemingly against their own will, all three are carried away in hypnotic delight to dance to the music (figure 1b). They rush upstairs and confront the pianist, who is oblivious to their arrival. The trio expresses their indignation at the racket, but their attitude quickly transforms and they resume their dance. The pattern repeats: soon a working class couple joins, as does a dressmaker's shop full of seamstresses. The music levels all differences of economic status, age, or sex, and each person who hears it is pulled into the same wild dance in the pianist's apartment. Even the stiff policeman making rounds on the street is unable to deny the music's pull, and executes a manic, awkward shuffling step before storming up to the apartment. At last, the pianist falls off his stool, exhausted, into the crowd—and they pull him back to the piano to compel him to play once again, now complicit and willing participants in their own choreomania (figure 1c).

Figures 1a–c: *Dancing takes over in* Le Piano irrésistible. *Creative Commons Public Domain Mark 1.0. Video stills from https://archive.org/details/le-piano-irresistible.*

The scenario of *Le Piano irrésistible* hinges on a truth that many of us hold in our bodies: that music has the capacity to make us lose control. The dancers' highly individual reactions to their own gestures, which range from anger to delight, show how bodily responses to music often transgress deeply held notions of taste or propriety. On multiple levels, the humor of the film raises questions of agency. The film not only challenges the power of the dancers to control their own motions, but also plays with the dynamics of control that are involved in the theoretical relationship between music and dance. In French comedy of the early twentieth century, agency and its loss was a common motif, and in this chapter I examine how dance films could be used as a vehicle for this preoccupation. Indeed, scenes of choreomania such as that found in *Le Piano irrésistible* were extremely common in early twentieth-century comic cinema. Film scholar Kristina Köhler identifies this film as an early iteration of a trend of films on both

sides of the Atlantic that portrayed dancing manias, later examples of which include *La Bous Bous Mie* (Gaumont, 1909), *Gavroche et la valse obsédante* (Éclair, 1913), *Turkey Trot Town* (Thanhouser, 1914), *The Epidemic* (Essanay, 1914), and *He Danced Himself to Death* (Ralph Ince, 1914).[2] I argue that silent film proved to be an exceptional medium for choreomaniacal comedy because—in tension with the dance it depicted—film separated the senses in a way that allowed for the playful reinterpretation of music-dance connections. Drawing on film scholar Dominique Nasta's concept of subception, theoretical writings of the period that address the relationship between film and its spectators, and considerations of in-theater musical accompaniment, I describe how directors could use dance on screen to conjure musical sounds in the imaginations of audience members. These speculative sounds provided an opportunity for play while also offering commentary on the forces that act on human bodies. I conclude by addressing the racialized and politicized nature of these forces, arguing that the medium of silent film could heighten choreomania's perceptual roots in pathology, racial alterity, and the subversion of hierarchy.

Bergson, Lukács, and Choreomania

In the early twentieth century, comedy was often connected to the body and its movements. In his collection of essays *Le Rire* (1900), Henri Bergson describes comedy in terms that would be familiar to the viewer of *Le Piano irrésistible*. For him, humor is rooted in the physicality of the comic subject. Even more than so than the physical form of the body, qualities of gesture are at the heart of Bergson's comedy: indeed, he argues that "if we wished to define the comic by comparing it with the body, we should have to contrast it with gracefulness even more than with beauty."[3] Ungainly movement was an integral component of Bergsonian concept of comedy because it "suddenly recalls" the viewer's attention away from the soul and toward the corporeal form. In ideal, non-

2 Kristina Köhler, *Der tänzerische Film: Frühe Filmkultur und moderner Tanz* (Marburg: Schüren, 2016), 316–23; a version of Köhler's arguments is also published in English as "Tango Mad and Affected by Cinematographitis: Rhythmic 'Contagions' between Screens and Audiences in the 1910s," in *Performing New Media, 1890-1915*, ed. Kaveh Askari et al. (Bloomington, IN: Indiana University Press, 2014), 203–14.

3 "Si donc on voulait définir ici le comique en le rapprochant de son contraire, il faudrait l'opposer à la grâce plus encoure qu'à la beauté." Henri Bergson, *Le rire* (Paris: Félix Alcan, 1900), 29; English translations are from Bergson, *Laughter*, trans. Cloudesley Brereton and Fred Rothwell (New York: Macmillan, 1911), 29.

comic circumstances, the soul was shown to be "kindled within us by a higher principle and perceived through the body, as if through a glass."[4] Humorous movements clouded this glass, asserting the body's presence in a scene. *Le Piano irrésistible*'s humor is nothing if not physical: the improvised motions of the dancers erupt spontaneously, unmoored from any notion of grace.

Creating emotional distance between the spectator and the comic subject was also crucial for Bergson's comedy. Laughter is accompanied by the absence of truly profound feeling, and "the comic demands something like a momentary anesthesia of the heart."[5] To view an otherwise serious situation as comedy, Bergson argues that we merely need to "step aside [and] look upon life as a disinterested spectator."[6] In *Le Piano irrésistible*, one of the ways this disinterestedness is generated is through a separation of dance from music: the close connection that the two art forms enjoy in live performance is severed by the lack of synchronized sound in this silent film. Without synchronized music, the dancers' gestures lack any motivation, making them appear all the more baffling, mechanical, and puppet-like. In fact, Bergson provided something of an explanation of Guy Blaché's joke *avant la chose*: "It is enough for us to stop our ears to the sound of music, in a room where dancing is going on, for the dancers at once to appear ridiculous."[7]

It is important to remember, however, that music existed in non-phantasmagorical forms in many screening venues of the period. Scholars have challenged the impression that films of this period were truly silent, and it is clear that the term "silent film" is both a misdirection and an anachronism that dates from the introduction of sound to cinema. In the first two decades of film, a variety of accompaniment practices could be employed to fill the sonic space at screenings. In many instances, in-theater musicians or sound effects outfits would use moments that suggested the presence of music to great effect, supplying some sound that heightened the representative and affective potential of the film. Film and music scholar Rick Altman identifies the piano playing in *Le Piano irrésistible* specifically as a signal that would have invited

4 "[…] allumée en nous par un principe supérieur, et aperçue à travers le corps par un effet de transparence." Bergson, *Le rire*, 51; Bergson, *Laughter*, 49.

5 "[…] pour produire tout son effet, quelque chose comme une anesthésie momentanée du cœur." Bergson, *Le rire*, 6; Bergson, *Laughter*, 5.

6 "Détachez-vous maintenant, assistez à la vie en spectateur indifférent." Bergson, *Le rire*, 5; Bergson, *Laughter*, 5.

7 "Il suffit que nous bouchions nos oreilles au son de la musique, dans un salon où l'on danse, pour que les danseurs nous paraissent aussitôt ridicules." Bergson, *Le rire*, 5; Bergson, *Laughter*, 5.

an in-theater pianist to play a cue.[8] He argues that the performance would function as a sound effect rather than an immersive musical selection. For the audience, the pianist's live performance would invoke the timbre and volume of the instrument on screen, but the music's semiotic content and "musical" meaning would be subdued, including its role in accompanying dance. Altman demonstrates this by highlighting a critique published in *Views and Films Index* which he asserts was based in the scenario of *Le Piano irrésistible*. The anonymous author opines that

> there are some films which cannot be shown to good advantage without [sound] effects [...] Anybody witnessing the portrayal of an excited musician, as he bangs in fury at a piano and storms and rages around the studio, would certainly not appreciate the film if the attacks on the keys brought forth no sound, and the statuary which is smashed falls to the floor without the necessary crash.[9]

An in-theater pianist's exact choice of music was less important than its presence as a sound object, connecting theater audiences to onscreen visuals. In the view of the critic from *Views and Films Index*, the piano music would serve an identical function to, for example, the noisy crash of a breaking statue. Due to the live music's status as a sound effect, it is possible that even basic considerations of musical meaning, such as tempo and meter, would not be held as sacred. While a piano could be an expected accompaniment throughout the film, a pianist would not expect to synchronize the pulse with the gestures of the dancers—indeed, given their erratic rhythms, synchronization would be nearly impossible. The audience would understand that the theater pianist would not necessarily be playing the same music as the pianist onscreen, and theater music would serve to augment, not ameliorate, the sense of disconnect between sound and visual.

A connection between disinterested spectators, such as those described by Bergson, and the lack of sound in silent film was articulated by others in

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8 Rick Altman, *Silent Film Sound* (New York: Columbia University Press, 2004), 209–10.

9 Anonymous, "Exhibitions with Sense," in *Views and Films Index* (4 January 1908): 11, quoted in Altman, *Silent Film Sound*, 209. Although Altman connects this quotation to *Le Piano irrésistible* in particular, the plot alluded to here is not that of the film, in which the pianist bangs at the piano only, and any property destruction occurs at the hands (and limbs) of the dancers. Perhaps the author was referring to another film or conflating *Le Piano irrésistible* and a companion film recorded on the same set in the same year, *Le Frotteur* (1907), which depicts much more violent property destruction.

the early twentieth century. In one article from 1911 (expanded in 1913), a young Georg Lukács connects an absence of human agency, presence, and soul specifically to the medium of cinema.[10] He argues that "the 'cinema' presents mere action but no motive or meaning. Its characters have mere movement, but no souls, and what occurs is simply an occurrence, but not fate."[11] This soullessness is the reason "that the scenes of the cinema are silent" rather than any technological limitations of the medium.[12] In terms that recall Bergson's understanding of the bodily dimension of comedy, Lukács links this lack of sound to a crucial quality of lightness in the cinema. The removal of the soul from film that Lukács describes means that the characters are seen as hardly human, but instead pure physical form: in the cinema, he writes, "[m]an has lost his soul; in return, however, he gains his body."[13] For Lukács, film feels the way it does "because there are only movements and actions of people—but no people" depicted onscreen.[14] Motion is of central importance in film; indeed, "[t]he essence of the 'cinema' is movement in itself, an eternal variability, the never-resting change of things."[15]

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10 Subsequent citations of this source: Georg Lukács, "Gedanken zu einer Ästhetik des 'Kino'" (1911/1913), repr. in *Kino-Schriften 3. Jahrbuch der Gesellschaft für Filmtheorie* (Vienna: Verlag der wissenschaftlichen Gesellschaften Österreichs, 1992), 233–41; English translations are from Georg Lukács, "Thoughts toward an Aesthetic of the Cinema" (1913), in *The Promise of Cinema*, ed. Anton Kaes, Nicholas Baer, and Michael Cowan, trans. Janelle Blankenship (Oakland, CA: University of California Press, 2016), 377–81.

11 "Das 'Kino' stellt bloß Handlungen dar, nicht aber deren Grund und Sinn, seine Gestalten haben bloß Bewegungen, aber keine Seelen, und was ihnen geschieht, ist bloß Ereignis, aber kein Schicksal." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 237; Lukács, "Thoughts toward an Aesthetic of the Cinema," 379.

12 "Deshalb—und bloß scheinbar wegen der heutigen Unvollkommenheit der Technik—sind die Szenen des 'Kinos' stumm: was an den dargestellten Ereignissen von Belang ist, wird durch Geschehnisse und Gebärden restlos ausgedrückt, jedes Sprechen wäre eine störende Tautologie." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 237; Lukács, "Thoughts toward an Aesthetic of the Cinema," 379.

13 "Der Mensch hat seine Seele verloren, er gewinnt aber dafür seinen Körper." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 237; Lukács, "Thoughts toward an Aesthetic of the Cinema," 379.

14 "[…] sie eben nur Bewegungen und Taten von Menschen sind, aber keine Menschen." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 235; Lukács, "Thoughts toward an Aesthetic of the Cinema," 378.

15 "[…] das Wesen des 'Kino' ist die Bewegung an sich, die ewige Veränderlichkeit, der nie ruhende Wechsel der Dinge." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 236; Lukács, "Thoughts toward an Aesthetic of the Cinema," 378.

Connecting these two sources, we can see how film in Lukács's formulation was an ideal medium for Bergsonian comedy. Both authors emphasize that there is an essential difference between the human body and the soul. The soul and its fate are the domain of serious art; the absence of these features therefore belong to comedy. As with Bergson, Lukács conceives of comedy as reliant on human physicality, which he argues is heightened in film. When depicted through the medium, "[man's] greatness and poetry lie [...] in the way in which his strength and skill are able to overcome physical obstacles. And comedy arises when these obstacles are insurmountable."[16] Lukács argues that the physicality of film renders it essentially lighthearted and inextricably linked to its silence: "[t]he *withdrawal of the word*, and with it of memory, of truth and duty to oneself and to the idea of one's selfhood renders everything light, bright, and winged, frivolous and dancing."[17] Lukács's paired observation that film is both *frivolous* and *dancing* is appropriate in light of this exploration of the early comic dance film: Lukács uses dance as metaphor for pure movement and shape, away from any logical underpinning, rendering dance a true companion to frivolity in many forms. The pairing also underscores how an emphasis on the body in film makes it an ideal medium for both the type of physical comedy that Bergson describes and for the depiction of human gesture, including dance. *Le Piano irrésistible* and other comic films that center on dancing, particularly through the portrayal of choreomania, united the features of film described by Lukács in a way that also satisfies Bergson's definitions of comedy.

Bergson also asserts that humor stemmed from qualities of movement that are mechanical or rigid because they highlight the involuntary nature of comic gesture. He dwells on this fact, framing it as a "law which seems to govern" all comic phenomena: "the attitudes, gestures, and movements of the human body are laughable in exact proportion as that body reminds us of a mere machine."[18] Like clumsiness, mechanical motions in a biological subject draw attention to

16 "[...] seine Größe und Poesie liegt hier in der Art, mit der seine Kraft aber keine Geschicklichkeit physische Hindernisse überwältigt, und die Komik besteht in seinem Erliegen ihnen gegenüber." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 237; Lukács, "Thoughts toward an Aesthetic of the Cinema," 379.

17 "Die *Entziehung des Wortes* und mit ihm des Gedächtnisses, der Pflicht und der Treue gegen sich selbst und gegen die Idee der eigenen Selbstheit macht, wenn das Wortlose sich zur Totalität rundet, alles leicht, beschwingt und beflügelt, frivol und tänzerisch." Lukács, "Gedanken zu einer Ästhetik des 'Kino,'" 240 fn 31, Lukács, "Thoughts toward an Aesthetic of the Cinema," 379; emphasis in original.

18 "Les attitudes, gestes et mouvements du corps humain sont risibles dans l'exacte mesure où ce corps nous fait penser à une simple mécanique." Bergson, *Le rire*, 30; Bergson, *Laughter*, 29.

the body, the root of Bergson's comedy. Mechanical gestures have no free will to underpin them, and he uses the metaphor of childhood games to clarify his approach toward mechanical movements. For example the Dancing-Jack, a simple marionette toy, demonstrates how humor stems from a loss of control. "All that is serious in life comes from our freedom," Bergson tells us, and to transform a situation into comedy is simply a matter of imagining "that our seeming freedom conceals the strings of a dancing-Jack, and that we are, as the poet [Sully-Prudhomme] says, '… humble marionettes / The wires of which are pulled by fate.'"[19] The Dancing-Jack amuses the child because it appears that the Jack assumes he is acting of his own volition, while the spectators and manipulators of the puppet are aware that he is not.

Choreomania was one popular manifestation of Bergson's Dancing-Jack phenomenon and certainly defines the gestures found in *Le Piano irrésistible*. Choreomania has been investigated most fully by Kélina Gotman, whose diachronic exploration of the concept folds it into older epistemic studies of madness, coloniality, and the body, including those by Michel Foucault and Edward Said.[20] Gotman frames choreomania in late nineteenth-century Europe as a "counterpart" to modernity's "brave new world," of "rapidly escalating and (it seemed to many) increasingly efficient pace." At the nineteenth century's close, scientists and medical researchers alike found renewed interest in creating efficient forms of motion that reduced extraneous energy expenditure and overwork, all while maximizing productivity.[21] In the popular press and in medical circles, choreomania came to be seen as the opposite of these idealized motions: erratic, unstable, disorderly, and pathological. As Rae Beth Gordon has demonstrated, multivalent connections exist between Bergson's conception of comedy and the disordered movements of choreomania; Bergsonian comedy was undeniably influenced by these perceptions surrounding choreomania and pathology.[22] Bergsonian comedy can thus be productively connected to

19 "Tout le sérieux de la vie lui vient de notre liberté […] Il faudrait se figurer que la liberté apparente recouvre un jeu de ficelles, et que nous sommes ici-bas, comme dit le poète, … d'humbles marionnettes / Dont le fil est au mains de la Nécessité." Bergson, *Le rire*, 80; Bergson, *Laughter*, 79.

20 Cf. for this and the following: Kélina Gotman, *Choreomania: Dance and Disorder* (New York: Oxford University Press, 2018), 30.

21 For more, see Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (New York: Basic Books, 1990); Felicia McCarren, *Dancing Machines: Choreographies of the Age of Mechanical Reproduction* (Palo Alto, CA: Stanford University Press, 2003), 9–41.

22 Rae Beth Gordon, *Why the French Love Jerry Lewis: From Cabaret to Early Cinema* (Palo Alto, CA: Stanford University Press, 2002), 14–7.

Le Piano irrésistible and films like it in two directions: first, through Lukács's comments on the representational essence of film; and second, through the subject of choreomania.

Absence Makes the Ear Grow Sharper

Scenes of choreomania seem to mimic the effects of the cinema itself, transforming the characters onscreen into Dancing-Jacks, entirely out of control of their own destinies or desires. Films that took choreomania as their subject in the early twentieth century were made all the more illogical due to the fact that the music that motivates their mania was open to interpretation: films without synchronized sound dislodged dance from the rationalizing force of music. Just as Lukács positions film as an inherently lighthearted medium, the subject of choreomania was brought to its fullest expression through silent film. Sound in these films is caught between presence and absence, a state which could be exploited by film directors and appreciated by audience members.

Certain qualities of film spectatorship that were acknowledged in the period and which have been since revisited by film scholars indicate that a spectator could imagine musical content for the characters to be dancing 'to.' Nasta has explored how film directors of pre-1915 cinematic melodramas often relied on sound to intensify the viewer's engagement through what she describes as a psychological process of "subception," or subliminal processing that serves to justify the missing sounds.[23] Nasta argues that this procedure results in an "authentic double discourse" in which sound is presented externally through visual markers that the audience processes internally as important emotional catalysts for a melodramatic narrative.[24] In Nasta's process of subception, sound activates our imaginations, deepening investment in the film. In order to complete the scene, we must imagine what the accompanying sound might be. "Even if the message is not complete" in a film, "the whole is still recognizable and can be interpreted," she argues.[25] Nasta highlights how early twentieth-century film directors valued visualized sound effects because they helped convey narrative and could invite the spectator

23 Dominique Nasta, "Setting the Pace of a Heartbeat: The Use of Sound Elements in European Melodramas before 1915," in *The Sounds of Early Cinema*, ed. Richard Abel and Rick Altman (Bloomington, IN: Indiana University Press, 2001), 95–109. Nasta had previously developed her theory of subception in *Meaning in Film: Relevant Structures in Soundtrack and Narrative* (Bern: Peter Lang, 1991).

24 Nasta, "Setting the Pace of a Heartbeat," 96–7.

25 Nasta, *Meaning in Film*, 93.

into a more active form of spectatorship with the film. Audiences of the period also acknowledged the ambiguous position of sound in films. In one 1912 article, the French critic who went by the pseudonym Yhcam argued that the "effect produced by the characters' silence" created a dynamic interchange between audience and screen, a psychological effect that was surely "one of the most fascinating aspects of the cinema-theater," and is not unlike Nasta's process of subception.[26] Yhcam focused on the lack of spoken dialogue:

> The spectator *does not perceive that the character is mute* for, through a particular form of psychism, through an auditory allusion, he senses the sentence that he himself puts in the mouth of the character. The spectator in some way hears himself speak, and the impression is all the stronger because *he himself* imagines the sentences of silent dialogue.[27]

For Yhcam, the silence of film afforded the audience an intimate and active relationship with the screened images, providing a space for them to imagine themselves in the story. Yhcam argues that this effect is central to the cinema's appeal; in fact, "there is no popular spectacle in which the imagination of the spectator plays a greater role than in the cinema-theater."[28]

While Yhcam's preoccupation is spoken dialogue and Nasta's is sound effect, *Le Piano irrésistible* demonstrates that the same principle could hold for music as well, particularly in the context of dance. The film exploits sound in the terms that Nasta describes nearly from the start, as the pianist sits down and begins to play in his new apartment. Soon, the film cuts to the apartment of the neighbors. While we no longer see the pianist playing, we can intuit that he has not stopped due to the enraged gestures of the neighbors. They look at the ceiling, and we know that they are *downstairs* from him. When they begin to dance, sound is still removed: we do not hear it, nor do we see its source, but the presence of dancers is enough for us to understand that the music must be continuous throughout the scene. When the dancers go upstairs to confront the pianist, they locate the source of the sound, and the film's audience witnesses the unification of the dancers with the source music, providing a

26 Yhcam, "Cinematography," in *French Film Theory and Criticism: A History/Anthology 1907–1939*, vol. I, ed. and trans. Richard Abel (Princeton, NJ: Princeton University Press, 1988), 69.

27 Ibid.

28 Ibid.

visual metaphor for the inviolable bond between music and dance that drives the work.[29]

Because of the likely presence of in-theater accompaniment and the subceptive potential of the motions of the dancers and pianist onscreen, the presence of *two* musical sources remains an important possibility to consider. It is my contention that these two musics may not have been the same, which could result in wondrous, playful ambiguity. In instances where musical and danced pulses did not align, audiences would have been confronted with two competing senses of musical time. For audiences who were experiencing subception, the selection performed in the theater could contradict the music that they supplied cognitively. In-theater sound effects or music employed to accompany screenings of *Le Piano irrésistible* thus further complicate questions of control and agency.[30] The competing temporalities provided by the in-theater musicians, the onscreen dancers and pianist, and the audience's subceptive reactions demonstrate the complex dynamics of power that always exist between music and dance. Does the onscreen pianist manipulate the in-theater musicians? Do the dancers regulate the audience? Does the audience control the dancers? A circular, recursive chain of agents—or lack thereof—contributes to the scene's humor. Every character, audience member, and musician becomes one of Bergson's marionettes, indebted in understandings of pulse and temporality to some external element that is out of their control.

The Pianist and the Dance

In *Le Piano irrésistible*, both the comedy of the situation and the hypnotic power of the music are augmented by the fact that the viewers are unable to hear what the pianist is playing. They must rely on the visual cues provided by the film and any in-theater accompaniment to decode what kind of music would hold such a forceful sway over the inhabitants of the building. However, the music implied by the visual content of the film is open to interpretation. Throughout *Le Piano irrésistible*, Guy Blaché guides us through an instance of subceptive play, providing multiple solutions at once to the riddle of the pianist's musical choices. These competing interpretations would also be available to any

29 My thanks go to Wayne Heisler, who so eloquently articulated the significance of this feature after my presentation of this material at the annual meeting of the American Musicological Society in 2020.

30 For more on choreography, agency, and control, see Gotman, *Choreomania*, especially 15–20, 196–8, 271–84.

in-theater musicians, who may see themselves as providing some insight into the pianist's music even if exact pulse or musical phrase were not synchronized. This ambiguity is generated by two contradictory elements in the film: the visual appearance of the pianist, and the wild, uncontrolled reactions of the dancers.

The music that robs the dancers of their autonomy emanates from the actions of a single figure, the pianist, and his appearance may provide some clues in filling in the musical content of the film. In the establishing shot, the pianist carefully removes a large, imposing top hat from his head and places it in pride of place on the piano's lid. The hat will proceed to oversee the musician's actions, marking his piano as a space in which the hushed formality of the concert hall reigns. The top hat also suggests what we will soon discover: that this pianist is no mere café entertainer but instead is a magician, whose mysterious power comes from his musical talents. The man is a curiosity in other ways too, and is dressed in a formal, somewhat old-fashioned style. He has an air of a solitary genius about him, and clearly wants to be left alone at his work. As he continues to play, the pianist remains wrapped up in his art, oblivious to the destruction building about him once the dancers begin to invade his apartment. In form, dress, and action, the character most resembles Franz Liszt, and an anonymous advertising poster for the film further exaggerated this visual similarity by emphasizing the character's windswept hair, large bow, and aquiline nose (figure 2). In particular, the poster illustrator seems to have taken a cue from Joseph Danhauser's well-known 1840 painting of Liszt surrounded by luminaries of French nineteenth-century salon culture (figure 3). The poster foregrounds the top hat, increasing its size and placing it at the center of the piano, creating a visual rhyme between this object and the bust of Beethoven in Danhauser's painting. The character could well be Liszt himself at the height of his powers, transported through the magic of film to contemporary Paris before the audience's eyes.[31] As a man who in his lifetime was known for his almost supernatural musical talents—and the ability to induce his own form of mania in audiences—Liszt is an apt choice as a model for this character. We can also easily imagine what kind of music might be conjured by such a figure: likely a piano showpiece of stunning virtuosity based in dance rhythms such as a waltz or, as he appears to play in duple meter, a galop or an excerpt from one of his *Rhapsodies hongroises*.

31 Here I am thinking of Mary Ann Doane's arguments regarding the cinema's unusual relationship with time and the medium's function as an archive or other means to access the past. Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002).

Figure 2: *Advertising poster for* Le Piano irrésistible. *Private Collection. Public Domain.*

Figure 3: *Josef Danhauser*, Liszt am Flügel *(1840). Alte Nationalgalerie Berlin, FV42. Creative Commons Public Domain Mark 1.0, https://id.smb.museum/object/968187*

But other clues in the film suggest that the music performed is in an entirely different style—something more modern, such as ragtime. The step vocabularies of the dancers in *Le Piano irrésistible* are improvised, highly variable, and intentionally erratic. They also borrow some of the characteristic gestures of the cake walk, the first dance associated with ragtime to achieve popularity in France, having reached Parisian audiences in late 1902.[32] For example, the elderly couple who begin to dance first prominently suspend their arms in front of the body, in a gesture that signals the loss of control (see again figure 1b), as does the woman in the second couple to dance. This same gesture was widely known as a signature motion of the cake walk—for example, it was a central feature of the dance as described by Gabriel Astruc in November 1902:

> The dancer launches his body forward and turns his shoulders back, curving like a bent bow. He raises his arms horizontally, folds them in on themselves and simultaneously shakes them in jerks. Posed like that, with unstable balance, he throws one foot and then another out in front of him in alternation while raising the knees as high as possible.[33]

In addition to precise choreographic alignment with the cake walk, considerations of class and age may help decode the scene: while the first couple, middle-aged and financially secure, are outraged by the music's intrusion into their lives, the young working-class seamstresses smile in delight as they begin to move. Perhaps the sounds are more palatable to a younger, female, and poorer audience, which would accord with ragtime's associations with popular culture, vulgarity, and the lower classes.

As Gotman describes, ragtime and its related dance crazes, from the cake walk to the animal dances, were central to the discourse surrounding choreomania in the early twentieth century both on and off the cinematic screen.[34] In France, the cake walk was often associated with *danses épileptiques* that

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32 There is a robust literature on the cake walk craze in France; for example, see Jody Blake, *Le Tumulte Noir: Modernist Art and Popular Entertainment in Jazz-Age Paris, 1900-1930* (University Park, PA: Pennsylvania State University Press, 1999); Davinia Caddy, "Parisian Cake Walks," in *19th-Century Music*, vol. 30, no 3 (Spring 2007): 288–317; Rae Beth Gordon, *Dances with Darwin, 1875-1910: Vernacular Modernity in France* (London: Routledge, 2009), 145–97.

33 "Le danseur lance le corps en avant et rejette les épaules en arrière, prenant la courbe d'un arc bandé. Ce pendant, il élève les bras horizontalement, les tient repliés sur eux-mêmes et les agite simultanément par saccades. Ainsi posé, surveillant son équilibre instable, il lance alternativement un pied, puis l'autre, au devant de lui en haussant le genou autant que faire se peut." Surtac [Gabriel Astruc], "Le 'Cake-Walk,'" in *Le Figaro* (15 November 1902): 1.

34 Gotman, *Choreomania*, 271–97.

had been popular on café-concert stages in decades prior, which were in turn influenced by research into hysteria and other choreic diseases by doctors such as Jean-Martin Charcot. This gave the ragtime fad a pathological flavor for many French audiences.[35] Due to its origins in the dances of enslaved people on plantations in the American South, the cake walk was also highly racialized. Gotman describes how these associations merged with the medical connotations of the *danses épileptiques* to create a popular understanding of the new dance craze—and all the ragtime dance crazes to follow—as a "popular and social plague emphasizing youth culture and the contamination of black (as well as occasionally Latin) moves among primarily white people," signaling a "racially marked hyper-locomotion and extreme gregariousness."[36] Depictions of choreomania often used the dancing body to both comic and subversive ends at the same time in ways that relate to choreomania's racialized and politicized connotations that extended beyond its associations with ragtime specifically. Drawing on the metaphors of contagion described by Barbara Browning[37] and Gordon's work on pathological dancing in French culture, Gotman describes how the end of the nineteenth century saw an increased political charge to choreomania: that "[c]horeomaniacs were increasingly described as the social under-class, restless and uncontained" in ways that also played into common European anxieties concerning race and colonial control.[38] Political and hierarchical subversion abounds in *Le Piano irrésistible*: for example, the head seamstress is enraged by the effect the music has on her delighted workers, a representation of choreomania's power to subvert capitalist production. And when the policeman begins to dance on the street, a symbol of urban control and force is disarmed by the music, rendered just as silly and useless as any of the film's other marionette-dancers.

The contradiction between the expected musical output of the Lisztian man and the modern choreic reactions of the dancers adds to the hilarity of the scene by creating further layers of dislocation and the subversion of expectations. By leaving the film open to an ambiguous musical meaning, the lack of synchronized sound removes a clear sense of musical agency from the dancers' motions, heightening choreomania's qualities of illogicity and disorder. Subception and live screening accompaniment could attempt to resolve this

35 To this point, Gotman is mobilizing more research from Rae Beth Gordon: Gordon, "Les rythmes contagieux d'une danse noire: Le cake-walk," in *Intermédialités* 26 (2010): 57–81; see also Gordon, *Dances with Darwin*, 14–97.

36 Gotman, *Choreomania*, 275.

37 Barbara Browing, *Infectious Rhythm: Metaphors of Contagion and the Spread of African Culture* (New York: Routledge 1998).

38 Gotman, *Choreomania*, 196.

disjunction, but the contradictory cues in the visuals make any one interpretation unable to mitigate the tension between the pianist and the dance. This music-dance disunion furthers the illogical, subversive implications of choreomaniacal movement, and *Le Piano irrésistible* also politicizes the dealignment of music and dance by associating it with choreomania: freed from the regulative logic of a musical frame, dance becomes even more anarchic and able to wreak havoc on the structures of society.

Le Piano irrésistible ought to be viewed as one of a larger matrix of choreomaniacal and cake walk films that proliferated in the first decade of the twentieth century on both sides of the Atlantic—some of which offer alternate windows into the connections between dance, music, and disorder in ways that speak directly to the racialized associations of dancing manias. Many feature dancers in blackface such as *Le Cake-walk infernal* (Star, 1903), while *The Dancing Nig* (Essanay, 1907) largely shares the plot of Guy Blaché's film and features a stock character drawn from the minstrelsy tradition.[39] Other films of the period also depict a musician with the power to induce states of choreomania much like the pianist in *Le Piano irrésistible*. For example, we can look to *The Hypnotist's Revenge* (American Mutoscope and Biograph, 1907), for which Gordon provides a synopsis: a hypnotist, intent on controlling a difficult man, plays violin at a dance, and the man

> falls to the floor, jumps up and down like a monkey, lies on his back and rises kicking in an epileptic version of a Russian Cossack dance, leaps and jumps like a caf'conc' performer, grabs a woman, then a valet, whom he spins wildly around by the waist, their feet off the ground, finally dragging a man onto the floor, until the horrified spectators are turned into "wild people."[40]

Rather than viewing any of these dance films as truly silent, it is instructive to examine the role of generative sound in them as the source of their chaotic effect. By forcing dance apart from music and inviting the active participation of both in-theater musicians and audience members, these films challenge notions of agency and control in ways that mimic the disorderly, subversive movements of the dancers themselves.

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39 For more on *The Dancing Nig* and other films with plots that revolved around sound from 1907 and 1908, see Altman, *Silent Film Sound*, 211–4.

40 Gordon, *Why the French Love Jerry Lewis*, 157.

Forced Freedom
Choreography and Music in Igor Stravinsky's Early Ballet Compositions

Christoph Flamm

Abstract: *The relationship between choreography and music in Stravinsky's three early ballets, L'Oiseau de Feu, Pétrouchka, and Le Sacre du printemps, changed dramatically within a few years: from the pedantic mimicry of body movements in the fairy-tale ballet to the grotesque psychograms of the fairground puppets to the "undanceable" rhythms of barbaric prehistory. This development was partly due to the changing interplay of the actors involved in Dhiagilev's Ballets Russes, especially Fokin and Nijinsky. At the same time, however, it reflects general tendencies of avant-garde dance art in the early twentieth century, of which Stravinsky's ballets are at the forefront. Using the original choreographies as examples, this contribution examines how the coordination of music and movement was radically transformed.*

There is no question that Igor Stravinsky not only significantly enriched the dance theater of the twentieth century, but also fundamentally transformed it. However, as his fame grew, he increasingly absolutized the importance of the music in his ballets, and at the same time relativized or completely devalued the interplay of the arts in these productions. The latter issue concerns in particular the multi-layered and finely tuned relationship between subject and narration, between soloists and groups in the choreography, and between set and direction, which also included dynamic lighting direction. Stravinsky's paradoxical view of reality (or his liberal attitude towards truth), as revealed in his own statements, would be a separate and rather complex topic. Regardless of this, the question arises as to the extent to which dance, or—more generally speaking—to what extent physical movement is inscribed in the scores of Stravinsky's music? To what extent does the choreography react to his music—or vice versa the composer to the body movements? To answer these questions, this contribution examines his first ballets *L'Oiseau de feu* and *Pétrouchka*, followed by

a brief overview of *Le Sacre du printemps*, in order to outline the development of the relationship between score and movement within a few years, and how both music and dance increasingly emancipated themselves from their traditions. Although these facts are not unfamiliar, focusing on central aspects of this interplay will hopefully stimulate further reflection.

L'Oiseau de feu

Michel Fokine (Mikhail Fokin), the creative center of *L'Oiseau de feu*—and as Ivan Tsarevich, also one of the protagonists in the premiere—gave an impressive account of the ballet's creation in his memoirs.

> I have staged many ballets since "The Firebird," but never again, either with Stravinsky or any other composer, did I work so closely as on this occasion. […] I did not wait for the composer to give me the finished music. Stravinsky visited me with his first sketches and basic ideas, he played them for me, I demonstrated the scenes to him. At my request, he broke up his national themes into short phrases corresponding to the separate moments of a scene, separate gestures and poses. I remember how he brought me a beautiful Russian melody for the entrance of the Ivan Tsarevich. I suggested not presenting the complete melody all at once, but just a hint of it, by means of separate notes, at the moments when Ivan appears at the wall, when he observes the wonders of the enchanted garden, and when he leaps over the wall. Stravinsky played, and I interpreted the role of the Tsarevich, the piano substituting for the wall. I climbed over it, jumped down from it, and crawled, fear-struck, looking around—my living room. Stravinsky, watching, accompanied me with patches of the Tsarevich melodies, playing mysterious tremolos as background to depict the garden of the sinister Immortal Kostchei. Later on I played the role of the Tsarevna (Princess) and hesitantly took the golden apple from the hands of the imaginary Tsarevich. Then I became Kostchei, his evil entourage—and so on. All this found most colorful interpretation in the sounds that came from the piano, flowing freely from the fingers of Stravinsky, who was also carried away with this work.[1]

Already in an interview from 1910, Fokine recounted:

> The Firebird was created by him and me hand in hand. Without one harassing the other on their own ground, we wrote every bar together. The result was an astonishing stringency, the complete agreement of the music with the meaning of the work. At the same time, the composer's dependence

1 Michel Fokine, *Memoirs of a Ballet Master*, trans. Vitale Fokine, ed. Anatole Chujoy (Boston and Toronto: Little, Brown and Co, 1961), 161.

> on the ballet master did not in the least affect the creative freedom of the musician nor the quality of the music itself.[2]

Thus, music was still essentially a contribution to the choreography, but no longer in the traditional sense of fulfilling a prefabricated *minutage*, such as Pyotr Tchaikovsky and Alexander Glazunov had still received. Instead, choreography and music now were created simultaneously in a collaboration in which both participants reacted to each other. The result was a seamless correspondence between the action on stage and the sound design in the orchestra pit. This was so important for Fokine because it was the only way he could overcome the traditional narrative patterns in the story ballet, in terms of both the solos and the groups. In *L'Oiseau de feu* he obviously wanted to explore the newly discovered potential of dance narrative on all levels. This already began with the pantomime:

> The Tsarevich did not say—as was customary in ballet tradition: 'I have come here.' Instead, he just entered. The princesses did not say: 'We are having a good time.' Instead, they had a good time, in reality. King Kostchei did not say: 'I will destroy thee,' instead, he attempted to turn the Tsarevich into stone. The fairest princess and the Tsarevich did not use sign language to express their love. But from their positions and looks, from their longing for each other, from the very fact that Ivan wrenched at the gates in order to follow her and from her tearful pleading with him in trying to save him from King Kostchei—from all this one could conclude and feel their mutual love. In short, no one had to explain anything to anyone else or to the audience; everything was expressed by action and dances. [footnote:] […] I use storytelling but not narration. There is no conversation in *The Firebird*. Ivan explains nothing. This is a vital difference between the old and the new ballet.[3]

The bumpy rehearsal phase before the premiere shows how unusual the ballet music that resulted from this creative teamwork was. After Maria Kshessinskaya had long before cancelled her participation in the 1910 Paris season, Anna Pavlova also dropped out as the Firebird: "I shall never dance to such nonsense!"[4] Finally, Tamara Karsavina took over the title role.

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2 A.P., "Simfoniya v khoreografii," in *S.-Peterburgskiye teatral'nïye novosti*, 10 September 1910, as cited in Igor Stravinskiy, *Perepiska s russkimi korrespondentami. Materialï k biografii*, ed. Viktor Varunts, vol. I: 1882-1912 (Moscow: Compozitor, 1989), 454.

3 Fokine, *Memoirs of a Ballet Master*, 168–9 (with footnote).

4 Anna Pavlova, as cited in Joni Lynn Steshko, *Stravinsky*'s Firebird: *Genesis, Sources, and the Centrality of the 1919 Suite* (PhD dissertation, Los Angeles, University of California, 2000), 53.

There is a photo of a rehearsal phase with Stravinsky sitting and Fokine standing at the piano and Tamara Karsavina in the center, it appeared barely two weeks before the premiere.[5] Since Karsavina is dancing here in a tutu, the reference to *L'Oiseau de feu* is not recognizable. The well-known Firebird's costume designed by Leonid Bakst—with its oriental, fairy-tale and erotic elements—rejected all traditional notions of ballet dress, just as the dance movements of the role remained only partially connected to the academic tradition. Fokine explains:

> The dance of the Firebird I staged on toe and with jumps which predominated in the choreography. The dance was highly technical but without *entrechats*, *battements*, *ronds de jambes* and, of course, without a turnout and without any *preparations*. The arms would now open up like wings, now hug the torso and head, in complete contradiction of all ballet arm-positions. In the ornamental arms of the bird, as in the movements of Kostchei's servants, there was an Oriental element.[6]

Fokine had already tried out such flowing erotic movements the previous year in the ballet *Cléopâtre*. In *L'Oiseau de feu*, Fokine retained the classical pointe dance, which had dominated the appearance of the prima ballerinas as a stereotype, only for the title character. Here, however, the pointe technique was no longer an end in itself, but was given scenic significance: Tamara Karsavina had to make the title character float, all the more so since the stage machinery of the Paris Opéra did not allow any real flights.

In retrospect, Tamara Karsavina confessed in an interview about the rehearsal phase, that grasping the musical structures initially caused her great problems, and that she only reached her goal thanks to Stravinsky's patience. The surviving handwritten rehearsal plan for the Paris premiere in 1910 shows that Fokine began with the most conventional element: the round dance (*Chorovod*) of the princesses.[7] The "general dance" was rehearsed last, i.e. the *Danse infernale* as a dance culmination with special challenges. The surviving vignettes[8] (figure 1a und 1b) show how Fokine finds symmetrical geometric arrangements and spatial movement patterns in the group dance of the princesses, which in turn unfold narrative potential. For example, the princesses first separate Ivan and the beautiful Tsarevna, that is, the future

5 See photograph in *Comoedia illustré*, 15 June 1910.

6 Fokine, *Memoirs of a Ballet Master*, 168.

7 See reproduction in Claudia Jeschke, "Russische Bildwelten in Bewegung—BewegungsTexte," in *Schwäne und Feuervögel. Die Ballets Russes 1909-1929*, ed. Claudia Jeschke and Nicole Haitzinger (Leipzig: Henschel, 2009), 58–89, 71.

8 Cf. ibid., 68–9.

bride and groom, starting with their floor movements, in order to finally let the groom get through to his bride. Stravinsky's music here forms a closed three-part form with a folk song melody as the main material, which runs through in a steady, calm pulse, thus leaving the choreographer every freedom.

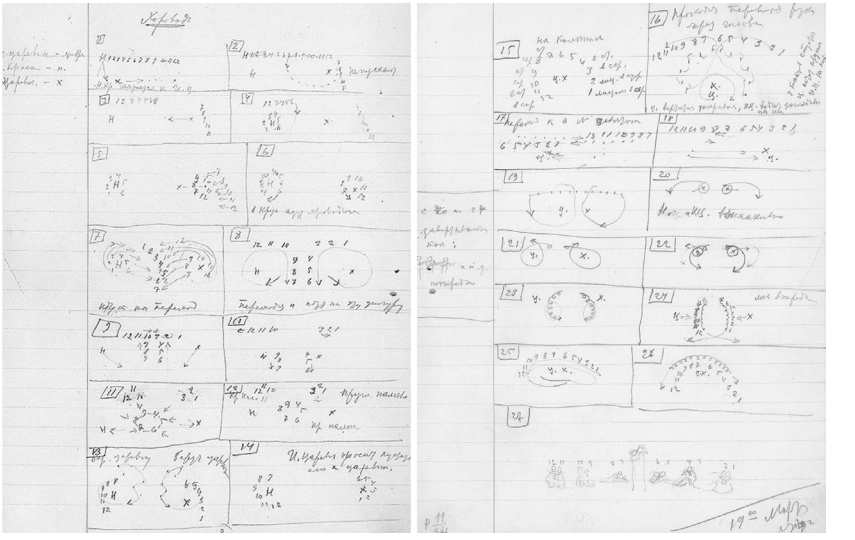

Figure 1a and b: *Michel Fokine*, Firebird, *choreographical sketches for the Khorovod of the Princesses. St. Petersburg State Theatre Library, Archiv M. M. Fokina, R11/34 © St. Petersburg State Theatre Library (with kind permission)*

The barefoot dancing of the princesses is almost certainly a reflection of the expressive dancing of the American Isadora Duncan, who performed in St. Petersburg from December 1904 and undoubtedly also inspired Fokine.[9] Nevertheless, Fokine always dismissed direct influences and emphasized the priority of his dance reforms. In fact, Duncan's vocabulary would not have been sufficient to represent stories like those of *L'Oiseau de feu* in dance—not least because she did not even intend to create such narratives.

9 Cf. Elizabeth Souritz, "Isadora Duncan and Prewar Russian Dancemakers," in *The Ballets Russes and Its World*, ed. Lynn Garafola and Nancy van Norman Baer (New Haven: Yale University Press, 1999), 97–115; Galina Dobrovol'skaya, *Michail Fokin. Russkiy period* (St. Petersburg: Giperion, 2004), 39–71.

Fokine himself commented: "The princesses danced barefoot with natural, graceful, soft movements and some accent of the Russian folk dance."[10] In order to enhance the dance expression, the dissolution of classical poses and figures went hand in hand with the avoidance of what might be called speaking gestures. The movements of the Russian figures were linked to free expressive dance as much as to traditional folk dances. The dance design of the title figure was characterized by the novel sensuality of flowing orientalism, as well as by those expressive elements of classical dance that serve the illusion of floating. In this respect, both the solo dance and the ensemble designs combine tradition and departure.

The grotesque physicality of the evil Kastschei and his monsters, on the other hand, offered a welcome break with tradition. Of the multitude of creatures in Kastschei's entourage, including monsters with two heads, unfortunately only very few illustrations have survived. Only Kastschei himself is frequently depicted in contemporary sources. In one of those very rare photographs, Kastschei's servants resemble a cheerful carnival party rather than a horde of terrifying monsters.[11] The entourage in the illustration of a performance at London's Covent Garden in 1912, drawn by the artist Fortunino Matania for the journal *The Sphere*, has a similar effect.[12] There, the dramatic moment is captured when Ivan Tsarevich (now Adolph Bolm instead of Fokine) throws up the egg with the soul of the immortal Kastschei (now Enrico Cecchetti instead of Alexis Bulgakov) in order to break it. Except for the missing firebird, the protagonists and the groups of monsters, princesses, Kastschei's wives, as well as the rarely noticed Indian women, and presumably also the knights or princes who have apparently already come to life, are depicted in detail here. This drawing is probably the only existing document that gives an overall impression of the original production.

The appearance of the monsters is, of course, not just a question of décor. Fokine broke new ground with the choreography:

> The evil kingdom was built on movements at times grotesque, angular and ugly, and at times comical. The monsters crawled on all fours, and leaped like frogs. Sitting and lying on the ground, they stuck the palms of their hands out like fins, now from under the elbows, now from under the ears, tying their arms into knots, rolling from side to side, jumping in squat positions, and so forth. In short, they did everything which twenty years later

10 Fokine, *Memoirs of a Ballet Master*, 167.

11 See photographs in *Comoedia illustré*, 15 July 1910.

12 See reproduction in Jane Pritchard, ed., *Dhiagilev and the Golden Age of the Ballets russes* (London: V & A Publishing, 2010), 176.

> appeared under the label of 'modern dance,' but which, at the time, seemed to express most adequately nightmarish horror and hideousness.[13]

Fokine invented spectacular "diabolical" jumps for Kastschei's servants, which were performed from the height of the castle hill, with twists in the air with bent legs, and appeared as dangerous as they were effective. Stravinsky's music picks up directly on Fokine's imagery, and not just the general grotesque of the monster procession with hollow xylophone sounds. The tritone repetitions, sharpened by acciaccaturas, could even be heard as a kind of croaking. Such musical frogs would then presumably be a direct reaction of the composer to the choreographer's visual imagination.

This brings us to the final point *of L'Oiseau de feu*: musical mimicry. According to Richard Taruskin, the real musical innovation of the ballet was the continuous orchestral recitative,[14] which allowed the fairy tale narrative to unfold like a film without cuts. As already mentioned, Fokine's memoirs reveal that the choreographer meticulously pantomimed each scene for the composer and that Stravinsky divided his musical ideas into suitable pieces, thus adapting his material to the scenic events in a practically tailor-made manner. Two examples of such "Mickey-Mousing," as it is called in film studies, may suffice. When Ivan first approaches the playing princesses, the long phrase of his recognition melody is broken down, as before, into short pieces, between which the reactions of the princesses take place: first a frightened flinch as a rapid chromatic 32nd run in the cellos over a nervously quivering organ point, then a shy, benevolent bow in the violins and violas. The moment when Kastschei tries to turn Ivan into stone is even more musically vivid. In the process, he utters his demonic curse three times, but on the third occasion Ivan begins to wave the talismanic feather he had received from the firebird. Every single one of these movements is precisely coordinated with the music. This degree of precise coordination marks it as a real novelty in ballet history.

Less comprehensible for us today is the confusion that Stravinsky's *Danse infernale* caused. Serge Grigoriev remembers:

> From the moment they heard the first bars ["Danse infernale"] the company were all too obviously dismayed at the absence of melody in the music and

13 Fokine, *Memoirs of a Ballet Master*, 167.

14 Richard Taruskin, *Stravinsky and the Russian Traditions*, vol. 1: A *Biography of the Works Through Mavra* (Berkeley and Los Angeles: University of California Press, 1996).

> its unlikeness to what they were used to dancing to at the *Mariinsky*. Some of them indeed declared that it did not sound like music at all.[15]

The completely even rhythm, pulsating like a racing heartbeat, cannot possibly be perceived as "undancing" by anyone who grew up with rock and pop, regardless of all the syncopation. It was probably the gestural wildness of the tension unleashed that broke with conventional aesthetic patterns to such an extent that incomprehension spread among the dancers. In the end, however, it was precisely this tumultuous dance with its abrupt ending in which everyone falls flat to the floor, that regularly provoked the audience to break out in applause at the end of the scene. It was to find an echo in *Pétrouchka* in the "Dance of the Coachmen and Stablemen."

Fokine defended *L'Oiseau de feu*'s fundamental principle of dance movements motivated directly by the scene against his critics. At the same time, however, it meant a new shackle: the choreography was symbiotically bound to the scenario, and the music symbiotically bound to the choreography. Therefore, Fokine, when seeing subsequent foreign productions, perceived every deviation, no matter how small—be it from the original set, or from the choreography—as a violation of the original intention.[16] *L'Oiseau de feu* as a total work of art only functioned for him in its most original conception, elaborated down to the last detail.

Pétrouchka

In *L'Oiseau de feu*, Fokine essentially specified what the composer was to translate into music. However, in *Pétrouchka*, the entire choreography was created after Alexandre Benois had fixed the plot in close consultation with Stravinsky. Stylized puppet movements had to be found for the three protagonists that corresponded to the psychology of the characters. Furthermore, the gigantic crowds of people in the fairground scenes had to be coordinated. Finally, Stravinsky's now very often asymmetrical rhythms posed a particular hurdle for the choreography.

For the group dances of the wet nurses, coachmen and stable hands, Fokine essentially made use of folkloric dance patterns that matched the historically precise costumed social types or occupational groups. These dances are

15 Serge L. Grigoriev, *The Diaghilev Ballet 1909-1929*, trans. and ed. Vera Bowen (London: Constable, 1953/2009), 32.

16 Cf. Fokine, *Memoirs of a Ballet Master*, 175.

choreographically among the most conventional elements of *Pétrouchka*,[17] but are at the same time also among the most effective, not least due to the power of Stravinsky's "beat." Fokine and Alexandre Benois agreed on the basic aesthetic stance, namely the naturalistic reproduction of reality. Their meticulousness had its most important model in the performance style of the Moscow Art Theater founded in 1898 by Konstantin Stanislavsky, of which Benois became director in 1909. Like Fokine and Benois, Stanislavsky strived for "the creation of historical illusion based on direct observation of reality combined with historical reconstruction."[18]

The colorful mass of fairground visitors required a new approach. For the realistic treatment of the corps de ballet, Fokine was already able to draw in part on predecessors such as Alexander Gorsky.[19] But whereas Stravinsky could episodically highlight individual voices from the acoustic tangle of the fairground, combine them in counterpoint and also bring them into the foreground in complete isolation, the choreographer was confronted with a crowd permanently present on stage.

> If I had kept close to the interpretation of the rhythmic and other qualities of each phrase as it is done by the orchestra, it would have resulted in my having a tediously static crowd on stage instead of a gay and merry one. Why? Because Stravinsky had all the described characters appear consecutively, while on stage I had them all simultaneously. For example: when the drunks enter on the stage, no characters, other than they, are interpreted in the music—without regard to the mass of other people I have on the stage at that moment.[20]

Fokine's solution was, in part, to let the extras more or less improvise. Stravinsky was dissatisfied with this.[21] Yet, that his score would provide, as he claimed, clear movement patterns for the crowd—which Fokin did not implement—is not true. Stravinsky's collage does sometimes combine two or even three elements of the stage action, which is spectacular enough in terms of music history. However, it cannot truly depict a scenic totality. The repetitive change of triadic chords, inspired by the accordion, serves as a musical "foundation," which, however, is not applied everywhere. Where could such a mass choreography have

17 Cf. Tim Scholl, "Fokine's Petrushka," in *Petrushka. Sources and Context*, ed. Andrew Wachtel (Evanston: Northwestern University Press, 1998), 41–50, 47.

18 Lynn Garafola, *Diaghilev's Ballets Russes* (New York and Oxford: Oxford University Press, 1989), 19.

19 Cf. ibid., 21.

20 Fokine, *Memoirs of a Ballet Master*, 189.

21 Igor Stravinsky, *Chroniques de ma vie* (Paris: Denoël & Steele, 1935), 59–60.

led in the first place? As Fokin has noted, uniform movements are inappropriate to the collage idea of the whole fairground bustle, but individual ones in such large numbers would require a rather utopian amount of rehearsal. Advising the extras hired for the crowd scenes to improvise was a less-than-ideal solution to create the illusion of an uncoordinated crowd of individuals—but probably more convincing than the amalgamation of a hundred individual choreographies which the audience would no longer be able to perceive.[22]

Additional difficulties arose because Stravinsky's metrics left the familiar paths. The irregular metrical structures of the first tableau, basically connected to the imitation of the fairground barker (*balaganny ded*), lie above a continuous movement of the accordion sounds, and can thus be covered up dance-wise. The choreography threatened to fail, however, where the dancers had no such steady basis, yet could not internalize the asymmetrical counting patterns. Fokine from his perspective of practical choreographic realization, considered some rhythmic complexities unnecessary, namely where they were not psychologically motivated, as in the part of Petrushka. Whereas the "rhythmic disruption" in the first tableau fulfilled the representational purpose of a colorful crowd, he felt "that not until the general dance begins, when everyone is united by one rhythm, should this rhythm go into its repetitious movements, emphasizing the same over and over again."[23]

This is precisely what the "Dance of the Coachmen" vividly demonstrates. Even more than in the *Danse infernale* from *L'Oiseau de feu*, a continuous pulse is almost manically prolonged here, as if it were post-war beat music. This maximum uniformity of the metric structure, a novelty in music history once again, allowed the choreography complete freedom. The negative extreme for Fokine, on the other hand, was the dance of the masked and disguised people in the fourth tableau:

> After the appearance of the masqueraders, the 5/8 count is played at a very rapid pace. This was so difficult to grasp that my rehearsal changed into a lesson in rhythmics. I summoned the troupe to the piano and asked them all to clap their hands. Everyone clapped, but on a different beat. The result was general confusion, so we tried again. I would clap first, then the others would follow me. Then the dancers clapped without me. [...] Finally we achieved our objective. But when we applied the acquired rhythms to the dances, nothing happened. Again, I called everyone to the piano. Again I recalled everyone to the piano. Again a lesson in rhythms—and so on. In such a manner, very gradually, we finally mastered it. The stumbling block was finally surmounted. After a few performances, the rhythms again became unclear. Was this obstacle an absolute necessity to the composer?

22 Cf. Dobrovol'skaya, *Michail Fokin*, 309-10.

23 Fokine, *Memoirs of a Ballet Master*, 187.

> I doubt it. I believe that Stravinsky could have achieved the same musical result with a more natural rhythm for this dance.[24]

This assumption is naïve: Stravinsky's asymmetrical and changing meters here not only question the musical period structure, but at the same time quite consciously question basic principles of dance—not coincidentally towards the end of the piece. It was precisely in the ballet's finale that the novelty lay: the complete rejection of established conventions which could have reconciled the audience with all the preceding audacities; the renunciation of an all-encompassing, intoxicating harmony spilling over onto the audience. The demonic animal and devil figures tear apart the colorful, saturated pictorial fresco both musically and choreographically, and open up a space for the tragic end, the collapse of illusions, the fragmentation of perspectives. It is indicative that Sergei Prokofiev, as Stravinsky recalls, disapproved of precisely this ending:

> [Prokofiev] was once seated beside me at a performance of that work when, in the fourth tableau, at the climax of the Russian dances, he turned to me and said, 'You should have ended here.' But it is obvious to any perceptive musician that the best pages in *Petroushka* are the last.[25]

Fokine may have lacked the last insight into Stravinsky's broken-up metrics, but his ensemble scenes in *Pétrouchka* were memorable. He understood the *corps de ballet* not as a homogeneous mass but as a heterogeneous set of individuals. It was this liberation of the ensemble that made such frenetically wild final dances in Fokine's ballets possible, on the model of the orgy in *Cléopâtre* or the slaughter in *Schéhérazade*. In the words of Lynn Garafola:

> Fokine's crowds replicated the paroxysm of revolution itself: the fury of the masses unchained, the ecstasy of blood, the triumph of instinct over ego, the liberation of the self through collective action.[26]

In creating the three puppet protagonists, Fokine expanded the naturalistic method to include a symbolic dimension; the meticulous observation of external nature was now joined by that of internal nature. The individualization of the crowd found its counterpart in the upgrading of the dancers to actors, to performers of individual characters whose movements and gestures were fundamentally dramatically motivated. This was done in the service of an emotional

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24 Ibid., 188.

25 Igor Stravinsky and Robert Craft, *Memories and Commentaries* (London: Faber & Faber, 1960/1981), 67.

26 Garafola, *Diaghilev's Ballets Russes*, 23.

truth, which Konstantin Stanislavsky's modern artists' theater also sought to achieve. The physical processes were thus the direct echo of the psychological ones. All roles became thereby character roles, including the main characters, whereby the repertoire of forms (*variation*, *pas de deux*, etc.), which had been developed over decades and by which the title roles usually defined themselves, was eliminated.[27]

Fokine was also able to draw on the experimental theater of Vsevolod E. Meyerhold, in particular his impressive embodiment of the grotesque, lanky Pierrot in Alexander Blok's *The Puppet Booth*. In the case of the three protagonists in *Pétrouchka*, Fokine was concerned with translating the non-human (or semi-human) of their existence into puppet-like movement, while at the same time drawing a psychogram of the respective figure. The result was a distorted image of academic movement patterns that were ignored or parodied.

In the case of the ballerina, the parody aspect was particularly evident: her superficiality and simplicity were expressed in a mechanical idling of stereotypical dance figures—a facade devoid of meaning that Stravinsky's music had all too clearly mapped out. Lynn Garafola remarks:

> The Ballerina, in fact, stood for everything he [Fokine] most despised: technical trickery (her coy échappés and tiny hops on pointe, passés relevés and whipping fouetté turns were variation staples) and empty display, as well as any number of lesser sins: drawn-out preparations, the extremes of turnout, arms en couronne, segmented phrasing—all of which he refused to countenance in his 'straight' choreography.[28]

Although the ballerina Tamara Karsavina is still named first in the program of the premiere and in the score, the dismantling of this position has probably nowhere been executed more drastically than in *Pétrouchka*. The love duet of the ballerina and the Moor in the third tableau is accordingly conceived as a caricature of a *pas de deux*.

An even more caustic parody of the prima ballerina cult are the female street dancers. Fokine asked Bronislava Nijinska to perform acrobatic feats of her own choosing; she imitated Matilda Kshessinskaya's celebrated coda from *Le Talisman*[29] to his amusement. Last but not least, the wriggling dance movements of the *Danse russe* can also be considered a "biting satire on the routine of the old ballet."[30] This is the historical significance of Fokine's choreography: it almost completely overturns the old conventions, albeit rarely substituting

27 Cf. Scholl, "Fokine's Petrushka," 45.
28 Garafola, *Diaghilev's Ballets Russes*, 37.
29 Cf. ibid.
30 Scholl, "Fokine's Petrushka," 45.

striking new elements in their place—a step reserved for Vaclav Nijinsky in *Le Sacre du printemps*.

The real sensation was Nijinsky's title role. To portray the suffering eponymous hero, it was not virtuosity that was required, but pantomime and acting talent, and the death scene in particular was felt to be "indescribably moving"[31] in Nijinsky's dance. Fokine's desire to use the whole body as an instrument of emotional expression in the male protagonists led to unusual solutions:

> It was not my wish to give completely opposite *plastiques* to the two characters. The basic difference is simple: the Moor is all *en dehors* ("turned out"); Petrouchka all *en dedans* ("turned in"). I have never seen a better example of choreography which discloses so eloquently the personality of two such different characters. This self-satisfied Moor, an extrovert, completely turns himself out; while the pathetic, frightened Petrouchka, an introvert, withdraws into himself. Has this been borrowed from life? Most certainly. It has been borrowed from life to be introduced into the most unlife-like puppet pantomime—puppet movements built on a psychological foundation.[32]

The outward turn ("en dehors"), which is part of the basic vocabulary of classical ballet, is further increased in the movement vocabulary of the Moor, in short: over-turned outwards. In doing so, the usually angled foot positions are in places performed frontally, as if on a line running horizontally opposite the audience, whereby the Moor reveals the view of his body without the otherwise usual slanted angles, i.e., without restriction. The *en dedans* ("turned inwards") position characterizing Petrushka was also used as early as the seventeenth century, at first for comic-grotesque roles, later for malicious or miserable characters. Yet Petrushka's "twisting in" or rather "introversion" as a fetus-like slumping into himself had to appear as a mockery of traditional ballet aesthetics, which was further heightened by awkward jumps and stiff arm movements. In this respect, Fokine developed the eccentric characters of his two male protagonists from elementary movements.

Fokine's artistic skill undoubtedly lay in shaping Petrushka's movements in such a way that they gave the psychogram of the suffering puppet vivid contours—such as the jumps with arms and legs spread out in a cross shape.[33] At the same time, however, the success of the character was based on Nijinsky's talent for mimicry:

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31 Grigoriev, *The Diaghilev Ballet 1909-1929*, 54.

32 Fokine, *Memoirs of a Ballet Master*, 192.

33 Cf. Jann Pasler, "Music and Spectacle in *Petrushka* and *The Rite of Spring*," in *Confronting Stravinsky. Man, Musician, and Modernist*, ed. Jann Pasler (Berkeley and Los Angeles: University of California Press, 1986), 53-81, 61.

> But Nijinsky succeeded in rendering so convincingly the sorrows of the ill-treated captive, his utter despair, his jealousy, his longing for liberty, and his resentfulness towards his gaoler, that Sarah Bernhardt, on witnessing the performance, said, '*J'ai peur, j'ai peur, car je vois l'acteur le plus grand du monde*.'[34]

One of the most vivid descriptions was left by Bronislawa Nijinska:

> When Pétrouchka dances, his body remains the body of a doll; only the tragic eyes reflect his emotions, burning with passion or dimming with pain. The heavy head, carved out of a wooden block, hangs forwards, rolling from side to side, propped on the shoulder. [...] The soft knees bend suddenly under the weight of the body, the knock-kneed legs sway from side to side, and the wooden dangling feet dance freely. Petrouchka dances as if he is using only the heavy wooden parts of his body. Only the swinging, mechanical, soul-less motions jerk the sawdust-filled arms or legs upwards in extravagant movements to indicate transports of joy or despair.[35]

In order not to disappear completely behind Nijinsky's performance, which in retrospect was becoming increasingly absolute, Fokine emphasized in his memoirs that he had developed the role of Petrushka entirely himself; Nijinsky had even asked him to prompt him behind the scenes at the premiere.[36]

It is unmistakable that the puppets in *Pétrouchka* attack all conventional notions of beauty in dance. The subject offered a justification for overcoming them: whereas in *L'Oiseau de feu* it was dancing monsters, in *Pétrouchka* it is dancing puppets. The grey prehistory of *Sacre* will then provide a projection screen to eliminate the last remnants of a tradition that was parodied in *Pétrouchka* on the one hand and was still vaguely recognizable in the ensemble dances on the other. The music played an increasingly large part in this process, in the end probably the largest.

Le Sacre du printemps

To conclude, let us briefly discuss the relationship between music and movement in *Le Sacre du printemps*. Except for the final *Danse sacrale*, all the dances here are ensemble dances, thus consistently continuing the dismantling of the prima ballerina to the point of her symbolic destruction and sacrifice.

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34 Romola Nijinsky, *Nijinsky* (New York: Simon & Schuster, 1934), 128.

35 Bronislava Nijinska, *Early Memoirs* (New York: Holt, Rinehart and Winston, 1981), 373.

36 Cf. Fokine, *Memoirs of a Ballet Master*, 194.

Body movement is now fundamentally movement of plastic masses. In the reconstruction of the original choreography by Millicent Hodson, this basic feature is perfectly recognizable.[37] Above the *Danse de la terre* in the particell, Stravinsky wrote the dedication "To the genius Michelangelo Buonarotti" in large letters—his music, too, now sees itself as the sculptural shaping of tonal masses in space, no longer as a generator of rhythm for step sequences.[38]

Stravinsky forced the choreography to abandon the direct parallelization of sound event and body movement altogether with his irregular meters, which he pushes even further—especially in the concluding *Danse sacrale*. This dissociation is the exact opposite of the mimicry that prevailed in *L'Oiseau de feu* and which the composer felt in retrospect to be an excessive heteronomy. Out of his categorical rejection of the traditional coordination of music and dance, a new freedom of body movement is forced to emerge. *Sacre* means for dance: compulsion to freedom.

In his criticism of Nijinsky's choreography, Stravinsky himself addressed this conceptual change:

> My own disappointment with Nijinsky was due to the fact that he did not know the musical alphabet. He never understood musical metres and he had no very certain sense of tempo. You may imagine from this the rhythmic chaos that was *Le Sacre du Printemps*, and especially the chaos of the last dance where poor Mlle Piltz, the sacrificial maiden, was not even aware of the changing bars. […] He believed that the choreography should re-emphasize the musical beat and pattern through constant co-ordination. In effect, this restricted the dance to rhythmic duplication of the music and made of it an imitation.[39]

Stravinsky is scandalously unfair in this quotation: the dissolution of the doubling of music and movement was a step that was only taken in and through *Sacre* in the first place—rhythmical imitation and coordination had been the unchallenged basis of all dance theater until then.

The choreographic entries in Stravinsky's copy of the four-hand piano version of *Sacre*, presumably only made for Leonid Massine's choreography of 1920, show a kind of contrapuntal interaction between musical and choreographic rhythm.[40] Jann Pasler recognizes as basic principles of these notations the al-

37 Millicent Hodson, "Nijinskij's Choreographic Method. Visual Sources from Roerich for 'Le Sacre du Printemps'," in *Dance Research Journal* 18 (1986/87): 7–15.

38 Cf. Christoph Flamm, *Igor Strawinsky. Der Feuervogel—Petruschka—Le Sacre du printemps* (Kassel: Bärenreiter, 2013), 159–60.

39 Stravinsky and Craft, *Memories and Commentaries*, 37.

40 See description and analysis in Robert Craft, "The Rite: Counterpoint and Choreography," in *The Musical Times* 129 (1988): 171–6.

ternation between movement and stillness in the music on the one hand, and between movement and standstill on the stage on the other;[41] where music and dance then do reach perfect agreement, significant moments are highlighted. It is the document of a changed ballet aesthetic, which for the first time puts the direct connection between music and dance movement up for discussion, or rather negotiates it on the open stage.

Nijinsky, who had almost no experience as a ballet master, developed the choreography in a good three months and 120 rehearsals for the total of sixty-seven roles in the Paris premiere with the support of Marie Rambert, a student of Émile Jaques-Dalcroze from Hellerau. The interest in eurhythmics was no incidence, since Dalcroze's method sought for a direct connection between rhythm in time and rhythm in space, between tone duration and according gesture—ideas which helped overcome the traditional staple of poses and movements and allowed for a stronger interaction with the musical score. In *Sacre du printemps*, the only connection between music and dance was rhythm. Rambert recalls:

> Originally they thought that if I would teach the people Dalcroze Eurhythmics—they admired the method very much—they would be able to interpret the music easily. But Dalcroze's method, which is terribly simple, didn't help because Stravinsky didn't care a hoot if one bar was three-four and the next seven-eight, then from three-four to five-three. I mean it was absolutely impossible. You had to learn it by heart … It was a matter at the time of concentrating on a few bars at a time, certain phrases.[42]

Nijinsky further developed the bent poses and twitching movements in connection with *Pétrouchka*; he was obviously inspired as well by the wooden idols and totem poles in Nicholas Roerich's paintings.[43] Here it was no longer a psychogram turned outwards, but an attempt to evoke the imagination of a precivilized atmosphere through maximally uncivilized postures and movements. Bronislava Nijinska emphasized that "primal" nature of the groups:

> The men in *Sacre* are primitive. There is something almost bestial in their appearance. Their legs and feet are turned inwards, their fists clenched, their heads held down between hunched shoulders; their walk, on slightly bent knees, is heavy as they laboriously struggle up a winding trail, stamping in the rough, hilly terrain. The women in *Sacre* are also primitive, but in

41 Pasler, "Music and Spectacle in *Petrushka* and *The Rite of Spring*," 78–9.

42 As cited in Millicent Hodson, "Ritual Design in the New Dance. Nijinsky's *Le Sacre du Printemps*," in *Dance Research* 3 (1985): 35–45, 37–8.

43 Hodson, "Nijinskij's Choreographic Method," 7.

> their countenances one already perceives the awakening of an awareness of beauty.[44]

Seen like this, beauty in *Sacre* was something hidden behind an avalanche of distortion and ugliness. The ballet turned traditional conceptions of beauty upside down: the primitivity of Roerich's prehistoric stage design and costumes, the elaborate rudeness of Stravinsky's score and the block-like mass movements devoid of any conventional elegance all contributed to the final sacrifice—that of art itself. It was a rebirth of new vital forces through the destruction of standard aesthetic (not to speak of academic) values. In a certain sense, such had already been the mission of Diaghilev's first productions in Paris. But while at the beginning the objective would be reached by a maximally detailed and all-encompassing coordination among all elements of the spectacle, in the end the art forms would freely coexist in a fusion of a higher order, with narrative elements reduced to an absolute minimum (such as the kiss of the earth or the choice of the sacrificial maiden). The chains which only three years before had so very tightly connected dance, music, and scenery, were now broken off, once and for all. It was an emancipatory step not only on the side of musical logic, but ultimately for choreography above all else. Instead of counting bars or following complex changes of meters with mathematical precision, body movements now willy-nilly had to be inspired freely, not by small musical units, but by the overall energy, atmosphere and expression of music. Such artistic freedom was a necessary result of the seemingly atavistic (but in reality hyper-erudite) quality of Stravinsky's score. The step of stage design into abstraction was soon to follow.

44 Nijinska, *Early Memoirs*, 459.

"The Creation of New Forms"
Igor Stravinsky's Choreodrama *The Rite of Spring* in the Context of the "Theater Reform around 1900"[1]

Leila Zickgraf

Abstract: *This article explains how Stravinsky—together with the choreographer Vaclav Nijinsky and inspired by Georg Fuchs and Edward Gordon Craig—aimed at creating "new dance forms" with his* The Rite of Spring, *premiered in 1913 at the Théâtre des Champs-Élysées. Through the rhythms of his composition, he intended to put both the dancers and the audience into a physically experienceable state of intoxication, thus integrating the audience into the action on stage. By providing insight into her 2020 doctoral dissertation* Igor Stravinskijs Theater der Zukunft: Das Choreodrama *Le Sacre du printemps* im Spiegel der "Theaterreform um 1900" *(Igor Stravinsky's theater of the future: The choreodrama* The Rite of Spring *as reflected in the "theater reform around 1900"), Zickgraf demonstrates how this intention is connected with the "theater of the future" and with Stravinsky's meeting with central proponents of the pan-European theater reform movement at the beginning of the twentieth century.*

The Russian impresario Sergei Diaghilev's company Ballets Russes broke with conventions and presentation principles of classical ballet. This was apparent at the latest on 29 May 1913 with the premiere of *The Rite of Spring*[2]—a ballet (as it is generally termed) created jointly by Igor Stravinsky, Vaslav Nijinsky, and Nicholas Roerich. Even years later, journalists and contemporary witnesses spoke about said evening—about the radical aesthetic that had been heard and seen in the Paris Théâtre des Champs-Élysées on the one hand, and about

1 This text is based on my interdisciplinary study (musicology, dance and cultural studies) *Igor' Stravinskijs Theater der Zukunft: Das Choreodrama* Le Sacre du printemps *im Spiegel der "Theaterreform um 1900"* (Paderborn: Fink, 2020).

2 See Sibylle Dahms, Monika Woitas, Gunhild Oberzaucher-Schüller, Marianne Bröcker, et al., "Tanz," in *Musik in Geschichte und Gegenwart*, ed. Ludwig Finscher, vol. 9, *Sachteil* (Kassel: Bärenreiter, 1998), cols. 328–31.

the tumult that was said to have broken out when Stravinsky, Nijinsky, and Roerich confronted the audience with their "images from heathen Russia"[3] on the other.[4]

Today Diaghilev is considered a ballet reformer, and his Ballets Russes is regarded as the most successful and influential ballet company of the twentieth century.[5] *The Rite* itself advanced to the status of an "avatar of modernity"[6] and a "Jahrhundertwerk"[7] and the much-described chaos of its premiere to "perhaps the greatest theater scandal of the twentieth century."[8]

In view of these effusive epithets, as well as the fact that Stravinsky characterized *The Rite* in 1912 as a "choreodrama"[9] that would replace the ballet in its

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3 Cf. the wording of the program for the premier at the Théâtre des Champs-Élysées, Saison Russe, May 29, 1913, 26, printed in Hermann Danuser and Heidy Zimmermann, eds., *Avatar of Modernity: "The Rite of Spring" Reconsidered* (London: Boosey & Hawkes, 2013), 417: "Le Sacre du Printemps. / Tableau de la Russie païenne en deux actes, de Igor Strawinsky et Nicholas Roerich. / Musique de Igor Strawinsky / Choréographie de Nijinsky / Décors et Costumes de Nicholas Roerich."

4 Esteban Buch provides a good overview of the often contradictory accounts of persons who attended the premiere of *The Rite of Spring*. See Esteban Buch, "The Scandal at 'Le Sacre': Games of Distinction and Dreams of Barbarism," in *Avatar of Modernity*, ed. Danuser and Zimmermann, 59–78.

5 See Lynn Garafola, *Diaghilev's Ballets Russes* (New York: Oxford University Press, 1989), vii–xiii.

6 Cf. the title of the edited volume published by the Paul Sacher Stiftung on the occasion of the 100th anniversary of the premier of *The Rite* in 2013: *Avatar of Modernity*.

7 Hermann Danuser and Heidy Zimmermann, "Multifarious Rites of Passage: An Introduction," in *Avatar of Modernity*, ed. Danuser and Zimmermann, 9.

8 Gabriele Brandstetter, "Grenzgänge II: Auflösungen und Umschreibungen zwischen Ritual und Theater," in *Grenzgänge: Das Theater und die anderen Künste*, ed. Gabriele Brandstetter, Helga Finter, and Markus Weßendorf (Tübingen: Günter Narr Verlag, 1998), 17: "vielleicht größte[n] Theaterskandal des 20. Jahrhunderts." All translations from German in this contribution are my own.

9 Letter from Stravinsky to Nikolaj Findejzen from December 2/15, 1912, edited in Igor Fyodorovich Stravinsky, *Perepiska s russkimi korrespondentami. Materialy k biografii*, ed. Viktor Varunc, 3 vols. (Moscow: Kompozitor, 1998–2003), 1:386: "Первая мысль о моей новой хореодраме 'Весна священная' появилась у меня еще при окончании 'Жар-птицы' весною 1910 года." Trans. in Richard Taruskin, *Stravinsky and the Russian Traditions: A Biography of the Works Through Mavra*, 2 vols. (Oxford: Oxford University Press 1996), 1:861-2: "The first thought of my new choreodrama 'Vesna svyashchennaya' came to me when I was still finishing 'The Firebird' in the spring of 1910." See also Stravinsky, cited in *Peterburgskaja Gazeta*, September 27, 1912 (Julian calendar), trans. and cited in

then present form,[10] it is astonishing that such a key work of modern theater[11] has yet to be discussed in connection with the "theater of the future"—a label used in a series of treatises, manifestos, and programs that began appearing sporadically in Germany from 1870 on and then, around the turn of the century, increasingly throughout Europe and Russia.[12]

All these texts were written with the intention of reforming (European) theater and are today subsumed under the general heading "theater reform around 1900." The protagonists of this reform included the German author and theater-maker Georg Fuchs, and the British actor and director Edward Gordon Craig.[13] Like all of their fellow reformers, these two theorists sought a new form of drama and therefore discussed, among other things, what the new actor should look like in it.[14] Georg Fuchs, who was interested in the authenticity and naturalness of the moving human body and therefore demanded that the actors act out of their unconscious inner being,[15] was convinced that the actors in the new drama needed to follow the model of the dancer. Fuchs was namely of the opinion that drama was "the most highly spiritual and most differentiated application of the art of dance,"[16] and he therefore stated in his 1905 treatise *Schaubühne der Zukunft*: "Drama is possible without word and without sound, without scene and without dress, purely as rhythmic movement of the human body."[17]

Taruskin, *Stravinsky and the Russian Traditions*, 2:982. For the sake of simplicity, I nevertheless continue to refer to *The Rite* as a ballet in the following.

10 Stravinsky in an interview in *Birževye vedomosti* from September 25, 1912, 5, cited in Vera Krasovskaja, *Russkij batetnyj teatr načala dvadcatogo veka*, 2 vols. (Leningrad: Iskustvo, 1971), 1:432.

11 On the term "modern theater" and the approaches of theater studies to modernity in stage direction and dramatic art, see Christopher Balme, ed., *Das Theater von Morgen: Texte zur deutschen Theaterreform (1870–1920)* (Würzburg: Königshausen & Neumann, 1988), 11–2.

12 See ibid., 11.

13 On the theater reform discussion around 1900 as a pan-European phenomenon as well as the main demands of the movement, see ibid., 9–29.

14 See Manfred Brauneck, *Theater im 20. Jahrhundert: Programmschriften, Stilperioden, Reformmodelle* (Reinbek: Rowohlt, 1995), 64.

15 On Georg Fuchs and the unconscious state he demanded of the actors or dancers, see Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 105–12.

16 Georg Fuchs, "Der Tanz," in *Flugblätter für Künstlerische Kultur* 6 (1906): 13: "die höchst-vergeistigte und differenzierteste Anwendung der Tanzkunst."

17 Georg Fuchs, *Die Schaubühne der Zukunft* (Berlin and Leipzig: Schuster & Loeffler, 1905): 41: "Das Drama ist möglich ohne Wort und ohne Ton, ohne Szene und ohne Gewand, rein als rhythmische Bewegung des menschlichen Körpers."

Gordon Craig was considerably more radical than his colleague in his demands for the new actor. He espoused the belief that the director—in his opinion the only true artist of the theater—should impress his ideas on the actors from outside. The only task of the performers on the stage would therefore be to carry out the will of the director on the stage.[18] In favor of this overriding design concept of the director (or control over the actors), Craig ultimately called for the actor to simply be done away with altogether and replaced by an (über-)marionette.[19] In his essay "The Actor and the Über-Marionette," published in 1908 and discussed throughout Europe and Russia, he thus wrote: "The actor must go, and in his place comes the inanimate figure—the über-marionette we may cal[l] him."[20]

If one considers *The Rite* as that which it was originally intended to be, namely as a *Gesamtkunstwerk*, composed of music, dance, and possibly scenery as elements of equal standing,[21] and if one furthermore takes into account the closely knit web of connections between the Ballets Russes and theater reform,[22] it quickly becomes clear that Stravinsky was interested particularly in realizing three points together with Nijinsky and Roerich on the night of *The Rite*'s premiere: (1) *controlling* movements (through the rhythms of the music); (2) creating new forms (of dance) without models, which were to develop in a state of *hypnosis* and reflect the rhythms emanating from the music; and (3)

18 Uta Grund uses the image of the "designer" in this context to illustrate Craig's design idea. See Uta Grund, *Zwischen den Künsten: Edward Gordon Craig und das Bildertheater um 1900* (Berlin: De Gruyter, 2003), 137.

19 On the idea and concept of the über-marionette, see, among others, ibid., 118; Manfred Brauneck, *Theater im 20. Jahrhundert: Programmschriften, Stilperioden, Kommentare*, vollständig überarbeitete und erw. Neuausgabe (Reinbek: Rowohlt, 2009), 214–8; Manfred Brauneck, *Die Welt als Bühne: Geschichte des europäischen Theaters* (Stuttgart: Metzler, 1999), 3:858–9.

20 Edward Gordon Craig, "The Actor and the Über-Marionette," in *The Mask. A Monthly Journal of the Art of the Theatre* 1/2 (1908): 11–2.

21 See Taruskin, *Stravinsky and the Russian Traditions*, as well as the following quotation: "To begin with—and that is something musicologists are apt to forget—'The Rite' is not just a piece of music. It originated, very self-consciously, as a 'Gesamtkunstwerk,' a mixed-media synthesis, and belongs to the historians of dance and stage design, as well as music." Richard Taruskin, "Resisting 'The Rite,'" in "*The Rite of Spring*" *at 100*, ed. Severine Neff, Maureen A. Carr, and Gretchen G. Horlacher with John Reef (Bloomington: Indiana University Press, 2017), 417.

22 These connections are described for the first time in detail in Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, especially 77–207.

integrating the audience (in the theater) into the action on stage by means of *collective intoxication*.[23]

As I aim to demonstrate in this paper, it may be concluded from these three points that Stravinsky presented his own personal "theater of the future" to the audience on the night of the premiere. It is possible, for example, to identify connections in particular between the two protagonists of the theater reform introduced above—Georg Fuchs and Gordon Craig—and the composer Stravinsky as well as the choreographer Nijinsky. In the following, I will present two examples—one about Stravinsky and Georg Fuchs and one about Nijinsky and Gordon Craig—to demonstrate how these connections are expressed in the sources and to what extent they influenced the creation of *The Rite*.

Stravinsky and Fuchs

As far as Stravinsky is concerned, we know that by the summer of 1911 he must have already read Georg Fuchs's reform text "Der Tanz,"[24] which had been published in 1906 in the *Flugblätter für künstlerische Kultur* in Stuttgart and in 1910 in Saint Petersburg in a Russian translation ("Tanec"[25]).[26] Stravinsky seems more than enthusiastic about Fuchs's text when he writes in a letter to Andrey Rimsky-Korsakov: "I shall not rest until you have read this article and given me your opinion in writing, with your signature attached, confirmed by the local police."[27]

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23 On these three points, see the detailed account in ibid., 77–181.

24 Fuchs, "Der Tanz."

25 Georg Fuks, "Tanec," trans. L. Krasil'ščik", in *Fial strastej* (Saint Petersburg, 1910), 59–96.

26 Stravinsky first mentions the Russian translation of Fuchs's text in a letter to Andrej Rimskij-Korsakov from September 24/October 7, 1911. See Stravinsky's letter to Andrej Rimskij-Korsakov from September 24/October 7, 1911, edited in *Perepiska*, 1:300–1. However, I succeeded in demonstrating (on the basis of diverse sources and documents) that Stravinsky must have already read Fuchs's text before the summer of 1911. See Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 105–51.

27 Excerpt from Stravinsky's letter to Andrej Rimskij-Korsakov from September 24/October 7, 1911: "Я не успокоюсь раньше, чем ты не прочтешь этой статьи и не выскажешь мне своего мнения на бумаге, скрепленной твоей подписью, засвидетельствованной местной полицией." English translation in Stephen Walsh, *Stravinsky: A Creative Spring: Russia and France, 1882–1934* (London: Cape, 2000), 171.

In the second paragraph, he then adds by way of justification: "What could be better and more wonderful than the development of established artistic forms? Only one thing—the creation of new forms."[28]

Here Stravinsky invokes the "new (art) form" as the better and more appealing alternative to continuing to develop existing (art) forms, and then attempts, as it were, to convince Rimsky-Korsakov to commit himself—as he himself has—to such a creation of new forms.[29]

Yet it is Georg Fuchs who, in the aforementioned essay "Der Tanz," calls for the creation of new (dance) forms.[30] And this call must be viewed in a larger (cultural-)political context:[31] with his commitment to the theater reform, Fuchs had set himself the goal of achieving increased physicality in society (in the medium term) and renewing German culture (in the long term).[32] He saw the new (dance) form as an initial step in pursuit of this goal. The means he had chosen for this purpose was a "stage in the modern style,"[33] on which the "independently creative"[34] woman was to dance in a new form, thus serving as a model for the future culture.[35] In the text, he therefore calls on individuals endowed with "formal potency"[36] to develop the "new dance forms"[37] he desired.

In the last dance of *The Rite*, the *Danse Sacrale*, it is a woman who—as numerous contemporaries attest—dances in an entirely new form. The influential patron of the arts Harry Graf Kessler, for example, recounts the following in his diary entry from May 29, 1913:

> Evening, premiere of *Sacre du printemps*. An entirely new choreography and music; Nijinsky's dance style as different from Fokine's as Gauguin's

28 Excerpt from Stravinsky's letter to Andrej Rimskij-Korsakov from September 24/October 7, 1911: "[Ч]то может быть лучше и прекраснее развития раз созданных форм искусства? Разве только одно – создание новых форм." English translation in Taruskin, *Stravinsky and the Russian Traditions*, 2:975.

29 See excerpt from Stravinsky's letter to Andrej Rimskij-Korsakov from September 24/October 7, 1911.

30 See Fuchs, "Der Tanz," 10–1.

31 See Brigitte Ruhwinkel, "Georg Fuchs: Theater als Völkischer Ritus," in *Handbuch zur "Völkischen Bewegung,"* 1871-1918, ed. Uwe Puschner, Walter Schmitz, and Justus H. Ulbricht (Munich: K.G. Saur, 1999), 748.

32 See Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 116–8.

33 Fuchs, "Der Tanz," 13: "Schaubühne modernen Stils."

34 Ibid., 40: "selbständig schöpferische."

35 See ibid., 40.

36 Ibid., 11: "formaler Zeugungskraft."

37 Ibid., 10: "neuen Tanzformen."

> painting from Delacroix's. A completely new vision, never before seen, riveting, convincing, is suddenly there. [...] all form devastated, a new one suddenly rising up out of the chaos.[38]

In view of the statements of the theater reformer Fuchs related above, the question inevitably arises: Did the artist Stravinsky intend for *The Rite* to bring to the stage the dance forms demanded by Fuchs?

If one additionally considers the extant source material, this is even quite likely to have been the case. After all, it is no secret that the first draft of *The Rite of Spring* (1910)—at the time still called *Великая Жертва* (*The Great Sacrifice*)—differs considerably from the work premiered in 1913 at the Théâtre des Champs-Élysées in Paris. The fact that the plans for *Великая Жертва* differ in important details from those of 1911 for *Праздник весны* (*Spring Fest*) has already been the subject of ample critical discussion.[39] The question of why, however, has yet to receive a satisfactory answer,[40] although Stravinsky again made significant changes to the ballet in July 1911—immediately after reading the text by Georg Fuchs. And these changes can easily be traced back to Fuchs's text.[41]

It has already been extensively described, for instance, that Stravinsky's plan for *The Rite* in 1910 was still to create a ballet based on archaeological research. Stravinsky had developed the ambition to realize the aesthetic ideal of the Ballets Russes for the first time: *The Great Sacrifice* was to become a

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38 Harry Graf Kessler, diary entry from May 29, 1913, edited in Harry Graf Kessler, *Das Tagebuch 1880–1937*, ed. Roland S. Kamzelak and Ulrich Ott, vol. 4, *1906–1914*, ed. Jörg Schuster (Stuttgart: Cotta, 2005), 886: "Abends 'Sacre du printemps' Premiere. Eine ganz neue Choreographie und Musik; Nijinskis Tanzstil von Fokines so verschieden wie Gauguins Malerei von Delacroix. Eine durchaus neue Vision, etwas Niegesehenes, Packendes, Überzeugendes ist plötzlich da. [...] alle Form verwüstet, neue plötzlich aus dem Chaos auftauchend."

39 See, e.g., Walsh, *A Creative Spring*, 173–4; Taruskin, *Stravinsky and the Russian Traditions*, 1:871.

40 Neither Walsh nor Taruskin provides a watertight explanation of the ballet's revival. See Walsh, *A Creative Spring*, 173–4; and Taruskin, *Stravinsky and the Russian Traditions*, 1:871–81.

41 I describe these connections in detail. The reason why this has never been done before is perhaps because musicologists have previously devoted but little attention to Fuchs's text. Dance studies scholars, on the other hand, while discussing the text frequently in studies on modern expressionist dance, have never treated it within the context of the Ballets Russes. See Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 108–10.

veritable neonationalist *Gesamtkunstwerk*[42]—an anti-literary music theater in which all three art forms involved were to coexist on an equal footing; the chosen subject—and this is crucial for the present example—should be based on Russian culture and on "authentic"[43] findings. Stravinsky therefore developed a first draft for his new ballet together with the archeologist and stage designer Nicholas Roerich, who was familiar like no one else in Saint Petersburg with what were thought to be the archaic rites and customs of prehistoric Russia.[44]

On July 15, 1910 (Julian calendar), the Moscow daily newspaper *Russkoe Slovo* announced for the first time that Stravinsky was working with Fokine and Roerich on a ballet dealing with ancient Slavic rites and customs:

> We have been informed by telephone from Saint Petersburg that an interesting new ballet is to be performed in the very near future. The academic N.K. Roerich, the young composer of *The Firebird*, I.F. Stravinsky, and the ballet master M.M. Fokine are working on a ballet called *The Great Sacrifice* that is devoted to ancient Slavic religiosity and its customs. Roerich is responsible for the content and the stage production of the ballet.[45]

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42 The expression "neonationalist *Gesamtkunstwerk*" was introduced by Richard Taruskin and has since been used to refer to the majority of the (music) historiography discourse on *The Rite* (pars pro toto, consider the following dictum by Francis Maes: "*Sacre* satisfies the neonationalist paradigm fully." Francis Maes, *A History of Russian Music: From Kamarinskaya to Babi Yar* [Berkeley: University of California Press, 2006], 226). On the expression used by Taruskin, its discussion in the literature, and the use of the German term *Gesamtkunstwerk* within the context of the Ballets Russes, see Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 51, 76–84.

43 I refer in my use of the difficult term "authentic" to Taruskin, who speaks of "archeological authenticity," among other things also in relation to the libretto and composition of *The Rite* and the folkloristic material used in it. He identifies the pursuit of "authenticity" as a key element of the *Gesamtkunstwerk* ideal of the Ballets Russes. See especially the subchapters "Archeological Authenticity" and "The Musical Sources" in Taruskin, *Stravinsky and the Russian Traditions*, 1:881–933. In a recent study, however, Andreas Meyer once again makes it very clear that *The Rite* lacks an "authentic" model for the human sacrifice in particular. See Andreas Meyer, "Disrupted Structures. Rhythm, Melody, Harmony," in *Avatar of Modernity*, ed. Danuser and Zimmermann, 118.

44 See Taruskin, *Stravinsky and the Russian Traditions*, 1:860–966, and the recapitulation of the state of research on this issue in Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 43–77.

45 Excerpt from an announcement of the ballet (without indication of an author) in the Moscow daily newspaper *Russkoe Slovo*, July 15, 1910, 4 (my translation): "Нашь сообщают по телефону изъ Петербурга: Вь ближайшемъ будущем должна появиться интересная балетная новинка. Академик Н.К. Рерихъ, молодой композоторъ 'Жаръ-Птици' И.Ф. Стравинский и балетмейстеръ

Around a month later, the Saint Petersburg daily newspaper *Peterburgskaja Gazeta* printed a very similar announcement. It included the additional information that the choreographic action of the ballet was set on a summer night, consisted of ritual dances, and was also the first work to offer a portrayal of the past without a dramatic plot:

> The new ballet shows us a series of images of the holy night and the early Slavs […] The action begins on a summer night and ends before dawn, when the first rays of [sun] appear. As expected, the choreographic part consists of ritual dances. This will be the first attempt to produce a rendition of ancient Slavic times without a fixed dramatic subject.[46]

In an interview printed a month later, on September 30, 1910, in the Saint Petersburg theater program magazine *Obozrenie Teatrov*, Roerich then reiterates the plan, emphasizing the following: "I aim [in the ballet] to portray how, on a bright summer night on the peaks of the sacred hill […], a succession of ancient ritual Slavic dances take place, concluding with a sacrificial offering."[47]

To portray these ancient ritual Slavic dances, Stravinsky and Roerich had then looked for and used folkloristic models for the scenario and the composition, and Nijinsky too was inspired by this material for the choreography.[48]

However, in *The Rite* of 1913—and herein lies the most telling difference from the original plan for the present example—these models were no longer

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М.М. Фокинъ работаютъ надъ балетомъ подъ названиемъ 'Великая Жертва', посвященнымъ древнеславянскимъ религиознымъ обычаям. Содержание и постановка балета сочинены г. Рерихомъ."

46 Excerpt from an announcement of the ballet (without indication of an author) in the Saint Petersburg daily newspaper *Peterburgskaja Gazeta*, August 1910, 4 (my translation): "Новый балет даст ряд картин священной ночи и древних славян […] Начинается действие летней ночью и оканчивается перед восходом солнца, когда показываются первые лучи. Собственно хореографическая часть заключается в ритуальных плясках. Эта вещь будет первой попыткой, без определенного драматического сюжета, дать воспроизведение старины."

47 "Naši Besedy: U N.K. Rericha," in *Obozrenie Teatrov* 1187, September 30, 1910, 14 (my translation): "Я хочу изобразить, как светлой летней ночью на вершине священного холма […] происходит ряд ритуальных древнеславянских танцев – оканчивающихся жертвоприношением."

48 Taruskin describes in detail how Stravinsky and Roerich used meticulously selected folkloristic models for the libretto and music, and Garafola, among others, remarks that Nijinsky too was influenced by these models in working out his choreography. See, e.g., Richard Taruskin, "Russian Folk Melodies in 'The Rite of Spring,'" in *Journal of the American Musicological Society* 33/3 (1980): 501–43; Garafola, *Diaghilev's Ballets Russes*, 68.

recognizable at all: Stravinsky had transformed the selected folk melodies in such a way that they were no longer identifiable by ear alone.[49] And according to the Ballets Russes expert Claudia Jeschke, it is not possible to ascertain any references to previously existing material with regard to the choreography either.[50] Hence, a comparison of the original plan of 1910 with *The Rite* as it was ultimately realized in 1913—and this has also been frequently described—reveals a significant qualitative leap.

And so the question arises: Was the archeologically "authentic" aspect intended at the outset (1910) for *The Great Sacrifice* manipulated deliberately in the realization of *The Rite* (1913)? And if so, for what reason?

Interestingly, Georg Fuchs provides a very clear answer to this question. In his reform text "Der Tanz," which, as we have seen, Stravinsky read shortly before changing his plans for *The Rite* in summer 1911, Fuchs discusses at length whether folk dance forms handed down from a primitive agrarian culture were suitable for the new dance forms he demanded. He reaches the following conclusion:

> Only a madman could come up with the idea of creating a new dance culture through an "aesthetic influence" of the "social dances." They are, like the "ballet," merely a subject for the satirist. Nor is our own daily increasing knowledge of the art of dancing practiced by our ancestors and the great civilizations up to antiquity of use to us, for living dance form can spring up only from the living rhythm of life itself, of the social life of our time, and the archaistic, didactic setting in motion of old reliefs, plates, and clay figurines is far more liable to stifle and mislead the creative power of dance of the modern races than to inspire it.[51]

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49 See Peter Hill, *Stravinsky: "The Rite of Spring"* (Cambridge: Cambridge University Press, 2000), 114. See also Meyer, "Disrupted Structures," 109–15.

50 See Claudia Jeschke, "Russische Bildwelten in Bewegung: Bewegungstexte," in *Schwäne und Feuervögel: Die Ballets Russes 1909-1929: Russische Bildwelten in Bewegung*, ed. Claudia Jeschke and Nicole Haitzinger(Leipzig: Henschel, 2009), 77.

51 Fuchs, "Der Tanz," 8–9: "Nur ein Wahnsinniger könnte auf den Gedanken kommen, durch eine 'ästhetische Beeinflussung' der 'Gesellschaftstänze' eine neue Tanzkultur erzeugen zu wollen. Sie sind, wie auch das 'Ballett,' lediglich ein Stoffgebiet für den Satiriker. Auch unser, sich von Tag zu Tag mehrendes Wissen um die Tanzkunst unserer Altvorderen und der großen Kulturen bis zur Antike hinauf nützt uns zu gar nichts, denn nur aus der lebendigen Rhythmik des Lebens selbst, des geselligen Lebens unserer Zeit kann auch lebendige Tanzform aufspringen, und archaisierendes lehrhaftes Inbewegungsetzen alter Reliefs, Bildtafeln und Tonfigürchen ist weit eher geeignet, die tanzschöpferische Kraft der modernen Rassen zu betäuben und in die Irre zu führen, als sie anzufeuern." Fuchs uses the term "Gesellschaftstanz"

Hence, Fuchs held a revival of old dance forms of the kind Stravinsky and Roerich had still intended at least in 1910 for *The Rite* to be completely unsuitable for the cultural renewal he aspired to initiate. He envisaged something entirely different for the new dance forms. What Fuchs regarded as a perfect example was namely the sleep dance of the hypnotized Madeleine (Guipet):[52] This co-called "dream dancer Madeleine" was always placed under hypnosis before her performances by her magnetopath Emile Magnin. And then, as soon as the latter played music, Madeleine started dancing in her hypnotic state.

Albert von Schrenck-Notzing, a German physician and early admirer of Madeleine, therefore once described the dancer as a "somnambulant reflex automaton."[53] In his psychological study on the dream dancer, published in 1904 in Stuttgart, he relates the following:

> [Madeleine] picks up the subtlest nuances of the music and reproduces them by means of gestures and facial expressions. […] One of the most interesting points is the dream dancer's behavior in relation to improvisation on the piano or on the organ. […] She exhibits […] a lightning-fast grasp of every tone color, every harmonic and melodic modulation; […] She can be […] controlled so completely by the piano that one needs only to indicate the expression to the pianist trained in working with her in order for him to compel her to act it out through the note.[54]

(social dance) largely synonymously with "Volkstanz" (folk dance), or rather he understands the folk dance as a kind of subcategory of the social dance. On the use of the terms today, see, e.g., Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 118.

52 See Fuchs, "Der Tanz," 21. On the dream dancer Madeleine, see, e.g., Gabriele Brandstetter, "Psychologie des Ausdrucks und Ausdruckstanz: Aspekte der Wechselwirkung am Beispiel der 'Traumtänzerin' Madeleine G.," in *Ausdruckstanz: Eine mitteleuropäische Bewegung der ersten Hälfte des 20. Jahrhunderts*, ed. Gunhild Oberzaucher-Schüller (Wilhelmshafen: Florian Noetzel, 1992), 199–211. The meeting with the dream dancer Madeleine is often described in the literature the initial motive for Fuchs's reform texts.

53 Albert von Schrenck-Notzing, *Die Traumtänzerin Magdeleine G.: Eine psychologische Studie über Hypnose und dramatische Kunst* (Stuttgart: Enke, 1904), 107. In the contemporary reception of *The Rite*, the dancers' movements are in some cases described as reflexive and the dancers themselves as automatons. See Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 181–207.

54 Schrenck-Notzing, *Die Traumtänzerin Magdeleine G.*, 107–13: "[Die Madeleine] fasst die feinsten Nuancen der Musik auf und gibt sie mimisch wieder. […] Einer der interessantesten Punkte ist das Verhalten der Traumtänzerin gegenüber dem Improvisieren auf dem Klavier oder auf der Orgel. […] [Es] erfolgt […] ein blitzschnelles Erfassen jeder Tonfarbe, jeder harmonischen und melodischen Wendung; […] Man kann sie […] so vollständig mit dem Klavier beherrschen, dass

Fuchs had seen the dream dancer for the first time in 1904 in Munich.[55] He notes the following in "Der Tanz":

> Every artistic act is done sleepwalking. Every form is born in the soul of the creator, far away from all consciousness. Yet everywhere else, conscious action is necessary to bring it out, to cause it to emerge as a work. […] A magical command releases Madeleine's body from earthly laws and from the force of gravity.[56]

Unlike Schrenck-Notzing, who was fascinated above all by the aspect of control in the dance of the hypnotized dancer, Fuchs believed to find in it an art that arose from the unconscious inner being:[57] hypnosis helped Madeleine to "rid herself of her inhibitions,"[58] he opined, enabling her to "reveal her innermost being and relinquish her own body."[59] The hypnosis revealed secrets "that otherwise hide all instincts, feelings, and habits."[60] He was therefore certain that new (dance) forms were to be found "far away from all consciousness in the soul of the creator."[61] They were to be completely free of models, and their

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man nur dem auf sie eingeübten Pianisten den Ausdruck anzugeben braucht, damit er sie durch die Töne dazu nötigt."

55 His enthusiasm for the dream dancer is evident in an article Fuchs published following Madeleine's performances in Munich. See Lenz Prütting, *Die Revolution des Theaters: Studien über Georg Fuchs* (Munich: Kitzinger, 1971), 134–5. The article appeared in the *Münchner Neuesten Nachrichten*, no. 89, 1904, and was cited in full in his essay "Der Tanz." See Prütting, *Die Revolution des Theaters*, 421, note 123.

56 Fuchs, "Der Tanz," 25: "Schlafwandelnd wird jede künstlerische Tat getan. Weit entfernt von allem Bewußten gebiert sich jede Form in der Seele der Schaffenden. Doch sie hervorzubringen, sie als Werk herauszustellen, bedarf sonst überall bewußten Handelns. […] Ein zauberischer Befehl erlöst den Leib der Madeleine von den Gesetzen des Irdischen und von ihrer Schwerkraft."

57 Fuchs's opinion was not shared by all observers. In fact, there was a lengthy discussion among writers and artists on whether a dance performed under hypnosis could actually be described as art. See Priska Pytlik, *Okkultismus und Moderne: Ein kulturhistorisches Phänomen und seine Bedeutung für die Literatur um 1900* (Paderborn et al.: Schöningh, 2005), 66.

58 Fuchs, "Der Tanz," 21: "Hemmungsvorstellungen zu beseitigen."

59 Ibid., 21–2: "Innerstes enthüllen und [ihren] […] eigenen Leib preisgeben."

60 Ibid.: "die sonst alle Instinkte, Empfindungen und Gewohnheiten […] verschleiern."

61 Ibid., 25: "[w]eit entfernt von allem Bewußten […] in der Seele der Schaffenden." See Gabriele Brandstetter's discussion of various concepts of dance at the beginning of the twentieth century in this context, especially "Bewegungsrausch. Trance-Tanz und Bacchanal," in Gabriele Brandstetter, *Tanz-Lektüren. Körperbilder und Raumfiguren der Avantgarde (Scenae)*, 2nd expanded edition

movements were to develop from their unconscious inner being, while at the same time reflecting the rhythms of the music. The (state of) intoxication he saw manifested in the (woman's) new dance on the newly designed stage was then to be transferred to the audience, culminating in a communal intoxication encompassing everyone present.[62]

So if Stravinsky really did intend with *The Rite* to realize the new dance forms demanded by Fuchs and to put both the dancers and the audience into a physically experienceable state of communal intoxication, the dancers' movements would need to have originated in an unconscious state on the one hand, and to reflect the rhythms of the music on the other.

In contrast to the extensive documentation of Stravinsky's compositional work, only few sources report on Nijinsky's choreography, making it impossible today to reconstruct precisely what movements the dancers performed in 1913.[63] Neither is it possible in most cases to unambiguously assign movements executed by the dancers to a place in the score.[64] However, Nijinsky's sister Bronislava Nijinska was present during the entire rehearsal process from the start. And she claims, for example, that in his choreography for *The Rite* Nijinsky attempted to translate every note value of Stravinsky's music into movement

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(Freiburg: Rombach, 2013), 251–326. On Fuchs's ideas on "orgiasm" and hypnotic dance in particular, see ibid., 255–9.

62 For a detailed description of Fuchs's demands for reform and his conception of the "new dance forms," as well as what led him to develop this conception, see Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 112–51.

63 With regard to Stravinsky's compositional work, in addition to the musical text, there are Stravinsky's sketches as well as the autograph of the score and the composer's own comments on them. For an overview of Stravinsky's sketches on *The Rite*, which are held in the Stravinsky collection at the Paul Sacher Stiftung in Basel, see Tatiana Baranova Monighetti, "Working on 'The Rite of Spring': Stravinsky's Sketches for the Ballet at the Paul Sacher Stiftung," in *Igor Stravinsky. Sounds and Gestures of Modernism*, ed. Massimiliano Locanto (Turnhout: Brepols, 2014), 101–36. With regard to the choreography, no details from Nijinsky himself but rather only second-hand sources have survived, for instance notational sketches, drawings of movements (by Valentine Gross), pictures of costumes and the stage set, and oral testimony. See Gabriele Brandstetter, "'Le Sacre du printemps' 1913/2013," in *Sacré 101: An Anthology on 'The Rite of Spring,'* ed. Raphael Gygax (Zurich: JRP Ringier, 2014), 151. On the relevant sources as well as their discussion in the literature, see also Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 152–4.

64 In professional circles, the claim to authenticity of Millicent Hodson's attempt in 1989 to reconstruct Nijinsky's choreography of *The Rite* is therefore viewed with a critical eye. Hodson herself even stated that the choreography only includes eighty-five percent of the original. See Jordan, *Stravinsky Dances*, 443.

and then took great care to ensure that the dancers carried out the movements he had given them with great precision. She recounts the following in her memoirs:

> Nijinsky's creation of a novel structure in the choreography and his innovative movements and poses demanded an exactness of execution to the minutest detail. All this was strange and unfamiliar to the artists brought up in the tradition of the old classical ballet [...]. Sometimes when they were so tired and exhausted by the long rehearsals they refused altogether work with Nijinsky. [...] Often Diaghilev had to intervene, mostly to calm Nijinsky, who did not understand that certain of his created "pas-movements," which he demonstrated with such ease in a huge jump, were not possible for the average dancer. Nijinsky was indignantly angry, believing that this inability of an artist to repeat the "pas-movement" after him was a deliberate act of obstruction, and he accused the artists of wanting to sabotage his ballet. I remember one particular incident during the early rehearsals in Monte Carlo. Nijinsky demonstrated a "pas-movement" in the choreography to the musical count of 5/4. During his huge leap he counted 5 (3 + 2). On count 1, high in the air, he bent one leg at the knee and stretched his right arm above his head, on count 2 he bent his body towards the left, on count 3 he bent his body towards the right, then on count 1, still high in the air, he stretched his body upwards again and then finally came down lowering his arm on count 2, graphically rendering each note of the uneven measure. Nijinsky worked in this manner on each measure, accenting the beats for the artists, and would not proceed in his composition until he obtained from each artist the exact execution.[65]

There are no records attesting to Nijinsky having also read Georg Fuchs's "Der Tanz." However, his approach to the choreography, as described here by his

65 Bronislava Nijinska, *Early Memoirs*, ed. and trans. Irina Nijinska and Jean Rawlinson (Durham, NC, and London: Duke University Press, 1992), 460. Claudia Jeschke, who has studied Nijinsky and his movement language and notation in detail, notes the following in particular on the notation: "Read as choreographic philosophy, Nijinsky's notation concentrates on the body's capability for rhythmic and motoric coordination. His physiological manner of dealing with time and energy approaches the understanding of rhythm found in Stravinsky's ballets scores [...]. Nijinsky's interest in dance notation can be generally subsumed among the conditions of control and vitality, as it combines an analytical, systemic, and thus controlled view of corporeality and action with newly invented movements generated through the perception of physical and cultural energy. [...] He manipulated the body in time (music) and space with his dance notation, treating it as a movement machine and thereby opening up the dancing body to distinctively different and individual kinetic utterances that resist aesthetic codification." Claudia Jeschke, "'... retrouver la source de variété ...': Nijinsky's Choreographic Textures," in *Avatar of Modernity*, ed. Danuser and Zimmermann, 142–51.

sister, indicates that he was informed about the content of the text as well as about Fuchs's demands for the new dance forms. By translating every note value into a movement, he satisfied at least the second of Fuchs's demands regarding the new dance forms, namely to develop the movements from the rhythms of the music.

Nijinsky's examination of the ideas and theories of the other reformer discussed above, Gordon Craig, provides a clear indication that the choreographer also attempted to satisfy the first demand in developing the choreography for *The Rite*—in other words, to have the movements arise from the unconscious inner being.

Nijinsky and Craig

The aforementioned influential patron of the arts Harry Graf Kessler reports in his diary on several meetings between Nijinsky and Craig in Paris and London—here too with increased frequency in the time between 1911 and 1913. Both Diaghilev and Nijinsky repeatedly discussed the idea of using marionettes in theater with Craig.[66] Kessler recounts the following in his diary about the meeting on 23 February 1913—only a good three months before the premiere of *The Rite*:

> Craig thought two extreme points of view were tenable: One could use living actors and respect them, build up the entire direction on their given individuality, or on the contrary [...] use dead material, marionettes, and then dictate everything. [...] Nijinsky replied that he wanted living actors, but that he wanted to work on them until they obeyed like dead material. It was not possible to reach an agreement; apparently the English and the Slavic temperament are at odds here.[67]

It was mentioned already at the outset that all of the reformers sought a new form of drama and therefore also discussed the role of the actor: Whereas

66 For a detailed account of the connections between Nijinsky, Diaghilev, Fuchs, and Craig, see Zickgraf, *Igor' Stravinskijs Theater der Zukunft*, 151–60.

67 Harry Graf Kessler, diary entry from February 23, 1913, edited in Kessler, *Das Tagebuch*, vol. 4, 869: "Craig meinte zwei extreme Standpunkte seien haltbar: man könne lebendige Schauspieler verwenden dann sie respektieren, die ganze Regie auf ihrer gegebenen Individualität aufbauen, oder im Gegenteil [...] totes Material, Marionetten benutzen und dann alles vorschreiben. [...] Nijinsky erwiederte, er wolle lebendige Schauspieler, aber sie so lange bearbeiten, bis sie wie totes Material gehorchten. Eine Einigung war nicht zu erzielen, offenbar streiten sich hier das englische und das slawische Temperament."

Fuchs only argued that the new actor should follow the model of the dancer, Gordon Craig wanted to do away with actors entirely and replace them with marionettes, because only then could he—as the director—receive absolute power and control over what happened on stage.

In the debate between Craig and Nijinsky documented by Kessler, it becomes clear that Nijinsky did not merely adapt or criticize Craig's (complex) theories and ideas. Rather, the conflict between the two was a result of the fact that Nijinsky countered Craig's concept by advancing his own (extended) concept: according to Kessler, the former wanted to work on living actors until they obeyed him completely. Hence, Nijinsky rather intended to put the actors into a state of unconsciousness or will-less obedience through his choreographic instructions. Through this state, he could then do what he wanted with the living actors or dancers—much like Craig with the (lifeless) marionettes. The only question at this point is what was behind this intention.

Against the background of Fuchs's demands for new forms and the assumption that Stravinsky planned with *The Rite* to realize them for the first time, however, the answer is clear: With will-less, living dancers, Nijinsky could not only control how the rhythms emanating from the music were reflected in the movements he designed; he could also ensure that the dancers' movements arose from their unconscious inner being. These were his dual intentions for the new dance forms he had devised. And they were both necessary with regard to achieving the communal intoxication of the dancers and the audience.

Conclusion

If one regards the extant sources on *The Rite* in relation to both music and dance and additionally considers the closely knit network of people, ideas, places, and the connections between them within which *The Rite* originated, it quickly becomes evident that Stravinsky aimed to realize new dance forms with *The Rite*. The intention of these new dance forms was for the dancers' movements to arise out of their unconscious inner being and to reflect the rhythms emanating from the music. The state of intoxication manifested in this way in the dancers was then also to be transferred to the audience, culminating in a communal intoxication encompassing everyone present. It may be concluded from this intention that with *The Rite*, Stravinsky aimed to create his very own "theater of the future," in line with an idea under discussion all across Europe as well as Russia at the beginning of the twentieth century. It is therefore possible

that "perhaps the greatest theater scandal of the twentieth century"[68] can be explained by the fact that Stravinsky came into contact around 1911 with important proponents of the "theater reform around 1900." On the night of *The Rite*'s premiere, at any rate, key demands of this movement found their way from Germany via Russia to Paris—to the Théâtre des Champs-Élysées.

68 Brandstetter, "Grenzgänge II," 17: "vielleicht größte Theaterskandal des 20. Jahrhunderts."

Petrushka's Survival[1]

Jeremy Coleman

Abstract: *First performed in Paris, 1911, the "burlesque" ballet* Petrushka *stands today as a central work of the modernist canon and an unruly assemblage of artistic media that eludes any attempt to define it simply in terms of a single "author" or as a work independent of its original production. In this chapter, I focus on* Petrushka*'s reputation precisely as a concert work—its various instrumental reductions, transcriptions, performances, and their own reception history—as a lens through which to consider the relationship between music and (choreographic) motion. Through a brief analysis of the 1965 Swedish television film of Stravinsky's* Three Movements from Petrushka *performed by Alexis Weissenberg and directed by Åke Falck, I consider* Petrushka*'s life, and that of the work's eponymous puppet, beyond the theater, and examine in what ways the extra-musical elements of the original work were either erased or preserved in "purely musical" versions.*

The product of a fraught collaboration between creative artists in dance, music, theater, visual arts, and folkloristics, the "burlesque" ballet *Petrushka* stands today as a central work of the modernist canon and at the same time an unruly assemblage of artistic media that eludes any straightforward attempt to define it in terms of a single author or as a work independent of its original production (Paris, 1911). There is no reason to suppose that *Petrushka*'s reception has been any less multifaceted than the circumstances of its origins. Christoph Flamm writes in conclusion to a recent encyclopedia entry on the work: "The broader cultural reception history of *Petrushka* remains to be discovered."[2] Flamm offers

1 A condensed version of this chapter was presented at the Annual Conference of the School of Performing Arts, University of Malta, 23–25 March 2022 (conference theme: "Mediating Performance: Technologies, Communities, Spaces"), and I am grateful to the participants in the session for their feedback. I also want to thank Carlo Cenciarelli and Michael Laus for helpful conversations on the topic.

2 Christoph Flamm, "*Petrushka*," in *The Cambridge Stravinsky Encyclopedia* [hereafter *TCSE*] (Cambridge: Cambridge University Press, 2021), 322.

some attractive signposts for future research here: the central notion of the "grotesque" in *Petrushka* arguably anticipates the use of the term by Vsevolod Meyerhold, and there is a possible connection between the carnival setting of the ballet and Mikhail Bakhtin's celebrated concept of the "carnivalesque." Whatever the exact relationship in either of these cases, *Petrushka*'s role within twentieth-century ideas and culture has been underestimated.

And yet it may be *Petrushka*'s reputation precisely as a concert work in various versions—its reputation, in other words, as *Stravinsky*'s—that has been the least explored facet of the ballet and its reception. Given its original form as a multimedia ballet work, the work's parallel existence as a "purely musical" work for the concert hall,[3] or as a suite of "scenes" extracted from it, may offer a productive point of view from which to consider the relations between music, choreography, and the performer's body. Such a mode of performance, transcription and reception is by no means unique to *Petrushka*: the three ballet scores Stravinsky produced for Diaghilev's Ballets Russes between 1909 and 1913 owe their present-day popular and canonical status less to fully staged productions than to concert performances, transcriptions for chamber settings, and audio recordings. It is an aspect of the reception history of the ballets that has been overlooked, most likely because it has been taken for granted as the works' inevitable fate. In what respects *Petrushka* is a unique case in this respect will be considered below.

This chapter seeks to probe the phenomenon of *Petrushka*'s life beyond the theater, in an attempt to think through an aspect of the work by no means limited to its reception history. The chapter begins with an overview of *Petrushka*'s performance versions and arrangements in dialogue with key moments in the work's collaborative genesis. There follows a discussion of concepts of translation and media via Adorno and Benjamin. The chapter will close with a discussion of Stravinsky's *Three Movements from Petrushka* for piano and in particular the 1965 Swedish television film of the piano work performed by Alexis Weissenberg. Through a close reading of the film in light of *Petrushka*'s broader critical legacy, this essay considers whether the "purely musical" versions erase or in some sense preserve the theatrical and choreographic elements of the original ballet.

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3 Terminologically, it may be more apt to speak of "exclusively musical" rather than "purely musical," since the process is tantamount to the *exclusion* of the other arts, rather than the *unveiling* of a purely musical core. However, this chapter uses the more familiar term to allow it to intervene in an existing discourse.

Petrushka in Concert

In his essay on the final scene of Wagner's *Tristan und Isolde*, John Deathridge focused on the role of "absolute music," of purely musical beauty, in relation to the social reality of Isolde's death and transfiguration. Whereas Catherine Clément had interpreted this moment of musical magnificence as an ideological trait of opera in general, where beautiful music conceals the gendered violence meted out to the lead soprano character, for Deathridge the musically absolute is implicated in the violence it simultaneously attempts to exclude.[4] He noted the ease with which Isolde's so-called Transfiguration can be performed independently as an instrumental concert number, with the soprano vocal line simply omitted, one of the more literal illustrations of a dialectical interplay between the Schopenhauerian metaphysics of instrumental music, on the one hand, and the disquieting message of Isolde's annihilation, on the other.[5] In his discussion of the scene and its reception history, including in Nazi Germany, Deathridge highlights a subtle "contract" or "alliance" between "the extramusical and absolute music."[6]

Similarly, in approaching *Petrushka*, I am not aiming to simply excavate social meaning from a work that has become a modernist classic and a canonical text for music theory, so much as to unravel a kind of pact between Stravinsky's "autonomous" music and the extramusical contexts in which it first emerged. In the case of Stravinsky's ballet works, the category of the "extramusical" may include theatrical and choreographic entities from which the music became isolated as a work for the concert hall or as audio recordings. My argument thus chimes with Arved Ashby's 2010 monograph on sound recording technology as a medium in which "absolute music" was variously challenged and preserved as a normative ideal.[7] In focusing on *Petrushka*, I want to expand the discussion of classical music and modern media by considering not only canonical orchestral

4 John Deathridge, "Postmortem on Isolde," in John Deathridge, *Wagner Beyond Good and Evil* (Berkeley, CA: University of California Press, 2008), 133–55. The chapter is a revised version of the previously published article: "Post-mortem on Isolde," in *New German Critique* 69, Special Issue devoted to Richard Wagner, ed. David J. Levin (Autumn, 1996): 99–126. See also Catherine Clément, *Opera, or the Undoing of Women*, trans. Betsy Wing, foreword by Susan McClary (Minneapolis: University of Minnesota Press, 1988); originally published as *L'Opéra, ou la défaite des femmes* (Paris: B. Grasset, 1979).

5 Deathridge, "Postmortem on Isolde," 141–42.

6 Ibid., 155.

7 Arved Ashby, *Absolute Music, Mechanical Reproduction* (Berkeley: University of California Press, 2010).

works originally intended for the concert hall but also music-theatrical works rendered "absolute music" in some sense of the term and at the same time living on in variously mediated forms.

Title	Composition	First performance	Publication
Petrushka, scènes burlesques en quatre tableaux [burlesque in four scenes]	Begun in Clarens (Switzerland), August-September 1910, finished in Rome, 26th May 1911 Revision: Hollywood, Oct. 1946	Original ballet: Théâtre du Châtelet, Paris, 13th June 1911	Berlin, Édition Russe de Musique (hereafter ERM), 1912 (score and parts), reissued by Boosey & Hawkes, 1947 Revision: London, Boosey & Hawkes, 1948
Petrushka, reduction for piano (four hands)	Rome, May 1911	n/a	Berlin, ERM, 1912, rev. 1913, rev. 1947 version published by Boosey & Hawkes, 1948
Trois Mouvements de Pétrouchka [*Three Movements from Petrushka*], transcription for solo piano	Anglet (France), August-September 1921	Paris, 26th December 1922, performed by Jean Wiener	Paris, ERM, 1922; London, Boosey & Hawkes, 1947
Danse Russe, transcription for violin and piano by the composer and Samuel Dushkin	Voreppe (France), 17th Apr. 1932	Funkhaus, Berlin, 28th Oct. 1932, performed by Dushkin and Stravinsky	Paris, ERM, 1933

Table 1: A Catalogue of *Petrushkas*[8]

8 Based on two existing worklists or catalogues: Daniel Jaffé, "Appendix 1: Musical Works," in *TCSE*, eds. Edward Campbell and Peter O'Hagan (Cambridge: Cambridge University Press, 2021), 506–35; and Helmut Kirchmeyer,

Table 1 summarizes catalogue information about *Petrushka* and its authentic versions, namely the three reductions or transcriptions produced by the composer.

The *Three Movements from Petrushka* for solo piano and the *Danse Russe* for violin and piano were evidently conceived as recital showpieces, whereas the four-hand reduction probably had the more utilitarian function as a short score for rehearsals with the dancers. Table 1 does not list the concert suite of *Petrushka*, since Stravinsky never published it as a distinct version of the work. However, when *Petrushka* received its first performance in Russia in early 1913, for instance, it was in the form of concert excerpts: the "Danse russe" at the close of the first tableau, the second tableau ("Chez Pétrouchka"), and the fourth and final tableau ("La semaine grasse") with a recomposed ending.[9] It may be noted that the ad hoc concert suite consisted of the same selection of numbers that Stravinsky would use a decade later as the basis of his *Three Movements from Petrushka* for piano.

This emphasis on concert performance applies to all three of Stravinsky's celebrated ballet works written between 1909 and 1913—*The Firebird*, *Petrushka*, and *The Rite of Spring*—and represents nothing less than an ideological rebranding of the works prompted by the composer and his attempt in various autobiographical accounts to downplay the contribution of others in the works' conception and genesis. What sets *Petrushka* apart in this respect is the peculiar musical allegory embedded in the work from the very start. As the story goes, in September 1910 Stravinsky conceived of a "concert piece" for orchestra (he used the German term *Konzertstück*) "in which the piano would play the most important part."[10] For all that the factual accuracy of Stravinsky's account has been called into question, his autobiographical writings are nonetheless valuable in that his account of *Petrushka* reflects something of the social dynamic of the original idea. For example, the account of *Petrushka*'s musical conception in *Chroniques de ma vie* (published first in French in 1935, and then in English translation in 1936) is often quoted but to my knowledge has yet to be analyzed with reference to the work's broader critical history:

"K012 *Petrushka*," *K Catalog: Annotated Catalog of Works and Work Editions of Igor Strawinsky till 1971*, June 2020, accessed 5 February 2022, http://www.kcatalog.org/index.php/browse-chapters/kcatalog/179-k012-petrushka.

9 See Stephen Walsh, *Stravinsky: A Creative Spring: Russia and France, 1882-1934* (London: Jonathan Cape, 2000), 164–5.

10 Igor Stravinsky, *Chronicle of My Life*, translated from the French (London: Victor Gollancz, 1936), 56.

> In composing the music, I had in my mind a distinct picture of a puppet, suddenly endowed with life, exasperating the patience of the orchestra with diabolical cascades of *arpeggi*. The orchestra in turn retaliates with menacing trumpet-blasts. The outcome is a terrific noise which reaches its climax and ends in the sorrowful and querulous collapse of the poor puppet.[11]

And in a similar account seven years prior, Stravinsky was quoted in an interview:

> In my initial conception, I saw a man in evening dress, wearing his hair long: the musician or the poet of Romantic tradition. He sat himself at the piano and rolled incongruous objects on the keyboard, while the orchestra burst out with vehement protests, with sonic fist-punches.[12]

A complete account of *Petrushka*'s early genesis will probably always remain elusive; however, it seems that Stravinsky's original idea, a grotesque parody of the Romantic concert pianist, was already bound up with the idea of social violence that would be the template, so to speak, for the character of the puppet Petrushka. It may also be noted that the belligerent exchanges between piano and orchestra remained an important feature of the final work.

Christoph Flamm has identified the process of "turning Petrushka, the active principle of aggression, into Pierrot, the passive principle of suffering" as "the result of Diaghilev's intervention and, above all, Benois's elaboration."[13] The observation bears further interpretation: the nature of the collaborative process behind *Petrushka* (namely Stravinsky's working relationship with Diaghilev, Benois, Fokine, Nijinsky, Karsavina, and so on) mirrors Petrushka's own character and narrative trajectory. The grotesque, anarchic figure of the Romantic pianist is tempered—symbolically castrated, in psychoanalytic terms—at the moment he comes to be identified with the commedia dell'arte puppet as a figure of tragic suffering. The early compositional history of

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11 Ibid.

12 Florent Fels, "Un entretien avec Igor Strawinsky à propos de l'enregistrement au phonographe de 'Petrouchka' [*sic*]," in *Nouvelles littéraires*, 8 December 1928: 11: "Dans mon idée primitive, je voyais un homme en frac, portant les cheveux longs: le musicien ou le poète de la tradition romantique. Il se plaçait au piano et roulait sur le clavier des objets hétéroclites tandis que l'orchestre éclatait en protestations véhéments, en coups de poing sonores." Translation slightly modified from Richard Taruskin, *Stravinsky and the Russian Traditions: A Biography of the Works Through* Mavra, vol. 1 (Berkeley and Los Angeles, CA: University of California Press, 1996), 664.

13 Flamm, "*Petrushka*," in *TCSE*, 319.

the ballet thus prefigures a dynamic of social violence and its suppression, providing a critical frame not only for the ballet work itself but for the concert interpretations of *Petrushka* in which the piano soloist is once again foregrounded.

Translation as Survival

Jonathan Dunsby noted the "menacing immortality" of the clown archetype in Schoenberg's *Pierrot lunaire* (first performed in 1912) as well as in *Petrushka*, two works of music theater almost exactly contemporaneous and in many ways comparable: "it is as if the Pierrot into whom [Schoenberg] breathed life has gone on to shape his own history, to frighten us into believing that he emerged from nowhere, has no ancestors, no attachments and, most provocatively, cannot die."[14] Dunsby implies a metonymic identification between Schoenberg's titular protagonist and the work as a whole, and this suggestion of a spectral haunting takes on further significance in the case of *Petrushka* in light of the various concert versions in which the work has been disseminated. Petrushka is killed in the final duel with his romantic rival, the "Moor," but his ghost returns at the last moment, thumbing his nose at the Old Magician who brought him to life,[15] just as the work recedes from the "presence" of the fully staged ballet production and takes on another life in the concert hall.

Already in his *Philosophie der neuen Musik* (1949), Theodor Adorno observed parallels and divergences between the two works, in turn crediting Egon Wellesz with the comparison: "*Pierrot* and *Petrushka*, as well as Strauss's *Till Eulenspiegel*—so distinctly audible several times in Stravinsky's ballet—survive their own demise."[16] The typographical ambiguity between Adorno's original published German text and the standard English translation by Robert Hullot-

14 Jonathan Dunsby, *Schoenberg: Pierrot lunaire*, Cambridge Music Handbooks (Cambridge: Cambridge University Press, 1992), 2.

15 Stravinsky later noted that the offensive gesture is directed not at the Old Magician but at the audience. Igor Stravinsky and Robert Craft, *Memories and Commentaries* (London: Faber and Faber, 1960), 34.

16 Theodor W. Adorno, *Philosophy of New Music*, trans., ed., and with an introduction by Robert Hullot-Kentor (Minneapolis: University of Minnesota Press, 2006), 109. German original: "Pierrot und Petruschka, wie auch der Straussische Eulenspiegel, der ein paarmal so vernehmlich in Strawinskys Ballett anklingt, überleben der eigenen Untergang." Theodor W. Adorno, *Gesammelte Schriften: Philosophie der neuen Musik*, vol. 12, ed. Rolf Tiedemann (Frankfurt am Main: Suhrkamp, 1975), 133. Stravinsky's and Schoenberg's mutual regard for each other's work (for *Pierrot lunaire* and for *Petrushka*, respectively) is summarized

Kentor—does the name "Petrushka" refer to the eponymous protagonist or to the work?—expresses the same metonymy implied by Dunsby: the work and protagonist seem to share an identical fate.[17] Not only does the ghost of Petrushka appear in the ballet's final moments, but Stravinsky's ballet score, too, "survives." The work's "survival" in various concert arrangements and paratheatrical media may indeed be a kind of uncanny, spectral haunting—even an act of revenge by the composer-pianist on his theatrical collaborators who, as we have already seen, had turned him from a parodic, diabolical aggressor into a sentimental, tragic victim.

Adorno used the word *überleben* (to survive, to live on) to describe both Schoenberg's *Pierrot* and Stravinsky's *Petrushka*. The substantive *Überleben* appears once, in enigmatic quotation marks, in one of the most influential essays on literary translation ever written: "Die Aufgabe des Übersetzers" (1923) [The Translator's Task] by Adorno's colleague Walter Benjamin, written as a preface to his German translation of Baudelaire's *Tableaux parisiens*:

> Just as the expressions of life are most intimately connected with the living, without meaning anything to it, so the translation issues forth out of the original. Though not from its life [*Leben*] so much as from its 'survival' ['*Überleben*'].[18]

Benjamin's translation theory is premised on the "life" of a work or text—that is, when "life is attributed to everything that has a history, and not to that which is only a stage setting for history."[19] This infamous pair of terms (*Leben*; *Überleben*) affords a certain analogy with the figure of Petrushka as a puppet

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by Stephen Walsh, chapter 4: "Petrushka meets Pierrot," *Igor Stravinsky: A Creative Spring*, 186–200, especially 189–90.

17 Hullot-Kentor's English translation (mis)reads "Pierrot und Petruschka" as the names of the works, not of the protagonists.

18 Caroline Disler, "Benjamin's 'Afterlife': A Productive (?) Mistranslation in Memoriam Daniel Simeoni," in *Traduction, terminologie, rédaction* [*TTR*] 24, no. 1 (2011): 183–221, 185. Otherwise I have relied on the English translation of Benjamin's essay by Steven Rendall, "The Translator's Task, Walter Benjamin," in *TTR* 10, no. 2 (1997): 151–65. German original: "So wie die Äußerungen des Lebens innigst mit dem Lebendigen zusammenhängen, ohne ihm etwas zu bedeuten, geht die Übersetzung aus dem Original hervor. Zwar nicht aus seinem Leben so sehr denn aus seinem 'Überleben'." Walter Benjamin, "Die Aufgabe des Übersetzers," in Walter Benjamin, *Gesammelte Schriften*, Vol. 4, ed. Rolf Tiedemann and Hermann Schweppenhäuser (Frankfurt am Main: Suhrkamp, 1985), 10.

19 "Vielmehr nur wenn allem demjenigen, wovon es Geschichte gibt und was nicht allein ihr Schauplatz ist, Leben zuerkannt wird, kommt dessen Begriff zu seinem

brought to life, one who is killed yet lives on. As for the "life" of the work, Benjamin's materialist view of translation as a "form" or "mode,"[20] rejecting the more commonly held view of translation as the utilitarian transmission of content for a receiver, accords with the various transmutations of a multimedia ballet work. Here Benjamin's reputation as one of the first serious theorists of modern mass media is justified, as his notion of translation as a "form" can be read as preempting Marshall McLuhan's widely quoted (and often misunderstood) slogan "the medium is the message."[21] Finally, as already suggested in the introduction, the present chapter is not simply a "reception history" of *Petrushka*, which as a methodology is at least nominally invested in the listeners' or readers' response, but rather an inquiry into what Benjamin called a work's "translatability" ("Übersetzbarkeit"), the virtual potentiality in a work for translation.[22]

What does it mean, then, for a ballet score to be "translated" into a concert work, ostensibly without theater or choreography? Such an arrangement or mode of performance is not merely the stripping away of the work's "external" elements, as if revealing its purely musical essence. Nor does it simply exchange one medium equivalently for another while preserving the narrative content. It invariably entails a change of media (e.g. solo piano instead of full orchestra; concert hall instead of theater; etc.) but one in which the narrative "content" (or "message" in McLuhan's sense) is subject to a dialectic of forgetting and recollection.

The phenomenon of Stravinsky's 1909–13 ballet scores in concert involved either concert presentation of the entire score or a selection of scenes from the larger work. In this respect, it recalls the nineteenth-century practice whereby popular numbers were extracted from operas and ballets for domestic consumption as piano pieces, or presented in concert in the form of "highlights." Using Benjamin's *Passagen-Werk* (*The Arcades Project*) as a critical touchstone,[23] Stephanie Schroedter has investigated the material cultures and psychological

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Recht." Benjamin, "Die Aufgabe des Übersetzers," 11. Rendall, "The Translator's Task," in *TTR* 10, 153.

20 "Translation is a mode [*eine Form*];" Benjamin, "Die Aufgabe des Übersetzers," 9; Rendall, "The Translator's Task," in *TTR* 10, 152.

21 Marshall McLuhan, *Understanding Media: The Extensions of Man* (Abingdon, Oxon: Routledge, 2001, first published 1964), 7ff.

22 Benjamin, "Die Aufgabe des Übersetzers," 9ff.; Rendall, "The Translator's Task," in *TTR* 10, 152ff. See also Samuel Weber, *Benjamin's -abilities* (Cambridge, MA: Harvard University Press, 2008).

23 Walter Benjamin, *Gesammelte Schriften: Das Passagen-Werk*, vol. 5, ed. Rolf Tiedemann (Frankfurt am Main: Suhrkamp, 1982); translated into English by Howard Eiland and Kevin McLaughlin, *The Arcades Project* (Cambridge, MA: Harvard University Press, 2002).

spaces of ballet and opera arrangements and the ways in which the theatrical and choreographic elements of an opera or ballet took up residence in imaginary spaces.[24] The difference in this case reflects the peculiar nature of Stravinsky's piano transcriptions of his 1909–13 ballet scores. What is of concern here is less the imagination or subjectivity of the listener than the ways in which choreographic movement or narrative elements "survive" in concert performance.

Choreographed for Piano and Two Hands

The dynamic relationship between solo pianist and orchestral collective lay at the heart of Stravinsky's initial idea of a *Konzertstück* and remained no less central to the final ballet. It is therefore fitting that Stravinsky about ten years later would compose a virtuosic transcription for solo piano based on *Petrushka*, as if to return the work to its roots: namely the *Three Movements from Petrushka* (1922), dedicated to Artur Rubinstein who originally commissioned it (see Table 1). The remainder of this chapter focuses on a "mediated" interpretation of Stravinsky's *Three Movements*: Alexis Weissenberg's performance filmed for Swedish television in 1965, directed by Åke Falck.[25] Shot over ten days in January 1965, Stockholm, the short film has been credited as single-handedly reviving Weissenberg's career, and if the film is already known to academics and to a broader audience, it is probably in this context.[26]

For the purposes of Falck's film, Weissenberg "performed" the work on a mute piano in synchrony with his own audio recording of the work, the silent instrument having been custom-made for the production. In a

24 Stephanie Schroedter, *Paris qui danse. Bewegungs- und Klangräume einer Großstadt der Moderne* (Würzburg: Königshausen & Neumann, 2018).

25 Åke Falck (dir.), *Three Movements from Petrushka*, Alexis Weissenberg (piano), filmed for Sveriges Television (SVT), co-produced by MusicaGlotz (Stockholm, 1965); reissued on DVD: *Classic Archive™: Alexis Weissenberg* (Ideale Audience International, 2008), item number 3078048, UPC number 899132000626. Falck would go on to direct Weissenberg as the soloist with the Berlin Philharmonic in a 1967 film of Tchaikovsky's Piano Concerto No. 1 conducted by Herbert von Karajan.

26 In Weissenberg's obituary in the UK newspaper *The Times*, the author made the astonishing claim that the film had been directed by Ingmar Bergman. Author anonymous, "Alexis Weissenberg" [obituary], *The Times* (24th January 2012), accessed 17 January 2022, https://www.thetimes.co.uk/article/alexis-weissenberg-nfdqgfzcvhc. Had Bergman been attached to the film in any way, it would surely have attracted more attention than it has to date.

sense, then, Weissenberg mimes *Petrushka*. To be more precise, he mimes his own recording. The latter observation may be interpreted in at least two ways. Firstly, the film can be understood as a kind of choreography, for while Weissenberg's physical movements were not artistically created in themselves, there was a profoundly mimetic element to his "performance" where the function of sound production is no longer important. In a subsequent interview on the film, Weissenberg felt that in Falck's film Stravinsky's *Three Movements* had been "choreographed for piano and [two] hands," and the choice of terminology is suggestive, albeit lacking the expertise of a dance scholar.[27] Secondly, the "playback" recording process reproduces something of the social dynamic of Petrushka himself, the puppet who is brought spectacularly to life by the Old Magician and dances the "Danse russe" under his spell. Weissenberg's performance for the camera encases the "dead" soul of a fixed soundtrack within a living body, creating a semblance of life for it, an illusion of "presence."

The use of playback for filmed "performances" of classical works is not unheard of but remains the exception rather than the rule, at least in the classical music recording industry. No less than Herbert von Karajan had the disgruntled players of the Berlin Philharmonic mime to playback for the filming of the canonical works for television in the 1960s and 1970s.[28] In a different context, Ben Winters has examined the production of the "reality" of classical concert music performance in the medium of screen fiction, which includes examples of musically inexperienced actors' miming to prerecorded tracks.[29] Such practices are in a sense an equivalent to "lip-synching": "hand-synching" or "finger-synching" in this case, not to mention other physical gestures and expressions that aid in the simulation. The idea of mimesis comes to the fore—especially in the case of a work adapted from *Petrushka*, a ballet about a magically animated puppet that is a mute object of violence to the same degree that his "life" is inherently and ineluctably mimetic.

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27 "[…] chorégraphié pour un piano et des mains." "Alexis Weissenberg talks about *Petrushka*," bonus material in the 2008 DVD. Interviewer: Christian Labrande. Director: Philippe Truffault. Quotation from interview transcribed and translated by the present author.

28 See: Georg Wübbolt and Peter Gelb (dir.), *Herbert von Karajan: Maestro for the Screen* [DVD] (Berlin: Unitel Classica, C Major Entertainment GmbH, 2016); and Ramón Sanjuán Mínguez, "El Controvertido Legado Fílmico de Herbert von Karajan: Una Necesaria Revisión de los Desheredados," in *Revista de Musicología* 41, no. 1 (January–June, 2018): 307–30.

29 Ben Winters, *Music, Performance, and the Realities of Film: Shared Concert Experiences in Screen Fiction* (New York: Routledge, 2014).

The seeming paradox of a "purely musical" work rendered and mediated by means of complex technological and choreographic operations lends irony to anti-theatrical platitudes about concert performance in general. The following assessment of Weissenberg's artistry is a case in point:

> Alexis Weissenberg's spectacular technique and individual style have made a lasting impression on the art of twentieth-century piano playing. Some of his recordings of the Russian repertoire especially have set a benchmark and are often cited as top recommendations in this field. On stage he has a commanding presence, *although he never uses theatrical or other non-musical gestures to deliver his message*.[30]

The disparagement of "theatrical or other non-musical gestures" only raises further questions, while the double negative formulation ("he *never* uses […] *non-musical* gestures") amounts to a deceptive tautology, as if to say that what counts as a "musical" or a "non-musical" gesture were natural and self-evident. As I shall consider briefly in more detail, Falck's film effectively collapses the distinction between the "theatrical" and the "purely musical."

In Falck's film, choreographic movement is reinscribed into the work not only through the recording process (the performer's miming to playback) but also via the cinematic form, aesthetic and style, all of which is realized with an ostentatious bravura that seems to rival the sheer virtuosity of the Stravinsky piano work itself. Falck's film is shot in stylish black and white, and indeed the extreme use of light and shade lends it a neo-expressionist flair epitomized by Falck's fellow countryman Ingmar Bergman and characteristic of 1950s and 1960s realist European arthouse cinema more broadly. Falck's own 1964 feature film, *Bröllopsbesvär* (*Swedish Wedding Night*), was shot in black and white using a disorientating mixture of realist, surrealist and expressionist stylistic tropes.[31] His *Petrushka* film of the following year contains a wide range of similarly inventive images, shots and camera angles: Weissenberg's hands in close-up from every conceivable angle; his face in close-up, again from various angles; wide shots from in front and from behind; shots that begin in a close-up of the hands and then zoom out; overhead shots following the movement of the hands across the keyboard; tracking shots moving around the piano from one end to the other; shots of the piano's interior showing the detail of the hammers; mirror images; and Weissenberg in dramatic, expressionist and sometimes warped silhouette. It may be noted here that every stylistic and technical feature in the

30 Anonymous description of compilation film directed by Pierre-Martin Juban, 2008, released on the online platform MediciTV, accessed 8 January 2022, https://www.medici.tv/en/concerts/alexis-weissenberg/, emphasis added.

31 I am grateful to Gerard Corvin for referring me to a copy of the film.

cinematography, editing, and direction is coordinated, to a greater or lesser extent, with a structural event or section in the music.

Figure 1a–c: *Video still from Falck (dir.)* Three Movements from Petrushka *(Stockhom, 1965). a) movement 1 "Danse russe," 0 mins. 26 s.; b) movement 2 "Chez Pétrouchka," 2 mins. 9 s.; c) movement 3 "La semaine grasse," 7 mins. 43 s. © Ideale Audience International*

While the film seems to underline the "choreographic" nature of the piano work as something inherent to it rather than imposed from without, the film constantly foregrounds the mediation of the work and the process of recording it. Periodically throughout the film, the camera closes in on single pages from the printed score—once in each of the three movements, to be precise (see figures 1a–c). The physical appearance of the score thus functions as a kind of framing device: the first page appears immediately before the performance starts, and the film ends with a close-up image of the final chord in the score. Movement 2 neither begins nor ends with an image of the score; rather, the score is shown open at the appropriate page in the middle of the movement, occupying half of the camera frame in the foreground with the pianist visible in the background. After a few seconds, the score is shakily withdrawn to the right-hand side of the screen.

The score seems to serve a double function in Falck's film. On the one hand, it shows the score to be already a mediation of the work. As such it flaunts the challenge it poses: that of bringing to life, in the most virtuosic and inventive ways, the dead letter of the musical text. On the other, images of the score project its critical authority and Weissenberg's sober—indeed technically flawless—fidelity to the musical text.

The references to technology and process seem equally designed to create the illusion of seamless, synchronic integration and "presence." There is a wide shot in the third movement ("La semaine grasse," starting at 3 mins. 40 s.) taken from a high vantage point that shows a microphone hanging from a stand and the piano in the background. While the image seems to draw attention to the technical process of recording and mediation, it also sustains the illusion that the audio had been recorded live in the studio and that the sound and image have an identical source in Weissenberg's "performance" in the TV studio.

Weissenberg's comment that the film was "choreographed for piano and [two] hands" is borne out above all in the close-up shots of his hands displaying the sheer physical demands of the work: the hands repeatedly spanning large intervals in a fraction of a second, sometimes crossing over one another, and especially the "diabolical cascades of *arpeggi*" (to recall Stravinsky's own description of his germinal *Konzertstück*) preserved in the second movement of the transcription ("Chez Pétrouchka").[32] In these close-up shots, the movement of Weissenberg's hands resembles that of dancing bodies. For instance, in the

32 The bitonal scales and arpeggios between the two hands (including the so-called "Petrushka chord") remain one of the technically easier passages of the entire piece for a pianist, even if to the untrained ear they sound the most impressive.

first movement ("Danse russe"), the left hand has a repeating pattern of staccato chords, and the close-up on Weissenberg's hand causes it to resemble the same dance performed by the three puppets in Fokine's original choreography. The cameras' movements in relation to the piano and the performer elicits choreographic features that are in some sense shown to be always already in the work, hence the notion of "translatability."

The case study of Falck's film is a timely reminder of the various ways in which a multimedia work is in turn mediated by its own history, by its transformations and translations, and by its wider critical discourse. In blurring the distinction between a musico-theatrical work (such as ballet) and a "purely musical" performance or arrangement of the score, the film deconstructs the notion of the "purely musical" for Stravinsky's *Three Movements* for piano as well as for his 1909–13 ballet scores in general. Nonetheless, the case of *Petrushka* helps to make this point more emphatically than almost any other musical work in the modernist canon: the figure of the suffering puppet is an all-too-prescient image of the diremptions of the performer-subject not only in modernism but in the contemporary landscapes of virtual and digital media—whether it be the process of "hand-synching" to a pre-existing track or that of bringing to life an inert score. Falck's remarkable 1965 film of Weissenberg's playing may serve as both a benchmark for the creative filming of musical performance today and a cautionary tale about the technical challenges of such a process and the implications of overcoming them.

"His dances were composed"
On the Choreographies *Séquence* and *Recueil* by Jean Cébron

Anja K. Arend and Matthias Geuting

Abstract: *Jean Cébron (1927–2019) was one of the most influential professors of modern dance at the Folkwang University of the Arts and one of the main figures in keeping the Jooss-Leeder method alive. But besides this pedagogical impact he was also a unique dancer and choreographer. His artistic personality and career was not only shaped by a very personal and forward-looking movement language, it was also highly influenced by contemporary music. In particular, the composer Juan Allende-Blin (b. 1928), was an important teacher, collaborator and discussion partner for him. By taking a closer look at two choreographies,* Séquence *(1962) and* Recueil *(1965), and its two associated compositions* Distances *and* Profils *that arose out of a collaboration between Cébron and Allende-Blin, this paper will focus on Cébron as a young and innovative artist who not only danced and choreographed but also composed.*

On the morning of October 28, 2020, composer Juan Allende-Blin and dance scholar Ricardo Viviani meet for a talk at the library of the Folkwang University of the Arts in Essen. The framework is set by a cooperative project of the three dance archives in North Rhine-Westphalia (Archive of the Institute for Contemporary Dance at the Folkwang University of the Arts, Deutsches Tanzarchiv Köln, Archive of the Pina Bausch Foundation)[1] which aims to highlight the history of dance in North Rhine-Westphalia in the years 1959–1969. It is intended as an oral history interview that should enrich the multitude of primary sources

1 *Euphorie und Aufbruch. Eine Geschichte des Tanzes 1959–1969*, a cooperation project by the Institute for Contemporary Dance, the Deutsches Tanzarchiv Köln and the Pina Bausch Foundation. The project was funded by the Ministry of Culture and Science of the State of North Rhine-Westphalia. The results of the project are presented on the website https://euphorie-und-aufbruch.de (accessed 2 July 2022).

dealt with in the mentioned project with personal memories. Juan Allende-Blin, born in Santiago de Chile in 1928 and resident in the Federal Republic of Germany since the early 1950s, is today one of the last remaining members of a generation of composers who represented a musical awakening in the years after the Second World War and National Socialism. After his studies in Detmold, the young composer attends Olivier Messiaen's composition class at the International Summer Courses for New Music in Darmstadt. He builds ties with the contemporary composing scene, with Pierre Boulez, John Cage, György Ligeti, Dieter Schnebel, and Mauricio Kagel—but soon his work represents his own path, one that also incorporates older, sometimes even neglected compositional traditions. A few years ago, the now Essen-based composer was awarded the Chilean National Prize for Music.[2] An important part of the about eighty-minute conversation with Ricardo Viviani is Allende-Blin's manifold connections to the dance world of the 1960s, which also influenced some of his compositions. One dancer and choreographer stands out as being particularly important: Jean Cébron.

Jean Cébron, born in Paris in 1927, professor of modern dance at the Folkwang Hochschule in Essen (now University of the Arts) from 1976 to 1993, is nowadays primarily recognized in dance education, dance research, and dance in general in relation to the Jooss-Leeder method. His *Etudes* are not only an important part of teaching among prominent practitioners of the Jooss-Leeder method (such as Stephan Brinkmann, Barbara Passow, Beatrice Libonati, or Olimpia Scardi, to name just a few), they also often serve as a starting point for artistic-pedagogical projects.[3] Cébron himself thus primarily appears in this context as a pedagogue. This is especially recognizable because many theorists and dancers coming from and working in the field of Jooss-Leeder method

2 For an introduction to the life and work of the composer, see: Christian Esch and Frank Schneider, "*Immer auch ein politischer Impuls.*" *Juan Allende-Blin im Gespräch mit Christian Esch und Frank Schneider* (Altenburg: Kamprad, 2017) and Stadtbibliothek Essen, Verena Funtenberger, ed., *Juan Allende-Blin. Komponist und Musikchronist. Verzeichnis der Werke, Rundfunkproduktionen, Tonträger, Texte* (Brühl: Edition Gravis, 2020).

3 For example the restaging of Jean Cébron's Etüde *Starting Point* 2016 (see: Stephan Brinkmann and Henner Drewes, "Notation Reflexion Komposition: Die Etüde 'Starting Point' von Jean Cébron," in *Tanzpraxis in der Forschung—Tanz als Forschungspraxis: Choreographie—Improvisation—Exploration*, ed. Susanne Quinten and Stephanie Schroedter [Bielefeld: transcript, 2016], 73–85). Or the project *Hommage an Jean Cébron* by Olimpia Scardi and Francesca Mommo 2020/21 (see https://www.francescamommo.com/hommage-an-jean-cebron / [accessed 2 July 2022]).

point out the importance of combining teaching and creating art as Stephan Brinkmann writes:

> The relationship between a school of movement and its artistic application is a decisive motor for the development and continuation of both the Jooss-Leeder method and the dance techniques originating in America […], because their representatives are thereby perceived as educators and creative artists at the same time and the teaching can always be associated with a performance practice.[4]

However, the artistic is here also considered pedagogically relevant. For all the charisma that Jean Cébron's work as a dance pedagogue has always had and still has, this pedagogue and dance educator nevertheless was also an ambitious, internationally active choreographer whose artistic work was seen as trend-setting in modern dance already in the early 1950s, as a review by Walter Terry impressively shows:

> Jean Cébron is one of the most exciting new dance figures to appear on the American scene. […] He has an individual form of dance expression, a sense of dedication, fluidity in a highly personal style with an air of ballet, torso strength of modern, and gestural beauty of oriental dance.[5]

Cébron performed his solo and chamber pieces in France, Chile, the United States, and Germany. But he never choreographed for a large ensemble: Even when a larger group of dancers is involved, only a few performers appear on stage in the different parts. This young and outstanding dancer and choreographer knew how to combine abstraction and narration, structure and emotion in a very unique way. And, less well known, he also experimented in other artistic disciplines: as draftsman, poet—and composer.

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4 Stephan Brinkmann, *Bewegung erinnern. Gedächtnisformen im Tanz* (Bielefeld: transcript, 2013), 233 (English translation by the authors): "Die Beziehung zwischen einer Bewegungsschule und ihrer künstlerischen Anwendung ist sowohl für die Jooss-Leeder-Methode als auch für die […] aus Amerika stammenden Tanztechniken ein entscheidender Motor für deren Entwicklung und Fortschreibung, weil ihre Vertreter dadurch als Pädagogen und gestaltende Künstler gleichzeitig wahrgenommen werden und der Unterricht immer mit einer Aufführungspraxis in Verbindung gebracht werden kann."

5 Walter Terry, in *Herald Tribune*, July 4, 1957. Many thanks to Ricardo Viviani for sharing information on his research about Jean Cébron in different archives in the United States.

Figure 1: *Sigurd Leeder, Jean Cébron in his piece* Aquatic, *drawing*, 1957. © SAPA, *Nachlass Sigurd Leeder*

All this was on the agenda of Ricardo Viviani and Juan Allende-Blin's talk on October 28, 2020. This interview is already accessible online,[6] but it still awaits an elaboration of its contents. It provides a source that sheds light on Cébron's early choreographic years in the 1950s. It also focuses on the choreographer-composer collaboration between Cébron and Allende-Blin, which has received little attention in dance and music studies yet. Based on the mentioned interview, this article will take a closer look at certain aspects of the artistic collaboration between Cébron and Allende-Blin, and will also discuss Cébron's general approach to music, which is remarkable itself. This article thus

6 Juan Allende-Blin interviewed by Ricardo Viviani at Folkwang University of the Arts, Essen, October 28, 2020, video, 1:18:48, accessed 2 July 2020, https://timeline.euphorie-und-aufbruch.de/media/pbf/video/20201027_juan_allende-blin_0000.mp4. The interview was conducted in German. All the translations used in this text are by the authors.

derives its structure from this new and so far unexplored source and aims to propose approaches for a comprehensive appreciation of the choreographer Jean Cébron, which has yet to be done.

Jean Cébron and His Approach to Music

Juan Allende-Blin and Jean Cébron met in Santiago de Chile in 1948. Cébron was visiting as a guest dancer with Kurt Jooss for a staging of Jooss' choreographies with the Ballet de la Escuela de Danza of the University of Chile. He danced the part of "junger Arbeiter" in Kurt Jooss' ballet *Großstadt* to music by Alexandre Tansman—a performance that is still inscribed in Allende-Blin's memory. At that time, a private and artistic friendship arose between the two men, which was to be continued years later in Essen. While in Santiago, Cébron took composition lessons from his friend, who had received excellent training through studies with Pedro Humberto Allende Sarón, a student of Claude Debussy. Through European emigrants who frequently visited his parents' house, Allende-Blin had access to the hard-to-reach scores from Arnold Schoenberg's circle, such as those by Anton Webern, whose subtle and complex tonal language he tried to introduce to Cébron. The outcome of these studies are two quite original compositions by Jean Cébron himself, written in 1952: *Pièce pour trois pianos*, and the quarter-tone *Pièce pour violoncello*.[7] Cébron came across the quarter tones while he was learning on his own to play the violoncello. His fascination for these minimal changes in pitch corresponded with his passion for detail in movement very well. Allende-Blin sums it up perfectly in the interview: "This millimeter work interested him not only in the movements of the hands and the whole body, but also in the music."[8] The music for three pianos, in turn, shows unmistakable echoes of the music by Olivier Messiaen, whose organ pieces Allende-Blin and Cébron studied with four hands at the piano.

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7 The scores are in private ownership. Both pieces were performed in May 1993 during an evening for Jean Cébron: *Tanz und Komposition. Choreographien und Kompositionen von Jean Cébron aus den Jahren 1952–1964* at the Neue Aula at the Folkwang University of the Arts. The performers were Klaus Marx (violoncello), Tatjana Dravenau, Thomas Schäfer, and Thomas Günter (piano). A video recording of the evening is stored in the Folkwang Tanzarchiv. It remains to be researched whether more compositions by Jean Cébron can be found and in which context his music for *The Ambiguous Monster* (1955) could be situated.

8 Allende-Blin, interview: "Diese Millimeter-Arbeit interessierte ihn nicht nur in den Bewegungen der Hände und des ganzen Körpers, sondern auch in der Musik."

Allende-Blin describes his friendship with Cébron as an extremely beneficial constellation: he, who was also studying mathematics and architecture at that time, gained deep insights into dance and the spatial thinking associated with it, and even made attempts to design his own dance notation with the support of his friend. In turn, the dancer and soon-to-be choreographer Cébron developed an astonishing understanding of the compositional métier, which in turn inevitably influenced his choreographic work. And both of them looked for relationships that seemed to connect all these art forms on a fundamental level.

Many of Cébron's early solo works were created without music and, according to Allende-Blin's memories, were presented to a small interested public in the context of private solo evenings. The young composer did not miss music in these choreographies, because he saw it integrated into the movements themselves: "He showed me his dances and his dances were without music. His music was in the dance. In the dynamics of his movements."[9]

Allende-Blin was particularly impressed by Cébron's *Vision Aquatique*, created in 1948. Here, too, he emphasizes in the interview the musicality in the dancer's movements, especially those of the hands: "You could feel in every movement of every limb, the fingers and so—they were in the right place at the right moment. There didn't need to be any music there."[10] This detailed use of hands and fingers, and in general a strong focus on the placement of the extremities, can be found throughout Cébron's choreographies. This may have something to do with his dance training, which included studies in Javanese dance with Djemil Anik and Indian dance with Ram Gopal, in addition to classical ballet, an intensive study of the Cecchetti system, and studies at the Sigurd Leeder School in London.[11]

In later pieces, Cébron did use music. It is hardly surprising that almost all of the music was by contemporary composers. Thus, music by Jess Meeker was heard in *Instant Absolument Vierge*, by Edgar Varèse in *Poeme Danse*, by

9 Allende-Blin, interview: "Er zeigte mir seine Tänze und seine Tänze waren ohne Musik. Im Tanz war seine Musik. In der Dynamik seiner Bewegungen."

10 Allende-Blin, interview: "Man spürte bei jeder Bewegung jedes Gliedes, der Finger und so—sie waren an der richtigen Stelle im richtigen Moment. Da brauchte keine Musik dabei zu sein."

11 Exploring these dance-technical and intercultural influences in Jean Cébron's choreographies in detail promises to be a fruitful approach to understanding his movement language. Ricardo Viviani has already started to do so in a seminar "Finding Your Own Voice" at the Institute for Contemporary Dance of the Folkwang University of the Arts in winter semester 2020/21. A deepening and expansion of this work is in preparation.

Karlheinz Stockhausen in *Struktur*, by Celso Garrido Lecca in *Time-Destruction*, by Jay Watt in *Two Poems* and, last but not least, by Juan Allende-Blin in *Séquence* and *Recueil*.[12] The latter will be examined more closely as case studies in the following text. It remains to be verified which of the aforementioned performances were realized with live music—an ideal to which Cébron likely felt committed. The already mentioned collaboration with Stockhausen was apparently inspired by a suggestion from Allende-Blin. The piece *Struktur* (1960), a choreography based on Stockhausen's *Elektronische Studie Nr. 1* (1952), can be seen as a kind of augmented canon between three performers, each movement imitating the previous one with a precisely defined degree of temporal stretching, thus allowing the audience to experience the same movement structure at a successively decreasing tempo.[13] Such procedures of mathematical precision were familiar to Cébron from his study of Olivier Messiaen's compositions—of course passed on to him by Allende-Blin, who carefully and in a well-structured manner introduced his friend to the fundamentals of composing: starting with melody and proceeding via counterpoint to harmony, always keeping an eye on the developments in music history. In his talk with Ricardo Viviani, Allende-Blin names Aristotle's Drama Triangle as well as the Golden Ratio as essential principles of artistic composition. A conscious use of tension and release and above all an "economy of resources"[14] are two practices that are also reflected in Cébron's choreographies.[15] The link back to well-established compositional principles, together with a tendency towards abstraction and the simultaneous search for new, contemporary possibilities of expression, seems to connect the entire œuvre of the two artists like a hidden parenthesis. In Allende-Blin's descriptions, we can clearly see the image of Jean Cébron as a choreographer who treated music in his works with particular sensitivity, and who furthermore knew how to transfer musical-compositional structures to his own work, thus reaching a degree of reflection in the union of music and dance that was not entirely common in his time.

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12 This information, especially the English spelling of the titles, refers to the Jacob's Pillow Dance Archive database. Jean Cébron performed there repeatedly in the 1950s and 1960s.

13 Esch and Schneider, "*Immer auch ein politischer Impuls*," 17.

14 Allende-Blin, interview: "Ökonomie der Mittel."

15 On Cébron's thoughts about tension and relaxation in dance, see also: Jean Cébron, "Das Wesen der Bewegung. Studienmaterial nach der Theorie von Rudolph von Laban," in program for the symposium "Folkwang Tanz," October, 13–15, 2017, Folkwang University of the Arts, ed. Stephan Brinkmann and Henrietta Horn (Essen: Folkwang University of the Arts, 2017): 22–30.

Séquence/Distances

Already in Chile, Allende-Blin and Cébron had begun working on a piece together. In the early 1950s, however, both moved to Germany at different times, which meant that the collaboration was temporarily interrupted. But at the beginning of the 1960s they both resumed their thoughts and the choreography *Séquence* was premiered on June 15, 1962 at the Akademie der Künste in Berlin.

What is remarkable about this first collaboration is the idea of an independent working process that composer and choreographer agreed on. One consequence of this is that the stage work and the composition have different titles: The choreography created by Jean Cébron with music by Juan Allende-Blin is called *Séquence*. The composition by Allende-Blin, on the other hand, is entitled *Distances* and was also performed under this title independently from the dance. It is a collaboration in the "sense of John Cage,"[16] which Allende-Blin describes as follows:

> We agreed that if he does choreography and I write music to go with it, there should be no agreement that the rhythm of the music is taken over by the choreography or vice versa. Rather, it should be in counterpoint. Of course, the music is created in the spirit of the choreography, but not, let's say, as a reproduction of the dynamics, the rhythm, the choreography. Rather, it uses its own laws of music and its own laws of choreography in dance. [...] But, as I said, always very conscious of the form, how you construct something and what dramaturgy a piece must have—both as dance and as a piece of music.[17]

Two aspects in particular are remarkable about this statement: Firstly, despite the independence of music and dance, there is a broad conceptual agreement; secondly, Allende-Blin seems to proceed quite naturally from the assumption that the music arises in reaction to the choreography. In this, he refers to a procedure that was used for a long time in the field of theatrical dance, in which

16 Allende-Blin, interview: "[…] im Sinne von John Cage."

17 Allende-Blin, interview: "Wir haben uns geeinigt, dass, wenn er eine Choreografie macht und ich eine Musik dazu schreibe, es keine Übereinkunft geben sollte, dass die Rhythmik der Musik von der Choreografie übernommen wird oder umgekehrt. Sondern es sollte im Kontrapunkt sein. Die Musik entsteht natürlich im Geiste der Choreografie, aber nicht, sagen wir, als Reproduktion der Dynamik, der Rhythmik, der Choreografie. Sondern es werden eigene Gesetze der Musik benutzt und eigene Gesetze der Choreografie beim Tanz. […] Aber, wie gesagt, immer sehr bewusst, was die Form betrifft, wie man etwas konstruiert und welche Dramaturgie ein Stück haben muss—sowohl als Tanz, als auch als Musikstück."

a composer who often was specialized in dance carried out the musical ideas of the choreographers. This procedure can still be found in modern dance to some extent. Today, this way of working is rather rare, as most choreographers use pre-existing music, which means that the choreography is largely oriented on the music. The fact that in *Séquence/Distances* this independence or equality of the two art forms is the starting point of the artistic collaboration not only indicates a great trust in both art fields, but also shows an approach to art in general that is based on taking risks and experimenting.

The available material for *Séquence* is limited, as there seem to be no video recordings and the accessible photographic material is also very fragmented. However, the Archive of the Institute for Contemporary Dance | Folkwang Dance Archive contains a handwritten and annotated score of *Distances*[18] and a kinetogram of *Séquence*,[19] two very rare and most interesting sources. Research into the metadata of both sources has not yet been completed. For example, the authorship of the kinetogram has not yet been identified, and a detailed evaluation of the kinetogram by kinetographers is also yet to be done. Nevertheless, both materials already allow us some insights into this almost unknown piece of dance.

The kinetogram is noted in a checkered notebook with the title CÉBRON and on some single sheets. It is written in pencil in both versions. The notebook contains fifty-two unnumbered pages. Corrections, crossed-out figures, and annotations indicate that it is a working material and not a clean copy. There is a note in the booklet that contains the cast of the different parts. According to this notebook, *Séquence* is a choreography "en 6 episodes."[20] Each episode has its own title, resulting in the following order: Oracle, Dialogue, Eclat, Distance, Fauve, Oracle. This structure is somewhat reminiscent of the Aristotelian Drama Triangle mentioned by Allende-Blin with its build-up of tension, climax, and release. The cast changes in the single parts from solos to duets and small groups up to five dancers. The second kinetogram has thirty-two double pages and seems to be somewhat more elaborate than the booklet. Here too, there are some notes, but fewer corrections. This version is also preceded by the cast of the parts. However, the title addition "en 6 episodes" is missing. The following cast is mentioned below the noted date of the Berlin premiere:

18 Juan Allende-Blin, *Distances*, autograph score, 1961, Folkwang Tanzarchiv, FTA_EA_22.

19 Kinetogram *Séquence*, autograph, Folkwang Tanzarchiv | Kinetographie-Archiv, FTA_EA_18_KA.

20 Ibid.

ORACLE Pina Bausch ou Loni Harmssen
DIALOGUE Christa Schwertfeger ou Hiltrud Blank et Dieter Klos
ECLAT Eckard Brakel, Michael Diekamp, Jean Cébron
DISTANCE Christa Schwertfeger ou Hiltrud Blank, Dieter Klos, Erika Fábry, Gustav Hempel
FAUVE Jean Cébron ou Michael Diekamp
ORACLE Pina Bausch ou Loni Harmssen, Eckard Brakel, Jean Cébron, Michael Diekamp, Gustav Hempel[21]

Figure 2: *Scene photography of* Séquence *by Jean Cébron, dancers Gustav Hempel, Loni Harmssen, Christa Schwerdtfeger, Dieter Klos. © Sven Håkansson | Deutsches Tanzarchiv Köln, DTK-TIS-16193-1*

Occasionally the kinetograms also contain notes on staging, for example when the use of light is placed next to the movements. Hermann Markard was responsible for the décor and costumes. This information contradicts Allende-Blin's recollection, who says that although Markard designed a stage set, it was not used in the end and only a black curtain was installed. The costumes, however, remained colorful and were chosen by Cébron and Markard together: "The [costumes] were of a simple color, but the colors were important. The colors were chosen specifically—a very particular color for everyone. And that was

21 Kinetogram *Séquence*.

all."[22] Unfortunately, the colors of the costumes cannot be traced via the black-and-white scene photos from *Séquence* available in the German Dance Archive in Cologne.[23] All the costumes are tight-fitting, the men wear leggings with a T-shirt, the women full-body leotards. All wear ballet slippers. In these photographs, however, a stage set or rather a prospectus with abstract, large-scale patterns can be seen in the background. Whether the stage scenery changed in the course of various performances or whether, in this case, Allende-Blin's memory is deceptive, must remain an open question at the moment.

If we take a closer look at the photographs from the German Dance Archive in Cologne and add some photographs from the Folkwang Dance Archive that were presumably taken during rehearsals, we get an initial idea of the movement language used. All the photographs show several dancers clearly positioned in relation to each other. Although there is no contact, the dancers' relationships to each other are very clear and become visible not only through the spatial constellation, but also through the copying of individual movements or their continuation from one body to another. Couple constellations dominate over group arrangements. Many postures are in plié, thus bringing the body into a middle spatial plane. Only the men leave this plane in powerful, high jumps. Generally, the men's leg positions are open, while the women's seem to be dominated by more spiral-like turns in the body. The upper bodies are often tilted to the side. In addition to round postures, the extremities are seen often in angled shapes. The bodies show clear spatial directions. Intensive work with the gaze supports the multidimensionality of the movements. Overall, the choreography fits aesthetically into the other known pieces by Cébron. However, the use of a somewhat larger number of dancers is noticeable.

The third source already mentioned for *Séquence* is an annotated score of *Distances*, which was used for the rehearsal and tape recording of the piece (with an ensemble from the Folkwangschule conducted by Hans-Jürgen Knauer). Under the title is written "(La brise chantante d'oiseaux P. [= Paul] Eluard) Ballet pour 3 danseurs."[24] The score, handwritten in pencil, is signed

22 Allende-Blin, interview: "Die [Kostüme] waren von einfacher Couleur, aber die Farben waren wichtig. Die Farben wurden gezielt ausgesucht–für jeden eine ganz bestimmte Farbe. Und das war alles."

23 This analysis is based on five stage photographies (Deutsches Tanzarchiv Köln, signatures: DTK-TIS-16192, DTK-TIS-16193, DTK-TIS-16194, DTK-TIS-16195, DTK-TIS-16196) and two photographies from rehearsals (Folkwang Tanzarchiv, signatures: FTA_EA_14-1_HR, FTA_EA_14-2_HR).

24 Allende-Blin, *Distances*. For a recording see Juan Allende-Blin, "*Distances* (1961) for flute, harp, vibraphone, and percussion," in *Künstler im Gespräch–Juan*

by Juan Allende-Blin and dated "Essen-Werden, 13.1.1961; Hamburg, 24.1.1961."[25] It contains some corrections added with a different pencil. But above all, it contains entries with an unmistakable reference to the choreography, such as the marking of the moment when the dance begins. Individual rhythms are again noted separately, individual bars are circled. Particularly noteworthy are the dancers' counts inserted over long sections. All this suggests that Jean Cébron was working with this score and was certainly looking for ways to create a relatively close link between dance and music. Although the composition and choreography were created independently of each other, they were not isolated.

But what other impulses—beyond what has been mentioned so far—could have emanated from the music to the performance? For now, this question can only be answered speculatively, and in any case it would require a more thorough examination. Nevertheless, a practiced score reader such as Cébron would surely not have missed essential structural moments of the musical discourse, the purposeful alternation of tension and relaxation in calculated proportions, which is typical of Allende-Blin's music in general. Apart from that, the music seems to have been crafted carefully to avoid anything showy, forced or constricting, and on the contrary, allows the dance to take its own space at all times. The music maintains a "distance" from the stage action and does well to do so. The unusual instrumentation constellation with its rich sound mixtures catches the listener's attention: If one looks at the instruments involved and their respective roles, the first thing that strikes the listener is the flute's expansive melodic curves, which break off and restart from time to time, and which are also partly taken up by the other instruments. The noisy accents or splashes of color in the percussion, which contribute significantly to the special tonal atmosphere of the piece, form a counterpoint to the melodic lines, whereas the vibraphone and harp are in a tonally mediating position with regard to color and expression. It would be fruitful to search for analytical criteria with which to objectify the astonishing depth of the music and its extremely nuanced colorfulness. For example in the dynamics: "The gradation in loudness have the effect of suggesting a space, with the indication of a curvilinear perspective," as the composer put it.[26] The choreographer and composer are likely to have discussed the concept of space at length, each from their own perspective.

Allende-Blin und das Ensemble, Cybele 3SACD KiG 007, E-MEX Ensemble, 2016, super audio compact disc.

25 Allende-Blin, *Distances*.

26 Juan Allende-Blin, "Works 1961–2010," CD-booklet, in *Künstler im Gespräch—Juan Allende-Blin und das Ensemble*, Cybele 3SACD KiG 007, E-MEX Ensemble, 2016, super audio compact disc, 37.

The title chosen by Allende-Blin for his music, *Distances* (with which the piece, regardless of its original role as music for dance, was premiered at the Grillo Theater in Essen in 1962 and with which it continues to live a life of its own), suggests that the idea of spatial distances—for example, as relationships of points in an imaginary sound space—represented a kind of conceptual starting point. Far from a merely tautological relationship, the encounter of dance and music seems to aim quite deliberately at an emerging "third" which as a contrapuntally conceived unity nevertheless dialectically preserves the autonomy of the two art forms.

Recueil/Profils

The second joint project was created according to a similar process. Once again, both artists agreed on a relative but not total independence of music and dance as a fundamental concept of the creative process. Commissioned in 1965 by Kurt Jooss during his tenure as head of the Folkwang dance department, Juan Allende-Blin this time composed a chamber music piece for five instruments (clarinet, trumpet, trombone, violoncello, and percussion).[27] The dual nature of the piece—on the one hand as music for a choreography entitled *Recueil*, on the other hand as an independent music piece named *Profils*—once again provides an indication that the music should in any case be perceived as an art form in its own right. The title and basic structure of the piece are explained by the composer in the Essen interview as follows:

> My music consists of parts that are precisely structured—in French: *confrontation et profile*. Confrontation as the word is also called in German [or English]: it is a being against; one group stands against another group, so to speak in counterpoint and in a certain contrast. And profile always means music that is in one part—with many instruments, but it is like a profile, a minority of melodies that alternate. And then there is another confrontation and once there are two profiles in a row—once for solo clarinet and once for solo percussion.[28]

27 For the commission see the letter by Kurt Jooss, March 22, 1965, Folkwang Tanzarchiv, FTA_EA_16_AK88.

28 Allende-Blin, interview: "Meine Musik besteht aus Teilen, die genau gegliedert sind—auf Französisch: *confrontation et profile*. Konfrontation wie das Wort auch auf Deutsch heißt: Es ist ein Dagegensein; eine Gruppe steht gegen eine andere Gruppe, sozusagen im Kontrapunkt und in einem gewissen Kontrast. Und *profile* meint immer eine Musik, die einstimmig ist—zwar mit vielen Instrumenten, aber es ist wie ein Profil, eine Minderheit der Melodien, die sich abwechseln.

For the premiere of the choreography in Essen in 1965, the composition was used as a tape recording performed by members of the NDR Symphony Orchestra under the direction of Gerd Zacher.[29] However, Jean Cébron made some cuts for *Recueil* after consulting the composer. If one follows Allende-Blin's indications, the synchronous creation process of choreographed dance and composed music also took place here in an informal manner: both worked autonomously, but with the knowledge of certain structural pre-decisions of the other. Dance may have provided a certain initial impulse, especially since Allende-Blin remembers occasionally attending rehearsals by Cébron and taking some impressions, moods, and inspirations from what he saw. The fact that he deliberately refrained from taking precise notes fits into the overall context, since he felt it was important to rely on his own experience and to use only "what I had retained in my memory"[30] for processing and realizing the music. The common starting point in the working process is described by Allende-Blin in the following words:

> There is no symmetry or, let's say, concordance where the dance would take over the rhythms of my music. But the rhythmic spirit in these movements also exists in my music—without having a strict parallelism. It's more of a curvilinear parallelism.[31]

Allende-Blin locates this "curvilinear parallelism," which characterizes the special dialogue between the art forms of dance and music as a whole, firstly in his special attention to detail, and secondly in the way he deals with time:

> There are movements of the hands by both [Jean Cébron and Pina Bausch] that are very, very precise and in which every movement has a meaning. And in my music there are parts where something like that also occurs: Either it is rhythmic, metronomic—to put it that way; or there are parts where time builds a curve—that is, the tempo slows down, slows down or it speeds up, speeds up and comes back to the starting point. And that can be found in the movements of the choreography as well as in my music.[32]

Und dann kommt wieder eine *confrontation* und einmal kommen zwei *profiles* hintereinander—einmal für Klarinette solo und einmal für Schlagzeug solo."

29 The concert premiere of the complete score (with the title *Profils*) took place some thirty years later, on May 22, 1993 in Essen.

30 Allende-Blin, interview: "[…] was ich in meinem Gedächtnis behalten hatte."

31 Allende-Blin, interview: "[E]s gibt keine Symmetrie oder, sagen wir: eine Konkordanz, wo der Tanz die Rhythmen meiner Musik übernehmen würde. Aber den rhythmischen Geist in diesen Bewegungen gibt es auch in meiner Musik–, ohne dass das eine strenge Parallelität hat. Es ist eher eine kurvige Parallelität."

32 Allende-Blin, interview: "Es gibt Bewegungen der Hände bei beiden [Jean Cébron und Pina Bausch; AKA], die sehr, sehr genau sind und in denen jede

Of course, one could also go further here and analyze Allende-Blin's music beyond the aspects mentioned in the interview with regard to its sound-spatial disposition as well as its possible influence from the choreographer, Jean Cébron's spatial conception (in the tradition of Rudolf von Laban or Kurt Jooss). To what extent would a kind of "diagonal listening" be adequate for his music, as he once suggested elsewhere? As in the previous piece *Distances*, a certain key role in *Profils*—whose multi-layered sound seems to be designed from the contrast between the groups of winds, strings, and percussion—is probably assigned to the differentiated percussion, whose functionality includes the whole spectrum from rhythmic accompaniment to solo, with all the intermediate levels and nuances that result from the chosen instruments and performance techniques.

The reverse question of the degree to which the choreographic realization incorporates elements of the music could be approached using a video recording of *Recueil*, which was filmed in May 1993 on the occasion of a Cébron retrospective in the Neue Aula of the Folkwang Hochschule.[33] Cébron himself was responsible for the rehearsal, with Amaya Lubeigt and Enrico Tedde dancing:

The stage is dark. Suddenly a mixture of sounds breaks the silence. The repetitive short melodic fragments sound almost searching, interspersed with soft, wooden percussion. A short pause, two spotlights are directed at a male and a female dancer. She in a calf-length thin flowing turquoise dress, he in brown leggings and bare-chested, both in ballet slippers. Sitting on the floor, their backs turned slightly diagonally to each other, their drawn-in knees locked. They look like two solitary, introverted individuals. His gaze goes forward, hers back. Two bodies that are far away from each other and yet seem to be connected across all distance. Creating their own little cosmos. A high clarinet note, upper bodies moving slowly, arms stretching. Still on the ground, the two slowly move towards each other with spiraling movements that open and close again and again. Circling each other until they finally find one another. Without any touch. Connected by the common flow of movement

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Bewegung einen Sinn hat. Und bei meiner Musik gibt es Partien, in denen so etwas auch vorkommt: Entweder ist es rhythmisch, metronomisch—um das so zu sagen; oder es gibt Teile, in denen die Zeit eine Kurve zeigt—das heißt, das Tempo wird langsamer, langsamer, oder es wird schneller, schneller und kommt wieder zurück zum Anfangspunkt. Und das ist sowohl bei den Bewegungen dieser Choreografie als auch bei meiner Musik zu finden."

33 Video recording of the dance evening *Tanz und Komposition. Choreographien und Kompositionen von Jean Cébron aus den Jahren* 1952–1964, May 14/15, 1993, Folkwang Tanzarchiv.

and almost architecturally designed postures that flow from one body to the other.

Dramaturgically, *Recueil* can be divided into four parts, separated by short pauses in the light; alternatively, a six-part structure is recognizable, which is oriented towards the alternation of duet and solo. A classical dramaturgical line spans the entire fourteen-minute piece, which begins with the couple approaching each other, leads to a joint dialogue with solos, and finally ends in a seated position again, but this time in a corresponding pose and next to each other. In the movement, this dramaturgical line is primarily constructed through the use of the spatial planes. While the choreography begins on the lower spatial level—positions and movements in a sitting position, on the knees, or in a very low plié dominate—the solos are choreographed in an upright standing position and include single jumps and lifting figures. The dancers then slowly move back towards the floor to finish in a seated position, thus closing the cycle.

The movement vocabulary is particularly characterized by its fluidity. Although the choreography contains many moments of pause that could seem almost pose-like or static, it nevertheless remains in a continuous flow of energy. The movements are inscribed on the dancers' bodies with a high degree of precision and focus. Almost as if with an accurately guided pencil, abstract three-dimensional figures are drawn into the space by bodies. Both dancers are clearly related to their kinesphere, which they seem to expand over and over again. This tendency to expand one's own kinesphere, combined with postures that are matched to each other in form, creates a communication between the dancers' bodies entirely without physical contact. The clear direction of the arms, legs, and especially the hands and feet create a narrative and add an emotional level to the rather abstract design, a combination that runs through the whole choreography. It is particularly obvious here that the focus of the movement design is on a varied and detailed choreography of the extremities. The torso is included repeatedly, especially with bends and curves, but it supports the movements of the arms and legs more than developing an independent expressive quality. Although there is no division between the male and female body that characterizes the whole piece, different qualities of movement are discernible, especially in the solos. While the female dancer's movement language is characterized by a rather upright stance, soft transitions, and spirals, the male dancer moves more angularly and plays with the contrast of tension and relaxation. Even in his jumps, the use of muscular tension and relaxation predominates over the idea of an explosive use of energy to move upwards away from the floor. The choreography almost completely avoids a presentational

mode. The couple seems to create a space of their own around themselves, into which the audience can glimpse from the outside while remaining unnoticed.

Music and dance both get their own place in *Recueil*. In the manner of the collaboration described by Juan Allende-Blin, two independent pieces have been created here that nevertheless complement each other in a convincing way. Thus, despite the independence of both arts, a close connection between dance and music is also evident, which is to be seen entirely in the sense of the "common spirit"[34] emphasized by Allende-Blin in *Séquence* as well. If one looks from the music to Cébron's dance, as it can be relived on the basis of this video recording from 1993, it is not surprising that the choreographer refrained from obvious congruencies with the music and its temporal arrangement, but rather aimed to create a complex relationship between sound and movement. In this piece, too, the subjects of "space" and "relations" seem to have been central to choreographer and composer. Allende-Blin uses compositional tools to create spaces of sound and listening, just as Cébron works with the kinesphere of the dancers and sets them in relation to each other. Although Cébron's movements are oriented towards the different spatial directions, they do not establish a clear relationship to the stage space. The dancers' kinesphere dominates the action. The external space in which the dancers move, on the other hand, is created by the music. Both are thus in relation to each other, refer to each other and yet remain independent at their essence.

A Beginning …

These first considerations on the artistic partnership between Jean Cébron and Juan Allende-Blin not only take a look at a close collaboration between choreographer and composer that was rare in the twentieth century, but also at two artistic personalities who are unique in their own œuvre and who have so far received little attention from dance and music scholars. At the end of these remarks, all that remains is: … to be continued.

34 Allende-Blin, interview: "gemeinsamen Geists."

Dramatic Statement and Theatrical Expression
Esthetics of Movement in Klebe/Gsovsky's *Menagerie* and Zimmermann/Roleffs *Kontraste*

Adrian Kuhl

Abstract: *In the phase of cultural reconstruction, ballet played a major role in post-war Germany. A heterogeneous ballet scene emerged which dared to experiment and often used new music. This case study discusses two works: It analyzes a* pas de deux *from* Menagerie *by Giselher Klebe and Tatjana Gsovsky (1958) and shows that the movements of a rocking chair, which is integrated into the scene dance-wise and musically, embed into an artificial network of interrelations between dance, music, and stage set. In contrast, Bernd Alois Zimmermann's* Kontraste *(1953) aims at artistic reflection on the abstractly set elements of color, movement, and music. Based on a puppet theater piece, in which colors act as abstract figures, Zimmermann designed a score that focuses on the expression of movement and spatially dissected color sound. The choreography of the premiere staged by Peter Roleff reflects in detail the conceptual idea of the work with its own means.*

In the phase of cultural reconstruction, ballet played an important role in the post-war German Federal Republic.[1] Guest performances by renowned ballet ensembles of the occupying powers such as the Sadler's Wells Ballet, the Rambert Ballet and the New York City Ballet, which appeared in western Germany

1 Cf. in particular Patricia Stöckemann, "Glücklich ist, wer vergisst. Die ersten Nachkriegsjahre in den westlichen Besatzungszonen," in Hedwig Müller, Ralf Stabel, and Patricia Stöckemann, *Krokodil im Schwanensee. Tanz in Deutschland seit 1945*, ed. Akademie der Künste Berlin (Frankfurt am Main: Anabas, 2003), 9–26 and Patricia Stöckemann, "Wir sind wieder wer. Neuorientierung am Ballett—die 50er Jahre in der Bundesrepublik Deutschland," in Müller, Stabel, and Stöckemann, *Krokodil im Schwanensee*, 47–84.

in the course of the cultural Cold War, contributed to this.[2] Ballet advanced to become the setting for the development and cultivation of a contemporary musical theater.[3] In spite of the fact that many actors who had already been established during the Nazi era continued to perform, the lack of a classical ballet tradition in Germany seemed to provide opportunities for a new aesthetic beginning after the cultural-political repressive measures of the Third Reich,[4] not least because classical ballet, unlike the expressive dance cultivated during the Nazi era, was not considered ideologically loaded.[5]

In this process of reorientation, the 1950s in particular can be described as a period of musical and dance-theatrical experimentation. Embedded in a new dance style between expressive dance and classical ballet, in exchange with other arts and in confrontation with contemporary cross-artistic aesthetic currents, the inclusion of contemporary music in ballet creation in particular provided a special developmental impetus with regard to new dance-theatrical possibilities.[6]

Despite its historical significance, the ballet repertoire of post-war West Germany is—with a few exceptions such as Werner Egk's *Abraxas* or the ballet works of Hans Werner Henze and Bernd Alois Zimmermann—hardly known to a wider public. In the following, we will take this as an opportunity to examine the multifaceted and regionally diverse repertoire in more detail. It also focuses on questioning the structure of the arts involved and on rethinking the traditional network of interrelations between music and movement. While

2 Stöckemann, "Wir sind wieder wer," 72; here also Kurt Peters, "Die Stunde Null wurde verpaßt. Ein Gespräch mit Hartmut Regitz," in *Tanz in Deutschland. Ballett seit 1945. Eine Situationsbeschreibung*, ed. Hartmut Regitz (Berlin: Quadriga, 1984), 54–9, 55; the wide-ranging influence of the Allied cultural policy is also pointed out by Gunhild Oberzaucher-Schüller, "Erdbeermund spricht Ballett. Tatjana Gsovskys Choreographie 'Der Idiot' zu Musik von Hans Werner Henze," in *Experimentelles Musik- und Tanztheater*, ed. Frieder Reininghaus and Katja Schneider in collaboration with Sabine Sanio (Laaber: Laaber, 2004) (*Handbuch der Musik im 20. Jahrhundert*, vol. 7), 133–6, 135; pointing to the general importance of ballet in the cultural Cold War, using the example of American and Soviet exchange tours, for example: Cadra Peterson McDaniel, *American-Soviet Cultural Diplomacy* (Lanham: Lexington Books, 2015), 180.

3 Oberzaucher-Schüller, "Erdbeermund spricht Ballett," 134f.

4 Stöckemann, "Glücklich ist, wer vergisst," 12, 19; Peters, "Die Stunde Null wurde verpaßt," 54.

5 Stöckemann, "Wir sind wieder wer," 56.

6 Stephanie Schroedter, "Neue Klangräume für neue Bewegungsformen und Bewegungsformate," in *Neue Musik in Bewegung. Musik- und Tanztheater heute*, ed. Jörn Peter Hiekel (Mainz: Schott, 2011), 134–58, 135f.; Stöckemann, "Wir sind wieder wer," 66f.

the ballets without plot, which were increasingly being created at this time, naturally provided a special forum for this,[7] the exploration of new movement constellations can also be found in works of this period which fostered the development of new forms of narrative ballet.

A comparison of Giselher Klebe's and Tatjana Gsovsky's narrative ballet *Menagerie* with Bernd Alois Zimmermann's plotless ballet *Kontraste* is intended to clarify this. Furthermore, it sheds light on the manifold ways of handling visible and audible movement in the two much-debated directions of West German ballet in the post-war period. While there are at least a few publications on Tatjana Gsovsky's ballet work, Klebe's ballet music is largely ignored in today's research.[8] Although Zimmermann's ballet works are in that respect in a considerably better state,[9] it is precisely in relation to *Kontraste* that the close aesthetic intertwining of the piece with the particular scenography of a puppet theater by Fred Schneckenburger, which was musicalized by Zimmermann and from which the ballet originated, can still be differentiated and tracked

7 Jörn Peter Hiekel, *Bernd Alois Zimmermann und seine Zeit* (Lilienthal: Laaber-Verlag, 2019), 169; Stephanie Schroedter, "Musik als eine Kartographie des Tanzes. Anmerkungen zum Verhältnis von (Musik-)Partitur und Choreographie," in *Notationen und choreographisches Denken*, ed. Gabriele Brandstetter, Franck Hofmann, and Kirsten Maar (Freiburg i. Br.: Rombach, 2010) (Rombach Wissenschaften. Reihe Scenae, vol. 13), 67–86, 73.

8 Cf. e.g. Michael Heuermann, *Tatjana. Leben und Werk der Choreographin und Pädagogin Tatjana Gsovsky*, München 2007; Max W. Busch, *Tatjana Gsovsky. Choreographin und Tanzpädagogin*, Berlin 2005; Michael Heuermann, *Tatjana Gsovsky und das 'Dramatische Ballett.' Der 'Berliner Stil' zwischen* Der Idiot *und* Tristan (phil. dissertation, Universität Bremen, 2001), accessed 18 August 2021, http://nbn-resolving.de/urn:nbn:de:gbv:46-diss000001977.

9 Cf. e.g. the more elaborate contributions on Zimmermann's ballet work by Jörn Peter Hiekel, *Bernd Alois Zimmermann und seine Zeit* (Lilienthal: Laaber, 2019); Dörte Schmidt, "'C'est ma façon de faire du Pop Art.' Zimmermann et le ballet dans les années 1960," in *Regards croisés sur Bernd Alois Zimmermann. Actes du colloque de Strasbourg 2010*, ed. Pierre Michel, Heribert Henrich, and Phillipe Albèra (Genf: Éditions Contrechamps, 2012), 143–57; Steffen A. Schmidt, *Musik der Schwerkraft. Die Beziehung von Musik und Ballett in Deutschland nach 1945, dargestellt am Werk Bernd Alois Zimmermanns* (Berlin: Kadmos, 2012); Silke Hilger, "Annäherungen an Bernd Alois Zimmermanns Ballettkompositionen," in *Feedback Papers* 41 (1996): 38–50; Erik Fischer, "Bernd Alois Zimmermann und das Tanztheater seiner Zeit. Versuch einer ersten Rekonstruktion," in *Zwischen den Generationen. Bericht über das Bernd-Alois-Zimmermann-Symposion Köln 1987*, ed. Klaus Wolfgang Niemöller and Wulf Konold (Regensburg: Bosse, 1989) (Kölner Beiträge zur Musikforschung, vol. 155), 165–203.

through a re-evaluation of Zimmermann's correspondence right into the world-premiere choreography of the ballet by Peter Roleff.

Movement and Music with Plot—*Menagerie*

Commissioned by the Berliner Festwochen, the ballet *Menagerie* was the result of an intensive exchange and already the third collaboration between Gsovsky and Klebe. It had its world premiere on September 24, 1958 at the Städtische Oper Berlin.[10] Based on Frank Wedekind's dramas *Erdgeist* (*Earth Spirit*) and *Die Büchse der Pandora* (*Pandora's Box*), Gsovsky had drafted a libretto in which she transformed Wedekind's double tragedy into a ballet consisting of a prologue and three scenes.[11] Gsovsky condenses the literary model into a few key points of the plot in a way that is characteristic of her work.[12] The ballet's prologue

10 Heuermann, *Tatjana Gsovsky*, 167; Giselher Klebe, "Zu meiner Musik," in *Programmheft Apollon musagète, Die Letzte Blume, Menagerie*, Städtische Oper Berlin [Berlin 1958], printed in Michael Rentzsch, *Giselher Klebe. Werkverzeichnis 1947–1995*, ed. Stiftung Archiv der Akademie der Künste, Berlin (Kassel: Bärenreiter, 1997), 75f.; in parts printed in Busch, *Tatjana Gsovsky*, 156.

11 Although Gsovsky states in the "Almanach der Berliner Festwochen" that the piece was based on "Frank Wedekinds Bühnenstück 'Lulu'" (Frank Wedekind's play 'Lulu', 91), the source material was probably not the "Tragödie in fünf Aufzügen" (Tragedy in Five Acts), which the author published in 1913 and which was a combination of various acts taken from *Erdgeist* and *Die Büchse der Pandora*. The actual source might be the other version published also in 1913, in which both aforementioned tragedies were included in their entirety. This can be deduced from the fact that Gsovsky took, among other things, act III from *Erdgeist*, which does not exist in the stage play *Lulu*, as the basis for the second ballet scene. Generally, the two tragedies are frequently summarized, but by no means correctly addressed under the title *Lulu*. Thus might also be true for Gsovsky's case; on this Ariane Martin, "Pierrot als Femme fatale? Zu den Fassungen und Deutungen von Frank Wedekinds 'Lulu'-Dramenkomplex in kulturwissenschaftlicher Perspektive," in *Musil-Forum. Studien zur Literatur der klassischen Moderne* 27 (2001/2002): 119–36, 122. On the history of the genesis, revision, and publication of *Erdgeist* and *Die Büchse der Pandora* cf. esp. *Frank Wedekind Werke. Kritische Studienausgabe*, vol. 3/2: "Kommentar," ed. Hartmut Vinçon (Darmstadt: Häusser, 1996), 833–7, 876, 878 and Katrin Hafemann, *Schamlose Tänze. Bewegungs-Szenen in Frank Wedekinds 'Lulu'-Doppeltragödie und 'Mine-Haha oder Über die körperliche Erziehung der jungen Mädchen'* (Würzburg: Königshausen & Neumann, 2010), 99f.; Tatjana Gsovsky, "Wedekind getanzt," in *Berliner Festwochen vom 21. September bis 2. Oktober 1958. Almanach*. Offizielles Programm [Berlin 1958], 91.

12 Heuermann, *Tatjana Gsovsky*, 137.

with ensuing pantomime is based on the prologue of *Erdgeist* and thus Lulu's performance in the ring, which also gives the ballet its title.[13] The first scene of the ballet combines the first and second acts of the same drama and focuses primarily on the tragically ending relationship between Lulu, Dr. Goll, the painter Schwarz, and the editor-in-chief Dr. Schön. The second scene of the ballet elaborates on act III of Wedekind's tragedy, in which Lulu appears in the theater as a dancer and then makes Dr. Schön realize how much he has fallen for her before he surrenders to her violence. The third scene of the ballet summarizes the fourth act and parts of Wedekind's *Büchse der Pandora*: the events surrounding the various lovers who are surprised by Dr. Schön at Lulu's home, Lulu's murder of Dr. Schön, the episode about the lesbian countess who frees Lulu from prison, Lulu's descent into prostitution, and her murder at the hands of Jack the Ripper.

Michael Heuermann explained that this focus on merely individual plot elements in Gsovsky's ballets serves above all to create dramaturgical space for the depiction of the central conflicts between the protagonists.[14] This also applies to the dramaturgy of the second scene of *Menagerie*—divertissement and pas de deux—which will be used in the following as an example to explore the question of new movement constellations in the piece. The opening divertissement of the scene serves to convey the plot and build up the conflict setting between the characters, while the pas de deux that follows focuses on the extended dance interpretation of the psychological conflict between Lulu and Dr. Schön. First, in the divertissement, the play-within-the-play scenario taken from the original is staged by showing, as in Wedekind, preparations for various performances by Lulu as a dancer, ringing bells for the performances, and applause from the audience.[15] Although the editor-in-chief had built up Lulu as his mistress in the past, he now tries to set Lulu up with another man through her increasingly provocative dance presentation in the theater in order to ensure his marriage to a woman of his standing.[16] In contrast to Wedekind's scene construction, however, the ballet omits the entire plot line around the Africa-travelling Prince

13 Thus the title already refers to Gsovsky's central choreographic idea, cf. ibid., 167, 204.

14 Ibid., 135f., 138.

15 On the conception of the scene in Wedekind's version cf. Hafemann, *Schamlose Tänze*, 115.

16 Ibid., 115f.; on the connection between dance and erotic presentation in Wedekind's work ibid. 108f., 119; and Ortrud Gutjahr, "Lulu als Prinzip. Verführte und Verführerin in der Literatur um 1900," in *Lulu, Lilith, Mona Lisa … Frauenbilder der Jahrhundertwende*, ed. Irmgard Roebling (Pfaffenweiler: Centaurus-Verlagsgesellschaft, 1989), 45–76, 63.

Escerny, who is interested in Lulu. Thus, in the ballet, Lulu's dance performance (and the associated humiliation[17]) in front of Dr. Schön and his bride becomes the main element of the divertissement, in which, according to the stage directions, the focus should be primarily on the reactions of the editor-in-chief and his bride rather than on Lulu's dance presentation.[18] The subsequent pas de deux between Dr. Schön and Lulu, builds on the dancer's collapse on stage taken from the original. According to the stage directions, after a dispute with Dr. Schön which opens the pas de deux, Lulu goes to a rocking chair, takes a seat and gradually begins to rock until, at the climax of the scene, the chair rolls over and she leaps onto Schön's lap and has taken possession of him.[19] The rest of the pas de deux follows the original drama with Dr. Schön writing a farewell letter to his bride, his submission, and Lulu's triumph over him.

The rocking chair now serves as one of the central means of depicting the conflict between Lulu and Dr. Schön in the pas de deux, in that both its positioning and its potential for movement are used to make a dramatic statement. In a sketch of the stage design, Gsovsky envisages the chair being positioned within the ring, which in this scene forms Lulu's theater dressing room.[20] However, the furniture is to be placed in such a way that the rocking chair stands between Dr. Schön and his bride, who continues to sit outside the ring in the drama-inherent theater audience of the previous dance performance.[21] Thus the rocking chair not only appears as a separating element of the couple, but at the same time draws attention to what is happening on as well as with it and places this in a semantically legible context to the editor-in-chief and his bride. In this respect, the chair's ability to move also takes on special significance. This is already evident from the fact that Gsovsky, and not Wedekind, integrated it into the scene; the poet had only envisaged an armchair and thus an immobile piece of furniture.[22] On the one hand, Gsovsky used the movement possibilities of the

17 Hafemann, *Schamlose Tänze*, 119.

18 Stage direction: "Auf das ertönende Klingelzeichen hin eilt Lulu wieder ab. Die Aufmerksamkeit soll jetzt ganz auf Dr. Schön und seine Braut gelenkt sein" (At the sound of the bell, Lulu hurries off again. The attention should now be completely focused on Dr Schön and his bride), as cited in: Giselher Klebe, *Menagerie. Ballett op.* 31, Bote & Bock, Berlin 1958 [borrowed material], Akademie der Künste, Berlin (D-Bda), Giselher-Klebe-Archiv 211, 47.

19 Cf. stage directions in Klebe, *Menagerie* [orchestral score], 62f.

20 Published in Busch, *Tatjana Gsovsky*, 156; confirmed by a production photo showing Willy Saeger with Judith Dornys and Rudolf Holz, Berlin 1958, ibid., 159.

21 Cf. the respective stage directions in Klebe, *Menagerie* [orchestral score], 55.

22 Frank Wedekind, "Erdgeist. Tragödie in vier Aufzügen (1913)," in *Frank Wedekind Werke. Kritische Studienausgabe*, vol. 3/1, ed. Hartmut Vinçon (Darmstadt: Häusser, 1996), 401–76, 455.

furniture to develop a breath-taking choreography, in which her characteristic choreographic style manifested itself, and in which acrobatic elements also played a major role.[23] Decades after the premiere, the ballet critic Klaus Geitel recalled this scene out of all scenes and its "ungeheuerlich[en]" (tremendous) effect in a television interview as part of a documentary on Gsovsky. One should no longer have spoken of a pas de deux, but of a pas de trois, since the movements of the chair were integrated into the dance movements.[24]

On the other hand, however, the choreographer used the movements of the rocking chair for the pictorial translation of the dramatic conflict and thus assigned them a specific dramaturgical function.[25] In relation to the concrete scene situation, the rocking movements of the chair transform Dr. Schön's oscillation between two women into a symbolically perceptible stage action. The movements, however, also unfold semantic significance from a higher perspective, as they also translate the fundamental relationship between Lulu and Dr. Schön into the scene. The oscillating movement reflects both the unsettled relationship,[26] which is also time determined by only temporary closeness, and at the same time translates the moment of emotional and physical attraction and repulsion of the two into a seemingly autonomous movement that can be influenced by controlling the chair.[27] Furthermore, it is precisely this control over the movement of the chair that enables the complex and sexualized power relationship between Dr. Schön and Lulu to be realized.[28] Through the pendular movement, but especially through a deliberate backward tilt of the furniture, which brings Lulu into a more recumbent position, positions can be created, depending on the initiator of the movement, that generate images of physical

23 Heuermann, *Tatjana Gsovsky*, 18, 124.

24 Interview with Klaus Geitel, in *Ein Leben für den Tanz. Die Wanderungen der Tatjana Gsovsky*, film by Christine Schaefers, WDR 1985, 43'18"-43'38".

25 This is characteristic of Gsovsky's choreographies, cf. Heuermann, *Tatjana Gsovsky*, 120, 125f., 132, 137.

26 Ibid., 204.

27 On the referential aspect of scenic movement on the inner processes of stage characters, cf. Stephanie Schroedter, "Audio-visuellen Bewegungen auf der Spur. Zum Konzept eines klangperformativen Spurenlegens und Spurenlesens," in *Klänge in Bewegung. Spurensuchen in Choreografie und Performance*, ed. Sabine Karoß and Stephanie Schroedter (Bielefeld: transcript, 2017), 25–44, 26.

28 Cf. on the balance of power and its sadomasochistic implications, amongst others Hafemann, *Schamlose Tänze*, 111f.; Gutjahr, "Lulu als Prinzip," 63f.; Mildner even calls it a "power struggle" between the two protagonists, whose relationship is defined by desire, humiliation, hate but also love; Susanne Mildner, *Konstruktionen der Femme fatale. Die Lulu-Figur bei Wedekind und Pabst* (Frankfurt am Main: Peter Lang 2007), 21f.

offering and seduction, but also of desire and submission. By abruptly tilting the furniture forward, however, both of them can also end or demonstratively destroy these moments. The chair's control of movement can thus be used—right up to the aforementioned overturning of the chair with Lulu landing on Dr. Schön's lap, which can be interpreted very clearly—for the differentiated and suggestive representation of Lulu's triumph over Dr. Schön, who finally capitulates in this scene.[29] Various photos by Siegfried Enkelmann, even if they are studio productions,[30] give an impression of the diverse possibilities of representation and provide an idea of the enormous scenic effect that the play with the chair must have produced.[31]

The theatrical functionality of the scene, however, is not only due to the fusion of stage set and dance movement, it is also due to the music. Klebe arranges the pas de deux in six parts with a subsequent apotheosis.[32] If the opening section offers space for the dispute between the two protagonists (bars 82–96),[33] sections two to four serve Lulu's rocking in the chair (bars 97–103, 104–109, 110–119), while sections five and six are devoted to Lulu's possession of Dr. Schön, the writing of the letter, and Lulu's triumph (bars 120–131, 132–143). With three sections and a total of twenty-three bars, a similar amount of space is provided for Lulu's rocking as for the writing and delivery of the farewell letter with twenty-four bars, which underlines the importance of the play with the chair. Looking at the score and the included stage directions, it becomes clear that Klebe composes the movements of the chair into the music in an

29 On the dramaturgical function of dancing in this scene and the effects on the drawing of characters in Wedekind's work cf. Hafemann, *Schamlose Tänze*, 115–25.

30 Enkelmann himself emphasizes that snapshots during performances were usually impossible to realize due to the lighting conditions. In his studio shots, he says he only worked against a white background and with deliberate lighting to set the scene. For him, it was central to "capture the mood as well as the character of the dance" and "the magic of the dance atmosphere" (die "Stimmung sowie den Charakter des Tanzes" und "den Zauber der tänzerischen Atmosphäre zu treffen"); Siegfried Enkelmann, [no title], in *S. Enkelmann. Ein halbes Jahrhundert Tanz- und Ballett-Fotografie. Gedächtnisausstellung. Theatermuseum München. April bis Juni 1978 und Theater Gütersloh November 1978 bis Januar 1979* (München: Dt. Theatermuseum, 1979), [1].

31 The photos have been preserved in the estates of Siegfried Enkelmann in the Deutsche Tanzarchiv, Cologne, and of Tatjana Gsovsky and Gert Reinholm in the Akademie der Künste, Berlin. One of them is published in Busch, *Tatjana Gsovsky*, 160.

32 The analysis is based on Klebe, *Menagerie* [orchestral score].

33 The bar-counting follows the score, in which the individual numbers are consecutively counted scene by scene.

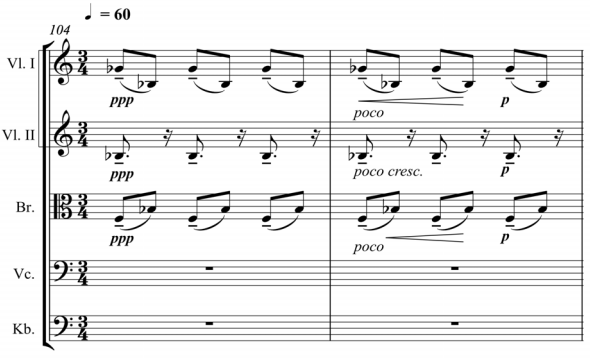
emphatically pictorial manner, thus literally staging them musically. At the same time, he supports the depiction of the conflict-ridden and erotically charged situation with details of the musical realization, thus making the music an essential part of the theatrical design of the scene. For the second section, the stage directions specify that Lulu takes a seat in the rocking chair and gradually begins to rock.[34] Klebe reproduces this in the music and, after a change of meter from 4/4 to 3/4 time, introduces a latent rocking movement played by various instruments. At the beginning of the third section from bar 104, a clearly audible rocking movement is then provided in the first violins and violas (figure 1), which continues to increase in the string parts until the rocking chair rolls over in bar 119, in which the measured tonal space of the pendular movements is enlarged and chromatically enriched. At the same time, the rocking movement becomes more dynamic through a change to 9/8 time and the transition to continuous or tremolo-like eighth notes (bars 110–119). This is further supported by the fact that the full beats in the cellos and basses are emphasized in addition to the eighth-note figures in the upper strings, which surprisingly creates a waltz-like meter (figure 2). This demonstratively pictorial arrangement of the music and the movement, which is suddenly no longer only visible on the stage but also audible in the music, creates an striking emphasis on the rocking chair movement.[35]

The explanation for this surprising parallelization of the arts lies in the dramaturgical intention already indicated. In narrative ballet, the focus is not primarily on the perception of movement as such, but on the perception of the action. If pure movement is to take center stage, it requires a special emphasis on movement as movement. Such an accentuation is brought about in this scene by the fact that the rocking chair is not used as a mere prop, but rather functions as a regular co-dancer, whereby its movements are highlighted from the per se moving context. In the music, the surprising pictorial realization of the rocking and the resulting synchronization of visible and audible movement directs perception to the scenic action as movement. The accentuation of the movement as movement in this way in turn leads to a questioning of the dramatic meaning of the rocking, thus making the movement readable as a metaphor for the viewer and further serving to convey the shifts in the dramatic constellation of characters that are central to the plot.

34 Klebe, *Menagerie* [orchestral score], 55.

35 Cf. on such correlation effects Stephanie Jordan, "Choreomusical Conversations. Facing a Double Challenge," in *Dance Research Journal* 43/1 (2011): 43–64, 50.

Yet at the same time, Klebe makes the striking movement seem ambivalent. By enriching it chromatically, he melodically intensifies the impression of the conflict-ridden relationship between the protagonists, while the change to waltz-like metrics calls up semantic implications of this revolving dance.[36] Due to its close dancing posture, in which the man holds the female partner in his arms with their bodies touching in the midsection, among other places, the waltz has been considered morally problematic by guardians of virtue since its triumphal march at the end of the nineteenth century and has connotations of eroticism and even lust.[37] Klebe uses this association to musically charge the dramaturgically central rocking movement with erotic connotations. The musical arrangement, which seems deliberately striking to emphasize the movement, thus reveals itself to be also closely involved in conveying the content of the scene. Thus, the example of the movement design of this scene reveals a highly artificial network of connections between dance, music, and set design, which Gsovsky and Klebe expressly put at the service of a theatrical statement.



Music example 1: *No. 7 "Pas de deux", bars 104f., strings only, from: Giselher Klebe*, Menagerie. Ballett in fünf Bildern op. 31, *based on the orchestral score © Bote & Bock 1958, 57. Transcribed by Patrick Dziurla*

36 I am grateful to Rainer Nonnenmann and Christoph Flamm for these references.

37 Remi Hess, *Der Walzer. Geschichte eines Skandals* (Hamburg: Europäische Verlagsanstalt, 1996), 275f.

Music example 2: *No. 7 "Pas de deux", bars 110f., strings only, from: Giselher Klebe,* Menagerie. Ballett in fünf Bildern op. 31, *based on the orchestral score © Bote & Bock 1958, 59. Transcribed by Patrick Dziurla*

Movement and Music without Plot—*Kontraste*

Zimmermann's ballet *Kontraste* aims less at a theatrical statement than at theatrical expression. The piece was created on the basis of Zimmermann's incidental music for *Das Grün und das Gelb* (The Green and the Yellow), an abstract puppet theater piece by the Swiss puppeteer Fred Schneckenburger.[38] The composer had initially composed this music for piano in 1952, based on an early version of his piano cycle *Exerzitien*, and recorded it himself on tape for

38 Cf. on this piece Dörte Schmidt, "'Das Grün der Wiese hat sich in das Gelb der Sonne verliebt. Was geschieht jetzt?' Fred Schneckenburger und Bernd Alois Zimmermann machen abstraktes Puppentheater mit Musik," in "*Man müßte nach Rom gehen.*" *Bernd Alois Zimmermann und Italien*, ed. Sabine Ehrmann-Herfort, Adrian Kuhl, Dörte Schmidt, and Matthias Pasdzierny (Kassel: Bärenreiter, 2020) (*Analecta musicologica*, vol. 55), 70–94; Hana Ribi, *Fred Schneckenburgers Puppencabaret* (Prag: Národní muzeum, 1999), 73–5.

Schneckenburger's theater performances.[39] Zimmermann was very excited[40] about the project and its scenic realization, and shortly afterwards he asked the Nordwestdeutscher Rundfunk (NWDR) to perform the puppet theater as part of the concert series "das neue werk" in Hamburg.[41] For this occasion, he changed the piano version into an orchestral version[42] from which, with a further revision in the course of 1953, the ballet *Kontraste* finally emerged.[43]

The motivation newly conceive incidental music for the ballet was, apart from the prospect of an immediate concert performance at Bayerischer Rundfunk,[44] apparently Zimmermann's fascination with the scenic idea behind Schneckenburger's plot of *Das Grün und das Gelb* and its special realization on the puppet stage. In August 1953, he wrote Schneckenburger a long letter describing in detail his thoughts on the change of concept,[45] which he subsequently elaborated on in various other letters and comments on the work.[46] Zimmermann perceived the actual core of Schneckenburger's plot to be a play based on contrasts using the "Urelemente" (primal elements) of the music-theatrical stage, "Musik, Bewegung und Farbe" (music, movement, and

39 See for this Heribert Henrich, *Bernd Alois Zimmermann Werkverzeichnis. Verzeichnis der musikalischen Werke von Bernd Alois Zimmermann und ihrer Quellen. Erstellt unter Verwendung von Vorarbeiten von Klaus Ebbeke* (Mainz: Schott Music, 2013), 747f., 753 (ibid. the list with adaptations from *Exerzitien*); St. A. Schmidt, *Musik der Schwerkraft*, 155f.; Klaus Ebbeke, "Kontraste. Musik zu einem imaginären Ballett nach einer Idee von Fred Schneckenburger (1953)," in Klaus Ebbeke, *Zeitschichtung. Gesammelte Aufsätze zum Werk von Bernd Alois Zimmermann*, ed. Heribert Henrich (Mainz: Schott Music, 1998), 136f., 136; Fischer, "Bernd Alois Zimmermann und das Tanztheater," 184–9; Wulf Konold, *Bernd Alois Zimmermann. Der Komponist und sein Werk* (Köln: DuMont, 1986), 86; on the recovered audio tapes cf. D. Schmidt, "'Das Grün der Wiese hat sich in das Gelb der Sonne verliebt,'" 71.

40 Letter to Jacques Wildberger from July 19, 1957, printed in Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 747.

41 Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 748; *Bernd Alois Zimmermann (1918–1970). Dokumente zu Leben und Werk*, ed. Klaus Ebbeke (Berlin: Akademie der Künste, 1989) (*Akademie-Katalog*, no. 152), 52.

42 Ebbeke, "Kontraste," 136; on the compository changes cf. Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 753f.

43 The orchestral piece *Suite aus Das Gelb und das Grün* is also based on the orchestral score.

44 Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 155.

45 Letter to Fred Schneckenburger from August 2, 1953, printed in ibid., 150.

46 Cf. e.g. commentaries on the works from September 28, 1954 and from September 10, 1957 as well as the letters to Bernhard Conz from September 2, 1953 and to Herbert Decker from December 2, 1953, each printed in ibid., 151–4.

color).[47] These primal elements could be grasped absolutely by abandoning a plot, which in turn made a plotless ballet possible in a special way.[48]

Looking at the puppet play makes it clear what the composer means by this, and at the same time underlines the importance of Schneckenburger's scenic realization for the conception of *Kontraste*, and here in particular of the two colors that act as protagonists there.[49] In the puppet play, the green of the meadow falls in love with the yellow of the sun, they caress each other, while the sun and the meadow are left colorless. After a revolt of people and animals, both colors return to the meadow and the sun.[50] While the other figures were embodied with Schneckenburger's typically abstract rod puppets, the meadow and the sun initially appeared on stage as a green veil and a sun disk.[51] As the colors emerged from their objectivity, the actors changed: the now absolute colors were represented by yellow and green gloved hands that pantomimically clasped each other to the sounding music.[52] If one takes a closer look at this play of movement, it becomes clear what must have impressed the composer about it. The hands caressing each other can be perceived as abstract three-dimensional bodies of color which constantly change their appearance through movement to the music.[53] The association with an absolute color dancing in space is indeed not too far-fetched. While photos of the original performance already illustrate this possibility of reception,[54] the special performative im-

47 Letter to Bernhard Conz, Städtische Bühnen Bielefeld, from September 2, 1953, printed in ibid., 151. The connection between colors and ballet in this context are not new, of course. Cf. Fischer, "Bernd Alois Zimmermann und das Tanztheater," 190; St. A. Schmidt, *Musik der Schwerkraft*, 154f., 162f.; but Schmidt points out fundamental differences, ibid. 164.

48 Letter to Fred Schneckenburger from August 2, 1953; comments on the work for the radio broadcast on September 10, 1957, in letter to Otto Tomek, Westdeutscher Rundfunk, from August 28, 1957, each printed in Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 150, 154.

49 Comments on the work for the radio broadcast on September 10, 1957, printed in ibid., 154.

50 Letter to Fred Schneckenburger from August 2, 1953, printed in ibid., 150.

51 Ribi, *Fred Schneckenburgers Puppencabaret* [1999], 74f.

52 Ibid., 74; on possible references to this depiction cf. D. Schmidt, "'Das Grün der Wiese hat sich in das Gelb der Sonne verliebt,'" 82; Hana Ribi, "Fred Schneckenburgers Puppencabaret," in *Sammeln heisst forschen. Lasst die Puppen tanzen*, ed. Museum für Gestaltung Zürich (Zürich: Museum für Gestaltung Zürich, 2017), 116–8, 118.

53 Contemporary reviews already emphasize abstraction as a central characteristic of the scene, cf. St. A. Schmidt, *Musik der Schwerkraft*, 160.

54 Cf. the photos by Michael Wolgensinger in Ribi, *Fred Schneckenburgers Puppencabaret* [1999], 73.

pression of the hand play was recently impressively reproduced on the basis of a scenic reconstruction of the piece. On the occasion of Zimmermann's hundredth birthday, the piece was staged for the first time in a long time at the Villa Massimo in Rome at the suggestion of Dörte Schmidt. It was performed by the puppet opera Marionettenoper im Säulensaal of the Heidelberg University under the direction of Joachim Steinheuer and underscored the enormous representational potential of the hands as abstract bodies of color.[55]

By reviewing the scenic arrangement of *Das Grün und das Gelb*, one of Zimmermann's sources of inspiration for the conception of *Kontraste* can thus be defined in a more differentiated way. The concept of abstract color forms acting in space is thus likely derived not only from abstract painting–cited by Zimmermann himself as the source of ideas, here specifically in the works of Joan Miró[56]–but also to a large extent from Schneckenburger's scenography of *Das Grün und das Gelb*.[57] The special performance of hand-playing to represent abstract colors acting independently in space in Schneckenburger's piece must have made Zimmermann aware of the enormous possibilities offered by a combination of absolute color and kinetics in theatrical and dance-theatrical contexts.[58]

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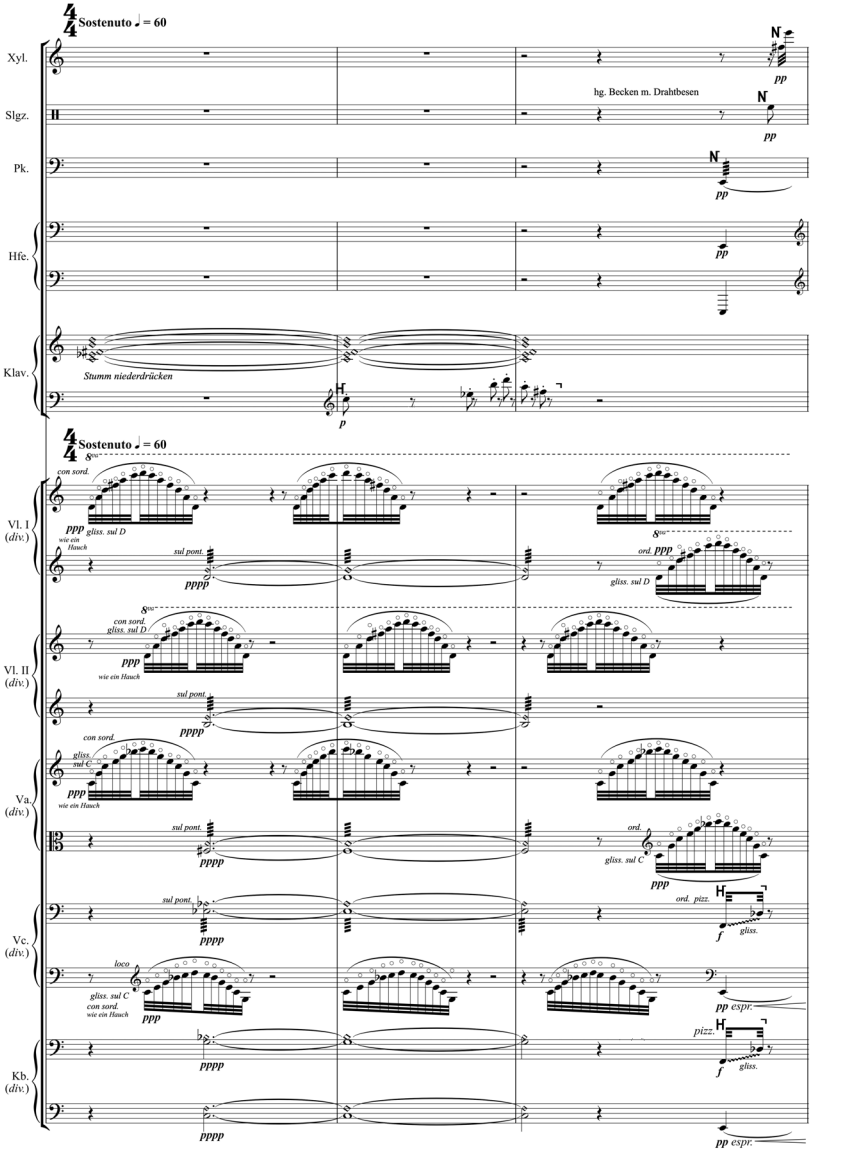
55 On the reconstruction cf. Joachim Steinheuer and Dörte Schmidt, "'Mit eigenen Ideen ganz ausgefüllt.' Zur szenischen Rekonstruktion von 'Das Grün und das Gelb,'" in "*Man müßte nach Rom gehen.*" *Bernd Alois Zimmermann und Italien*, ed. Sabine Ehrmann-Herfort, Adrian Kuhl, Dörte Schmidt, and Matthias Pasdzierny (Kassel: Bärenreiter, 2020) (*Analecta musicologica*, vol. 55), 136–48 (incl. photo series).

56 Hiekel, *Bernd Alois Zimmermann und seine Zeit*, 164; Hiekel also points to the role of color in the constellation of geometric bodies in Miró's paintings ibid. 165; on the enthusiasm of Zimmermann for the painter as well as on further correspondence on Miró cf. ibid. 164–6; cf. also St. A. Schmidt, *Musik der Schwerkraft*, 161; it is not clear which paintings by Miró Zimmermann might have referred to; he must at least have known Miró's *Personnages et etoiles* 1950. The painting was printed on the cover of Schneckenburger's program for the staging of *Das Grün und das Gelb* at the NWDR in Hamburg; St. A. Schmidt, *Musik der Schwerkraft*, 160.

57 Not so Steffen A. Schmidt, who emphasizes that Zimmermann "did specifically not refer to a certain painting […] or work (like that of Schneckenburger);" ibid., 161 (trans. Stephanie Schöberl): Zimmermann habe "gezielt nicht Bezug auf ein bestimmtes Bild […] oder Werk (wie das Schneckenburgers)" genommen.

58 Cf. for a broader analysis of the aesthetic, musical and choreographic concept of *Kontraste* my forthcoming study "Die wollten Ballette schreiben". Westdeutsches Ballett in den 1950er Jahren als Forum der musikalischen Avantgarde.



Music example 3: "*Phantasmagorie. Blanc–Pas de deux*," *bars* 1–3, *from: Bernd Alois Zimmermann*, Kontraste. Musik zu einem imaginären Ballett nach einer Idee von Fred Schneckenburger, *based on the orchestral score © Schott 1977, 20. Transcribed by Patrick Dziurla*

Zimmermann also transfers this basic idea of color and movement as a central characteristic into the music, which he calls an "imaginary ballet" in the subtitle, but at the same time allows the piece a scenic realization on stage.[59] Although Zimmermann links the six movements of the piece with a semantic idea of a mirror of life abstracted from the puppet play plot and with references to color,[60] he emphasizes several times that no representation of colors or their synesthetic characters is intended.[61] Rather, the focus is on the attempt to musically explore various "Farbklangmöglichkeiten" (color sound possibilities) beyond specific motifs or themes by creating contrasts and "to dissect the color sound 'spatially,' as it were" ("den Farbklang gewissermaßen 'räumlich' zu zerlegen").[62] In a scenic realization, he considers it also as central that none of the arts involved merely serve to support or interpret the others, but are each equal in their artistic significance.[63]

What Zimmermann means by a spatial dissection of color sound can be illustrated most vividly in the "Phantasmagoria (Blanc)" at the center of the piece.[64] Here Zimmermann creates music that evokes both spatial movement

59 On the significance of the imaginary cf. Hiekel, *Bernd Alois Zimmermann und seine Zeit*, 163, 168–81; Wolfgang Rathert, "'... Ausdruck einer ganz bestimmten geistigen Situation ...' Zum Kontext von B. A. Zimmermann's 'Perspektiven' (1955/56)," in *Bernd Alois Zimmermann*, ed. Ulrich Tadday (Munich: Ed. Text + Kritik, 2005) (Musik-Konzepte Sonderband. Neue Folge, vol. 12), 143–60, 147; St. A. Schmidt, *Musik der Schwerkraft*, 40f., 148, 165–9, 171, 181; Schmidt also accentuates the proximity to the dream in the transition from puppet theater music to ballet, ibid., 157, 169f.

60 On the interpretation of *Kontraste* as ballet of ideas cf. Fischer, "Bernd Alois Zimmermann und das Tanztheater," 189; on the proximity of the semantic idea to the dream theme and its references cf. St. A. Schmidt, *Musik der Schwerkraft*, 147–9. The semantic reference recedes in the course of further performances of the play, cf. Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 156.

61 Letter to Karl Bauer, Bühnen der Stadt Essen, from October 8, 1954; comments on the work for the radio broadcast on September 10, 1957; letter to Friedrich Berger, *Kölner Stadt-Anzeiger*, from July 15, 1964, each printed in Henrich, *Bernd Alois Zimmermann Werkverzeichnis*, 153–5.

62 Letter to Reinhold Schubert from January 16, 1957, printed in ibid., 153.

63 Dörte Schmid has pointed out the central importance of *Kontraste* and the ballet for the development of this esthetic concept in Zimmermann's thinking, D. Schmidt, "'C'est ma façon de faire du Pop Art,'" 146–53.; cf. on this concept amoung others also St. A. Schmidt, *Musik der Schwerkraft*, 95–110, 164–7; Fischer, "Bernd Alois Zimmermann und das Tanztheater," 183, 185, 190–2.

64 The analysis is based on the orchestral score: Bernd Alois Zimmermann, *Kontraste. Musik zu einem imaginären Ballett nach einer Idee von Fred Schneckenburger für Orchester* (1958) (Mainz: Schott 1977) [borrowed material].

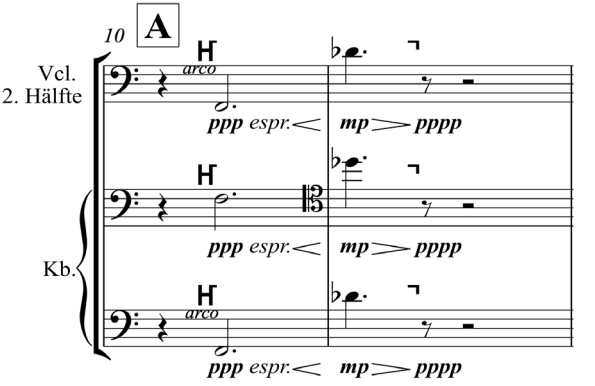
and permanent changes in timbre through various sound events that are repeatedly combined with different timbres.[65] This becomes clear right at the beginning. Harmonic figures of violin 1.1, violin 2.2 and viola 1 suggest movement through their ascending and descending melody, but are also set against each other in voice groups of violin and viola or violin and violoncello. This creates the impression of a continuous, wave-like, but spatially distributed movement, in which the different timbres of the instruments create different sound facets despite playing the same notes. The movement character of the figures is deliberately intensified by the fact that the harmonics are contrasted with horizontal sounds in the double bass and the muted piano, thus creating a tonal contrast between movement and stillness. The tremolos of violin 1.2, violin 2.2 and viola 2 again seem to be a combination of movement and standstill, by linking the soundscape and short note values. This idea is transformed in later bars by the use of alternating notes instead of pure repetitions (e.g., bar 7).

This presentation of various movement phenomena is combined with elements that can be heard as yet another form of movement, such as the ascending and descending melody line fragmented by rests in the left hand of the piano (bars 2f.) or the glissando lines in the low strings (bar 3; see figure 3). Sound transformation occurs again here when the melody, which is only brief, is heard again in the harp (bars 4–6), or when the glissando effect returns later in other instruments such as the harp or the kettledrum (bars 7, 11). Another element of movement is dynamics, which can be perceived as spatial movement. Here, for example, we can refer to dynamic progressions which, by becoming louder and quieter, evoke a spatial arrival or, in the opposite direction, a spatial departure.[66] The fact that such dynamic progressions are not linked to certain instruments or to a specific motif again translates the aspect of the changing color movement into sound (figure 4). Zimmermann thus writes music in which the goal is not the visual depiction of a movement, a color, or even the synchronization with a possible dance movement, but rather

65 Steffen A. Schmidt sees in such a compositional layout the work with a "musically contoured body" ("musikalisch konturierten Körper," 151), which he pursues by means of his methodology of "KörperHören"; a methodology that enables a reading of music in terms of "corporeal representations" ("korporale Repräsentationen"), St. A. Schmidt, *Musik der Schwerkraft*, 71; in this context cf. ibid., 59–94, as to *Kontraste* ibid., 171 and Steffen A. Schmidt, "KörperHören," in *Die Tonkunst* 2 (2008): 67–73.

66 Cf. St. A. Schmidt, *Musik der Schwerkraft*, 260.

the audible experience of diverse timbres and manifold tonal movement in space.[67]



Music example 4: "*Phantasmagorie. Blanc—Pas de deux*," *bars 10f., only violoncello 2, double bass 1 and 2, from: Bernd Alois Zimmermann*, Kontraste. Musik zu einem imaginären Ballett nach einer Idee von Fred Schneckenburger, *based on the orchestral score © Schott 1977, 23. Transcribed by Patrick Dziurla*

In Peter Roleff's choreography for the ballet's premiere on April 24, 1954 at the Stadttheater in Bielefeld, the idea of the colors moving and constantly changing form is also explicitly made central. Although Zimmermann emphasized that the dance-theatrical realization was the choreographer's responsibility, he had clear ideas about the scenic and costume design, which he had already communicated to Schneckenburger and which he also communicated in a slightly abbreviated and modified form to Herbert Decker, the artistic director of the Bielefeld theater.[68] Furthermore, as can be seen from

67 Hiekel is similar in this and points to references to the approaches of Willy Baumeister, Paul Klee, and Joan Miró, Hiekel, *Bernd Alois Zimmermann und seine Zeit*, 166; the significance of the timbre in *Kontraste* is also emphasized by St. A. Schmidt, *Musik der Schwerkraft*, 177, 180, 188 (here also with regard to a connection with movement, 309); Hilger, "Annäherungen an Bernd Alois Zimmermanns Ballettkompositionen," 40.

68 Letter to Herbert Decker, Städtische Bühnen Bielefeld, from December 2, 1953, Akademie der Künste, Berlin, Bernd-Alois-Zimmermann-Archiv 1.62.159d.70; cf. for a detailed discussion Adrian Kuhl: "Die wollten Ballette schreiben". West-

the correspondence with the choreographer and the Bielefeld artistic director, Zimmermann had discussed the overall direction, the stage design and scenic ideas extensively with Peter Roleff in the run-up to the performance. Therefore the choreographer was probably informed both about the genesis of the ballet from the incidental music and about the composer's conceptual ideas.[69] In this respect, it seems legitimate to interpret Roleff's choreography as a reflection of Zimmermann's own concept.

Against this backdrop, it is remarkable that Roleff not only takes up the idea of color acting in space, but also the moment of color's emergence from the representational, which had been determining in *Das Grün und das Gelb*. Based on reviews and photographic material from the premiere, it can be reconstructed that Roleff had planned dancers in unitards for the frame parts of the piece, who acted in combination with colored form boards—circles, triangles, lines, or intertwined elements.[70] In the interior movements, on the other hand, the dancers appeared without color boards, only in colored unitards with small geometric headdresses.[71]

Relating this realization to Zimmermann's conceptual idea and thus also to Schneckenburger's puppet show, it becomes apparent that Roleff placed the emphasis in the frame parts (analogous to the puppet show) on the geometric color form moving in space.[72] In the interior parts, however, Roleff blended—like Zimmermann in his costume suggestions—Schneckenburger's idea of the colored gloved hand with the colored unitard onto the entire body of the dancers. In doing so, he transferred the scenic idea of the abstract three-dimensional body of color to the ballet stage, which can be derived from

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deutsches Ballett in den 1950er Jahren als Forum der musikalischen Avantgarde (forthcomming).

69 Cf. the letter to Peter Roleff from March 2, 1954 and Herbert Decker from March 4, 1954; in the latter Zimmermann informs the artistic director that he has consulted with Roleff on March 3, 1954 at home and that their scenic ideas are "fast völlig" (almost) identical; Akademie der Künste, Berlin, Bernd-Alois-Zimmermann-Archiv 1.62.159e.17 and 1.62.159e.22. Thus Hiekel's comment that Zimmermann did not participate in the scenic realization, has to be modified; Hiekel, *Bernd Alois Zimmermann und seine Zeit*, 168.

70 Same reference in St. A. Schmidt, *Musik der Schwerkraft*, 189.

71 Photos can be find in St. A. Schmidt, *Musik der Schwerkraft*, 190 and Konold, *Bernd Alois Zimmermann*, figure 17.

72 Similarly, Steffen A. Schmidt, though without reference to Schneckenburger's puppet show, recognizes in the choreography "a play of geometry between form and colour" in which "the bodies [...] become the functions of an abstract geometry" (ein "Spiel von Geometrie zwischen Form und Farbe," bei der "die Körper [...] zu Funktionen einer abstrakten Geometrie" werden); ibid., 189.

Schneckenburger's performative hand play and which continuously changes its appearance through dance movement. Roleff's choreographic realization of the piece thus kept the central concept of *Kontraste* visually present for the audience and thus drew attention beyond the visual part of the network of interrelations between music and choreography to the compositional handling of timbre and space.

Conclusion

Based on the two examples given, it becomes clear that different models of movement design can be found in ballets of the post-war period. The Klebe scene presented focused on the visual representation of a scenic movement in the music. This temporary synchronization of audible and visible movement served to allow movement to emerge as movement from the dance context in the network of connections between music and choreography and thus to become recognizable as a metaphor for the constellation of characters and the dramatic situation. Despite the use of new music, the use of audible movement is thus shown here as an artificial interaction of the traditional elements of dance theater serving the dramatic statement.

The example from *Kontraste*, on the other hand, illustrates the musical reflection on fundamental parameters of body and movement, which is particularly possible due to the use of new music. Zimmermann does not focus on the musical representation of movement, but on its expression in a kinesthetically intended score.[73] The artistic idea here is to create different kinds of movement qualities with the aim of audible color movements. If the abstract visual impression of the colorfully gloved hands from Schneckenburger's puppet piece provided the inspiration for the musical conception, Peter Roleff also took this up in the choreography. In contrast to Klebe and Gsovsky, the focus in *Kontraste* is not on the unification of the arts at the service of a plot-bound statement, but on the artistically individual implementation of the same theatrical idea in each case, which draws attention to the underlying idea of color movements in space in the interaction of visual and audible events.

With such different models in the merging of new music and dance, the post-war ballet repertoire thus provides starting points both for the reinvention of the narrative ballet, as well as for the numerous experimental formats of later years.

73 Similar in ibid., 491f.

Related Sounds
Adriana Hölszky's *Roses of Shadow* and *Deep Field* in Martin Schläpfer's Choreography

Barbara Dobretsberger

Abstract: *On the basis of an in-depth study of the score and the video material provided by the Düsseldorf Opera, the interplay of music and movement is explored. The independence of the creative processes always emphasized in statements by Adriana Hölszky and Martin Schläpfer—the putting down on paper of the sounds and the dance staging took place practically without prior consultation between composer and choreographer—could lead one to expect a looseness, perhaps even non-commitment between music and ballet. However, the analytical findings of both the music and the choreography point to a number of associative interconnections. Understanding Hölszky's music as moving sounds and Schläpfer's choreography as musicalized movement is favored by related procedures such as repetition, variation, motif development or mirroring. Despite this structural proximity and despite a certain affinity of Hölszky and Schläpfer to a "cosmic world view," music and choreography drift apart repeatedly and cause irritations in the perception of* Roses of Shadow *and* Deep Field.

With *Roses of Shadow*, Adriana Hölszky has presented what she describes in the subtitle of the work as a sound choreography for soprano and eight instrumentalists. Although the work was commissioned in 2016/17 for a Düsseldorf choreography by Martin Schläpfer, the composer refrains from designating it as a ballet genre—unlike *Deep Field*, a ballet also choreographed by Schläpfer in 2013. This may be sufficient for an analysis that initially focuses on the functionality and meaningfulness of the composition as a "work as such." "There [will be] no mutual visualization [...]; it is more like Martin Schläpfer and I encircle each other—and we sometimes lose sight and sound of each other in the pro-

cess,"[1] the composer says about the process of creation, thus emphasizing the autonomy of the musical work. Adriana Hölszky is still not entirely satisfied with the subtitle "sound choreography"; with "sound space transformation, spatial sound transformation, sound image, complimentary transformation, sonnets of no return, like a sonnet of no return"[2] she circles around the most diverse terms that were considered and discarded again in the search for a subtitle.

The subtitle acts as a program, so to speak—*Roses of Shadow* is a choreography of sounds, a spatial composition or staging of spatial sound. This reads more freely, more independently, perhaps also more reflectively than the simply functional reference to "ballet music" in the subtitle of *Deep Field*.[3] Nevertheless, the same principle applies to both works in the creative process, namely a focus on the musical composition per se, which Adriana Hölszky calls "absolute music."[4] The choreographic design, the pictorial, dance, and rhythmic realization was as little "prepared" by her in *Deep Field* as in *Roses of Shadow*, and in this aspect was consciously left entirely to her colleague.

This radical compositional attitude—an analogy would be the composition of an opera without a rudimentary idea about the visualization of the scenes—is based on the one hand on the composer's own working method of doing her creative work in voluntary self-isolation. On the other hand, it is based on the new territory that the composer entered when she started writing ballets. On the genesis of *Deep Field*, the ballet written three years before *Roses of Shadow*, she notes: "I've never had the desire to work with or rather for dance before."[5]

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1 Anne do Paço, "Eine Hymne auf die Schönheit dieser Erde. *Roses of Shadow*," in *Programmheft Ballett am Rhein*, vol. 33, ed. Deutsche Oper am Rhein Düsseldorf Duisburg (Düsseldorf, 2017): 12–6, 13 (trans. Stephanie Schöberl): "Es [wird] kein gegenseitiges Bebildern geben […]; es ist vielmehr so, dass Martin Schläpfer und ich uns umzingeln—und wir uns dabei auch mal aus den Augen und Ohren verlieren."

2 Adriana Hölszky, phone conversation between Adriana Hölszky and Barbara Dobretsberger, Stuttgart / Salzburg on December 14th, 2021 (trans. Stephanie Schöberl): "Klangraumverwandlung, Raumklangverwandlung, Klangbild, komplimentäre Verwandlung, sonnets of no return, like a sonnet of no return."

3 Adriana Hölszky, *Deep Field* (Wiesbaden: Breitkopf & Härtel, 2014).

4 Adriana Hölszky, phone conversation between Adriana Hölszky and Barbara Dobretsberger, Stuttgart / Salzburg on December 20th, 2021 (trans. Stephanie Schöberl): "absolute Musik."

5 Anne do Paço, "Zirkulationen des Lebendigen. Adriana Hölszky, Rosalie und Martin Schläpfer im Gespräch mit Anne do Paço über ihre Uraufführung *Deep Field*," in *Programmheft Ballett am Rhein*, vol. 20, ed. Deutsche Oper am Rhein Düsseldorf Duisburg (Düsseldorf, 2014): 8–20, 9 (trans. Stephanie Schöberl): "Ich hatte bisher noch nie den Wunsch, mit bzw. für den Tanz zu arbeiten."

Her novitiate as a ballet composer may have triggered an impulse in 2013 to compose something "useful" for ballet. This would explain the somewhat stronger orientation towards the "balletic" (more on this in the second part of this essay dedicated to *Deep Field*). Indeed, no other work for dance was composed in the creative period between the two ballets discussed here. But even before and after that, one searches in vain for a ballet composition in Hölszky's œuvre. It is a genre that probably fundamentally has a rather limited appeal for her, apart from Stravinsky's ballets, in which "the music actually has an independent rank, is independent of a choreography."[6]

Figure 1: *Scene from* Roses of Shadow. © *Gert Weigelt*

One could interpret this as a sign of mature sovereignty, but also of the composer's confidence that the choreography would not merely be adequate (in the true sense of the word, an "egalitarianism" on Martin Schläpfer's part would

6 Hölszky, phone conversation between Adriana Hölszky and Barbara Dobretsberger, December 14th, 2021 (trans. Stephanie Schöberl): "die Musik tatsächlich einen eigenständigen Rang hat, unabhängig von einer Choreographie ist."

have been neither desirable nor appropriate). Rather, the fact that there was the chance of an artistically independent, fascinating dance composition coming to light,[7] which the choreographer had shied away from, may have contributed to the conception of *Roses of Shadow* as a "sound choreography" and to the rejection of an intentional, "ballet-suitable" composition.

The basis of this approach to *Roses of Shadow* is a video production made available by the Düsseldorf Opera. Leaving aside the admission that "with *Roses of Shadow* a score [emerged] on whose basic coordinates the composer and choreographer intensively agreed, but with whose elaboration Adriana Hölszky then withdrew in order to finally hand over a finished work to Martin Schläpfer and more: to leave the score to him full of trust and freedom,"[8] the analytical approach to the work (in the sense of the "complete" choreographed work) followed the chronology of the ballet's genesis. When asked about the "basic coordinates" that were set out in advance, the composer explains that it was Schläpfer's wish to use only a few musicians live, a maximum of nine, in order to facilitate the financing of tours. Due to the planned use of a voice, or rather a text, there was some skepticism on the part of the choreographer at first, but this was able to be resolved. Apart from these two agreements, there were no discussions beforehand.[9]

Following this genesis, the approach to *Roses of Shadow* presented here began with the study of the score and the analysis of the music; this was followed by an examination of the choreography based on the available video material.[10] Similarly to the musical investigation, where special attention was paid to aspects of form, structure, motifs, density, and color of soundscapes, the examination of the choreography focused on the recognition of connections (e.g. through repetition, mirroring, variation, or motif development), on associative interweavings with the music (especially in the text-bound parts) and finally on the question of a dramaturgy. It should be added that neither

7 Do Paço, "Eine Hymne auf die Schönheit dieser Erde. *Roses of Shadow*," 13.

8 Ibid. (trans. Stephanie Schöberl): "Und so entstand mit *Roses of Shadow* eine Partitur, über deren Grundkoordinaten sich Komponistin und Choreograph intensiv verständigten, mit deren Ausarbeitung sich Adriana Hölszky dann jedoch zurückzog, um Martin Schläpfer schließlich ein fertiges Werk zu übergeben und mehr: ihm die Partitur voller Vertrauen und Freiheit zu überlassen […]."

9 Cf. Adriana Hölszky, phone conversation between Adriana Hölszky and Barbara Dobretsberger, Stuttgart / Salzburg on December 7th, 2021.

10 I have to admit that, regrettably, when watching the video, my point of view was limited to the perspective taken by the videographer; the whole stage is not always visible, so that actions which might have been useful for an interpretation had to be disregarded.

a comprehensive systematic choreographic analysis nor a complete musical analysis is presented here, but rather individual aspects of music and choreography are singled out in order to contribute to an interdisciplinary exchange.

Nine centers of sound—from voice to wind instruments, strings, koto, accordion and piano to percussion—form the starting point of *Roses of Shadow*. The palette of timbres is expanded by additional instruments such as alphorn, euphonium, and harmonica (in a wide variety of tunings) as well as by the use of lip sounds, mutes, mallets, plastic cards, oil barrels, and iron ball marbles. Thus, Hölszky overturns Martin Schläpfer's stipulation of limiting the number of musicians to nine. With regard to the text on which the sound choreography is based, it is relevant that the speaking, creaking, and whispering voices performed by the instrumentalists, which complement the soprano—despite all kinds of sound alienations quite plainly referred to as "voice" —are described by the composer as a "'shadow' ensemble or as 'ghost voices.'"[11]

Käthe Recheis and Georg Bydlinski translated texts and poems by North American Indians into German[12] which acted as an "'ignition', [as] the starting point for intensive compositional work."[13] A second inspiration, though more due to the "aura"[14] than to a direct setting of text excerpts, comes from Shakespeare's Sonnet 67. A look at this poem may be permitted with due brevity; after all, the title of the work originates from this poem, and the composer quotes the central line on the back cover of the score: "Why should poor beauty indirectly seek Roses of shadow, since his rose is true?" Without even being able to comment here on the numerous subtleties and thus possibilities of interpretation inherent in Shakespeare's text, it is at any rate permissible to describe this sonnet, however much abbreviated, as a lament about the abuse and exploitation of natural beauty. Why should a second-rate beauty invent shadow roses by dubious means, when nature holds the true rose in her possession? In terms

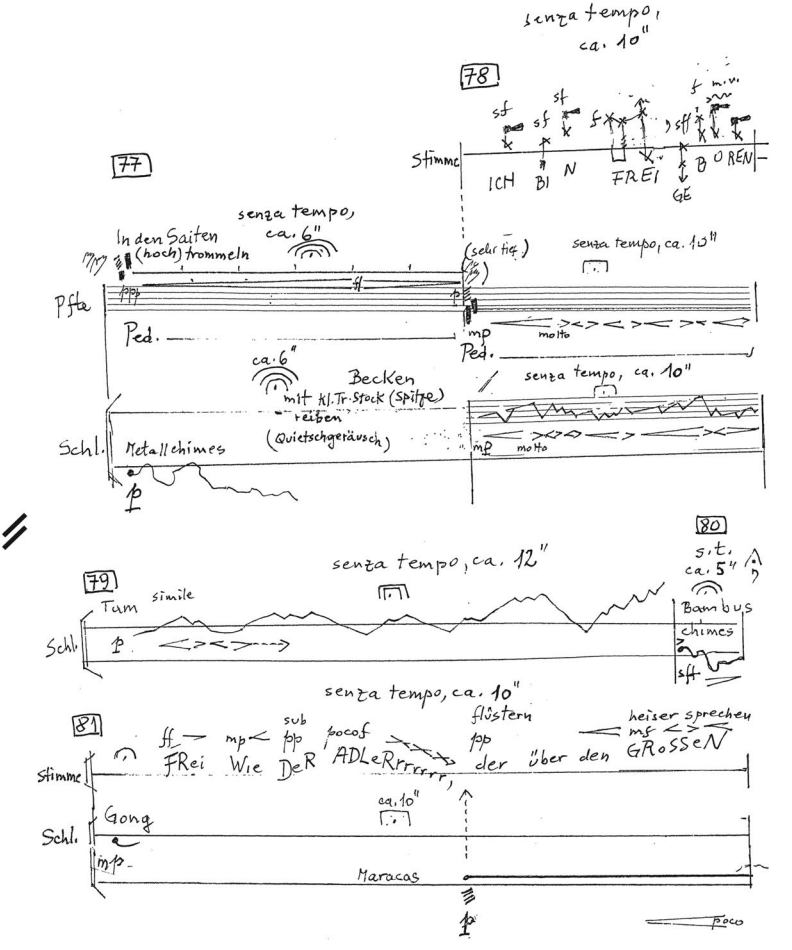
11 Adriana Hölszky, *Roses of Shadow* (Wiesbaden: Breitkopf & Härtel, 2017), back cover of the book [n.p.] (trans. Stephanie Schöberl): "ein 'Schatten'-Ensemble oder als 'Geisterstimmen.'"

12 Cf. Käthe Recheis and Georg Bydlinski, *Weißt du, dass die Bäume reden. Weisheiten der Indianer* (Freiburg: Herder, 1983).

13 Hölszky, *Roses of Shadow*, back cover of the book [n.p.] (trans. Stephanie Schöberl): "die 'Zündung,' der Ausgangspunkt einer intensiven kompositorischen Arbeit."

14 Adriana Hölszky, "Es sollte nicht nach Kammermusik riechen," conversation between Adriana Hölszky and Dorothee Krings (December 2017), accessed 7 December 2021, https://rp-online.de/nrw/staedte/duesseldorf/kultur/es-sollte-nicht-nach-kammermusik-riechen_aid-17639615.

of content, this consideration closes a circle to the fragments that Hölszky extracts from the texts of the Native Americans.



Music example 1: Roses of Shadow, *p. 33, mm. 77–81. © 2017 by Breitkopf & Härtel, Wiesbaden*

The inclusion of text and voice, since it is not customary in the context of "ballet music," is certainly remarkable and has an impact on the choreography. A dramatic ballet with a concrete narrative style could not be created on the basis of the text fragments; this would require a plot to be forcibly superim-

posed. Martin Schläpfer chooses a path that does justice to the composition's looseness–especially on the text level–and its tendency towards the merely suggestive and associative, and yet does not lose itself in arbitrariness. The renunciation of a concrete story, already manifest in the composition, means a special challenge for the choreographer in creating a dramaturgy, which he cannot do without in the forty-minute *Roses of Shadow* any more than in the full-length *Deep Field*. Specific examples from the choreography of *Roses of Shadow* will be given to illustrate Schläpfer's associative approach to translating sounds into movement:

Phase I, mm. 52ff. ("I cry with thirst."[15]; minute 5:18): Three dancers remain frozen, listening to the words, four female dancers fall to the floor, as if exhausted.

Phase I, mm. 78ff. ("I am born free, free like the eagle soaring over the great blue sky."[16]; minute 7:09-9:24): The lying dancers rise collectively; from m. 79 the limbs begin to loosen, the vertical, upright position stabilizes, the wings and the eagle's eye are symbolized by illustrative gestures. At the same time, however, part of the ensemble performs "hopping" movements that are bizarrely reminiscent of eaglets still unable to fly, hopping around in their eyrie waiting for food. Whether these figures, or rather their gestures, are to be guilelessly acknowledged with a smirk, or are instead meant to represent an ironic, subtle commentary–a counter-position to the powerful, seemingly invincible eagle that has matured into an adult bird–remains open. In any case, this interpretation as a metamorphosis motif would correspond with Hölszky's subtle irony. The latter is already revealed in the preparatory, detailed study of the score: the soprano voice begins with the clearly articulated text ("I am born free, free like the eagle soaring over the great blue sky."[17]), moves into a "trumpet" articulation (m. 87), to phonemes in chains of trills (mm. 89–90) and finally to bright, accentuated, bird-like but miserably choppy R sounds (m. 94).

Phase III, m. 10 ("the trees"[18]; minute 20:03): The abruptly assumed posture with asymmetrically "gnarled," tree-top-shaped, branch-shaped, or root-stick-like arranged limbs seems like a sculpture of the text fragment placed in space. The second compositional parallel passage which immediately follows in m. 15 ("the stones"[19]; minute 20:30) releases part of the ensemble from its stiffness

15 Trans. Barbara Dobretsberger: "Ich weine vor Durst."

16 Trans. Barbara Dobretsberger: "Ich bin frei geboren, frei wie der Adler, der über den großen blauen Himmel schwebt."

17 Trans. Barbara Dobretsberger: "Ich bin frei geboren, frei wie der Adler, der über den großen blauen Himmel schwebt."

18 Trans. Barbara Dobretsberger: "die Bäume."

19 Trans. Barbara Dobretsberger: "die Steine."

and prompts more sweeping, round movements illustrating "rolling" pebbles with some imagination. The choreography in the third parallel passage in m. 20 ("the earth"[20]; minute 20:42) with the dancers' bodies sinking to the ground is semantically easy to interpret.

Phase VII, mm. 1ff. ("You spread death, you buy and sell death, but you deny it, you do not want to look it in the face. Poor white man, in your rage, in your glamour, in all your prosperity, you have lost your heritage [...]."[21]; minute 38:30–40:20): Here the narrative proximity between music, or rather text, and choreography is equally clear and, because it is maintained over a longer period of time, most detailed. A female soloist, the only one dancing on pointe, performs a kind of dance of death that torments the other members of the ensemble and ultimately drives them to their knees. This archaic image is heightened by the rhythm of the music, which is for once, at least in parts, accentuated in the prima ballerina's dance. This is a striking procedure because there is little congruence between dance and compositional rhythm in Martin Schläpfer's choreography. This performance is also noticeable because normally the tutti, also split into smaller groups, is given preference over solos.

Despite this "parallelism" between music, or rather word/voice, and dance shown here in the examples, Hölszky's statement quoted at the beginning—"there will be no mutual imaging"[22]—is valid. Apart from those few passages where, in intensive and synchronous study with one eye on the score and the other eye following the choreography, a conspicuous interweaving can be discovered on a rhythmic and gestural level; music and dance move in their own spheres that cannot be semantically pinpointed, but nevertheless appear coherent in their independence.

For the composition itself, Hölszky notes "wave-like discharges of powerful sound energies"[23] and a "compactness and menace of sound"[24] that increase until the end of the work. Both are also visible in Schläpfer's choreography, on the one hand through the dancers, who often perform in tutti rather than as soloists, and who as a collective seem to overrun the stage at times with a

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20 Trans. Barbara Dobretsberger: "die Erde."

21 Trans. Barbara Dobretsberger: "Ihr verbreitet Tod, ihr kauft und verkauft Tod, aber ihr verleugnet ihn, ihr wollt ihm nicht ins Gesicht sehen. Armer weißer Mann, in deiner Wut, in deinem Glanz, in all deinem Wohlstand hast du dein Erbe verloren [...]."

22 Do Paço, "Eine Hymne auf die Schönheit dieser Erde. *Roses of Shadow*," 13 (trans. Stephanie Schöberl): "dass es kein gegenseitiges Bebildern geben wird."

23 Hölszky, *Roses of Shadow*, back cover of the book [n.p.] (trans. Stephanie Schöberl): "wellenartige Entladungen von gewaltigen Klangenergien."

24 Ibid. (trans. Stephanie Schöberl): "Kompaktheit und Bedrohlichkeit des Klanges."

massive energy of movement. On the other hand, gestures associated with the search for protection increase towards the end of the ballet, which correlate with the increasing "menace of sound"[25] described by Hölszky.

Schläpfer composes his choreography from a series of associatively arranged, but often semantically ambiguous images. All the more weight is given to those sections—one could also say "scenes" of the choreography—which leave little or no room for interpretation, that is, which are relatively unambiguous. As an example of the development of a dramaturgy detached from Hölszky's composition by means of pictorial associations, the mm. 64ff. ("where there is danger or pain"[26]; minute 30:10) from phase IV may be cited here. The tunnel created by the men's legs closes above the female dancers crawling on the floor in the manner of soldiers; the women are virtually suffocated in the tunnel, which could offer protection, on their "mission." Towards the end of phase VII (m. 37; minute 42:03), the female soloist's point work gradually dies away, and in a striking contrast to the score, which introduces a homorhythmic fortissimo stretta starting in m. 43 (minute 42:40), the ensemble tips over into strangely lethargic, powerless movements. The fact that the soloist finally withdraws from the ensemble into the background of the stage is reminiscent of an archaic ritual in which death departs silently after the harvest has been completed.

The astronomical analogue of "'sound paths'"[27] underlying the creative process is poetic and detached from any earthly heaviness. If one continues Hölszky's metaphor, one sees a double star (voice—percussion) orbited by seven planets (or instruments). Just as the gravitational forces in our cosmos create cohesion and coherence, the timbres in *Roses of Shadow* are linked to each other by contrasts or similarities—giving each other impulses, cancelling each other out, entering into a dialogue, or merging into a collective event. Thus, after an in-depth analysis of the work (to be understood here in the sense of the combination of composition and choreography), the following question arises: Are Adriana Hölszky and Martin Schläpfer simultaneously conveying a vision and a longing for a redemptive cosmos to the audience? What is the message of the text, which is sometimes semantically unambiguous and "earth-heavy," sometimes merely reduced to phonemes, and of the sound of the final measures sucked into the abyss? And what is the message conveyed by Schläpfer with the apocalyptic, many-limbed, tangled beings that the dance stage gives birth to at the end of his choreography?

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25 Ibid. (trans. Stephanie Schöberl): "Bedrohlichkeit des Klanges."

26 Trans. Barbara Dobretsberger: "wo Gefahr ist oder Schmerz."

27 Hölszky, *Roses of Shadow*, back cover of the book [n.p.] (trans. Stephanie Schöberl): "'Klangbahnen.'"

The composition is divided into seven sections, which the composer calls phases, ranging from about three to about eleven minutes. As the composer informs us, the number seven has no symbolic meaning; the final number of phases resulted from shifts in the underlying texts and the associated reduction from thirteen to ten and ultimately seven phases at the beginning of the compositional process.[28] The following indications, which are more exemplary than complete, may serve in future refined analyses as a starting point for recognizing connections within the composition. The focus here is on the material, structural and textual levels, as well as on overarching "shaping principles" and references between the individual phases. In places, reference is made to Martin Schläpfer's choreography.

Phase I: "Heaven. A white mountain"[29] are the first words that could evoke a creation myth. But the already ambiguous mood ("white mountain"–idyll or hostile place?) does not last long, for "the sky begins to shed its tears"[30] (mm. 37–41). "I cry with thirst"[31] (mm. 52–53) and another "the sky begins to shed its tears" (mm. 54–55) confirm that the "voice," the carrier of the text, the lyric persona, is not granted a stay in paradise. Hölszky's statement that "from the beginning to the end of the work [...] the compactness and menace of the sound increases like a maelstrom"[32] is already fulfilled at the beginning of the work.

The text "I walk through the high grass"[33] (from m. 103) "far out in the desert mountains"[34] (mm. 107–108) is a foretelling of freedom, but even more of threat, and ultimately sinks into the "niente" (m. 110). Schläpfer's interpretation starting in m. 78, which has already been mentioned in more detail above, fits into the dark, questioning atmosphere created by the composer or, even more, complements it with its own images. In addition to the metamorphosed figures that seem like helplessly hopping eaglets, these images include, for example, the ensemble looking expectantly in one direction, with facial expressions and pantomimic gestures that are understandable but not narratively assignable (from minute 10:35).

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28 Cf. Hölszky, phone conversation between Adriana Hölszky and Barbara Dobretsberger, December 14th, 2021.

29 Trans. Barbara Dobretsberger: "Himmel. Ein weißer Berg."

30 Trans. Barbara Dobretsberger: "der Himmel beginnt seine Tränen zu vergießen."

31 Trans. Barbara Dobretsberger: "Ich weine vor Durst."

32 Hölszky, *Roses of Shadow*, back cover of the book [n.p.] (trans. Stephanie Schöberl): "Von Anfang bis Ende des Werks nimmt die Kompaktheit und Bedrohlichkeit des Klanges wie ein Sog zu."

33 Trans. Barbara Dobretsberger: "Ich laufe durch das hohe Gras."

34 Trans. Barbara Dobretsberger: "weit draußen im Wüstengebirge."

Phase II: Desemanticized phonemes in the voice and soundscapes characterize mm. 1–52, until in mm. 53–54 the voice continues as if it had never been interrupted—"and heard the ants talk, the ants talk."[35] This passage is not without an ironic twist that is characteristic of Hölszky's composing: the percussion produces a maximum volume (quadruple forte) with the antique cymbal in m. 55, falling back into a subito pianississimo with the tam-tam in m. 55, only to fade away into a "niente" after a brief attempt at a crescendo. The question therefore arises as to whether the talking of the ants could actually be perceived. "I am akin to the stars"[36] in m. 57 has the instruction "speak hoarsely" and is the first passage in the forty-minute composition to be an absolute voice solo (i.e., without percussion). The assumption that this text passage, together with its continuation, could be a key passage in Hölszky's composition as well as in the choreography is confirmed in the analytical findings: "free like the eagle soaring over the great blue sky; a light breeze touches its face. A white mountain rises …"[37] is performed in a normal speaking voice and is again accompanied by percussion (mm. 58–61). The text of this scene is clearly acted out in the choreography: arm movements imitating eagle wings, arms stretched up to the "great blue sky" (m. 59), which, however, unmistakably formulate a counterposition with their thumbs pointing to the ground, and a "light breeze" (m. 60), which throws the ensemble to the ground in a disorderly fall (minute 16:30). "Brightly white arcs of light tilt from its top …"[38] (mm. 62–63) as well as the following chant performed with phonemes are again "accompanied" by the ensemble. After the tutti sound of mm. 69–70, repeated three times, the voice, supported only by a soft and quiet percussion sound (again: "hoarse"), has a soloistic effect in mm. 71–72 and m. 74: "akin to the stars."[39] The tutti tremolo in m. 73 seemingly has no other function than to accentuate the revelation of this kinship with the stars. The pronounced execution of this core statement, "akin to the stars,"[40] that is, as the legend indicates, a "speaking with emphasis on the consonants and persistence on 'T'",[41] lends particular weight to the end of this phase II

35 Trans. Barbara Dobretsberger: "und hörte die Ameisen reden, die Ameisen reden."

36 Trans. Barbara Dobretsberger: "Ich bin mit den Sternen verwandt."

37 Trans. Barbara Dobretsberger: "frei wie der Adler, der über den großen blauen Himmel schwebt; ein leichter Wind streift sein Gesicht. Ein weißer Berg erhebt sich …"

38 Trans. Barbara Dobretsberger: "Leuchtend weiße Bögen aus Licht neigen sich von seiner Spitze …"

39 Trans. Barbara Dobretsberger: "mit den Sternen verwandt."

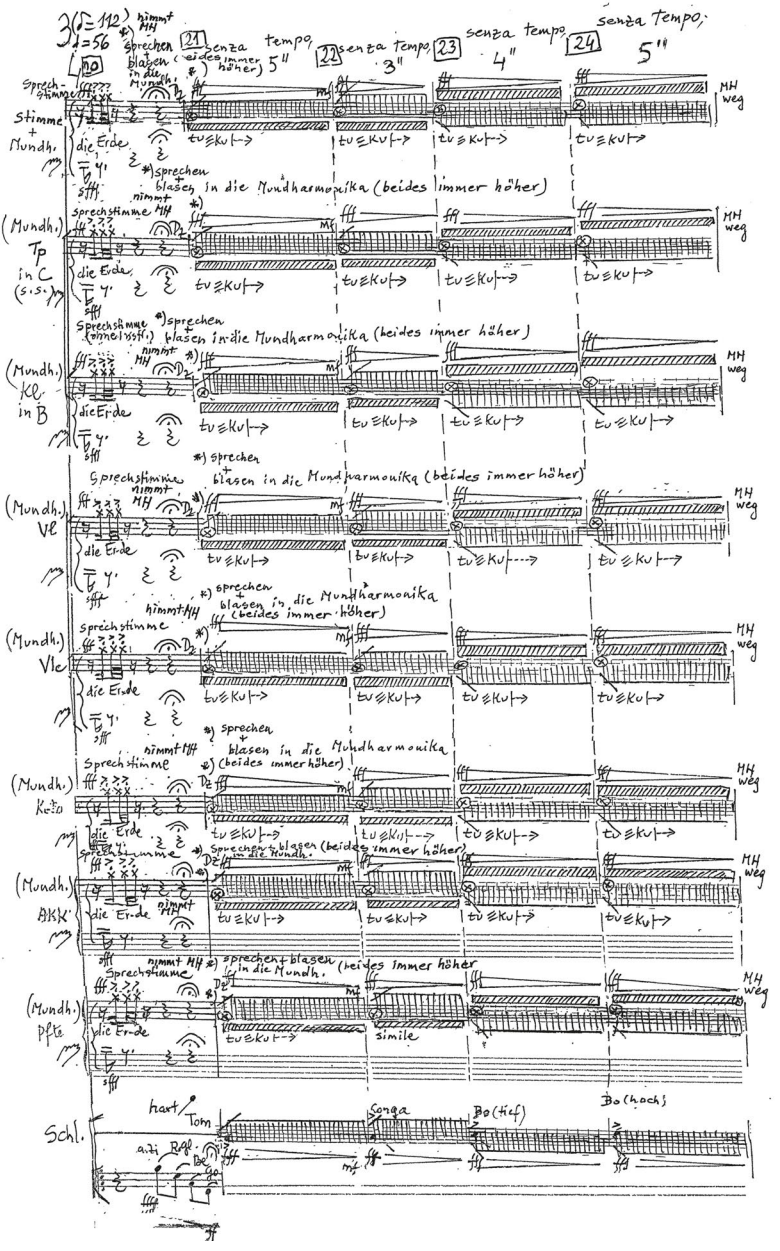
40 Trans. Barbara Dobretsberger: "MiT DeN STeRNeN VeRWaNDT."

41 Hölszky, *Roses of Shadow*, V (trans. Stephanie Schöberl): "Sprechen mit Hervorhebung der Konsonanten und Verharren auf 'T.'"

section. However, no one should be misled by this analytical finding—which only takes into account a partial aspect of the score—into assuming a poetic underpinning of the text. Exactly the opposite is to be heard: like rifle shots, the instruments hammer their forte strokes (mm. 68–70) into a soundscape of glissandi, tremolo, and accentuated repetitions. Thus, the confession of a starry affinity falls into an environment with a threatening effect. The reverberation, an eight-part whisper (voice and seven instruments) in desemanticized consonants (m. 75) appears in its four repetitions like a commentary on the confession of the lyric persona. The fact that Martin Schläpfer was by no means merely skimming the surface of the text, but was subtly plumbing the depths and shallows of Adriana Hölszky's music, can be seen in the introduction of a prop in this phase II: a ball. The expectation from the audience's perspective, however, amounts to nothing, because there is no ball game to be seen. Instead, the ball is used as a threatening, injurious weapon, which is sometimes held aloft triumphantly. As good as this scene is to decipher in itself, the function of the solo that follows the fight with or around the ball (minute 19:00) remains cryptic.

Phase III is characterized by a tutti tonality, predominantly on a piano level. The voice becomes part of the instrumentation—its phonemes are unable to lend any clarity to the dramaturgical events, but it nevertheless creates connotations. A fortissimo measure repeated three times (m. 6) sets an impulse, after which the voice, dynamically placed above the instruments, unmistakably produces a precisely intoned sighing glissando (from b' to a-sharp', from m. 9 from e-flat" to d"). M. 10, the first measure of this section to feature a spoken text ("the trees,"[42] spoken by the entire ensemble), is followed by nine-part harmonica sounds, and is replaced four measures later by the next tutti text (m. 15 "the stones"[43]). In mm. 16–19 the harmonica tutti sound is repeated and leads into a speaking voice tutti again in m. 20 ("the earth"[44]), and to the end of this phrase after four more harmonica measures. These mm. 10–24 are loud in both the spoken text and the harmonica parts, but the short text phrases are by no means clear. The composer subtly increases the tempo of these three speaking-voice measures from quarter = 46 bpm to quarter = 56 bpm, granting the text—"the trees," "the stones," "the earth"—only the equivalent of thirty-second-note values. Nothing in this score is left to chance or approximate execution. Schläpfer's interpretation of this passage has already been referred to above.

42 Trans. Barbara Dobretsberger: "die Bäume."
43 Trans. Barbara Dobretsberger: "die Steine."
44 Trans. Barbara Dobretsberger: "die Erde."



Music example 2: Roses of Shadow, *p.* 73, *mm.* 20–24. © 2017 *by Breitkopf & Härtel, Wiesbaden*

The following section reveals another phenomenon of Hölszky's style, namely a pronounced will to shape the composition, despite all the allowing and losing oneself in sound textures. From m. 25 onwards, a chamber-music-like instrumentation of percussion, accordion (from m. 29) and piano (from m. 31) continues, whereby the latter two instruments are brought close together not only tonally but also in terms of compositional technique. Mm. 37ff. seem like a reprise of mm. 1ff. ("*staccatissimo sempre*"), or, if one encounters this old-fashioned term in the context of Hölszky's composition, a déjà vu. Mm. 48ff. show, similar to mm. 10ff., the increase to a fortississimo sound, which is interrupted in mm. 50–51 with a threefold repetition of a motivic interlocking of percussion, koto, and piano. The motif of three falling semitones (m. 51) as well as the rising and falling broken chords (m. 50; in terms of timbre, entrusted to a wide variety of percussion instruments) form a tonal caesura, after which the return to the harmonica sound takes place in m. 52. Here, too, the thesis of the "recapitulation characteristic" is confirmed (see mm. 11ff.). In the continuation (mm. 56ff.), the accordion and piano enter into a dialogue again (see mm. 31ff.). As in phases I and II, phase III ends in a quiet finale ("niente").

Similar to phase I (piano and percussion), phase IV begins with a percussion sound, which is joined by the alphorn from m. 11. It is, however, quite obviously not the striking timbre of the alphorn that is intended to have a new effect here. Rather, the composer exploits the tonal range of arpeggiated and repeated motifs ("snapping," "sucking in," "creaking voice") and in m. 14 allows the voice to join in with the same "motifs" ("snapping") in quasi-polyphonic two-part harmony. From m. 29 onwards, contrary to what one might expect from a mere reading of the score with its differentiated motifs, a flat sound gradually builds up. The use of the speaking voice ("as a recitative" for the first time in this phase IV in m. 41) does not mark a new internal section because of the mixture with the instrumental timbres (e.g., the instruction "sing into the instrument" in the euphonium; e.g., the flutter-tongue glissando in the bass clarinet in m. 42). There is a caesura only in m. 50, but it is very clear with a general pause of twelve seconds, into which only the rainmaker enters with a pianissimo sound. The appeal of the text—"Walk around the mountain"[45]—is spoken hoarsely by the voice. The text continuation "walk softly"[46] is presented a total of six times, whereby mm. 55–57 show small, almost inconspicuous variations and therefore dispense with the repetition signs otherwise familiar from the score. Counteracting the text, Hölszky creates a march character through

45 Trans. Barbara Dobretsberger: "Geh uM DeN BeRG."

46 Trans. Barbara Dobretsberger: "geh leise."

accents in strict 4/4 time, creating a stiff and military counter-world to the appeal in the Native American texts, namely to walk quietly, softly. Schläpfer has the male dancers slide on their knees at this point, burdened with the weight of the female dancers on their shoulders. These body sculptures underline the oppressive, hopeless moment of the voice's hoarse appeal. The technique of repetition with small variations also defines mm. 58ff. up to the text "where there is danger or pain"[47] (played three times). The transition to include the solo voice in m. 70 is striking, first beginning with phonemes performed *bocca chiusa*, and from m. 73 ends phase IV speaking hoarsely, whispering hoarsely, astonished, very intensely and whispering: "Draw a circle of thoughts around the gentle silent mountain, and the mountain becomes crystal, and you see the open valley through the crystal mountain, and all the truth of the valley is yours."[48] Analogous to the solo voice, Martin Schläpfer places a male solo dancer at the center of the stage, who—in a counterpoint to the text that can be interpreted as a promise—sinks to the ground at the end of his scene.

Phase V follows attacca. The sound of the trumpet in C is striking; despite the mute used, it has a bright and other-worldly quality. However, mm. 1–5 with their fanfare-like motif in m. 4 are not without a certain ironic, perhaps even threatening note, for the trumpet is both the instrument of the white man and the instrument of war. As abruptly as this tonal digression appeared, it departs. Apart from the change of meter, mm. 7–14 take up the *staccatissimo* soundscape of the beginning of phase III almost precisely; the trumpet is completely absorbed into the collective sound. In m. 15, underpinned by the bass drum with a pianissimo swirl, it emerges in a *senza tempo* measure. The connotation of a cadenza is obvious, even if the virtuosity here is distorted into a creaking and whispering into-instrument speech. In phase V, this is the last solo appearance of the trumpet, for the sound of the accordion (from m. 16) and the harmonica (from m. 19), played in glissandi by the soprano, take center stage, while the piano plays in unison with the accordion (mm. 19 and 21). The structure, divided by the alternation of rhythmically dense action and pauses, changes starting in m. 24 to a flat sound, which thins out from mm. 28–29 to a dialogue between waterphone and iron ball marble. In conception, these measures would be comparable to the end of phase III; here, however, the sound events are once again gathered into a restless tutti. Phase IV is the first section of the composition so

47 Trans. Barbara Dobretsberger: "wo Gefahr ist oder Schmerz."

48 Trans. Barbara Dobretsberger: "Zieh einen Kreis aus GeDaNKeN um den sanften stillen BeRG, und der Berg wird zu KRiSTaLL, und du siehst das offene Tal durch den kristallenen BeRG, und die ganze WaHRHeiT des Tales ist dein."

far that remains without spoken or sung text. Collective lip sounds, the creaking voice as well as phonemes groaned or "creaked" into the alphorn and the contrabass clarinet merge into a collective "murmuring voice" (m. 36). That the collective has lost all grounding, with the exception of the two wind instruments (which sing as low as possible into the instrument), may well be asserted: In aperiodic, very short bursts, "as high as possible" is murmured here. With the exception of the piano and the alphorn (singing into the instrument in head voice), phase V ends in a collective exhalation into the harmonica. The snare drum has the final word with a repeated motif that "sweeps" wildly in the forte which already played a central role in phase IV (mm. 49–60; "Walk around the mountain, walk softly, walk softly …"[49]). The fact that the choreography works with motifs on an equal footing can be seen in the gestural motifs ("throw-away gesture,"[50] shaking, defiant and defensive gesture), which accumulate especially in this phase, possibly stimulated by the "illusions of movement" created by the music (the fanfare exhorting to departure, periodic or aperiodic creaking, sweeping). In this, Schläpfer refers, whether consciously or unconsciously, to the gestural character of Hölszky's music; for example, even the soprano voice, "deconstructed" into phonemes and desemanticized, is reduced to a gestural moment, an extremely abbreviated moment of movement of a sound event.

Phase VI is also a wordless phase. The interactions of the instruments and the voice become increasingly chaotic; blocks of sound with ordered, homorhythmic structures become noticeably rare. The end of the phase is most compact with the *presto possibile* (from m. 30), in which the violin and violoncello enter into a partly hocket-like dialogue, while the bass drum forms the foundation with a tremolo. This final drum tremolo is familiar from the final measures of phases I and III (both times extremely restrained dynamically). In phase VI, it rises to a quadruple forte in the final measure. There is an obvious element of symmetry here which seems legitimate in view of the image of the planetary orbits. If, as the composer suggestively conveys, the nine sound centers move like celestial bodies, there are always planetary passages that create a similar, but never an identical constellation in the "sound cosmos." Or, to use another of Hölszky's images, through the "chemical bonds [...] [of the] 'sound molecules'"[51] of the bass drum to the two string instruments, a new chemical element is formed—"new substances"[52] are formed.

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49 Trans. Barbara Dobretsberger: "Geh um den Berg, geh leise, geh leise …"

50 Term chosen by Stephanie Schroedter. E-Mail to Barbara Dobretsberger from August 23th, 2020.

51 Hölszky, *Roses of Shadow*, back cover of the book [n.p.] (trans. Stephanie Schöberl): die "chemischen Bindungen [der] 'Klangmoleküle.'"

52 Ibid. (trans. Stephanie Schöberl): "neue Substanzen."

Phase VII builds on the small-scale sound connections of the preceding phase. The percussion, particularly colorful here with various instruments, creates a "thunder sound" (m. 2), after the piano has reinforced the percussion rhythm with clusters (played in the strings) in the opening measure. After the textless phases V and VI, the voice is present in this last phase of the work: "You spread death, you spread death, you buy and sell death, you buy and sell death, but you deny it, you don't want, you don't want, you don't want to face it. You buy and sell death."[53] The textual repetitions are also emphasized musically with slightly varied or even identical motifs (mm. 1–11), a technique that can also be found in the other phases (e.g., in phase IV, in which mm. 52–67 also feature motif repetitions, but applied to both the voice and the instrumental tutti). The *staccatissimo* soundscape (from m. 10 and in the varied resumption from m. 14) can be understood as a derivative of similar soundscapes in phases III and V. The chemical reaction, so to speak, of all tonal elements leads to an increase in dynamics and to an intensified structuring of the temporal progression in blocks. Examples of this are: Block of mm. 10–11; block of mm. 12–13 (quasi as an echo with tremolo sounds to the phonemes of the voice); block of mm. 14–15 (with the *staccatissimo* as in the block of mm. 10–11); block of mm. 16–17 (again with phonemes in the voice in addition to an ostinato, but subtly varied percussion part); block of mm. 18–23. This block features tremolos, repeated notes and a motif in trumpet and clarinet that can be derived from m. 4 of phase V. Already there, it has a strangely dark, ironic sound. The integration of the voice into the instrumental tutti is hocket-like, so that the voice remains audible as the carrier of the central textual message: "Poor white man, in your rage, in your splendor, in all your prosperity, you have lost your heritage."[54] In multiple forte and as high as possible, the voice rings out at this point. Ten seconds of general pause, into which only a sound from inside the piano reverberates, end this sequence. The following block of mm. 24–34 seems short of breath and as if thinned out, interspersed with fermatas and pauses: "Now you want mine … there … take it … I have more."[55] Respectfully following the score, Martin Schläpfer brings the ensemble to a standstill (albeit incomplete) here (minute 40:20). The continuation of this conflict-laden "scene" takes place with slowed movement impulses,

53 Trans. Barbara Dobretsberger: "Ihr verbreitet Tod, ihr verbreitet Tod, ihr kauft und verkauft Tod, ihr kauft und verkauft Tod, aber ihr verleugnet ihn, ihr wollt ihm nicht, ihr wollt ihm nicht, ihr wollt ihm nicht ins Gesicht sehen. Ihr kauft und verkauft Tod."

54 Trans. Barbara Dobretsberger: "Armer weißer Mann, in deiner Wut, in deinem Glanz, in all deinem Wohlstand hast du dein Erbe verloren."

55 Trans. Barbara Dobretsberger: "Jetzt willst du meines … da …nimm es … ich habe noch mehr."

whereby the most striking aspect of the stage performance is probably the slowly fading dance on pointe—the soloist gradually relinquishes her position of prominence among the ensemble (minute 42:03), thus introducing the final sequence of *Roses of Shadow*. The block of mm. 35–36 is a derivative of the *staccatissimo* blocks (m. 10, m. 14). However, its density is increased and it ends with a glissando in the voice (crescendoing, decrescendoing), which acts as a counterpoint to the polyphonic texture of the instruments. The block of mm. 37–46 is fluctuating in tempo and in this, too, a contrast to what precedes. "You who live where the sun sets—HEY—you thunder beings."[56] Rhythmically divided into clear quarter note beats, the block of mm. 47–49 follows. The fact that Martin Schläpfer lets the music rage here, while the ensemble, in its calm and almost lethargic movements, remains untouched by the rhythmic impulse, shows the independence, if not originality, of his staging of Adriana Hölszky's sound choreography. This block with the oft-repeated "Hey" circles within itself. The composer arranges for m. 49 to be presented seven times. This interjection, whose semantics are ambiguous, is heard no less than forty times. Is it the call of the white man who, in his own downfall, still triumphantly snatches the inheritance from the Native American? Or a vital commitment to a universal, mystical energy that embraces and, in a sense, protects man as part of the cosmos? In any case, the last "niente" of the composition fades out between single and quadruple forte—a "downfall" in a creaking and aperiodic roar (mm. 50–52). "Morse-like" is the instruction for the last three extremely quiet measures. Is this a magical redemption, allowing oneself to fall in a quasi Big Bang-like chaos that slides into a Morse-like pulsating gentle pianissimo state? The choreography could also suggest this interpretation.

If, after this study of the score, one returns once again to a consideration of the total work of art, which is composed of music, dance and—admittedly not given due consideration in the context of this contribution—the strikingly dark stage design (Markus Spyros Bertermann) dominated by a monolith, then some questions remain unanswered. A plot line cannot be discovered in Martin Schläpfer's choreography. However, his associative use of the stage space (collective vs. grouping vs. solo performance; vertical vs. horizontal; close to the floor vs. upright posture; furthermore, small, expressive gestures such as hand movements, head posture, etc.) suggests, on a large as well as small scale, the narration of individual phases of a drama. The fact that the range of interpretation is wide and remains wide even on closer examination places the choreography on an equal footing with Adriana Hölszky's composition, whose

56 Trans. Barbara Dobretsberger: "Du, der dort wohnt wo die Sonne untergeht—HEY—ihr Donnerwesen."

ambiguity is likewise not resolved by this analysis. Of course, this conclusion does not refer to a deficiency in the artistic production–be it composition or choreography–but is rooted in Hölszky's and Schläpfer's artistic process and intention.

Figure 2: *Adriana Hölszky and Martin Schläpfer during the rehearsal for* Deep Field. *© Sascha Kreklau*

Deep Field, unlike *Roses of Shadow*, which was composed three years later, is explicitly identified as a ballet. However, here, too, something seems to resist the classification as ballet music. The term seems too harmless, too banal, does not seem to do justice to this superlative text-based work. "This is not a ballet evening!" says Adriana Hölszky about *Deep Field*.[57]

The subjects of *Roses of Shadow* and *Deep Field* are deeply related. Both are about man's relationship to nature, to his fellow world, but also about his own responsibility, which he is hardly empowered to perceive. However, let us

57 Anne do Paço, "Zirkulationen des Lebendigen. Adriana Hölszky, Rosalie und Martin Schläpfer im Gespräch mit Anne do Paço über ihre Uraufführung *Deep Field*," in *Programmheft Ballett am Rhein*, vol. 20, ed. Deutsche Oper am Rhein Düsseldorf Duisburg (Düsseldorf, 2014): 8–20, 20 (trans. Stephanie Schöberl): "Ein Ballettabend ist dies nicht!"

start with the title Hölszky chooses for her 2013 commission for the Düsseldorf Opera initiated by Martin Schläpfer: *Deep Field*. A title rich in associations, almost poetic, which the composer borrowed from the name of one of the Hubble space telescopes. This "giant eye"[58] enables us humans to look at populations of distant galaxies—a fascination of a special kind that obviously inspires not only further astronomical research but also a composer like Adriana Hölszky. Far from it, however, would be the assumption that Hölszky is only concerned with the greatest possible range in her outward gaze. Those familiar with her work know of her affinity for introspection: "First you see nothing, then more and more stars, and finally everything pulverizes, the whole drama of humanity, the stories of living and dying, language, everything becomes universe, mystery …"[59] However, before man's self-suffering is entrusted to the universe and allowed to sink into the "deep field" and dissolve, before man attains "that divine substance"[60] which Hölderlin's Empedocles longs for, the dramas must be acted out and lived through. For this—and this may at least strike some as unusual in the composition of ballet music—texts are needed, and Hölszky chooses these carefully. In order to illuminate the interplay of the composition and the choreography, at least pars pro toto, an analysis of the video production (provided by the Düsseldorf Opera) will be preceded by a study of the score.

Like *Roses of Shadow*, *Deep Field* is divided into what the composer calls phases and epilogues. Only phase X does without an epilogue, resulting in a division into ten phases and nine epilogues.

Hölszky opens the work with a quotation from the first scene of Hölderlin's fragmentary tragedy *The Death of Empedocles*. Respect, but also fear, for the divine being of Empedocles ("all-transforming"[61] and "sadly searching"[62]) and the awareness that even this "beautiful star" must set, resonate in Panthea's words. The end of the text (and thus also of phase I)—"Already the clear day dawned before me and around the sun wavered, like a soulless shadow, the

58 Adriana Hölszky, in *Programmheft Ballett am Rhein*, vol. 20, ed. Deutsche Oper am Rhein Düsseldorf Duisburg (Düsseldorf, 2014), 5 (trans. Stephanie Schöberl): "Riesenauge."

59 Ibid. (trans. Stephanie Schöberl): "Erst sieht man nichts, dann immer mehr Sterne, und schließlich pulverisiert sich alles, das ganze Drama der Menschheit, die Geschichten vom Leben und Sterben, die Sprache, alles wird Universum, Geheimnis …"

60 Meinhard Prill, "Friedrich Hölderlin," in *Kindlers Neues Literatur-Lexikon*, ed. Walter Jens, vol. 7 (Munich: Kindler-Verlag, 1990), 923–34, 933 (trans. Stephanie Schöberl): "jene göttliche Substanz."

61 Trans. Stephanie Schöberl: "allverwandelnd."

62 Trans. Stephanie Schöberl: "traurigforschend."

world."[63]—seamlessly joins, quasi in an enjambment, the title of phase II: "Earth." However, let us first trace the return of the Hölderlin text in the final phase (phase X). The second block of Hölderlin quotations is attached to the end of the work like a frame, or rather like an inexorable parenthesis: only fragments of text from Panthea's appearance remain, scraps of words transformed from the originally longing to the threatening, torn from their context of meaning. Phase I as well as phase X bear the title "Delirium," and yet it is not a return, but a metamorphosis of delirium.

The texts of Nietzsche, this word-metamorphosis artist par excellence, fit seamlessly into Hölszky's "Sound exposures of a Metamorphosis"[64] (the subtitle of the work). "Birds of Prey,"[65] the title of phase VI, refers to the element of air (see phase II "Earth," phase IV "Water," phase VIII "Fire"); the text modules from the Dionysus dithyrambs are heightened in their mysteriousness by being heard simultaneously. That the quotation of "I am your labyrinth"[66] (from the "Lamentation of Ariadne"), partly written in universals, stands out graphically like a motto from the score is one thing; that it is also audibly exposed in the polyphony of sounds is another and stands pars pro toto for the coherence of the subtitle. Nevertheless, the considerations can be spun even further: the view through Deep Field, the space telescope that allows our eyes to access distant galaxies, is a glimpse into a labyrinth of stars and galaxies. Thus, the labyrinthine is also found in the title so carefully chosen by Hölszky. Her reference—"You have only reached the inside when you have passed through these illuminations"[67]—can be understood as an appeal, namely not only to look through Deep Field, the telescope, but to go into *Deep Field*. What the composer calls illuminations are the labyrinths and metamorphoses of our life on earth. The third layer of texts included in the composition are fragments from Hanns Johst's *Die Stunde der Sterbenden* (Hour of the Dying). The expressionist drama from the beginning of World War I depicts the drastic suffering of war and served as inspiration for the composer. Johst, however, changed from a pacifist to a right-wing nationalist only a short time later and, as a friend of Himmler's and honored by Hitler, made a career as a poet. "As president of both the Reichsschrifttumskammer' (Reich Chamber of Culture) and the 'Deutsche

63 Trans. Barbara Dobretsberger: "Schon dämmerte der klare Tag vor mir und um die Sonne wankte, wie ein seellos Schattenbild, die Welt."

64 Trans. Barbara Dobretsberger: "KLANGbelichtungen einer METAmorphose."

65 Trans. Stephanie Schöberl: "Raubvögel."

66 Trans. Barbara Dobretsberger: "Ich bin dein Labyrinth."

67 Do Paço,"Zirkulationen des Lebendigen," 12 (trans. Stephanie Schöberl): "Das Innere hat man erst erreicht, wenn man durch diese Belichtungen hindurchgegangen ist."

Akademie der Dichtung' (German Academy for Poetry) 1935–1945, he was one of the leading literary figures of the Nazi regime."[68] The omission of this fact in the program notes for the premiere led to criticism. The literary scholar Karl Carino says, "historical decency demands that the author's National Socialist turn after his early Expressionist phase be mentioned and reflected in the program."[69] However, he describes Hölszky's inspiration by a youthful work by Johst as "not reprehensible."[70] This is where we will connect: Phase VIII "Fire" opens with the words "He died. He is rigid and cold."[71] This, as well as most of the following text fragments, get lost in the noisy polyphony. Individual key words stand out visually from the score's graphics and are also perceptible acoustically: "Forward"[72] (m. 4), "Forward. Through the rain. Through the fire."[73] (mm. 39–43), "Earth"[74] (m. 120), "Thrown down"[75] (m. 129), "The dying"[76] (mm. 136/138), and "Bleeding darkness"[77] (m. 146).

These words, like those of Hölderlin and Nietzsche, are by no means isolated in space. If one follows the textual levels of the individual phases closely, a network of either identical words or words of the three poems connected by associative fields becomes apparent. Even if the text seems to play a marginal role in the vastness and complexity of the musical realization of the score, it is likely to have been a decisive parameter in the compositional process itself. This is also and especially true of the text mentioned in the title of phases III, V, VII, and IX—Hesse's love fairy tale "Piktor's Metamorphoses." "For me, Hesse's

68 Wulf Piper and editorial department of Kindlers Literatur-Lexikon, "Hanns Johst," in *Kindlers Neues Literatur-Lexikon*, ed. Walter Jens, vol. 8 (Munich: Kindler-Verlag, 1990), 832 (trans. Stephanie Schöberl): "Als Präsident der Reichsschrifttumskammer wie der Deutschen Akademie der Dichtung 1935–1945 gehörte er zu den führenden Literaten des NS-Regimes."

69 Karl Carino, in csi, "Kritik am Umgang der Rheinoper mit Nazi-Dichter," in *RP Online*, 26 May 2014, accessed 7 December 2021, https://rp-online.de/kultur/kritik-am-umgang-der-rheinoper-mit-nazi-dichter_aid-20385655 (trans. Stephanie Schöberl): "Allerdings gebiete es der historische Anstand, die nationalsozialistische Wende, die der Autor nach seiner expressionistischen Frühphase genommen hat, im Programmheft zu erwähnen und kritisch zu reflektieren."

70 Ibid. (trans. Stephanie Schöberl): "nicht verwerflich."

71 Trans. Barbara Dobretsberger: "Er starb. Er ist starr und kalt."

72 Trans. Barbara Dobretsberger: "Vorwärts."

73 Trans. Barbara Dobretsberger: "Vorwärts. Durch den Regen. Durch das Feuer."

74 Trans. Barbara Dobretsberger: "Erde."

75 Trans. Barbara Dobretsberger: "Hingeworfen."

76 Trans. Barbara Dobretsberger: "Das Sterben."

77 Trans. Barbara Dobretsberger: "Blutende Finsternis."

fairy tale is the inexpressible, the utopian space,"[78] says Hölszky, and indeed the longings formulated in "Piktor's Metamorphoses" stretch out their arms like tentacles to the texts of Hölderlin and Nietzsche. Just a few examples: the garden as a symbol of paradise; the spring as a symbol of the origin of life and spiritual inspiration; the thirst-quenching waters of the earth rising up to Empedocles as well as to Piktor; the stooped, troubled posture of the tree Piktor and of Empedocles, which can also be found in Nietzsche's text fragments; thirst as a metaphor and also as a real threat in all texts up to Johst's *Hour of the Dying*; the loneliness of the individual, which connects all four texts.

On the compositional level, if one searches for similar networks of relationships, one also makes a find. Due to the limited scope of the publication and the "density" of the score, references follow only pars pro toto. The "framework" of phase I and X ("Delirium" 1 and 2) as the opening and closing sections has already been mentioned. Phase II "Earth" and phase VIII "Fire" are characterized by a block-like structure. Phases III, V, and VII ("Piktor's Metamorphoses" 1, 2, and 3) characterize the changing nature, the metamorphosis of Piktor on several levels. While in "Piktor's Metamorphosis 1" he initially appears as a soloist, symbolized by the sound of the trumpet (the connotation of a Wagnerian leitmotif may arise spontaneously when listening and reading the score), the shades of sound and structures change increasingly. "Metamorphosis 2" shows the dominance of an elaborated micropolyphony, while "Metamorphosis 3" is determined by looseness and colorfulness. The last metamorphosis in phase IX ("Piktor's Metamorphosis 4") takes on the character of a synthesis through the integration of the Nietzsche text (from m. 25). To recognize a moment of intensification here, a kind of final effect, will not be mistaken. The following "Delirium 2" functions more or less as a swan song.

Both in phase IV "Water" and in phase VI "Birds of Prey," the composer explicitly uses illustrative structures and associative motifs. In order to help with understanding the compositional process as well as for orientation during listening, it can be helpful in phase IV to interpret a rippled water surface (mm. 7ff.), wave forms (mm. 24ff.), a surge of water (mm. 45ff.), crystalline frozen water (mm. 49ff.), a drop shape (mm. 76ff.), and water collected in a basin (from mm. 82ff.). The same applies to phase VI "Birds of Prey" with its dominance of repeated motives, groups of notes to be played as quickly as possible, and chains of trills. As monumental as the oversized score and its calligraphic notation may be, the attention to detail must not be neglected. This will hopefully provide stimuli for further research.

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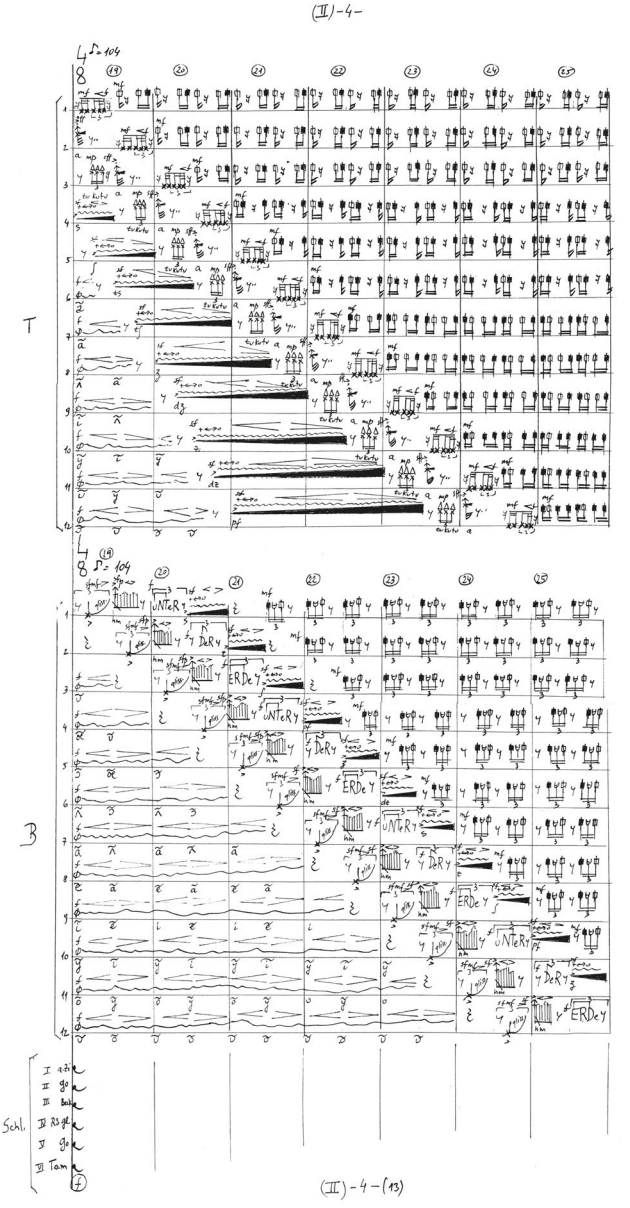
78 Do Paço, "Zirkulationen des Lebendigen," 13 (trans. Stephanie Schöberl): "Hesses Märchen ist für mich das Unaussprechbare, der utopische Raum."



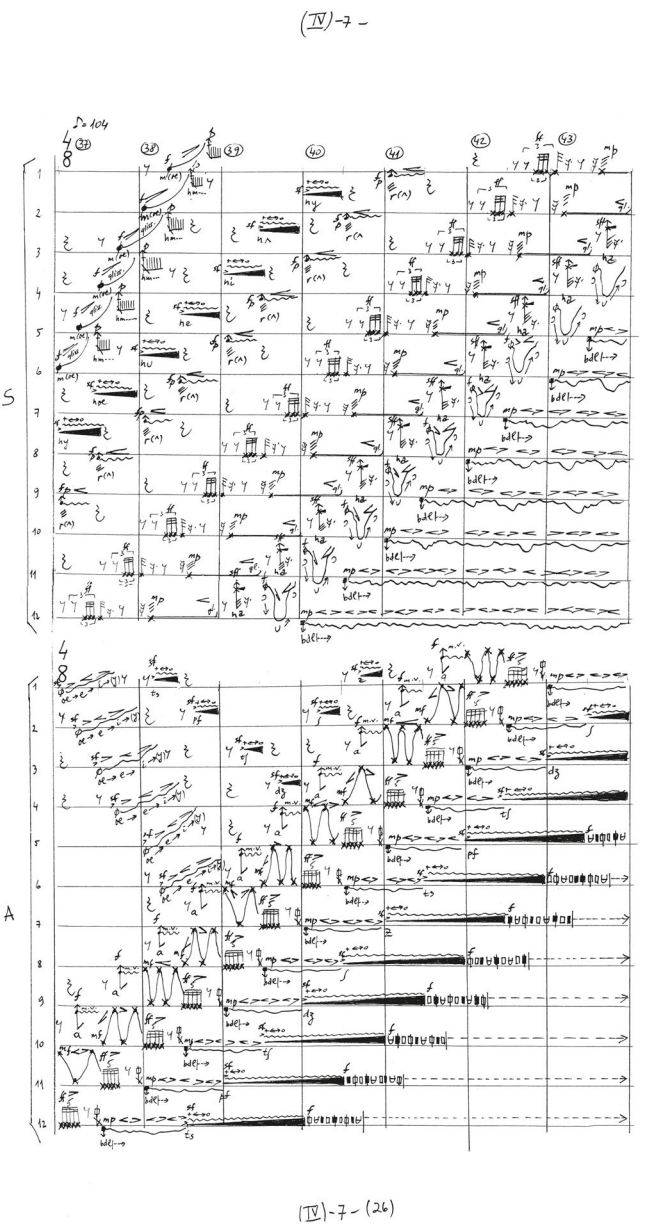
Music example 3: Deep Field, (II) – 4 – (13), *mm.* 19–25. © 2014 *by Breitkopf & Härtel, Wiesbaden*

Several challenges arose for Martin Schläpfer in the choreographic design. On the one hand, Adriana Hölszky's musical calligraphy is in many areas closer to a metamorphosing texture than to a closed form. On the other hand, it is (as in the work *Roses of Shadow*, created in 2016) the textual level that not only guides the choreographer, but can also restrict him like an unwelcome shackle. "For me, this was a great challenge, as I am hardly used to choreographing to language—even if it is pounded. Of course, I can't just escape words, but I don't want to give them power over my work either."[79] In the soloistic beginning of the ballet, Martin Schläpfer stages the dancer's performance almost redundantly to the spoken voice played from the tape. The rhythmic congruence between voice (music) and dance as well as the striking doubling of words through movement and gesture seems almost naïve. Examples include the sideways hopping at the words "where the spring rises"[80] (mm. 12–13; minute 1:35) or the covering of the eyes with the feet at the words "you have never seen him?"[81] (mm. 26–27; minute 1:58). Props—namely the posts projecting into the stage like a garden fence or like oversized flower stalks, which disappear again as quickly as they appeared—underline the fairy-tale-like narrative impression of this first scene. However, this entry into *Deep Field*, which is oriented towards a concretization of the music, or rather of the text, is lost in the subsequent phases. Only the handling of rhythm remains to a certain extent a programmatic parameter until the final part of the work (Panthea, Delirium 2). Where Hölszky utilizes clear rhythms in the music, these are reproduced in the dance movement. And where Hölszky's music proves rhythmically elusive through soundscapes, tremoli, glissandi, and an almost impulse-free flow and transformation, Martin Schläpfer resorts to choreographing motivically deployed, shimmering or tremulous movements (cited as an example: phase II "Earth"; minute 11:20), which establish a connection to the timbre of the instruments or voices on a micro-level. This (along with the preference for dancing on pointe in *Deep Field* and the preference for dancing on flat soles in *Roses of Shadow*) is probably the clearest contrast to the choreography for *Roses of Shadow*, created three years later, which is (even) more independent and free of associations in the dance "visualization" of the musical events.

79 Ibid., 8 (trans. Stephanie Schöberl): "Für mich war dies eine große Herausforderung, bin ich es doch kaum gewohnt, zu Sprache—auch wenn sie zerstampft ist—zu choreographieren. Natürlich kann ich mich den Worten nicht einfach entziehen, möchte ihnen aber auch nicht die Macht über meine Arbeit geben."

80 Trans. Barbara Dobretsberger: "wo die Quelle springt."

81 Trans. Barbara Dobretsberger: "Du hast ihn nie gesehen?"



Music example 4: Deep Field, (IV) – 7 – (26), *mm.* 37–43. © 2014 *by Breitkopf & Härtel, Wiesbaden*

Figure 3: *Scene from* Deep Field. *© Gert Weigelt*

Not a quotation from Hölszky's *Deep Field*, but from Hölderlin's *The Death of Empedocles* shall be placed at the end of this essay: "Then dare! What you have inherited, what you have earned, / What your fathers' mouths have told you, taught you, / Law and custom, the old gods' names, / Forget it boldly, and, like newborns, / Raise your eyes to the divine nature [...]."[82] In *Roses of Shadow* and *Deep Field*, Adriana Hölszky and Martin Schläpfer address how little man has succeeded in this enlightened view of nature and the cosmos; each has their own artistic means, which complement each other, but also collide with each other ("counteract and also oppose,"[83] as described by the choreographer) or at times seem to run incoherently alongside each other. However, in the view of

82 Friedrich Hölderlin, *Sämtliche Werke. Kleine Stuttgarter Ausgabe*, vol. 4, ed. Friedrich Beissner (Stuttgart: Cotta, 1962), 68f., accessed 7 December 2021, http://www.zeno.org/Literatur/M/H%C3%B6lderlin,+Friedrich/Drama/Der+Tod+des+Empedokles/%5BErste+Fassung%5D/2.+Akt/4.+Auftritt. "So wagt's! was ihr geerbt, was ihr erworben, / Was euch der Väter Mund erzählt, gelehrt, / Gesetz und Brauch, der alten Götter Nahmen, / Vergeßt es kühn, und hebt, wie Neugeborene, /die Augen auf zur göttlichen Natur [...]."

83 Do Paço, "Zirkulationen des Lebendigen," 10 (trans. Stephanie Schöberl): "entgegnen und auch entgegen setzen."

both artists, everything that exists—on earth as well as in the inner and outer cosmos—is interconnected. This is without a doubt the core message in *Roses of Shadow* as well as in *Deep Field*, and just as doubtlessly, the failure of man in his approach to the "God question"[84] is brought to our attention and made audible to us in sounds and movements that are not afraid to slide into the bizarre. The "passing by" of sound and movement, the missed synthesis between music and movement, the (occasional) drifting into seemingly incoherent parallel worlds, which particularly in *Roses of Shadow* is partly irritating (and probably deliberately intended to irritate), is both an artistic program and a philosophical statement—both Adriana Hölszky's music and Martin Schläpfer's dance are "existential."[85]

84 Ibid., 20 (trans. Stephanie Schöberl): "Gottfrage."
85 Ibid. (trans. Stephanie Schöberl): "existentiell."

Musicians as Performers
On the Relationship Between Dance and Music in the Works of Stephanie Thiersch and Brigitta Muntendorf

Gerald Siegmund

Abstract: *Stephanie Thiersch's choreographies* Bronze by Gold, Bilderschlachten/Batailles d'images, *and* Archipel—a Spectacle of Blending—*the latter two in collaboration with composer Brigitta Muntendorf—establish a non-hierarchical relationship between dance and music. Rather than the dance following the music and the music following a score, the two composite parts of the productions co-exist in a performative space that they produce together. Creating a performative environment implies inventing performative strategies not only for the dancers but, above all, also for the musicians. Both Thiersch and Muntendorf look for an intermedial way of working that contextualizes their respective arts and makes them resonate socially. Thus, Muntendorf's music extends into the choreography, while the concerns of choreography gain an audible dimension.*

Arms wave, hips turn, torsos twist and stretch. Bent over his turntables and computer equipment, Belgian DJ Elephant Power, aka Nicolas Baudoux, plays a set of euphoric techno music that produces an irresistible pulse the seven dancers cannot resist. Huddled together on the movable bandstand encroaching on the DJ's space, the group enjoys their night out in a club. They move in slow motion thus creating the impression of an iconic moment, an almost frozen film still of a perfect situation in which the dancing bodies merge in unison with the music. Light bars on the floor at the back of the stage emphasize the silhouettes of their bodies, bathing the stage in a play of golden light and its shadows. Slowly and gradually the group disperses. One by one the dancers step off the platform and expand onto the stage. The music sputters and spurts, short flashes of disruptive sounds that accompany the dancers' abrupt stop-and-go movements. They stretch out trying to reach each other, turning, twist-

ing, shaking, always a little off center, slowly lowering their bodies to the floor until they frieze and the whole scene grinds to a halt.

Bronze by Gold (2015), or: dance by music, is Stephanie Thiersch's second production that actively probes into the relationship of dance and music on stage. It is also her second collaboration with the Asasello Quartet who have since joined her for two further productions, *Bilderschlachten/Batailles d'images* (2019) and most recently, *Archipel–A Spectacle of Blending* (2020/21), all of which explore and expand the possibilities of dance and music to co-exist on stage.[1] In her productions, the Cologne-based choreographer–who has a strong background in media arts and has created several award winning dance films[2]–always includes media and popular culture references into her choreographic research. The name of her company MOUVOIR, which she founded in 1999, blends the French words "mouvement" and "voir," moving and seeing, thereby underlining Thiersch's interest in confronting and analyzing bodies, movements, and their medial and social representations on stage. The use of slow motion at the beginning of *Bronze by Gold*, the blackouts and cuts, the focus on one single scene framed on stage like an image–these techniques demonstrate Thiersch's filmic way of choreographing although neither film nor video are actually employed on stage.

In this text, I argue that the three productions of Stephanie Thiersch, *Bronze by Gold*, *Bilderschlachten*, and *Archipel* offer perspectives on a non-hierarchical way of integrating dance and music on the contemporary stage. The two more recent productions are both collaborations with the German-Austrian composer Brigitta Muntendorf, whose original compositions for the

1 The first collaboration between Thiersch and the Asasello Quartet was *for four* (2014), which set out the agenda for their further research into the relationship between playing music and dancing on stage. While I have attended live performances of *Bronze by Gold* in Darmstadt, *Bilderschlachten/Batailles d'images* in Bonn and *Archipel–A Spectacle of Blending* in Berlin, I have not seen *for four* performed on stage. For my analyses, Stephanie Thiersch was so kind as to provide me with recordings of the productions. *Bronze* premiered August 22, 2015 at Radialsystem Berlin during the festival Tanz im August. *Bilderschlachten* premiered May 9, 2019 at the Théâtre de Nîmes, France. *Archipel* premiered on June 18, 2021 at Central Theater Düsseldorf during the Festival Theater der Welt.

2 Stephanie Thiersch (https://www.mouvoir.de) studied dance and literature before enrolling to study media arts with performance artist Valie Export at KHM Cologne from which she graduated in 1999. Her most recent dance film, *Insular Bodies*, was filmed in 2020 on the Greek island of Corfu and premiered at the Venice Biennale.

pieces give the musical side of the endeavors more weight and importance.[3] My perspective here is not that of a musicologist but rather of a performance scholar. I will not, therefore, analyze Muntendorf's complex scores, which is far beyond my professional capacity, but will instead reflect upon the way they are staged and performed as part of Thiersch's choreographies.

Recently, musicology has turned towards the epistemological role of the body to establish it as a musicological category. With its foundational role in making music, the "body turn" approaches and reflects upon the body as an instrument to produce sound or "body sounds,"[4] influencing the way music is produced and perceived.[5] Karolin-Schmitt Weidmann looks at the body as a mediator between everyday life and the world of art in which music is performed. Thus, making music is an embodied cultural practice next to other embodied cultural practices that resonate with each other and help to situate and understand music in a social context.[6] Rather than focusing on the sounds the body makes as music, my intention here is to look at performative strategies that draw our attention towards the presence of the musicians' bodies on stage. I will analyze how the various musicians Thiersch and Muntendorf work with are turned into players in the choreographic field. As a choreographer, Stephanie Thiersch works on the presence of bodies on stage, be they the bodies of dancers or musicians. She develops strategies of communication between dance and music, dancers and musicians. In the next section, *Bronze by Gold*, I will analyze three strategies that Thiersch employs in her work to turn the act of playing music into a physical and therefore risky performance. Then, I take a closer look at *Bilderschlachten*, the battle of images. I argue that the stage activities and the choreography give Muntendorf's music a context and space to resonate with contemporary social issues, which her composition tackles by means of music alone. Thus, the stage becomes another, namely a non-musical and *hybrid channel* for both her music and Thiersch's choreography to communicate. In the section that follows, *Archipel*, the "blending" of dance, music,

3 Brigitta Muntendorf (https://www.brigitta-muntendorf.de) studied composition at the Hochschule für Künste Bremen and at the Hochschule für Musik und Tanz Cologne where she is currently professor of composition.

4 Jörn Peter Hiekel, ed., *Body Sounds. Aspekte des Körperlichen in der Musik der Gegenwart* (Mainz: Schott, 2017).

5 Cf. the recent publication Christine Hoppe and Sarah Avischag Müller, ed., *Music in the Body–The Body in Music. Körper an der Schnittstelle von musikalischer Praxis und Diskurs* (Hildesheim: Olms, 2021).

6 Karolin Schmitt-Weidmann, *Der Körper als Vermittler zwischen Musik und (all)täglicher Lebenswelt. Distanzauslotungen am Beispiel ausgewählter Werke der Neuen Musik* (Bielefeld: transcript, 2021).

voice, and body to a large extent undermines the professional specialization and compartmentalization of capacities that have hitherto divided dance and music. Here, being a performer is an all-inclusive concept that allows for various modes of expression and communication. It is transversal to any categories of identification.

Bronze by Gold, or: Strategies to Transform Musicians into Performers

Ten minutes into Stephanie Thiersch's *Bronze by Gold*—a title taken from James Joyce's novel *Ulysses* and its musical ninth episode dedicated to the Sirens and their seductive onomatopoetic powers—the mood changes. On a second bandstand in the right corner at the back of the stage, the Asasello Quartet[7] starts playing a section of the *Grand Fugue* by Ludwig van Beethoven. The celebratory nature of contemporary club music pumped out of the speakers by a DJ gives way to the jubilant and festive nature of Beethoven's music performed by a string quartet. Their bandstand is tiny. It provides no opportunity for the quartet to assume their habitual seating arrangement from a concert situation. Instead of sitting next to each other forming a semi-circle, the four musicians stand upright with their backs to each other, facing away from the center with only a limited chance to make eye contact. Thus, cues have to be played by ear, by breath, or simply by intuition.

One by one, the dancers get up and approach the musical bandwagon. They pause to look before they decide to climb onto the platform forcing their way through the legs of the musicians, standing up between them or crouching on the floor, filling up what little space there is left. All the time, the quartet keeps playing presumably unperturbed by all the activity that, however, physically affects them. A dancer uses a rope to pull the platform diagonally from its position at the back to the front left side of the stage. Its journey is continuous along the front of the stage before it enters a second diagonal from front right to back left. The movement adds an additional difficulty to the already precarious and shaky situation on the platform. Dancers fall off, being dragged along with the platform, some remain lying on it with arms or legs hanging off its edges while others fall off completely. Four dancers revive and get up again, loosely

7 The Asasello Quartet was founded in 2000 in Basel, Switzerland. Its members, who graduated from the Hochschule für Musik und Tanz in Cologne, are: Rostislav Kozhevnikov (Violin), Barbara Streil (Violin), Justyna Sliwa (Viola) and Teemu Myöhänen (Cello).

dangling their arms and expanding into space as the dynamics of Beethoven's music increase. Finally, fifteen minutes later, the music stops. The DJ wagon is pushed to the back right hand corner of the stage. The light fades, before techno music sets in again. The musicians step off the platform and join the dancers moving across the floor.

The performance of music has always been an integral part of dance performances, with the dancers traditionally following the music. Steps and notes were made to match, supporting each other in myriad ways ranging from providing structure and organization to the choreography—supplying rhythms and energy for the dancing, giving the dancers something to bounce off of—to creating atmospheres to the complex visualization of a musical score by the choreography. While the playing of music is always also a performance—a performative realization of the score the musicians themselves follow—more often than not the performance of the musicians is made invisible. Playing an instrument is also a physical act that requires dexterous coordination of various body parts. While the dancing follows the music, the dance of the musicians that follows the score is hidden away in an orchestra pit or is excluded altogether by the prolific use of musical recordings during dance concerts. What the first half of *Bronze by Gold* reveals, however, is a different approach to the more traditional ways of how dance and music may relate. Here, the Asasello String Quartet is an integral part of the action taking place on stage.

In my description of the piece, three strategies of how to achieve this integration can be isolated. First, the musicians share the same space as the dancers. In what looks like a simple line formation, Rostislav Kozhevnikov, Barbara Streil, Justyna Sliwa and Teemu Myöhänen become part of the dancing group, blending in physically with the dancers, their bodies now being their instruments. Second, by disrupting the traditional set-up of the quartet, by impairing the quiet execution of making music through the physical intervention of the dancers, the sheer physical act of playing music *here and now* is stressed as their bodies need to readjust and adapt to an ever-changing and fragile situation. What follows is a different kind of performance that far exceeds the execution of a score. The musicians' performance becomes evident as a physical performance because the traditional *frame of a string quartet performance* is challenged. The performance becomes risky because the unperturbed playing of music is challenged by the dancers' activities. Thus, Beethoven's *Grand Fugue* gains a rarely heard urgency and roughness because it is literally the product of movement—the movements of the musicians playing intensely, the movements of the dancers crawling amongst them, the movement of the bandwagon—in the current situation. Third, in *Bronze by*

Gold, Teemu Myöhänen places the sharp endpin of his cello against the chest of a dancer while its neck is lying on his shoulder. The instrument supports the dancer, leaning against it all the while, putting pressure on the musician's body. Myöhänen plays the cello laid out between their two bodies with a bow while the dancer waves her hand across the strings. The musical tone that emerges is not the result of a single player playing his instrument perfectly, but the result of a physical interaction between the musician and the dancer as performers. Similar scenes occur frequently during *Archipel*, too. Towards the end, the musicians isolate on stage giving up the security of the musical group altogether. Face to face with individual dancers, the members of the quartet perform Hikara Kiyama's nervous and highly pitched *Raga Phi* to sheer physical exhaustion and a general collapse.

Figure 1: *Scene from* Bronze by Gold © *Martin Rottenkolber*

The Battle of Images, or: The Insertion of Images into the Music

Both Stephanie Thiersch and Brigitta Muntendorf situate their respective arts in a contemporary context of media representations of our everyday lives. Thiersch looks to film and video to come to terms with the way we make

use of and perceive the body today. For Birgitta Muntendorf, the concert hall in all its splendid isolation is not the only venue for classical or "new" music to communicate with its audience.[8] In some of her previous works, she used social media platforms and internet tools as a means for generating and changing material through "sharing and commenting." She calls this method of using contemporary "communication models" to get her music across, "social composing."[9] Social composing, to her, means to compose in "a social environment" like the internet rather than at an "asocial desk" at home.[10] Although *Bilderschlachten* does not include social media platforms, for Thiersch as for Muntendorf the performance presents such an intermedial model of communication. In Muntendorf's understanding of "social composing," the performer rather than the musical object (i.e., a violin) becomes the most important instrument. Musicians as performers are not asked to be perfectly trained virtuosos. Rather, they function as part of a larger environment "as triggers of time-controlled processes"[11] in a live and interactive situation. Thus, for Muntendorf, dance and scenography are an extension of her composition. For Thiersch, music is an extension of her choreography in a different medium. They meet and see eye to eye in the very moment of the performance, making use of different channels of communication.

For *Bilderschlachten*, Muntendorf reworks Bernd-Alois Zimmermann's *Musique pour les soupers du Roi Ubu* (1962–66), and includes it into her own *Six Moods to Stand Up Kings* (2018/19). Zimmermann calls his twenty-minute piece a "ballet noir," a caricature of pompous royal entries and other modes of inflated self-representation. As the score for an actual ballet, it was produced in 1968 at the Deutsche Oper am Rhein in Düsseldorf choreographed by Erich Walter, one of the most prestigious post-war choreographers in West-Germany. Apart from marching music, Zimmermann's piece makes frequent use of Renaissance dance music such as the pavane to launch his satire on the vulgarity, ignorance, greed, and violence of the times he lives in (the 1960s). The character of Roi Ubu, usurper of the Polish throne—created by French playwright Alfred Jarry and which inspired Zimmermann for his composition—epitomizes these traits

8 Brigitta Muntendorf, "Anleitung zur künstlerischen Arbeit mit der Gegenwart," in *Zurück zur Gegenwart? Weltbezüge in Neuer Musik*, ed. Jörn Peter Hiekel (Mainz: Schott, 2015), accessed 10 July 2022, https://brigitta-muntendorf.de/words/dies-ist-ein-essay/.

9 Brigitta Muntendorf, "Social Composing," accessed 10 July 2022, https://brigitta-muntendorf.de/words/social-composing-2015/.

10 Ibid.

11 Ibid.

perfectly. Zimmermann's music consists almost entirely of quotations[12] from other composers, asking productions to insert "epigrams of the political and cultural situation of the places" the piece was to be performed between its seven sections.[13] Thus, already Zimmermann called for an extension of his music into the social sphere making use of another art form, ballet, to make it resonate and communicate. In his extensive study on Zimmermann's compositions in relation to the body, Steffen A. Schmidt argues that Zimmermann's "imaginary ballets" demand "the open space, the still to come mirror image of the dance. Thus, the work possesses an explicitly fragmented character"[14] His compositional technique of citations, "collage and decollage,"[15] which describes the layering and ripping apart of materials, creates an implicit musical body that opens itself up for the medium of dance. "For Zimmermann, dance is a 'composition with bodies' and therefore precisely the medium that is addressed by the implicit bodies in music (and above all his music)."[16]

Taking Zimmermann's intentions seriously, Stephanie Thiersch inserts images and movements in between Muntendorf's music which, in turn, makes ample use of quotations from Zimmermann's piece.[17] Vice versa, the music

12 For a detailed description of the material used cf. Werner Klüppelholz, "'Gott allein kann helfen.' Der Komponist Bernd-Alois Zimmermann (4)," accessed 10 July 2022, https://www.swr.de/-/id=21358102/property=download/nid=659552/12zkkz3/swr2-musikstunde-20180426.pdf; for Zimmermann's ballet compositions including *Ubu Roi* cf. also Jörn Peter Hiekel, *Bernd Alois Zimmermann und seine Zeit* (Lilienthal: Laaber-Verlag, 2019), 194–200 and Steffen A. Schmidt, *Musik der Schwerkraft: die Beziehung von Musik und Ballett in Deutschland nach 1945, dargestellt am Werk Bernd Alois Zimmermanns* (Berlin: Kulturverlag Kadmos, 2012), 413–49.

13 Bernd-Alois Zimmermann, *Intervall und Zeit. Aufsätze und Schriften zum Werk*, ed. Christof Bitter (Mainz: Schott, 1974), 110: "Epigramme über die jeweilige politische oder kulturelle Situation des betreffenden Ortes oder Landes." All translations from German in this contribution are mine.

14 Schmidt, *Musik der Schwerkraft*, 39: Zimmermanns Charakterisierung des Balletts als imaginär "fordert den offenen Raum, das noch ausstehende Spiegelbild des Tanzes. Das Werk besitzt damit explizit fragmenthaften Charakter."

15 Ibid., 427: "Collage und der Decollage."

16 Ibid., 445: "Für Zimmermann ist der Tanz eine 'Komposition mit Körpern' und daher genau das Medium, an welches sich implizite Körperentwürfe wie die der Musik (und vor allem seiner Musik) richten."

17 The piece can be divided into three distinct parts. Part one (00.00–15.00) ends when the musicians have taken their place in the orchestra pit, part two (15.00–1.11.00) displays a series of images as a comment on contemporary society, part three (1.11.00–1.23.00) stages a funeral march. For the beginning of the middle section, Muntendorf references mainly the first section of

accommodates the dance by becoming physical. *Bilderschlachten*, the battle of images, probes into our contemporary cultural situation of selfie-induced hedonism, narcissism, overproduction, and waste. Apart from the Asasello Quartet, French orchestra Les Siècles conducted by the American conductor Benjamin Shwartz is responsible for the musical side of the production.[18] The piece falls into three sections that explore different aspects of the non-hierarchical relation of dance and music.

For the first fifteen minutes in section one of the performance, down in the almost empty orchestra pit, Benjamin Shwartz, dressed in black trousers and simple black t-shirt, is turned towards the auditorium where he conducts his musicians placed amongst the audience, on the sidelines near the exits and on the balconies above. Muntendorf's music emerges from amongst the public, it is produced in its midst so that Shwartz also conducts the audience as silent partners in crime. The surround sound created engulfs everybody present in the theater. After a while in semi-darkness on stage, eight dancers appear dressed in black transparent costumes that play with their silhouettes. Twisting, twirling, and turning always slightly off balance on the brink of falling, they move across the stage, until from minute ten onwards, the Asasello Quartet leaves their position in the auditorium and joins them on stage. Moving together, they form a close group center stage that slowly expands. Here, the distinction between dancers and musicians is blurred, because Thiersch's choreography based on variations of circles and lines gives the same material to both groups, refusing to play up the dancers' virtuosity or to play down the musician's abilities to move. A glowing sun appears on the backdrop that transforms into an image of planet Earth.

Once the orchestra has assembled again in the pit, Shwartz assumes the conventional position of a conductor, facing the musicians with his back towards the audience. For the next three minutes, the stage remains in darkness and all we hear is the music. When the light goes up again, the mood has changed completely. On stage eight dancers in flamboyant plastic costumes in garish colors try to come to life. Equipped with small technical devices they inflate their costumes, their cone heads, body suits, and bunny ears come erect to show off their inflated egos. Flamboyant rubber tubes that look like crinolines or chemical molecules extend their bodies. Sita Messer's costumes raise associations to Oskar Schlemmer's Bauhaus dances from the

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Zimmermann's *Musique*, "L'Entrée de l'Académie." Towards the end, the seventh section, "Marche du décervellage" provides the basis for her music.

18 Les Siècles was founded by François-Xavier Roth in 2003. The orchestra comprises forty-eight musicians.

1920s. But whereas Schlemmer's costumes are precise geometrical abstractions of basic movements shaped into figurines and transferred back onto the body to visualize its structure, Messer lets her imagination run wild. In contrast to the previous section, the preparation for what is to come is played out in silence. The separation of music and movement underlines Thiersch and Muntendorf's effort not to make dance and music overlap, simply following each other. Sometimes in the middle of a scene, the music breaks off while the dancing continues in silence. After a while, a completely different section of music intervenes in what sounds like a completely random act.[19] For the short time of the music playing, the dancers mimic the music in an almost grotesque way, before they, too, break off and continue with something else.

The second part of the piece is based on Zimmermann's "L'Entrée de l'Académie." Together the eight dancers and the four Asasello musicians perform what comes across as a parody of festive entrances of court ballets with two-by-two formations hopping and skipping towards the front of the stage with the occasional lifted leg. Light designer Begona Garcia Navas bathes the backdrop in beautifully bright colors from blue to green, yellow, lilac, and pink. The series of images continues with an aerobics class that has everybody bending and stretching, while the music shifts from Zimmermann's original composition to Muntendorf's own version of it.[20]

Thiersch's images that battle for our attention are constructed in a dialectical way.[21] Each image or scene either contains its opposite or is transformed into its opposite by counter action. The result is an ambiguity of how to perceive and read the image. The silly dance class is countered by Benjamin Shwartz suddenly leaving the orchestra pit and moving onto the stage, while the orchestra continues to play autonomously. Bewildered, he looks at what goes on around him. Hesitantly he approaches the dancers, but they withdraw until he is left all alone. Bathed in a single spotlight, Shwartz, barefoot and in silence,

19 Cf. the break off in minute 54:16, the re-start minute 58:30 and then intermittently.

20 In a conversation with the author, Stephanie Thiersch stresses the point that Muntendorf's composition frames Zimmermann's music that can be heard only in the second part of the piece.

21 In his commentary on Bertolt Brecht's epic theater, Walter Benjamin uses the notion of the image as a "dialectics in standstill" to describe the Brechtian notion of *Gestus*. Dialectical images oscillate from within the standstill of the image making its defined contours vibrate and its content flip into its opposite; Walter Benjamin, "What is Epic Theatre? (First version)," in Walter Benjamin, *Understanding Brecht*, introd. Stanley Mitchell, trans. Anna Bostock (London and New York: Verso, 1998), 1–13.

turns towards the audience and starts to conduct. Almost tenderly he moves his hands and arms, turns his torso, focused on himself, performing a small and delicate dance, the intimacy of which belies the garish jumps of the group that went before.

While the next scene starts off as a piece of abstract dance, the dancers' movements slowly evolve into what can be read as movements of protest with rhythmical breathing noises, with raised fists and chanting voices. Before long, however, the image of protest gives way to the idea of a crowd just partying. The difference between protest and party is slim. Both are encapsulated in a single image that seems to oscillate between its two sides. The protest is caricatured by the Asasello Quartet mingling among the dancers with costumes made from straps of plastic and rubbish, an aesthetics of waste that at the same time criticizes and celebrates the remains of our affluent consumer societies.

The protest scene is also an example of Thiersch and Muntendorf's aim to write or compose a choreomusical score together. Theirs is a collaborative way of working that works across disciplinary boundaries and undermines traditional conceptions of the composer or choreographer as a genius author of her work. The episode is based on a choreographical score that Thiersch developed together with the dancers and which Muntendorf then transcribed into a musical score. In the process of transcription from dance to music, the score changed. The altered version of the score was then given back to the dancers to learn, thereby changing the original material and its structure.

Gradually the music changes into bird noises that trigger animal-like movements in the dancers, quickly gliding across the floor in bizarre positions. Here too, images of nature are turned into their opposite with a microphone being passed around to capture sound bites from the dancers who only move their lips in silence. After a frenzy of movement, self-indulgent babbling, seductive posing, some abuse of musical instruments by heavy playing, colorful strobe-light effects with billowing fog shrouding the stage, the mood once again changes for the third part.[22] Muntendorf ends her composition with a funeral march. First the dancers get in line, lifting their arms and then lowering them a little only to raise and open them up again with energy. The four musicians from Asasello approach them, while one by one, the orchestra musicians leave their instruments behind and climb out of the pit to join the procession. Softly swaying to and fro, their bodies occupy the stage to form a Pina Bausch-like line formation that circles the stage. With their arms slightly raised, their right fists punch the palms of their left hands. Then their wrists cross and the backs of their hands touch. Finally their arms open, groping for something in the air. As the number

22 Minute 1:11:00.

of musicians on stage increases, the music gets thinner and peters out slowly, while a dancer says into the microphone that everybody is going to get sober. Gradually, they all lie down to form a massive heap of bodies. In its midst, the members of the Asasello Quartet are the last ones standing, playing the final mournful notes.

Figure 2: *Scene from* Bilderschlachten © *Sandy Korzekwa*

Archipel, or: The Hybridization of Capacities

The ritualistic ending of *Bilderschlachten* finds its continuation in Thiersch and Muntendorf's next collaboration for the stage, *Archipel–a Spectacle of Blending*. Rather than inserting choreographic images into and in-between the musical sections, which in return gain a visual dimension, the piece blends, as the title suggests, dance, music, voice, and body into a single continuous stream of actions. Over the course of ninety minutes, the blending produces a growing feeling of ecstasy. Next to the Asasello Quartet, Muntendorf's own musical ensemble, Ensemble Garage, is also part of the show. A video of The Norwegian Soloist's Choir projected onto two screens adds both a visual and aural dimension to the already complex set-up. In conversation Thiersch reveals that the 3D surround sound consists almost entirely of the sixteen voices of the choir,

which are distributed onto sixteen speakers spread out across the space. All together twenty-one musicians and dancers fill the stage.

The focus of the production is a sculpture by Japanese architect Sou Fujimoto. With its organic shapes and leaf-like platforms that look like parasols, the sculpture becomes the habitat of the performers, their hive of continuous activity and connectivity, their island of refuge. The species formerly known as human has evolved into some new life form that one may call transhuman. Although uniformly dressed in white leotards, their costumes differ in the various applications of fabric or tubes, rips and tears that extend and open their bodies into space. The futuristic headwear created by Sita Messer and Lauren Steel makes you wonder if you are on the holodeck of Star Trek Enterprise. A reviewer describes the effect of Messer and Steel's costumes: as if nature with its branches and foliage grew out of their no longer human bodies.[23] Fujimoto's sculpture serves as a visual object that is also the main performance space, with the dancers and musicians climbing on its tiers, changing levels, falling off, or simply running through its middle passage, allowing them to cross the stage more quickly. Most importantly, it also serves as a huge musical instrument. While Thiersch once again makes frequent use of her familiar strategies to incorporate the musicians as performers,[24] in *Archipel* the dancers are also given a chance to contribute to the music. The parasols may be used as drum kits. Tubes and other percussive instruments are attached to them giving everybody a chance to bang on them.

The movements Stephanie Thiersch conceives of in *Archipel* differ from her interest in creating ambiguous or dialectical images that resonate socially. For *Archipel*, together with the performers she works on states of energy and their resulting dynamics of ebb and flow, action and repose. Distributed over the various platforms and levels of Sou Fujimoto's sculpture, the performers are on all fours breathing heavily to the point of convulsion with their backs arching and hollowing, their heads rhythmically moving up and down. Similar scenes of togetherness that rely on trance-inducing ritualistic practices also emerge when the musicians turn into vocalists intoning three simple notes and repeating them in an endless loop. The atmosphere created is intense as it assumes an almost religious fervor. Sometimes the action leaves the sculpture and spills

23 Arnd Wesemann, "Primitive Zukunft," in *Tanz. Zeitschrift für Ballett, Tanz und Performance*, 8/9 (2021): 8–11.

24 For instance, at the very beginning of the performance, a couple of musicians are stretched out head down over various levels of the sculpture. Despite the awkward physical position they are in, they try to play their instruments. A dancer moves in the tiny space between the backs of two musicians touching und pushing them with his outstretched arms and legs.

over onto the floor of the hall. Solos, duets, or even smaller group dances are performed in the various corners of the space with the performers changing positions, circling the sculpture like a holy shrine.[25] In a rabble-rousing procession they wave their instruments, hopping and skipping across the space. As in *Bilderschlachten*, music and movement in *Archipel* are intricately linked. In the parade that Thiersch describes as a "carnival parade,"[26] the dancers follow the music, which in turn was adapted to the movements, changed and played back to the dancers. With click tracks in their ears for cues, the dancers move as a choir to complex polyrhythms that constantly navigate between the following of rules and anarchic impulses and freedom.

In *Archipel*, it is hard to distinguish between dancers and musicians or even singers. Just who does what professionally does not seem to be important anymore. Already the uniform costumes refuse to mark musicians or dancers. The hybridization of faculties, to the point that everybody is capable of doing everything, is also the effect of a staging that does not pay more attention to either music or dancing. While the musicians may still handle their respective instruments, the fact that they do so does not necessarily put them into the spotlight. Doing things together as musicians and dancers or several things happening simultaneously on and around the sculpture produces a multi-focus that levels individual virtuoso performances. Although the production is rich in details and imaginative individual performances, these elements primarily contribute to an overall picture. Every detail resonates and communicates with everything else. Brigitta Muntendorf's dense score contributes to this effect, too. It begins with simple electronic sounds and overlapping minimalist loops, which develop into rhythmically driven passages reminiscent of music for folk dances that propel the dancers forward. Samples of bird sounds and noises from natural environments emerge while Muntendorf mixes live and prerecorded elements and voices. Thus, she produces a veritable maelstrom of music that carries both performers and audience along with it. As does every other performance, *Archipel* represents a way of being together. It creates an image of togetherness for the audience. But what sets it apart from other performances is that the performative strategies it employs *enact* togetherness in the here

25 Due to the Corona pandemic the arrangement for the audience had to be changed. Originally the audience should have been allowed to stand and walk around the sculpture freely. Due to hygiene rules, it was then seated depending on the venue in three or four blocks, one on each side of the hall. Also, the Norwegian Soloist Choir could not perform live as originally planned, cf. Beatrix Joyce, "An Island of Togetherness," in *Magazin Tanz im August*, ed. HAU, Berlin 2021: 6–9.

26 Conversation with the author, 3 November 2021.

and now through the collective action of musicians, dancers, and singers, transcending professional boundaries. However, the ritualistic and festive character of the performance should not lead us to assume that Thiersch strives for the representation of a pre-established community. The enactment of this community between dancers, musicians, singers, and the audience only ever results in an incomplete picture. There are always some actions that elude any particular spectator or dancer, actions that fray the borders of the stage and spill over into the audience. The set-up, therefore, remains suggestively open. Community, as the piece suggests, is not a pre-given and stable entity. Rather, because of its non-totalitarian nature, achieving togetherness is an ongoing task that needs to be re-enacted again and again working towards a community to come, but never to be.[27]

Figure 3: *Scene from* Archipel–A Spectacle of Blending © *Martin Rottenkolber*

To sum up: I argue that Stephanie Thiersch's choreographies *Bronze by Gold*, *Bilderschlachten*, and *Archipel*–the latter two in collaboration with composer Brigitta Muntendorf–establish a non-hierarchical relationship between dance and music. Rather than the dance following the music and the music

27 For the notion of a community to come, cf. Jean-Luc Nancy, *La Communauté désœuvrée* (Paris: Christian Bourgois Éditeur, 1986).

following a score, the two composite parts of the productions co-exist in a performative space that they produce together. Creating a performative environment implies inventing performative strategies not only for the dancers but, above all, also for the musicians. While playing an instrument is always a performative act producing and perceiving the music in situ, these productions allow the musicians to actively act and react, sometimes in an unpredictable way, with the dancers. Thiersch and Muntendorf bring music and dance into a conversation developing complex choreomusical scores. They make use of the following strategies:

the integration of the musicians of the Asasello Quartet, the Ensemble Garage, and Les Siècles into both the stage action and the chorus of dancers in order to making the musicians move;

the disruption of their traditional way of playing by changing the set-up of their formation or by physical interventions that make playing more difficult. The riskiness of playing adds a strong emotional dimension to the movement which in turn changes the sound of the playing;

the production of music as an interaction between musicians and dancers using the musical instruments as props and bodies in their own rights, making the music the result of a physical interaction.

These strategies put the music at risk, making its appearance fragile and the results edgy. Both Thiersch and Muntendorf look for an intermedial and collaborative way of working (i.e., the passing on of scores) that contextualizes their respective arts and makes them resonate socially. Thus, Muntendorf's music extends into the choreography, while the choreography gains an audible dimension that reflects back onto the way the sound is produced and perceived. Whereas *Bronze by Gold* and *Bilderschlachten* rely on the construction of dialectical images to comment on the state of our contemporary consumer societies that consume both images and bodies, *Archipel* invents a utopian state in which professional categories and differences between dancers and musicians cease to exist. The piece creates a common and communal form of communication.

Moving to the Beat of Its Own Drum
Contemporary Theatre Music in Relation to Gesture and Space

David Roesner

Abstract: *In this chapter, a music-theatrical practice is put into focus: theatre music, and more specifically, live musicianship in theatrical productions. This practice at the intersection of composing, musicking*[1]*, improvising, performing, and even acting provides rich ground for an analysis of how music, space, gesture, and stillness are intertwined. Using four case studies as objects of enquiry, I argue that theatre music has come a long way from serving as a mere atmospheric or structuring accompaniment to theatrical performance. By demonstrating how formative the role of musicking often is for the style, meaning, and impact of contemporary theatre, and how inextricably music as a relational practice is enmeshed with space, motion, narrative, and performance on the theatre stage, I reiterate the need for analytical tools and more attention to theatre music—past and present.*

Introduction

In the past couple of decades, theatre music in German-speaking theatre has seen major developments, rendering it a practice far from "incidental"[2] and subservient. In particular, sounds and motions have been mobilised: moving out of the orchestra pit and onto the stage as well as from fixed mixes for stereo playback into flexible digital sound arrangements for surround sound setups. This has rendered the relational quality of theatre music much more dynamic: A practice continuously dialoguing at interfaces of speech and sound, noise

1 Christopher Small, *Musicking: The Meanings of Performing and Listening* (Hanover: University Press of New England, 1998).

2 Roger Savage, "Incidental Music," in *New Grove Dictionary of Music and Musicians*, 2nd edition, vol. 12, ed. Stanley Sadie (London: Macmillan, 2001), 138–45.

and music, musical and scenic motion, sense and sensuality.[3] In the following, I will explore one particular aspect in this wide range of performances: the relationship of stillness and motion—both in a musical and a physical sense—in the spatial and gestural interplay of musicians and actors onstage.

At the risk of stating the obvious, all four of these terms—stillness, motion, space, gesture—need some unpacking. Stillness and motion are relative terms and co-dependent. I will use "stillness" rather than "silence" to indicate a sense of a notable sonic and/or visual absence—recognised by an audience most often through contrast to its expectations, whether these have formed *within* the performance or been imported from other artistic or real-world contexts. Motion is a highly layered and complex term; on stage, it can grab our attention through moving gestures, bodies, lights, props, objects, etc. In music, it can refer to the trajectory of a melody, to motifs being passed around parts of an orchestra or band, to questions of rhythm, tempo, meter, to the acoustic behaviour of sounds in spaces, to the inner tensions expressed by expression marks (such as *con moto*), and of course to the micro- and macrostructures of a piece of music, such as the aptly named "movements" of a symphony.

Accordingly, space is both a condition and a result of music-theatrical actions: for a more detailed discussion of the many layers and meanings of space in theatre, I refer to Gay McAuley's seminal study from 1999.[4] For the purpose of this paper it is worth mentioning and distinguishing the theatre space, and within it, the performance space[5], which creates the conditions for how sound and motions can unfold and can be perceived, as well as the presentational and fictional space, which guide us in how to "read" sound and motions, but are equally shaped by them.[6]

Gesture plays a privileged role in this context as a particular kind of motion. Jens Peters defines this in some detail with reference to Alexander Kuba, Vilém Flusser, and Walter Benjamin:[7] he understands "gesture" as "the body's

3 Theatre artist and scholar Bagryana Popov asserts: "Music is essentially relational: meaning and affect are created between people within the performance space. It is part of the atmosphere in theatre. It is a corporeal, sensory presence, and affects the space and shapes the moment, with all its inherent dramaturgy and nuance." "Music, Silence and the Single Note in the Creation of Meaning in Theatre," in *Australasian Drama Studies* 67 (Oct. 2015): 28–48, 48.

4 Gay McAuley, *Space in Performance. Making Meaning in the Theatre* (Ann Arbor: University of Michigan Press, 1999).

5 Ibid., 25.

6 Ibid., 30.

7 Jens Peters, *Narration and Dialogue in Contemporary British and German-Language Drama (Texts—Translations—Mise-En-Scène)* (PhD dissertation, University

movement" *and* its "static positions,"[8] "for which there is no satisfactory causal explanation."[9] Gestures have, according to Walter Benjamin, "a definable beginning and a definable end. This strictly framed unity of every element of an attitude, which nonetheless as a whole is a living flow, is one of dialectical basic phenomena of the gesture."[10] In relation to gestures of making music, it is thus particularly those movements, gazes, stances, etc. that don't seem directly related to the production of sound, that we thus notice as potentially theatrically significant.

The aim of this paper is then to develop and analyse some of the relationships of music and sound with stillness, motion, space, and gesture in the field of theatre productions which make noteworthy use of music—both live and pre-produced. They form part of a larger trend of innovative and advanced theatre music practices which I have described elsewhere[11] and for which I have appropriated the term "relational music" (as opposed to incidental music, subservient music, or utilitarian music [= *Gebrauchsmusik*], all of which have contributed to sustaining the marginalised and maligned status of this musical practice for too long).[12]

In the first part of this article, I will look at three productions involving a live drummer on stage and seek to analyse how text, acting, and musicking (in Christopher Small's coinage from 1998[13]) are interwoven in each case. What

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of Exeter, 2013), accessed 21 June 2021, https://ore.exeter.ac.uk/repository/bitstream/handle/10871/14393/PetersJ.pdf;sequence=3;Narration.

8 "Bewegungen des Körpers" und "statische Haltungen". Alexander Kuba, "Geste/Gestus," in *Metzler Lexikon Theatertheorie*, ed. Erika Fischer-Lichte, Doris Kolesch, and Matthias Warstat (Stuttgart: Metzler, 2005), 129–36, 129 (trans. Jens Peters).

9 "Für die es keine zufriedenstellende kausale Erklärung gibt." Vilém Flusser, *Gesten* (Bensheim and Düsseldorf: Bollmann, 1991), 8 (trans. Jens Peters).

10 "Einen fixierbaren Anfang und ein fixierbares Ende. Diese streng rahmenhafte Geschlossenheit jedes Elements einer Handlung, die doch als ganze in lebendigem Fluß sich befindet, ist sogar eines der dialektischen Grundphänomene der Geste." Walter Benjamin, "Was ist das epische Theater?," in *Gesammelte Schriften II.2*, ed. Rolf Tiedemann and Hermann Schweppenhäuser (Frankfurt am Main: Suhrkamp, 1977), 519–39, 521 (trans. Jens Peters).

11 David Roesner, "'Gequietsche, Gewaber oder Gewummer.' Methodische Herausforderungen bei der Analyse von Theatermusik," in *Methoden der Theaterwissenschaft*, ed. Christopher Balme and Berenika Szymanski-Düll (Tübingen: Narr, 2020), 169–86.

12 See also: David Roesner, *Theatermusik. Analysen und Gespräche* (Berlin: Theater der Zeit, 2019).

13 Christopher Small, *Musicking: The Meanings of Performing and Listening* (Hanover: University Press of New England, 1998).

rhythms are evoked here and how do they emerge, collide, or complement each other? How does the static placement of a drummer, his/her gestural repertoire, and the other actions on stage relate to each other? Case studies include: Thomas Ostermeier's *Richard III* (Schaubühne Berlin 2015),[14] Felix Rothenhäusler's *Nichts von euch auf Erden* (Münchner Kammerspiele 2015),[15] and Christopher Rüping's *Dionysos Stadt* (Münchner Kammerspiele 2018).[16]

In the second part, I will look at a different relational configuration. In Thom Luz's *Olympiapark in the Dark* (Residenztheater München, 2019), two general motions pervade the performance: arriving and shifting. The devised piece's theme is reflective of the new artistic leadership of the Residenztheater arriving in Munich, including its resident director Thom Luz. In contrast to the case studies above, it is debatable whether we should call this a performance with theatre music, a piece of music-theatre, a staged concert, or whether we should simply accept that it is perhaps all and none of these things in a pure sense. The performance reflects processes of discovery, exploring, and getting to know an unfamiliar city through its musical history and its signature soundscapes. The aesthetic form, which Luz develops (inspired by Charles Ives' composition *Central Park in the Dark*, 1906), is characterised by *shifts* on many levels: the performance itself shifts between being a theatrical performance, a sound installation, and a concert, its performers oscillate between acting and musicianship, speech becomes sounds, sounds become recordings, video recordings become musical scores, and so on. Luz offers an abundance of visual and auditory stimuli, which provide little focus and orientation for the audience, but instead an invitation to a *flânerie* of the senses.

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14 William Shakespeare, *Richard III*, trans. Marius von Mayenburg. Director: Thomas Ostermeier, stage design: Jan Pappelbaum, costumes: Florence von Gerkan, music: Nils Ostendorf, video: Sébastien Dupouey, dramaturgy: Florian Borchmeyer. Schaubühne Berlin, 7.2.2015.

15 Reinhard Jirgl, *Nichts von euch auf Erden*. Director: Felix Rothenhäusler, stage design: Matthias Singer, costumes: Elke von Sivers, music: Matthias Krieg, dramaturgy: Tarun Kade. Münchner Kammerspiele, 16.12.2015.

16 *Dionysos Stadt* based on varied ancient Greek texts. Director: Christopher Rüping, live-musician: Matze Pröllochs, stage design: Jonathan Metz, costumes: Lene Schwind, dramaturgy: Valerie Göhring, Matthias Pees, Music: Jonas Holle, Matze Pröllochs. Münchner Kammerspiele, 6.10.2018.

Part 1: Drumming Theatre

The practice of using live musicians on stage is as old and common an idea as theatre itself. Using just a live drummer is significantly less common, as there are good reasons not to: the drum kit takes up space, is usually fixed to one spot, is often too loud in relation to an unamplified human voice, and can feel limited musically since melody and harmony are unavailable parameters to play with. It also carries pretty heavy iconographic and musically idiomatic baggage. Nonetheless, recent productions have made use of the drums, and seem to have seen their accompanying obstacles as adding to their appeal. The drum kit is, after all, quite a theatrical instrument and playing it quite a performative affair. The three productions I want to compare have a few things in common: in all three, the drum kit and the male drummer are visible, and the drums are amplified and played in combination with electronic sounds, ostensibly controlled also by the drummer. Also, the use of the drums is a core part of the performance's overall aesthetic, co-defining the performance style rather than, for example, consisting of an isolated and diegetic event—such as the rock band sequence in Nicolas Stemann's *Die Räuber* from 2008.

The drummer on the theatre stage is an interesting prism, I would argue, for a number of reasons. He/she is a particularly iconographic combination of musician and instrument, instantly recognizable and immediately evocative of certain musical styles such as rock and jazz as well as certain common clichés: a certain masculine primitivism,[17] a mixture of being both the backbone of the band and its least creative part,[18] and also generally the butt of many jokes.[19]

With regard to space and motion, drumming provides a paradox: there is, on the one hand, the relative fixity of "place" (in Michel de Certeau's usage of the term "*lieu*") and the relative gestural freedom in contrast to more intricately played instruments—in other words a more expansive sense of "place" or "*espace*" at the drum set.[20]

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17 Dillon speaks of "performing masculinity through drumming." Gregory M. Dillon, *Masculinity in Carioca Carnaval Drumming* (Master thesis, University of Massachusetts Dartmouth, 2013), iii, accessed 13 July 2022, https://www.umassd.edu/media/umassdartmouth/portgrad/Dillon.MasculinityCarnaval.MAthesis.pdf.

18 Bill Bruford, *Uncharted. Creativity and the Expert Drummer* (Ann Arbor: University of Michigan Press, 2018).

19 For a particularly in-depth and authoritative analysis see Matt Brennan, *Kick It. A Social History of the Drum Kit* (Oxford: Oxford University Press, 2020).

20 Michel Certeau, *The Practice of Everyday Life* (Berkeley, CA: University of California Press, 1984).

Drummers and their kit are inevitably something that draws attention on stage—both visually and aurally.[21] They are rhythmical, spatial, sonic, and performative reference points for the performance and the performers around them.

Richard III

Ostermeier's *Richard III* plays on a kind of thrust stage with a rough-walled backdrop including metal ladders and landings. A central feature is a vintage-style microphone hanging from the ceiling, which to me is strongly evocative of the kind of amplification a boxing ring announcer would use. The position of the drummer (Thomas Witte) at downstage left, situated below the stage, is therefore partly an orchestra pit position, partly a kind of ringside coach (see figure 1). His physical position, his clothes, and his demeanour, however, suggest in contrast to the other two productions, that Witte is really more of an off-stage musical accompaniment—visible and in a few instances addressed by Lars Eidinger's Richard, but otherwise clearly separated from the fictional world. This echoes the more conventional directorial style of the production, which has even been described by some as bland and conventional recitation theatre ("blass konventionelles Aufsagetheater"),[22] calling the "thundering drum-set"[23] its most dramatic aspect. For the most part, the music also functions almost like traditional *entr'acte* music, separating scenes or acts.[24] Rather than echoing or anticipating the mood of the scenes, its funk-rock plus electronics sensibility asserts its own mood, evokes its own world, which is not directly paralleled in the production design or performance style. Moreover, the drums set the *tone* of the performance here rather than truly interact with Shakespeare's text. Eidinger actually speaks *to* the drumming (rather than *over* it) only in a few instances, and he then often falls back to Shakespeare's original lines rather than using the more prosaic German adaptation by Marius von Mayenburg. In these moments, there is an interesting tension between Elizabethan poetry and

21 Brennan, *Kick It*, 156–65.

22 Peter von Becker, "Alles gegeben, bürgerlich geblieben. Lars Eidinger als Richard III. an der Schaubühne," in *Der Tagesspiegel*, 9.2.2015, accessed 4 January 2021, https://www.tagesspiegel.de/kultur/lars-eidinger-als-richard-iii-an-der-schaubuehne-alles-gegeben-buergerlich-geblieben/11344546.html.

23 "Das donnernde Schlagzeug." Ibid. (my translation).

24 It is noteworthy that in Peter Boenisch and Thomas Ostermeier's account of the genesis of the production, music is mentioned only occasionally and in passing (*Peter M. Boenisch and Thomas Ostermeier, The Theatre of Thomas Ostermeier* [London: Routledge, 2016], 187–227).

a kind of indie rap or poetry slam sound, as we may have seen from artists like Kate Tempest (e.g., *Brand New Ancients*, 2012/2014).

Figure 1: *Thomas Witte drums from downstage left in* Richard III; *video still.* © Arte[25]

Only Eidinger uses the drum-beats and the hanging microphone, particularly to deliver his soliloquies, both instilling and absorbing a Mick-Jaggeresque "bad boy of rock" attitude, which also turns his physical contortions into more than an expression of Richard's disabilities. They are at least partly an expression of his non-conformity with societal rules of posture and behaviour. Gesturally, this seems almost like a transference: while the drummer plays in a very restrained and economical way, Eidinger paces, twists and contorts. The music itself by Nils Ostendorf also symbolises his physicality: frequently the drum patterns defy an easily detectable time signature and are cross-rhythmically juxtaposed to the synth bass pattern. His body is out of joint, as are the beats.

25 The still (figure 1) stems from a TV broadcast of the production by arte, with kind permission. The programme was called: Richard III, broadcast on 18 July 2020, archived at: https://programm.ard.de/TV/arte/richard-iii-/eid_28724 3198817257.

Nichts von euch auf Erden

Nichts von euch auf Erden is an adaptation of the dystopian novel by Reinhard Jirgl from 2014, in which mankind has depleted the Earth and emigration to the Moon and to Mars have started. Here, the role of the drummer is quite different. At the beginning, Matthias Krieg (who also composed the music) is situated right at the back of the smaller stage of the Kammerspiele and the visible drum set remains untouched for some time: initially, Krieg mainly plays a continuous layered texture of synth sounds from his laptop, which interweaves sonically with the sounds created by the performers who are standing in the few inches of water that cover the entire stage (figure 2). At this point the music helps to establish a floating quality of the production's beginning: flowing movements by the actors, wave ripples and the light reflections they cause, softly undulating voices which are amplified and unstrained, and a continuous soundscape which is harmonically ambiguous and spatially unstable, as the individual tracks of the soundscape meander through space aided by the surround speaker setup.

Figure 2: *Stage for* Nichts von euch auf Erden; *video still. © Münchner Kammerspiele*[26]

26 The stills (figures 3–9) stem from unpublished video recordings by the Münchner Kammerspiele for their archive used here with kind permission by the theatre. The details of both productions are detailed in footnotes in the introduction.

In later passages this interplay between music, text, and motion is transformed a number of times. One could even say that it is the central directorial approach to create ever-changing arrangements and relationships between the spoken text (its rhythm and melody), the abstract movements of the actors (often accentuated by costumes that transform their physical range of motion), and the space (as determined by scenography and music).

A few more examples stand out: Firstly, there is an almost jam-session-like dialogue between the drums (now more centre stage) and actor Christian Löber, who moves and gestures in fluid motions interspersed with punctuated utterances. His voice runs the gamut of rhythmic, dynamic, and timbral variations in the text, at times responding to, at others being led by Krieg's improvised drumming. Secondly, and in addition to text, the music and the physical movement are densely interwoven; the stage lighting is also rigged to respond to the music, culminating in a scene towards the end of the show when we only hear the now acousmatic voice of Wiebke Puls, while a hanging rack of about one hundred lights "embody" that voice by modelling its rhythm and timbre like a spectrum analyser. The effect—on me, at least—was that of the lights becoming a speaking collective.

In contrast to the more identifiable idiom in *Richard III*, the music here is harder to pin down. It defies a clear genre and is also tonally ambiguous and rhythmically very rubato. While there are echoes of jazz and avantgarde styles, Krieg's drumming consciously avoids recognizable patterns or grooves; it explores the kit as a source of sounds and accents, moves between sparse and dense accompaniments, and adopts a more speech-like quality. In his own words, he describes this movement from a more conventional background position of an on-stage accompanist to an active performance partner as follows: "When it works, I make music together with the speaking and performing actor on stage and we develop a textual-musical maelstrom."[27]

Dionysos Stadt

This last statement is actually also quite a fitting description of how Christopher Rüping and his musician and on-stage drummer Matze Pröllochs approach *The Ilias*, and later *Trojan Women*, in the second part of his ten-hour production *Dionysos Stadt*. The "textual-musical maelstrom," however, is quite different: here the drums—extended by trigger pads and samples and also supported by

27 "Wenn es funktioniert, mache ich mit den sprechenden und performenden Schauspieler*innen zusammen Musik auf der Bühne, entwickeln wir einen inhaltlich musikalischen Sog." Roesner, *Theatermusik*, 187 (my translation).

electronics from a tablet—transform the Trojan War into a relentless rave. The principles and dramaturgies of electronic dance music are applied to text and stage; Pröllochs develops steady, repetitive beats to looped samples, and the music tends to follow a pattern of extended crescendos with its texture getting both louder but also more layered (music by Pröllochs and Jonas Holle). On top of that, we have relentless[28] descriptions of battleships, war heroes, fights, triumphs, and downfalls. Critic Maximilian Sippenauer writes: "The protagonist is the drum set, at which Matze Pröllochs is seated in midst of the illuminated white wall of Troy transposing the greatest battle in literary history into senseless noise."[29] Musically, it is far from noise, I would argue; it is instead an insistent pulse, which in its ebbing and flowing captures the increasing horror, the waves of ships, the duration of the war, and the contrast between an outer stillness as the siege plays out and inner growing tension of male frustration.

In the performance, the drums are indeed placed centre stage, built into a scaffolding which may well represent the city walls of Troy, but which also resembles a billboard or a wall of screens at a rock concert (stage design: Jonathan Mertz). And while both Pröllochs and Brombacher remain almost completely static over the course of this long opening, the audience is far from unchallenged, given the wall-to-wall projections by video artist Susanne Steinmassl, which seem to choreograph images and their movements on screen. Principally, there are busts by the actors often arranged in a triptych, sometimes as photos, sometimes transformed into slowly rotating marble busts, and finally morphing between the two. There are also moments of an onslaught of images in a music video style, colourful and in quick succession. And there is an extended section of small projected icons, such as Trojan horses or battle shields, falling like snow with a black backdrop. Through all this, one should add, the actors either wear make-up, face masks, or have words written on their faces and bodies—even the

28 The first section, which features Peter Brombacher as the main narrator and is mainly a list of the ships and their crew, lasts well over twenty-five minutes.

29 Maximilian Sippenauer, "Mehr als nur Theater. Dionysos Stadt—Christopher Rüpings zehnstündiger Ritt durch die Topoi der Antike bereitet den Münchner Kammerspielen ein großes Theatererlebnis," in *Nachtkritik.de*, 7.10.2018, accessed 4 January 2021, https://nachtkritik.de/index.php?option=com_content&view=article&id=15919:dionysos-stadt-christopher-ruepings-zehnstuendiger-ritt-durch-die-topoi-der-antike-bereitet-den-muenchner-kammerspielen-ein-grosses-theatererlebnis&catid=99&Itemid=100190 (my translation): "Protagonist ist das Schlagzeug, an dem Matze Pröllochs inmitten der weißleuchtenden Mauer Trojas sitzt und die größte Schlacht der Literaturgeschichte in sinnloses Lärmen transponiert."

drum head of the bass drum has writing on it, saying "Shine Bright'–Lakedaimon."[30] It is not unusual for drum heads to be adorned with a band's name, for example, but here–as with the faces and most other surfaces on stage–the writing is visibly added retrospectively with red sticky tape, a quick and dirty layering.

The central motion in this whole first section, then, is one of palimpsest overwriting, overlaying, superimposing. This echoes the musical idiom of electronic dance music, which pervades whole sections (and is, as you will have guessed, anything but "senseless noise"), but which in its use of loops, samples, beats, and the dialectic of repetition and variation becomes an expression of this palimpsest approach.

Out of the three productions, Pröllochs is also the most theatrical drummer–not, however, by what he does, but by how he is staged: To begin with, he actually makes an entrance (after a few minutes of visibly lingering behind the wall), already operating sounds through a tablet, later also makes an exit. At the set he plays, concentrated and with no unnecessary gestures or posing, and there is a certain tension between his slight frame and gently bopping shoulders and the amplified and at times quite powerful beats and solo passages he plays. He also wears a costume and make-up (see figure 7), again creating a tension between, on the one hand, the more masculine and tribal-looking face tattoo writings, and on the other hand, the more feminine cropped t-shirt and the dangling in-ear headphones resembling nipples. In this narrative context of hyper-beautiful women (Helena) and hypermasculine heroes (Hector, Achilles etc.), it is quite an androgynous look.

Most importantly, however, there is a drastic shift in status for the drummer. Having been the roaring engine of the show for about eighty minutes, everything changes after the fall of the walls of Troy (see figure 3). The white porcelain tiles are shattered noisily, the light changes into a warmer wash, and the Trojan women become the centre–but not as despondent servants lamenting their fate, but as self-assertive representatives of the #me-too movement. Pröllochs is dragged from his now quiet drum set and, while being referred to as a military leader, becomes the receiving end of abuse and ridicule from the "loot."

30 Lakedaimon (engl.: Lacedaemon) was a Son of Zeus and King of Sparta. It is possible that the logo is also a reference to the Rihanna Song from 2012 "Shine bright like a diamond".

Figure 3: *Women of Troy centre stage; video still. © Münchner Kammerspiele*

Figure 4: *Banging their own drum: Maja Beckmann (left) and Gro Swantje Kohlhof; video still. © Münchner Kammerspiele*

This reversal of status culminates in two gestures: at one point, the women begin to operate the men like puppets, raising their inanimate arms and voicing them as shallow and thoroughly primitive male specimens ("I can only drink and fight and fuck") who compare the relative breast sizes of their female slaves. The

second "gestic" moment (also in a Brechtian sense of the word[31]) happens, when Gro Swantje Kohlhof as Cassandra bemoans being traded off to Agamemnon to her mother Hecuba, and in an act of outrage picks up the sticks from the drum set. Standing in front of it, she hits its cymbals violently while sarcastically bellowing the bridal march "Treulich geführt" from Wagner's *Lohengrin*. It is a poignant and telling contrast to Pröllochs' physically restrained drumming—a moment in sharp acoustic relief also to the relative silence before and after it. It also highlights the gender reversal in musical and physical movement that is the undercurrent of the *Troia* part; the men are mostly still, their motions internalised, needing visible and audible amplification as they are caught up in loops and loops of sound and war, whereas the women play with some expansive swagger, projecting their lines, using the stiff immobile men as toys and banging their own drum (see figure 4).

Part 2: Arriving and Shifting: Motions in Thom Luz's *Olympiapark in the Dark*

I have chosen the case study for the second part for two reasons: it widens the scope with regard to what role stillness, motion, space, and gesture might play for music on stage, and its genesis also suggests a different kind of relationship between music and scene. While all three theatre projects above were based on text (two canonical dramas and one novel adaptation) and have found ways to respond to these texts by choosing a performance style that made integral use of music and musicianship, most of Thom Luz's projects and *Olympiapark* in particular are devised theatre[32] (and often also composed theatre[33]). This means they are based on a variety of materials, ideas, and starting points, such as—in the case of *Olympiapark*—Charles Ives' short composition *Central Park in*

31 See Kenneth Fowler, *Received Truths: Bertolt Brecht and the Problem of Gestus and Musical Meaning* (New York: AMS, 1991).

32 See Tina Bicât and Chris Baldwin, *Devised and Collaborative Theatre: A Practical Guide* (Ramsbury, Marlborough: Crowood Press, 2002); Deirdre Heddon and Jane Milling, *Devising Performance. A Critical History* (Basingstoke: Palgrave Macmillan, 2006); Alison Oddey, *Devising Theatre: A Practical and Theoretical Handbook* (London: Routledge, 1994); Jacqueline Smart and Alex Mermikides, eds., *Devising in Process* (London: Palgrave Macmillan, 2009).

33 See Matthias Rebstock and David Roesner, eds., *Composed Theatre. Aesthetics, Practices, Processes* (Bristol: Intellect, 2012).

the Dark (1906). It is not, in his view, "theatre with music." Instead, the production of sound and its ensuing theatricality are at the heart of the performance.[34]

As director-in-residence under the new artistic leadership of Andreas Beck at the renowned Residenztheater München, Luz sought to thematically explore the city of Munich from the perspective of a new arrival and through a lens (or should one say: an ear trumpet?) of its musical and sonic history. He wanted the performance to be understood as an invitation to perceive the world as musical. Again, the palimpsest became an important trope and technique in the devising process. The Olympiapark in Munich is itself an artificial mound, erected on tons of rubble from World War II, and Charles Ives' composition is a compositional rendering of what men would have been hearing "some thirty or so years ago (before the combustion engine and radio monopolised the earth and air), when sitting on a bench in Central Park on a hot summer night."[35] The idea of historic layers and subsequent superimpositions is also present in the performance itself; pieces of music from Munich's cultural past are continuously being cited, at times performed, but often played over each other, or combined with more contemporary materials and sources.

But let us go back to the beginning of the piece and look at how Luz and his creative team[36] relate motion, gesture, and music together as a process of arriving, becoming, framing, and shifting.

Daniele Pintaudi opens the performance by a gesture of drawing a frame around most of the black box stage, which the audience looks down on from their raked seating. The frame is intangible, though, conjured up through a laser beam hitting a series of small mirrors and reflected in ninety-degree angles around the front of the stage (see figure 5). As if Ives drew a compositional frame

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34 In the following I refer to two unpublished sources: A live interview I conducted with Thom Luz on 16 December 2016 as part of the symposium "Singing the Document. Exploring the Relationship of Documentary Material and Its Music-Theatrical Treatment," hochX Munich (see http://www.theaterwissenschaft.uni-muenchen.de/aktuelles/archiv/archiv_2016/termine/symp_sing_act_doc/index.html, accessed 13 July 2022) and a guest appearance he made to talk about *Olympiapark in the Dark* on 28 November 2019 in Tamara Quick's seminar "Von der Banda zur Band: Musizieren auf der Theaterbühne" (Theatre studies, LMU Munich).

35 Charles Ives, *Central Park in the Dark [Musical Score]*, ed. John Kirkpatrick (Hillsdale, NY: Mobart Music Publications, 1978).

36 Director, stage design, and lighting: Thom Luz, musical direction: Mathias Weibel, costumes and lighting: Tina Bleuler, video: Jonas Alsleben, dramaturgy: Katrin Michaels. With actors/musicians Mareike Beykirch, Elias Eilinghoff, Christoph Franken, Camill Jammal, Barbara Melzl, Mara Miribung, Daniele Pintaudi, Noah Saavedra.

around the sounds of nature in the park, we are now encouraged *visually* to look at the ensuing performance as a music-theatrical event—even though for most of it we are allegedly just witnessing the preparations for a concert to be held at the end of the performance.

Figure 5: *Ensemble and speakers in* Olympiapark in the Dark. *© Sandra Then*

The attention then shifts from the presentational space to the performance space, since the actor-musicians become audible first from outside before entering the space via the landing usually reserved for light technicians near the back of the audience. They are seemingly introduced to the new space by a guide, but since they all talk in a cluster of voices, little detail can be made out. Already we are invited to concentrate on the sound rather than the semantics of this vocal cloud which passes through the entire space, down a spiral staircase out into the lobby again and back with equipment and musical instruments.

The act of arriving is then composed as a continuous music-theatrical process and is staged in multiple forms. We see the actor-musicians getting to know the new *place* and beginning to populate it and make it into a *space* (see de Certeau's distinction above). We encounter Munich through the eclectic research presented by the performers, the bits of information about musical pieces, about measurable loudness of certain events (such as the audience's

cheer for a goal in the Allianz arena), but also through documents such as an old promotional Super8 film, which seems to have been made by the Tourism Board and highlights all the main attractions commonly associated with the city. Arriving also involves unpacking instruments and equipment, testing and rehearsing as forms of accommodation and acculturation to new surroundings. These are acts of settling in and filling the place not just physically, but also sonically, checking how it resonates with the new arrivals.

All of this may seem mundane and potentially quite boring—and some of the spectators seem to find that to be the case. But Luz has a fascination for the quotidian, the non-dramatic, the aesthetics of everyday non-events. He cites the Swiss-German author Robert Walser as an inspiration for his idea of theatre, claiming that Walser once said: "Theatre should make an effort to calm down those who are too confused, and to confuse those who are too calm."[37]

The meditative, aimless pace—often associated with a notion of *flânerie*—certainly contributes to this kind of theatrical phenomenology, but there is also the appeal (or the confusion) of the many shifts and defamiliarizations that characterise Luz's style. Here are a few examples: Firstly, the projector, which plays the promotional Super8 film, projects the film bottom up and backwards so that we struggle to see and hear the familiar sights of the beer garden at the Chinesischer Turm in the Englischer Garten (complete with a Bavarian brass band), or the soccer stadium with its resident FC Bayern as filmic representations. The familiar is estranged or recontextualised and turned into objects of colour, motion, and abstract sound.

Secondly, many props on stage are transformed into instruments; bubble wrap and a tray of pebbles become percussive sound sources, and a step ladder is turned into a mallet instrument, first by hitting its steps (which sound higher as they get smaller), but also by accompanying the act of climbing it in mickey-mousing fashion with the solfege of the actor-musicians.

The performers themselves, thirdly, oscillate between being actors, performers, and musicians—not quite private, not quite in their usual professional habitus, and not quite fictional characters either. Is the viola player (Mareike Beykirch) a trained musician stepping out of her comfort zone to deliver a short monologue or a professional actor and amateur musician?

37 Walser is quoted with this line elsewhere ("Die Theaterkunst sollte sich Mühe geben, die allzu Verwirrten zu beruhigen und die allzu Beruhigten zu verwirren."), at Deutsches Theater, accessed 14 August 2020, https://www.deutschestheater.de/mediathek/hoer-stuecke/podcast-304/. I could, however, not find an original source for the quotation.

Forthly, many of the sounds produced on stage—steps, breaths, singing, speaking—are recorded and played back, sometimes layered or looped, through individual moveable active speakers (see figure 10). This renders them "*objets sonores*" or sound objects in two ways: They become short musical units in Pierre Schaeffer's sense,[38] and "*a coming together of an acoustic action and a listening intention*."[39] In addition, they are objects that sound, but the speakers are deliberately not staged as "transparent" media, not mere "neutral" amplifiers of sound, but moveable objects, the acoustic properties and sonic behaviour of which are brought well into focus. We are thus "*ceasing to listen to an event through the intermediary of sound, we will still be listening to sound as a sound event*."[40] That sound event is inextricably linked to its arrangement and motion in space and to the gestures which produced it and which are remembered as the sound is removed from one object and placed into another, making it both acousmatic and non-acousmatic at the same time.

Finally, there is quite a playful and ironic shift from video to notation, rendering moving images into a graphic score. Video artist Jonas Alsleben filmed the performers on a day out in Olympiapark, small black dots in a wide landscape, following trails or walking up and down the hilly terrain. In the performance, this is projected silently on a canvas, upon which two lines of staves have been drawn. The filmed individuals are thus transformed into moving note-heads and ephemeral instructions for the actor-musicians, who improvise a live rendition of this animated score. Other than being a rather funny scene, which gets a chuckle out of the audience, it is also a whimsical stab at normative ideas of notation and "the work" in music theatre, suggesting the composability of all materials in the tradition of John Cage or Mauricio Kagel. It calls the mediality and modality of music-theatrical performance into question: a film becomes a score, a score becomes impermanent, images become musical, sounds become objects, playing music becomes theatre, speaking becomes a composition, and so on.

This also renders our ideas of genre (is this music-theatre?) obsolete. Luz's piece is not "music-theatre" in a traditional sense with its originally close links

38 See Pierre Schaeffer, *Treatise on Musical Objects: An Essay Across Disciplines*, trans. Christine North and John Dack (Oakland: University of California Press, 2017). Also: Jean-François Augoyard, *Sonic Experience: A Guide to Everyday Sounds*, trans. Andra McCartney and David Paquette, ed. Henry Torgue (Montreal: McGill Queens University Press, 2005), 6.

39 Schaeffer, *Treatise on Musical Objects*, 213, original emphasis.

40 Ibid., original emphasis.

to (and rejections of) opera, certainly.[41] But in a wider sense, there are connections to Christoph Marthaler, Mauricio Kagel, or Alvin Lucier, all of whom have worked at the boundaries of this term, widening the frame in different directions. Looking at the performance in the context of "theatre music" as outlined above, however, is also not an attempt to categorise it, but to follow the trails of sound, music, and motion relationships in theatre, and to extrapolate some of the common questions across different but related phenomena. In the end, it remains a performance that defies categorization and in doing so and in making us investigate the aesthetic conditions and processes of listening to and encountering our surroundings, it is quite meta-theatrical. If we wanted to put a label on it, Heiner Goebbels' idea of a "polyphony of the elements"[42] of theatre comes to mind. This, he argues, "allows us to see a performance from different perspectives. A polyphony which opens up many access points and enables audiences to individually synthesise their impressions from all the single impressions."[43] This kind of polyphony is then both the result of an undirected, contemplative, strolling process of discovery and creation by the artistic team, and the condition for a similarly aimless, *flâneur*-like mode of attending[44] and experiencing Luz's performances.

Conclusion

Using a range of recent productions in German theatres, which are quite different at first glance and cover very diverse thematic ground, I have sought to highlight the experimental nature in which they all redefine the relationship of music and scene, or sound, motion, and gesture—both in support of their narratives, and, just as importantly, in order to facilitate an aesthetic experience for their audiences.

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41 See Andrew Clements, "Music Theatre," in *New Grove Dictionary of Music and Musicians*, 2nd edition, vol. 17, ed. Stanley Sadie (London: Macmillan, 2001), 534–5.

42 Heiner Goebbels, *Aesthetics of Absence* (London and New York: Routledge, 2015), 104.

43 Ibid. See also: David Roesner, "The Politics of the Polyphony of Performance: Musicalization in Contemporary German Theatre," in *Contemporary Theatre Review* 18/1 (2008): 45–55.

44 I am using this word advisedly with reference to George Home-Cook's study of aural attention in theatre. George Home-Cook, *Theatre and Aural Attention* (Houndmills, Basingstoke: Palgrave, 2015).

In part one, all three productions I discussed use the drum set and the drummer as theatrical partners, helping to frame the characters and the text in different ways, inviting us to look and listen with fresh eyes and ears. They involve the musician as a persona[45] to very different extents, though: *Richard III* barely highlights the performative aspects of musicking on the theatre stage, *Nichts* makes the drummer an equal performative partner, while *Troja* even (quite literally) overwrites the musician's persona with a fictional character and uses his physical presence to redraw the gender hierarchies in an ancient play. In different ways, all productions also make use of the various kinds of iconographies and musical idiomaticness of drumming, sometimes citing, but often underplaying the rock/jazz/dance baggage and the clichés of a drummer's habitus.

In part two, the production in question (*Olympiapark in the Dark*) further dissolves the separation between actor and musician, between acting and musicking, presenting and representing sounds, gestures, personae, and worlds. It seeks to transform processes of arriving and of acquainting oneself with a new surrounding and its eclectic histories in a non-linear process of perception and absorption, leading to a performance structure which affords an experience and may even trigger a contemplation on the nature of music-theatrical relations themselves.

All performances have in common, I should add, that they display a certain playfulness, an ironic quality and a sense of humour—despite all of them touching on very serious themes: from the abuse of power by a narcissistic leader, to the end of the world as we know it, the atrocities of ancient warfare, or the complex histories of Munich as a gravitational centre for the highest achievements of the arts and the lowest moments of humanity. An experimental approach to music and theatre seems to offer ways in which to deal with the paradoxes and entropies of human life on stage.

With respect to the music in question, I hope to have demonstrated that rather than merely amplifying a current mood or semantic on stage, theatre music—in the many forms we encounter it today—often proves to be a much more complex expressive partner in contemporary theatre, hardly a separate function but an integral part of it, particularly when it physically and spatially asserts itself in such varied ways as I have outlined here.

In a time of renewed interest for the performance of music—as expressed, for example, by new musicology and some of its protagonists like Nicholas Cook,

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45 Philip Auslander, "Musical Persona: The Physical Performance of Popular Music," in *The Ashgate Research Companion to Popular Musicology*, ed. Derek B. Scott (Farnham, Surrey and Burlington, VT: Ashgate, 2009), 303–15.

Georgina Born, Carolyn Abbate, or Christopher Small[46]—the kind of enquiry proposed here adds another layer, I would argue, since it looks at live performance *outside* of a generic dispositive such as the concert, the opera, or the musical, all of which come with more established rules and expectations for the role of music and indeed for musicians within them. Tamara Quick summarises this aptly by stating: "In the context of theatre music in particular, one can no longer speak of music as an object or a work that is comprehensible in written form, but exclusively of an artistic practice full of performative processes. Theatre music is an integral part […] of a theatre production that is constituted by manifold artistic, personal, and institutional relations."[47] It thus demonstrates the layers of connections and meanings between music, gesture, and motion in contexts, which are *not* guided by generic rules and expectations.

I could only hint at the implications this has for analysing phenomena such as those used as case studies here,[48] but I hope it has become evident that theatre music requires a multilateral approach (quite distinct also from how we analyse film music), which takes musical, sonic, theatrical, performative, cultural, technological, as well as further aspects into account.

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46 Carolyn Abbate, "Music—Drastic or Gnostic," in *Critical Inquiry* 30 (spring 2004): 505–36; Georgina Born, "For a Relational Musicology: Music and Interdisciplinarity, Beyond the Practice Turn. The 2007 Dent Medal Address," in *Journal of the Royal Musical Association* 135, no. 2 (2010): 205–43; Nicholas Cook, *Beyond the Score: Music as Performance* (New York: Oxford University Press, 2013); Small, *Musicking*.

47 "Insbesondere im Kontext heutiger Theatermusik kann nicht mehr von Musik als Objekt oder schriftlich begreifbarem Werk gesprochen werden, sondern ausschließlich von einer künstlerischen Praxis voller performativer Prozesse. Theatermusik ist ein integraler Bestandteil […] einer sich aus vielfältigen künstlerischen, personellen und institutionellen Relationen konstituierenden Theaterproduktion". Tamara Yasmin Quick, "Die Qualität im Relationalen. Herausforderungen in der Analyse theatermusikalischer Interpretationen," in *Analyse & Interpretation*, ed. B. Asmus (Mainz: Schott, 2024, 160–80, here: 165)) (my translation).

48 For more detailed methodological discussions see: Quick, "Die Qualität im Relationalen" and Roesner, "'Gequietsche, Gewaber oder Gewummer.'"

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Composing and Choreographing the Audience in Contemporary Music Theater

Fabian Czolbe

Abstract: *The moving audience is becoming increasingly valuable in contemporary music theater. This paper presents an analytical approach that examines different pieces to discuss the audience's movement in music theater performances. By heuristically questioning the performance experience and the artistic participants, such as directors or composers, a functional differentiation emerged. Three perceptual models of the moving audience can be described: an installative, a stationary, and a performative one.*
Each of these models presupposes a distinct space of action for the audience and the artistic concept. This also allows alternative narrative forms that do not follow a linear structure. This paper should also be seen as a basis for the development of analytical tools of this dimension in the context of contemporary music theater. This requires, among others, a critical interweaving of aspects of perception in movement and narrative concepts

Introduction or Introducing the Self-Reliant Audience

The audience at concerts, staged music, or musical theater is no longer tied to a fixed seat. For more than two centuries, and in a large number of established bourgeois concert halls, the audience has cultivated a seated mode of perceiving music. But there were and are concerts where you can stand, walk around, lie down, or even swim. Today one finds artists who invite the audience to wander through public space, to search for sounding objects, or to explore their own perception as well as certain elements from different angles and perspectives. The following text questions the 'moving' or rather the 'moved' audience in the literal sense. It is not about emotions or cognitive stimuli, but about the physicality of the audience on a perceptual level. What does it mean for a participant to move through the performance space? How does it affect

their reception? And finally, on what level can composers reflect the choreography of the audience in their work?

In 2014 Julia H. Schröder already points out in the book *Zur Position der Musikhörenden* that specific perception situations have been established today and are reflected more and more by composers, ensembles and concert dramaturges of contemporary music. She does not approach the question primarily from the perspective of concert pedagogy or music education, but instead focusses on the aesthetic experience from the perspective of the listener. In addition to the perception situation in the context of concert halls, combined with frontal, mostly fixed listening positions, she discusses open stationary formats that include a standing, sitting or lying audience. Her approach examines and presents concepts including movement in artistic or public space for both the artists and the audience. Schröder therefore speaks rightly of the 'moved listener' ("Bewegte Zuhörer") and emphasizes emphatically that it is not initially about being emotionally and cognitively 'moved', but rather about the physicality of the recipient's physical movement before, after or while listening.[1] It becomes clear that the 'mode of experience in motion' must be understood as a question of shared attention in perception[2] and can also become an important aesthetic dimension of the work or concert situation. Schröder convincingly demonstrates that theatrical and performative

1 Cf. Julia H. Schröder, *Zur Position der Musikhörenden: Konzeptionen ästhetischer Erfahrung im Konzert* (Hofheim: Wolke, 2014), 82ff.

2 Cf. ibid., 165. Regarding questions of the psychology of perception in these cases the cognitive perception and the cognitive processes perceiving "auditory streams" as well as "auditory segregations," as Albert Bregman calls it, see Albert S. Bregman, *Auditory Scene Analysis. The Perceptual Organization of Sound* (Cambridge, MA et al.: MIT Press, 2001). Concerning the shift towards the audience's perception and autonomous action in the context of sound art and music, see Helga de La Motte-Haber, "Einleitung," in Elmar Budde, Helga de La Motte-Haber, and Barbara Barthelmes, *Geschichte der Musik im 20. Jahrhundert: 1975–2000*. Vol. 1. (Laaber: Laaber Verlag, 2000), 11–22; Sabine Sanio, "Musik jenseits des Konzertsaals," in *Dissonanz* 82 [August] (2003): 4–13.

elements of post-dramatic theater concepts[3] therefore increasingly form the basis for music and sound art experiences today.[4]

Since contemporary music theater in particular repeatedly reveals points of contact and overlaps between concert, theater, installation, performance, etc., similar questions arise: To what extent is the movement of the audience considered as part of the compositional process? In which way can the movement be a formative part of the narrative structure? How can the movement shift the perception during attending the performance?

This chapter discusses the aesthetic significance of the moving audience for contemporary music theater using a number of case studies.[5] While music

3 Concerning post-dramatic theater, music in post-dramatic theater, and post-dramatic music theater see Hans-Thies Lehmann, *Postdramatisches Theater* (Frankfurt am Main: Verlag der Autoren, 1999); Anno Mungen, Ulrike Hartung, and Universität Bayreuth Forschungsinstitut für Musiktheater, eds., *Mitten im Leben Musiktheater von der Oper zur Everyday Performance*. Thurnauer Schriften zum Musiktheater 23 (Würzburg: Königshausen & Neumann, 2011); Regine Elzenheimer, "Dekonstruktion Von Subjekt Und Erzählung: Aktuelle Musiktheaterproduktionen Von Bernhard Lang, Salvatore Sciarrino Und Gerhard Stäbler," in *Neue Musik in Bewegung: Musik- und Tanztheater heute*, ed. Jörn Peter Hiekel. Veröffentlichungen des Instituts für Neue Musik und Musikerziehung Darmstadt (Mainz: Schott Musik International, 2011), 51–64; Matthias Rebstock and David Roesner, eds., *Composed Theatre Gesthetics, Practices, Processes* (Bristol and Chicago: Intellect, 2012); Jelena Novak, *Postopera Reinventing the Voice-Body*. Ashgate interdisciplinary studies in opera (London: Routledge, 2016); Matthias Rebstock, "Spielarten des Freien Musiktheaters in Europa," in *Das Freie Theater im Europa der Gegenwart*, ed. Manfred Brauneck and ITI Zentrum Deutschland (Bielefeld: transcript, 2016), 559–611; Ulrike Hartung, *Postdramatisches Musiktheater.* Thurnauer Schriften zum Musiktheater 36 (Würzburg: Königshausen & Neumann, 2020); Gerhard R. Koch, "Unterwegs ins Ungewisse: Was ist, was könnte 'postdramatisches Theater' sein? Wie sieht ein 'postdramatisches' Musiktheater aus? Wie klingt es? Ein Essay," in *Oper: das Jahrbuch der Zeitschrift Opernwelt* (2022), 142–45.

4 Concerning the moving recipients in sound art in the public space see Fabian Czolbe, "Klangkunst Goes Mobile," Proceedings of the *Electroacoustic Music Studies NetworkConference. Electroacoustic Music Beyond Performance*, Berlin, June 2014, accessed 5 March 2024, http://www.ems-network.org/IMG/pdf_EMS14_czolbe.pdf; Fabian Czolbe, "Bewegtes Hoeren," in *bonn hoeren–urban sound art / stadtklangkunst 2010–2019*, ed. Carsten Seiffarth (Mainz: Schott Music 2020), 49–51.

5 The case studies mostly come from Berlin's current independent music theater scene, which was showcased at BAM! festival (bam-berlin.org) in 2018, 2019, and 2022 organized by the Zeitgenössisches Musiktheater Berlin e. V. (musiktheater-berlin.de). The fact that the selected examples are representative works of contemporary music theater should reinforce the fact that some of

theater still primarily takes place on stage or within a stage arrangement, one increasingly finds concepts that involve the audience in less rigid reception positions. To overcome these inflexible positions, one can either incorporate the concept of co-composing the moving audience within the creative process or one can integrate a directed choreography of the audience in the performance of the finished piece. Both approaches assign fundamental importance to the perspective of the audience reception. This text discusses the value of audience reception for the compositional process. It emphasizes the importance of understanding reception as an integral part of the work rather than just an aesthetic consideration. The distinction between these two concepts is significant: while the former approach views the audience's perception as a means to establish concrete perspectives on the finished piece, the latter approach considers the audience as an active participant in shaping a specific work. The first approach links audience performance directly to the structure of the piece, generating musical peculiarities from the close reading of the interweaving of reception and specific sounding gestures. The second approach is subordinate and positions perception in a certain way. It follows an analysis of the aesthetic configuration of the completed piece to identify the most valuable reception situation to support or contradict the sounding narrative. This could be understood as a dramatized approach by the artist or a third party.

Initiated by this functional differentiation,[6] three models can be observed that allow for particular reception situations: these can be installative models on the one hand, stationary models on the other, and finally performative models. As my research is in its early stages of exploring this compositional dimension, the terms used should be understood as working definitions. The models help to draw a line within the heterogeneous field of moving audiences in contemporary music theater. The following reflections and theoretical propositions are methodologically based on the analysis of my own performance experiences,

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these mostly young ensembles and collectives have been operating successfully for more than a decade in the ever-growing and increasingly internationally acclaimed scene. Concerning the independent music theater scene in Europe see Matthias Rebstock and Deutschland Internationales Theater-Institut Zentrum Bundesrepublik, eds., *Freies Musiktheater in Europa Vier Fallstudien = Independent Music Theatre in Europe : Four Case Studies* (Bielefeld: transcript, 2020).

6 Here, the term 'differentiation' is used in the notion of Niklas Luhmann's systems theory. In particular, referencing to the concept of 'outdifferentiation of the art system' in his book *Die Ausdifferenzierung des Kunstsystems* (Bern: Benteli, 1994) and *Die Kunst der Gesellschaft* (Frankfurt am Main: Suhrkamp, 1995; engl. trans.: *Art as a Social System* [Stanford: Stanford University Press, 2000]).

supported by notes, working materials, and conversations with those involved. Therefore, my remarks can be understood as a taxonomic approach to this field of research and further reflections.

The Audience in Music Theater Installations

In the second half of the twentieth century, the visual arts broadened their terminological horizons from spatial perception in the context of sculpture to discuss a genre called installation art. A 'new genre,' of course, with roots in the idea of multimodal and immersive theater in ancient Greece, the Gesamtkunstwerk of Richard Wagner, the ready-mades of Marcel Duchamp, the spatial works of Kurt Schwitters, the experimental art forms of the Japanese Gutai Art Association, and finally Allan Kaprow's happenings. In some cases, it could be called music theater, but these were intermedial and site-specific movements in the arts, not opera or music theater. Regardless of the historiographical terminology, two fundamental aspects of aesthetics become clear: the spatial expansion of art and the associated attitude of perception. Shortly after or perhaps at the same time as the concept of the concert installation in music, the concept of the installation found its way into the practice of music theater. The interweaving of spatial characteristics with the staged scene forms a dramatized, site-specific configuration in this context that invites the audience member to find his or her own way through the music theater performance.

In the following I will discuss different forms of music theater installations on the basis of *Fidelio* (2020) by the opera company NOVOFLOT[7] and *Land (Stadt Fluss)* (2018) by Daniel Kötter and Hannes Seidl[8]. On the one hand you can see a repetitive music theater configuration that allows the visitor to enter and leave the installation at any time. On the other hand there is an continuously structured piece in whose spatial arrangement the participating audience can also move freely. Thus, here is a kind of a loop that can be entered at different points or experienced several times and there is a continuous piece that lasts several hours and encourages an individual positioning and moving while the performance.

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7 *Wir sind so frei #1–Fidelio* was staged in collaboration with the Akademie der Künste as part of the festival *Labor Beethoven 2020* to celebrate Beethoven's anniversary. NOVOFLOT (https://novoflot.de) is an independent opera company based in Berlin and founded in 2002.

8 *Land (Stadt Fluss)* is the second part of the trilogy *Stadt*, *Land*, *Fluss* (2017–19) by the artists Daniel Kötter and Hannes Seidl.

In the first part of the trilogy *Wir sind so frei #1-#3*, a reflection on 250 years of the discursive effects of a Beethoven's oeuvre on the art of the present and the present of art, NOVOFLOT performs *Fidelio* as an 'echo of an opera of freedom'. A trumpet, sound installation, keyboard instrument, voices, performer, objects, and video appear as a performance in an art exhibition hall to mark a field of acoustic sources and artifacts. The piece with its spatial staging offers many approaches of various political, philosophical, and artistic revolutions which appear as long-forgotten attributes of our cultural history. The trumpet signal for example, once the salutary musicalized message of the supposed happy ending, becomes the cornerstone of an experimental arrangement in the museum's white cube with an ensemble that examines the utopian potential of this opera as well as of Beethoven's 'music-dramaturgical' elements within the creative process of that piece. The protagonists of the opera are also heard as voices from the beyond, embedded in a kaleidoscope of sound, Beethoven's music and new compositions.

The exhibition's concept, direction, and composition successfully transform the sterile atmosphere of the space with scenic and installation elements. The visitor is taken on a journey through an installative cemetery of failed struggles for freedom, followed by a liberation scene complete with trumpet signals, aria fragments, and choreographed musicians. The great themes of love, trust, freedom, and visionary models of society are the table. NOVOFLOT presents the question of freedom, which has accompanied world events in revolutions right up to the present day, as a freely accessible loop in this installation-based music theater. This experimental arrangement makes it possible within the music theater to experience scenes or entire runs several times from different perspectives. Inevitably, the question arises as to what holds back individual characters, what drives scenes forward, or how sound energies accumulate before they erupt. The piece offers an aesthetic experience that enables a coexistence between visual, sound, music, and scene, leaving the audience free to decide for themselves. As a visitor, one may ask: Am I free? Where is my spatial and historical position? What shall I look at? Can I leave the performance and re-enter it at another time? What am I allowed to do here, and what outside this art space? The installation space allows the audience to experience a dynamic and interactive environment, which stimulates both physical and cognitive responses.

Sven Holm director of NOVOFLOT underlines the strong connection between the artistic questioning of concepts of freedom and the offered freedom to move and think in the installative music theater space. The moving audience is a part of the piece's conception that arranges sounding and narrative objects in the space and uses the musicians to initialize an erratic dynamic of movement

through the space to translate these moving dynamics to the audience. The audience here is driven by the dynamics of the performance as well as by their individual momentum.

Similarly, composer Hannes Seidl and director Daniel Kötter transform an outdoor space into an indoor space while exploring the fundamental question of 'How do we want to live?' through various theatrical experiences. The trilogy *Stadt Land Fluss* (2017–19) by Kötter and Seidl opens up different perceptual perspectives for the audience. While in *Stadt* it is the heterogeneous community that explores the installative arrangement on individual routes, visitors are released into the virtual reality of *Fluss* each on her/his own. *Land* explicitly seeks the communality of the rural commune, which one can experience both in the staged film and in the performance space—the stage acts here as a space where performers, musicians and audience temporarily live together. The audience embarks on a meadow between Frankfurt and Cologne for five hours. Kötter and Seidl take time to act in the time experience of the local commune: It seems as if there is a specific time configuration for working, making music, cooking, ramming piles, land seizure, thinking, and, above all, listening.

Even though there is a kind of libretto with fictional and real texts and stories on the subject of land, there is hardly any dialogue reference function apart from the signal-like marking of the five parts, each lasting just over an hour. The text displayed in the theater space as a handbook was not the starting point for the play, but rather the result of research into the place and its social, political and economic structures. It is not staged, but is merely available for the audience as freely available material. It remains open as to whether, when and how much of it the individual reads.

Land shifts the audience's perspective away from the reference and exchange between the filmic and site-specific levels of action towards a continuity between the auditory-visual artifact and the live performance situation. For instance, the audience in the theater performance is seated on actual grass, which is also featured in the film. Musicians in both the theater and film interact with each other and continue musical gestures. Additionally, food and drink are provided for both the actors in the film and the audience in the theater (figure 1).

The time configuration in the film, according to Christian Grüny, "is synchronized with that of the performance."[9] For example, the video was shot at the same time as the performance takes place in the theater space—from 6 pm

9 Christian Grüny, "Orte, Flächen, Grenzen: Die 'Stadt Land Fluss'-Trilogie von Hannes Seidl und Daniel Kötter im Mousonturm in Frankfurt am Main," in *Neue Zeitschrift für Musik*, CLXXXI/2: *Hybrid Generation* 181/2 (2020): 16–9, here 18.

to 11 pm.[10] The film shows an idyllic-looking scene of a kind of rural commune, in which living together seems to simply happen, but is repeatedly broken up by musical actions. These include various time markers such as the path in the film and on the theater meadow, which connects film and theater every hour like a clock hand; a tower clock that strikes every quarter of an hour; the brass band on the avenue every fifty minutes; fanfares every seventy-two minutes and the time regime of the light from day to night, which directly interweaves the film and theater space. The music is only predetermined to a limited extent, so often only short, repeated, sometimes quarter-tone motifs, fragments or merely intervals appear—it becomes atmospheric and gives the effect of pastoral sequence of a romantic symphony. Moreso, the openness of the concept and the composition allows a creative space for musical practices in the countryside, in the public space. It is therefore about making music and not about consuming a series of arias or musical numbers.

Figure 1: *Video still from the trailer for* Land (Stadt Fluss) *(2018) by Daniel Kötter and Hannes Seidl. View of the performance space with audience, musicians, video, and a self-service stand on a lawn within the performance hall. © Daniel Kötter and Hannes Seidl*

10 The film camera rotates a full 360° every hour, creating a continuous continuity of recurring durations. The film is a continuous, uncut film that has a continuous time sequence like that of the actual theater performance. Although the theater space is thus expanded medially, it remains synchronous in its time configuration.

The auditory and visual aspects of the stage and film are intertwined. The cinematically extended meadow and space for movement create a physical experience for the audience. One can sit on the meadow or a picnic blanket, or stand, but it is important to avoid sitting in fixed rows of seats. Instead, the audience is encouraged to go to the table to get a drink or, later, a bowl of soup. It is also recommended to look for a different place on the meadow to gain a new perspective and a new space for action. One can leaf through the libretto and forget the filmic events until a musical fragment or a sound attracts one's attention—the audience realizes the piece through itself, and unfolds the narrative of the evening, the narrative of the temporary community and perhaps an utopian draft of the initial question.

The corporeality of the movement in space, the actors in the film, and in the performance space, as well as the relationships between the participating individual and the rest of the audience through physical presence become part of the piece. At the same time, these marks nothing less than the central artistic and dramaturgical elements of this music theater piece. The moving audience undoubtedly creates its own horizon of perception. This means that when an artist creates an artistic situation that includes a moving audience, he/she should have thought about and dramatized this element of the piece's perception. The installative model offers more autonomy to the audience, but at the same time requires an artistic concept that includes openness to different perspectives on the artwork. This raises the question of whether the dramaturgy is based on a strong or weak hierarchy of perspectives. It also raises the question of a teleological narrative in a music theater piece, or how to dramatize an open form. Finally, it goes without saying that the audience can move independently and is thus understood as an independent entity. However, this presupposes a music theater structure that has been dramaturgically shaped with the moving audience in mind.

Moving Audience Between Dramatized Arrangements

In contrast to works with installation character, such as those discussed above, works like Manos Tsangaris' *Beiläufige Stücke: Mauersegler* (2013), François Sarhan's *Gestern und Morgen—Die Wahrheit über die Villa Elisabeth* (2018), or *THE WHALE WHALE SONG* (2019) by the music theater collective Hauen und Stechen arrange a path of different 'stations' for a moving audience to explore. The audience must physically move along a dramatized line through the space. They are faced with a dramatized arrangement of situations or scenes

characterized by and capable of creating a specific temporal configuration of perception.[11]

Figure 2: *Video still from* Beiläufige Stücke: Mauersegler *(2013) by Manos Tsangaris. Transition 1. © Manos Tsangaris*

Manos Tsangaris' *Mauersegler*, for example, begins with a kind of peep-box stage for the audience. The stage projection depicts the city outside. Framing the partial view of the city initially creates a sense of manageability for the observer. From this position, as a spectator, one has a view of the entire theater stage. One can distance the self-perception of one's own body by positioning the audience remotely above the stage. However, as the play progresses, this sense of safety and physical superiority may be challenged. The play then leads the audience outside with a choreography that is both sophisticated and well-planned (figure 2). It further leads into a small shop with a new framed view

11 Cf. Fabian Czolbe and Ulrich A. Kreppein, "Erzählte Zeit–Zeiterfahrung als Narrativ im Musiktheater heute," in *ACT–Zeitschrift für Musik und Performance*, *Beharrungs- und Bewegungskräfte: Musiktheater im institutionellen Wandel zwischen Musealisierung und neuen Formaten* 9 (Bayreuth, 2019), accessed 31 November 2023, https://www.act.uni-bayreuth.de/resources/Heft2020-01/04-Erzaehlte-Zeit.pdf.

of what is happening outside the door. The new perspective is framed theatrically once again, but this time at eye level. The view from above, the distance, and the darkness of the auditorium have vanished, along with the possibility of recognizing everything. There are only limited perspectives now. It becomes evident in the next step when the audience is finally invited to go outside to a tram stop. Perception framing and distanced overview are completely lost. Each visitor must find an individual position to observe what is happening in the tram while also asserting themselves physically against the tram as a stage, the other spectators, and the city as an observer.

In *Mauersegler* Tsangaris juxtaposes the physicality of the audience with that of the theater space.[12] This creates a reflection that results from the specific spatial and physical relationships, which are ultimately integrated into a music-theatrical process. The composer co-composes perception situations for the audience, seeking to create specific and occasionally unexpected music-theatrical situations for our perception to reflect upon.

The Whale Whale Song, a production by music theater collective Hauen und Stechen, explores whale stories from world history in a freely associative manner—including Richard Wagner's 'Wal-Küre'. Here, the changing relationship between the physical sensation of the audience and the theater space becomes a factor in the dramaturgy of the piece. The Volksbühne am Rosa-Luxemburg-Platz building serves as a performance space with various locations and spatial configurations. The theater's presence is striking, engulfing the audience upon entry. The interior offers a sensory theatrical experience that aims to connect with the audience: The music theater collective is about "not just looking at the art, but being part of it" and taking the audience into it.[13]

As a tribute to the fading music of whales, *The Whale Whale Song* draws on sources from a wide variety of fields. For instance, the play utilizes stories from the biblical tale of Jonah, followed by *Moby Dick* and *Pinocchio*. The various narrative strands interconnect to create a network that spans the entire theater, from the foyer to the cloakrooms and cupboards to the stairwells and corridors. In doing so, Hauen und Stechen take the audience into the interior of the theater itself and allow excerpts of musical history to pass by in diverse places: Alongside improvised sounds and fairground music, there is classical opera repertoire (a Georg Friedrich Händel aria appears alongside Henry Purcell's *Cold Song*, Debussy's *Clair de Lune* and excerpts from *Pelleas et Melissande*

12 Cf. Jörn Peter Hiekel, "Erhellende Passagen. Zum Stationentheater Von Manos Tsangaris," in *Musik & Ästhetik* 13/52 (2009): 48–60.

13 Cf. the film documentation "BAM!—Berliner Festival für aktuelles Musiktheater 2018", a film by Uli Aumüller, see 0′55″–1′03″.

as well as Richard Wagner's *Walküre*), of course in an idiosyncratic mix of professional music practice and theatrical free play. This aesthetic approach is supported by musicians who play their instruments in every conceivable way throughout the corridors of the theater, or singers and actors moving rhythmically through sound and space.

Figure 3: The Whale Whale Song (2019) *by Hauen und Stechen. Entry scene in the box office of Volksbühne am Rosa-Luxemburg-Platz. © Marcus Lieberenz*

The dramaturgically well-thought-out choreography takes the audience into a musical narrative about whales, repeatedly taking them to different places in the theater. This almost permanently changes the perspective on the respective narrative and thus also the perception of the audience and the theater space. The prologue, for example, welcomes the audience in the box office foyer with tinny whale songs and leads into the stairwells and cloakrooms of the whale-theater (figure 3). From there the piece goes through the whale's mouth into the Sternfoyer to Wagner's 'Whale-hall' (figure 4). The foyer on the upper floor offers various positions between a view from above of the entire foyer as a stage and a position in the foyer directly between the actors. In contrast to the openness of the foyer, the bar or the staircase forces the audience into a confined space; there is hardly any possibility of escaping and an almost intimate closeness is created between the audience and the actors. Finally, the

entrance/exit area of the Volksbühne offers something akin to an amphitheater before each individual was led through the final intestinal twists and turns to the end of the play. With the *libera me* of church funerals and Nick Drake's "I Was Born to Love Magic" the theater-whale releases the audience.

Figure 4: The Whale Whale Song (2019) *by Hauen und Stechen. Playing in the theater foyer with three levels of observation: the floor, stairs, and from the first-floor balustrade. © Marcus Lieberenz*

The movement of the audience not only puts the spectators into a certain observer position, but also changes their perception of themselves and the space through changing spatial configurations and the physical movement of their bodies: "The concept was based on the wandering through the Volksbühne—always around the large stage, and in the end you didn't need it at all,"[14] says director Franziska Kronfoth in an interview with the author after one of the performances. "The wandering of the audience always seems to me to be a good 'way' to actively participate in the performance [...], you can't lean back in

14 "Die Konzeption beruhte auf der Wanderung durch die Volksbühne—immer um die große Bühne herum, und am Ende brauchte man die gar nicht." (original quote)

your theater seat."[15] Movement creates situations of reception between omniscient distance and intimate closeness. Through walking, one experiences the spatiality of a specific place and relates it to one's own individual spatial configurations. In this case the physical experience becomes a part of the artistic concept.

Station models consciously work with the different specifics of the respective spatial configurations in order to take the audience out of the comfort zone of the seat ticket. The site-specific positioning of the audience, the physicality of the movement in the space, and the respective perspective on the action can thus become a 'co-composed' and 'choreographed' element of the work's aesthetic. In this context, composers or composer-director-collectives understand the site-specificity of different spaces, or rather different stages, as a dramaturgical dimension in the narrative of the piece. They can therefore search for an ideal reception perspective, even co-compose it, and ultimately have to choreograph the audience's movement accordingly.

Performing Audience on Site

The third artistic approach can be characterized by so-called performative models that make the boundaries between performance and audience increasingly permeable. The performance of the audience is understood not only as the spatial movement of the participants, but rather in their performative participation in the performance of the piece. Performative music theater concepts seek ways to activate and interact with the audience. All the models presented so far assume an active audience, in contrast to the generally passive attitude of a person attending a classical art music concert. The approaches in the context of performative music theater models seek spaces for interaction. Their music-theatrical composition is oriented towards both the content and the audience, seeking opportunities for interaction with the audience and incorporating these creative spaces for action into the overall dramaturgical concept of the piece and the performance.

Dorfkneipe International (2018) by glanz&krawall, for example, is a piece that goes beyond both installative and stationary models to stage an almost continuously moving and partly interactive music theater experience for the audience. glanz&krawall work between music theater and drama, whereby their

15 "Die Wanderung des Publikums scheint mir immer ein guter 'Weg' zu sein, auf eine aktive Weise an der Aufführung teilzunehmen […], man kann sich nicht zurücklehnen in seinen Theatersessel." (original quote)

arrangements can jump directly between the high culture of opera and the poetic forlornness of a solo entertainer in a village disco. Singers often form alliances with actors, performers, and instrumentalists to explore the milieus of lost places: these include corner pubs, empty railway stations, boxing halls, open-air swimming pools, campsites, and much more, telling stories of the everyday life.

This is the case as well in *Dorfkneipe International.* There in Berlin's Mitte district, in one of the last smokers' bars, the real estate market and international travelers heralds the last evening of a unique pub culture. That is the reason for the artists of the music theater company to perform on site, in the pub, in the adjoining cinema, and the public space to tell these stories. Even though, or perhaps precisely because, property investors are already waiting in the wings, the bar and the cinema will open one last time before another piece of subculture becomes history. The artistic question became: "How to say goodbye properly?"

Figure 5: Dorfkneipe International (2018) *by glanz&krawall. Storytelling as collaborative reenactment. © Marcus Lieberenz*

The performance of *Dorfkneipe International* stages the last supper for regulars, neighbours, and the curious. So, it remains unclear who is audience, performer, bartender, and regulars until the end of the performance. The bar

looks like every day with its bartender and regulars, drinking, talking, and smoking. In the back on the cinema stage, meanwhile, the grief processing program is underway with an strange funeral orator and the Titanicas, an a cappella trio with polyphonic lamento parts between grotesque and profound melancholy. As the audience moves from the cinema to the bar, a blissfully entertaining round of Berlin dance music hits such as Harold M. Kirchstein's and Richard Busch's "Auf meiner Geige spiel ich dir heut ein Abschiedslied" from the Roaring Twenties opens up. It is important to note that when the audience departs the cinema, they also leave or alter their own perspective. The individuals who were spectators and mourners during the funeral ceremony on stage become guests and relatives at the subsequent funeral meal in the bar—the observer becomes a participant. The piece is going to make the audience feel like the pub is lost, but never mind, raise the cups, because in the moment before the end, freedom is ultimately at its greatest.

The entire evening occasionally drifts into a kind of a happening (figure 5). The performance and the dramaturgical structure make the boundary between audience and stage, between viewer and narrative, between theater and pub, between piece and regulars ever more permeable and fragile. Audience and performer are singing, laughing, drinking and dancing together until everyone leaves the pub slightly intoxicated. An ongoing mash-up of dance music hits, theater, performance, video, operatic arias, and drinking songs turn the audience into participants and actors or thus into storytellers themselves. The physical difference between audience and performance increasingly dissolves, creating an intimate closeness of the private sphere that temporarily suspends critical reflection in favor of the sensual experience and only allows it again after one leaves the performance. In this case the music theater starts with a face-to-face situation that turns into a music-theatrical happening. The audience is free to move in the situation, and is free to determine their individual action in the dramatized situation: one can go to the bar and have a drink, one can talk to the others, one can sing along, listen or simply observe.

The dramaturgical concept of such a play needs both a strong narrative threat and an openness to interaction. The piece must carry enough possible narrative strands to ultimately depict the continuity of life. It must be able to think through the expected and the unexpected actions of the audience in the musical and performative structure. The self-reliance of the audience becomes a co-actor in the conception of the piece as well as in the final performance. In this case, it is not only impossible to choreograph the movement of the audience, it is not even desired. Rather, the artistic focus is on an open music-theatrical situation that offers countless narrative strands, but leaves open which of these strands will be taken up, how, and by whom. The con-

ception of the work must therefore take into account the freedom of action of the audience and thus make the movement of the audience an aesthetic characteristic and co-composed part of the work itself.

Conclusion or Moving Audience as Composed Element

When examining various music theater works, three distinct models appear: an installative, a stationary, and a performative one. Each of these models incorporates some level of co-composed or conceptualized audience movement. As a result, it is reasonable to expect or assume that the audience or individuals within the performance will move in various ways. This expectation requires a compositional reflection during the creative process. However, it is unclear whether this dimension has been thoroughly considered in the aesthetics of the work or if it has been intentionally choreographed to enhance the dramaturgy of perception.

When analyzing performance and perception, it is evident that the more the degree of independence and physical as well as mental movement of the audience increases, the less the determinability and choreographability of the audience's movement becomes. It can also be seen that the site-specificity as a compositional factor of music theater can be shaped more strongly by a moving perception or a moving audience. Therefore, site-specificity becomes a crucial aspect of dramaturgy. If the audience is guided to specific locations during the performance, the historical, associative and sensory aspects of the site can become active participants in the production's dramaturgy. In a certain environment these aspects have a stronger effect. It is important to consider these factors when analyzing the impact of the environment.

It has become clear that works of contemporary music theater consciously engage with the body and the movement or motion of the audience in their conception. These are sometimes 'co-composed,' as movement and changes of perspective are part of the poetics of the piece, or choreographed in such a way that the audience's perception can be focused on the situational narrative. A specific perceptual situation, especially that of the moving or freely moving audience, creates a specific view of the piece. Hence, the movement of the audience becomes more and more a significant element of the perception, the structure of the work and the creative process of contemporary music theater.

Tarantella Helvetica
Animal Movement in Twentieth Century Opera Exemplified by Adaptations of Gotthelf's *Black Spider*

Leo Dick

Abstract: *This article deals with the representation of animal movement in operas of the twentieth century. In accordance with a main interest of composers, librettists and directors in this field, the focus is on aspects of the uncanniness of such representations. An exemplary comparison of the adaptations of Jeremias Gotthelf's novella* Die schwarze Spinne *by Heinrich Sutermeister (1934) and Rudolf Kelterborn (1984) shows how animal symbolism is used to negotiate current role and body images. The analysis results in supporting the thesis that both case studies are prototypical for the aesthetic influence of a state-induced cultural and social policy that propagates, among other things, a certain gender-specific role and body image. This is done under the opposing signs of tradition affirmation in the first case, and a critical self-questioning in the second.*

It took a long time in the history of the genre before such a legendary and mythically charged animal as the spider appeared on the opera stage for the first time. It may be because the animal is soundless that, for a long time, it was not considered suitable for music and/or theater. However, inspired by Jeremias Gotthelf's world-famous tale *The Black Spider* (1842) and probably also by countless horror tales and films thereafter, composers and theater makers gradually discovered the aesthetic potential of spider representations, especially regarding the animal's incomparable movement. Its uncanny movement patterns not only became the starting point for unconventional sound, text, and performance formations, but they also proved to be highly adaptable symbol patterns for social self-reflection with artistic means, especially for mirroring current anxieties related to sexuality, search for identity, heteronomy, and threat of technology.

The following study deals with two transfers of Gotthelf's story to music theater. The basis of this investigation is the now widely accepted interpretative reading that a "narrative construction of 'woman' is somehow deeply at issue in this horror story."[1] From this gender-theoretical perspective of reception, the question will be discussed of how gender-specific body and role images are negotiated, (re)produced and propagated with the means of music theater. The aim is to identify aesthetic configurations of symbols that allow conclusions to be drawn about contemporaneous gender concepts and thus about an essential aspect of societal definitions. The diachronic approach of the study identifies both constants and changes in the reception of Gotthelf's fable on the one hand, and in the music-theatrical construction of gender on the other. The limitation to two Swiss case studies is meant to exemplify general principles of the interrelation between artistic symbolization and the concrete conditions in a particular social environment.

After a preliminary introduction to the general history of animal figures in opera, I will locate Gotthelf's novella in the cultural history of the spider motif. Furthermore, we will briefly discuss the political and social conditions of the time when *The Black Spider* was created: Gotthelf's tale emerged during the decisive transformational phase of modern Switzerland, at the end of which the loose confederation of states became a federal state. An echo of these social disturbances is permanently inscribed into the text and inevitably influences any in-depth examination of the subject.

The main part of the study is devoted to an exemplary comparison of the music theater compositions of Heinrich Sutermeister (1934) and Rudolf Kelterborn (1984). Interestingly, these two versions share an important condition of origin. Both works were produced by the Swiss Broadcasting Corporation for the most popular medium at the time they were written: the older work as a radio opera, the more recent as a television opera. The analytical work focuses on aspects of the compositional, choreographic, and performative transmission of three key moments of the narrative in which the artistic negotiation of gender is condensed: the devil's kiss, the dance festivities in the village, and the mother's final battle with the spider for her newborn child.

In the concluding part of the contribution, a conceptual outlook is ventured, taking a cursory glance at a recent setting of *Die schwarze Spinne* by the composer Peter Roth from 2016 as an opportunity to speculate about adaptation

1 William Collins Donahue, "The Kiss of the Spider Woman: Gotthelf's 'Matricentric' Pedagogy and Its (Post)war Reception," in *The German Quarterly* 67/3 (Summer 1994): 304–24, 304.

strategies that could bring Gotthelf's story into our time in an adequate way with the means of contemporary music theater.

However, I would like to preface the discussions of *The Black Spider* with a brief historical overview of animal representations in opera. The symbolic configurations in Sutermeister and Kelterborn are in fact embedded in a system of operatic aesthetic conventions that has been formed over centuries. Many of the conceptual decisions being discussed can actually only be explained within this context.

Figurations of Animal in Opera History

Animal representations play a role in opera that should not be underestimated. Since its beginnings in the early seventeenth century, the genre has by no means limited itself to the performing of the relationship between human beings or between gods and human beings. Rather, from the outset, nature animated or embodied by animals was also included in the artistic depiction of a universal world structure.[2] In the course of the history of the genre, this initially happened under "Orphic" auspices. The mythical figure of the Thracian singer Orpheus is known to be the first real operatic hero. His heroism is based not least on his ability to influence his natural environment by the power of his artistry: "His singing and string playing bring morality and order among human beings and tame even the wild beasts."[3]

Countless variations of this archetypal scene have left their mark on the entire operatic repertoire. The most famous example of this is Tamino's use of the magic flute in Mozart's eponymous last opera, bringing both wild animals and the elements such as fire and water under control. Such portrayals of the human-animal relationship express, on the one hand, a belief in the civilizing power of music and art in general; musical performance is supposed to tame affects and provide order. In this context, human beings are usually shown as standing above animal urges. At times, however, the animal topos is also varied to the effect that the (supposedly) wild beasts, once tamed, are used as a model for civilized life.[4] On the other hand, this constellation also celebrates

2 See Christine Fischer, "Tier und Macht: Oper im Spannungsfeld von Natur und Zivilisation," in *Basler Jahrbuch für historische Musikpraxis*, vol. 33 (2009): 67–95.

3 Elisabeth Frenzel, *Stoffe der Weltliteratur* (Stuttgart: Kröner Verlag, 1998), 603 (translation by the author): "Sein Gesang und sein Saitenspiel bringen Sitte und Ordnung unter die Menschen und bändigen selbst die wilden Tiere."

4 Such a variant of the animal topos is described, for instance, in the following paper: Stephanie Schroedter, "Tanzende Bären im Zeichen der 'Triumphie-

absolutist rule. In a political sense, the dressage of animals performed on the opera stage can be understood as "subject behavior."[5] In every direction, animal instincts, behavior, and physis are presented as something to be suppressed, domesticated, and controlled.

This symbol configuration of a feudal world on the threshold of the Enlightenment underwent an expansion with the beginning of the modern era. In romantic opera, encounters with animals symbolically reopen the human being's lost access to areas of the unconscious and/or numinous. As a result, they primarily endow the hero with contemplative and transcending experiences beyond civilizational alienation and restriction. Later, especially under the influence of Sigmund Freud's writings, these sublimation tendencies are more and more turned into their shadowy counterpart. Subsequently, representations of animals often refer to the confrontation with what an individual or a collective represses, rejects, or unacceptably longs for. In Julia Kristeva's terminology, such symbols stand thus for "abjection" processes[6] that human beings have to go through in their psychosexual development before entering the "mirror stage,"[7] that is, the establishment of such boundaries as self and other or human and animal.

In response to various developments in politics, culture, sciences, and social life, the function of animal symbolism in opera was gradually expanded. Opera animals metamorphosed from the *object* to be mastered, to the unconscious part of the individual *subject*, finally to the disintegrated, rejected *abject*.

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renden Liebe'—ein hochfürstlicher Hochzeits-Ballet aus dem Jahre 1653," in *Bühnenklänge. Festschrift Sieghart Döhring zum 65 Geburtstag*, ed. Thomas Betzwieser, Daniel Brandenburg, Rainer Franke, Arnold Jacobshagen, Marion Linhardt, Stephanie Schroedter, and Thomas Steiert (Munich: Ricordi 2005), 3–24.

5 Fischer, "Tier und Macht," 76 (translation by the author): "Einübung eines Untertanenverhaltens."

6 Kristeva uses the term "abjection" to describe powerful responses such as horror and disgust, which are spontaneously evoked by things like garbage, corpses, excrement, or certain animals: "It is thus not the lack of cleanliness or health that causes abjection but what disturbs identity, system, and order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite." (Julia Kristeva, *Powers of Horror. An Essay on Abjection*, trans. Leon S. Rudiez [New York: Columbia University Press, 1982], 4.)

7 Jacques Lacan refers to the identification of the young child with his own image (what he terms the "Ideal-I" or "Ideal ego") as "mirror stage." For Lacan, this act marks the primordial recognition of one's self as "I," although at a point before entrance into language and the symbolic order, see: Jacques Lacan, *The Four Fundamental Concepts of Psycho-Analysis*, trans. Alan Sheridan, ed. Jacques-Alain Miller (New York: Norton, 1977), 203ff.

The fact that the three functions potentially interpenetrate each other is made clear by Richard Wagner in his *Siegfried* when he makes his hero interact successively with a bear (trained object), a forest bird (aspect of the hero's own subjective personality), and a lindworm (abject).

Following the differentiation of psychoanalytic theories, modern opera developed a special affinity for the monstrous body that results from the fusion of human being and animal. Since 1940, numerous pieces have negotiated abjection aspects of uncanny hybrid creatures, for example in the grotesque courtroom scene of Arthur Honegger's *Jean d'Arc au Bûcher* (1942), in settings of Kafka's *Metamorphosis* by Paul-Heinz Dittrich (1986) and Frank Moon (2013), in the adaptation of the ancient *Minotaur* legend by Harrison Birtwistle (2008), or in pieces such as Olga Neuwirth's *Bählamms Fest* (2003) with its varied cast of half-animal characters, and Karlheinz Stockhausen's *Licht* (1977–2003) with its many Lucifer transformations. The focus of compositional experimentation in all of these pieces is on shaping timbre with the intention of creating a kind of monstrous vocality, for example in the mixture of voice and live electronics in Neuwirth's opera. With the discovery of Gotthelf's *Black Spider* as opera material, on the other hand, compositional parameters gained importance that have been otherwise rather neglected in the sound design of opera monsters. According to the physiological characteristics of the animal, rhythm, movement, and spatiality are preferably used to imitate the spider's behavior and movement patterns. This opens up new symbolic worlds and potential meanings that have been far from exhausted.

Spider Symbolism

The physical appearance of the arachnids has impressed mankind since ancient times. The mix of fascination and horror with which we encounter the movement, hunting, social and pairing behavior, or the feeding of the spider has been preserved over the centuries until modern times.

This ambiguity is undoubtedly at the origin of the countless symbolic assignments that have been given to the arachnid species in the course of human history. In Ovid, *Arachne* (ancient Greek for "spider") is a gifted but arrogant weaver. She challenges the goddess Athena to a creative contest in the field of weaving. Arachne performs brilliantly and weaves a tapestry depicting the amorous escapades of the Olympian gods. As punishment for her insolent hubris, Athena transforms the rebellious competitor into a weaving spider. Almost two thousand years after Ovid, psychoanalysis and depth psychology see in the animal the "the archetypal image of the Great Mother with her

threatening, ensnaring, and devouring qualities."[8] In the spider symbol, which almost always has explicit female connotations, two streams of motifs are thus intertwined. On the one hand, the spider is staged as a rebel against the world of the gods, and thus against the political and economic system of rule. Similar to Prometheus, the animal thus functions as an enlightener and bringer of culture. On the other hand, fears are projected onto the spider's body that are related to the distribution of roles between men and women.[9]

These two overlapping aspects predestine the spider to be the monster protagonist in the genre of horror literature and scary movies. Music theater, on the other hand, adopted the spider archetype surprisingly late and hesitantly. So far, only Gotthelf's elaboration of the spider motif has become operatic material. His tale is about a devil's pact that the self-confident farmer Christine enters into in order to save her village from the aggressions of a ruthless feudal lord. The price: an unbaptized child. The deal is sealed with a kiss, which Christine receives on the cheek. Several times the devil is cheated out of his reward. As punishment, Christine first gives birth to little spiders from the devil's mark on her cheek. These fall as a black plague on the cattle. Later, Christine herself is transformed into a large spider, which from then on decimates the village population. Only a young mother finally succeeds, sacrificing her own life, to banish her into the window pillar of a farmhouse.

Gotthelf's tale has acquired a status in Switzerland that goes beyond its reception as mere literature. As a result of its canonization as mandatory school reading, *The Black Spider* has increasingly become the projection of an imagined common since the 1920s: wherever the current social constitution of Switzerland is publicly debated, the black spider is not far away as an illustrative example.[10] This also applies to the field of theater. To date, countless stage adaptations of the material have been created. A comparative analysis of significant productions of the spider archetype based on Gotthelf can therefore provide insight into the state and development of collective images of the self and of others.

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8 Bernd Rieken, *Arachne und ihre Schwestern. Eine Motivgeschichte der Spinne von den 'Naturvölkermärchen' bis zu den 'Urban Legends'* (Münster: Waxmann, 2003), 268 (translation by the author): "das archetypische Bild der Großen Mutter mit ihren bedrohlichen, umgarnenden und verschlingenden Eigenschaften."

9 See ibid., 7.

10 As a recent example of referencing Gotthelf's tale in political speeches, see, for example: "Die Schwarze Spinne heute. Rede von Bundesrat Ueli Maurer anlässlich der Bundesfeier 2016 vom 31. Juli in Fischingen und Bussnang," accessed 3 March 2022, https://www.admin.ch/gov/de/start/dokumentation/medienmitteilungen.msg-id-62934.html.

My two case studies, the opera compositions by Heinrich Sutermeister and Rudolf Kelterborn, are united by the fact that they were not originally conceived for the theatrical stage, but in each case for the most popular broadcast medium of the time. In the case of both Sutermeister's radio opera and Kelterborn's TV opera, the Swiss Broadcasting Corporation acted as both the commissioner and producer of the project and was thus also responsible for the choice of subject. This production pattern is unusual for the decidedly federalist Switzerland, where art and culture are explicitly seen as the responsibility of the municipalities and cantons and not of the federal government. National broadcasting is an exception in this respect, and initiatives from this side usually aim at having discourses of national importance negotiated by artistic means. In the following, I will argue that state-induced debates about self-understanding are encoded in both commissioned works. For this purpose, I will examine sequences of the pieces in which gender-specific roles and body images are reproduced with music-theatrical means, starting from the archetypal symbolism of the spider.

Sutermeister's *Schwarze Spinne*: An Affirmative "Radio Festspiel"

It may seem surprising that a text as popular as *The Black Spider* was not set to music by a Swiss composer until ninety years after its publication. But during his lifetime, Gotthelf was anything but a consensually recognized literary figure of the newly emerging federal state of Switzerland. Rather, the "poet pastor" distinguished himself as a sharp critic of the new constitution and as a voice of warning against the victory of uncontrolled liberalism, in which he saw the triumph of the right of the strongest. Gotthelf only underwent a radical reinterpretation from an inconvenient social analyst to a "Heimatpoet" with majority appeal posthumously in the period between the two World Wars. The harmonizing reception of his texts, which was necessary for this, has left traces in Sutermeister's adaptation. The piece begins with a chorale sung by the village church congregation in thanksgiving for the supposed divine rescue from a pestilence plague. An acoustic zoom-in then brings Christine's confessional conversation with the priest to the fore. She confesses to having asked the devil for help in the face of the rampant pestilence. He promised help and pressed a kiss on her forehead to confirm it. For this agreement, she asks for absolution, which she is denied, while in the background the congregation sings their Gloria anew.

The motif of the rebellion of an oppressed community is omitted in this version. Instead, the black plague is unceremoniously reinterpreted as the cause

rather than the consequence of the devil's pact. Gotthelf's strong woman, Christine, experiences a significant domestication in various respects. She enters into the devil's pact not out of audacity and full of self-confidence, but out of desperation, and without immediately being informed of the price to be paid. Her encounter with the devil is decidedly desexualized: the kiss is on Christine's forehead and not on her cheek, which at least weakens the symbolism of procreation and pregnancy. Consequently, Christine does not give birth to spiders from the gaping devil's mark. Moreover, the pact is not shown, but only recounted, and that from the mouth of a humble young woman. The erotic fascination that surrounds the figure in Gotthelf is thus completely lost; Christine is instead reduced, not without empathy, to her role as a scapegoat who must be sacrificed for the good of the community.

The figure of the devil also appears in a completely different light than in Gotthelf. Due to the omission of the authoritarian father figure, the devil can no longer be read as a projection of the oppressed farmers' inner potential for rebellion; rather, he manifests a danger of seduction coming from the outside. The devil appears in Sutermeister's opera in the flesh after Christine has been denied absolution. His appearance is in no way metaphysically exaggerated; rather, he seems to come directly from the mundane world of the big city. This is at least suggested by the use of muted trumpet, blue notes, and seventh chords, as well as somewhat later by the musical ductus between chanson and dance music.

Christine offers her body to the devil for the price of release from her torments. He rejects her and demands instead the procurement of an unbaptized child. The archetypal Oedipal constellation of the trade in Gotthelf fully degenerates in the following scene to the plain agenda of a (possibly pedophile) libertine. Contrary to the original, the devil sneaks into the upcoming village festivity and unsuccessfully tries to seduce a young girl on his own. An alienated "Ländler" creates a peculiarly subdued mood: its tempo is noticeably slowed, and into the static C major diatonic—composed more modally than functionally in harmony—are mingled those chromatic alterations of the third, fifth, and seventh degrees that I have previously referred to as blue notes (see figure 1). The dancing people prove to be potentially endangered, but ultimately resistant to decadent influences from the outside.

Meanwhile, Christine fails in her first attempt at child abduction and mutates into the black spider. As such, Sutermeister sends her into a final confrontation with the mother of the child chosen as the victim. After her transformation, Christine's vocal part is reduced to wordless vocalises and chromatic, glissando passages, thus symbolically dehumanized. The orchestral setting evokes a tense atmosphere with tremolos, trills, and signal-like phrases

and seems to mimetically trace the uncanny movement of the black spider (see figure 2). First and foremost, however, a musical gesture of suffering is formulated here: this is evident in the motivic treatment of Christine's earlier lament aria as well as in the chromatic ascents and descents, which oscillate between sighing figures and passus duriusculus.

Music example 1: *Heinrich Sutermeister*: The Black Spider, *VII. Chorscene mit Teufel und Mädchen, excerpt from the piano score ("Ländler" with blue notes).* *© 1949 Schott Music. Ltd, London. Mit freundlicher Genehmigung von SCHOTT MUSIC, Mainz.*

In the battle of the "final girl"[11] with the monster, the good mother triumphs completely, unlike in Gotthelf. The spider is not only temporarily banished but destroyed once and for all. The domestic role ascribed to women by God as caring and protecting mother is emphatically confirmed. Behind this affirmative attitude, which runs completely against the spirit of the original, lies the agenda of a political-cultural movement in Switzerland, which had as its goal the strengthening "of values declared as Swiss."[12] In the spirit of the so-called

11 The "final girl" is a trope in horror films. It refers to the last girl(s) or woman alive to confront the monster.

12 Marco Jorio, "Geistige Landesverteidigung," in *Historisches Lexikon der Schweiz (HLS)*, accessed 3 March 2022, https://hls-dhs-dss.ch/de/articles/017426/2

"Geistige Landesverteidigung" ("intellectual defence of the nation," translation by the author), Sutermeister and his librettist Roesler show us that the evil of this world basically comes from the outside. If it does infect someone on the inside, it is necessary to isolate the contaminated person in order to prevent the individual case from further infecting the whole community. In any event, the evil is localizable, thus controllable and, with a little help from good mother Helvetia, even defeatable.

Music example 2: *Heinrich Sutermeister*: The Black Spider, X. *Duett*: *Spinne (Christine)–Mutter, excerpt from the piano score. © 1949 Schott Music. Ltd, London. Mit freundlicher Genehmigung von SCHOTT MUSIC, Mainz.*

In Sutermeister's conception of the piece there is no place for complicated dialectics. One may criticize the reduction of complexity compared to the literary original with good reason. However, one must concede to the composer that

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006-11-23/: "von als schweizerisch deklarierten Werten" (translation by the author).

he understood very precisely what was to be conveyed aesthetically via the then new form of radio opera on the one hand and what was expected of him from the political side on the other. The showy juxtaposition of sharply contrasting sound tableaus and the transparency of the orchestration demonstrate an instinctive understanding of the potential of radiophony in view of the state of technical development at that time. In form and content, the piece certainly met the requirements of a unifying popular radio station. The fusion of chamber opera and radio can be understood as a contemporary response to a traditional form of popular music theater in Switzerland, the so-called "Festspiel"[13]:

> In a sense, radio formed the most advanced stage of the Swiss Festspiel tradition—mass meetings that involved the population, regardless of origin, in the ritual of the festival as a performance by the people for the people, typical of a country with a political culture based on communal responsibility and the principle of participation.[14]

The form of the affirmative "Radio Festspiel," of course, severely restricts the possibilities of access to Gotthelf's multi-layered novella. Apart from the few illustrative moments in the music described above, Sutermeister's interpretation of the narrative largely suppresses that uncanny kinetic potential of the spider archetype that is so impressively described in Gotthelf in its nonlinear, network-like constitution, i.e. in its unpredictability. The clear front lines and unambiguous role assignments propagated by Sutermeister's opera may have been useful for the construction of a defense-oriented self-image of Switzerland in pre-war and wartime. As an authentic reflection of a society that gradually opened up after 1945, the work was no longer suitable, at the latest since the end of the 1960s. At the beginning of the 1980s, the Swiss Broadcasting Company therefore once again commissioned a composition for a *Black Spider* Opera.

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13 For the history and characteristics of the Swiss "Festspiel," see: François de Capitani, "Festspiel," in *Historisches Lexikon der Schweiz (HLS)*, accessed 2 March 2022, https://hls-dhs-dss.ch/de/articles/011212/2005-11-28/.

14 Carlo Piccardi, "Moderne Musik im Schweizer Radio," in "*Entre Denges et Denezy …*" *Dokumente zur Schweizer Musikgeschichte 1900–2000*, ed. Ulrich Mosch (Mainz: Schott, 2000), 123 (translated by the author): "In gewissem Sinne bildete das Radio das fortgeschrittenste Stadium der schweizerischen Festspiel-Tradition—Massenzusammenkünfte, welche die Bevölkerung ohne Ansehen der Herkunft in das Ritual des Festspiels als einer Vorstellung des Volkes für das Volk einbezogen, wie es typisch für ein Land ist mit einer auf gemeinschaftliche Verantwortung und auf das Prinzip der Teilhabe gegründeten politischen Kultur."

Kelterborn's Remake as Critical Television Play

The necessary impulse for renewal in the 1984 remake, a "musikalisch-dramatische Erzählung" (musical-dramatic narrative) for television, was guaranteed by the choice of the artistic team alone. With Kelterborn, Hansjörg Schneider as librettist, Werner Düggelin as director and Hans Hollmann as performer, protagonists of the progressive Swiss music and theater scene of the time were involved. They were all united by the effort to break up encrusted social structures, which is unmistakably reflected in their resulting joint work. The figure of the cruel superfather Hans von Stoffeln is reinstated, the revolt of the oppressed thus becoming, as in Gotthelf, the central motor of the fable. The antagonist Christine presents herself this time as a self-confident and erotically self-determined woman. Her breaking of taboos is correspondingly re-connotated compared to Sutermeister.

Figure 1a and b: *Screenshots from the television play* The Black Spider, *musical-dramatic narrative after Jeremias Gotthelf (text: Hansjörg Schneider, music: Rudolf Kelterborn, directed by Werner Düggelin): the devil (Agnes Fink) and Christine (Annelore Sarbach), and the devil and the village fool (Ernst Sigrist). © 1983 Schweizer Fernsehen DRS, reprinted with kind permission of SRF.*

The musical setting of the central kissing episode captures something of that "freakish gender elasticity"[15] long-identified as an essential feature of the narrative in psychoanalytically oriented Gotthelf scholarship.[16] The casting of Agnes Fink in a travesty role as the devil, the musical underscoring of the spoken

15 Collins Donahue, "The Kiss of the Spider Woman," 311.

16 This view of Gotthelf's novella was formulated quite early in the work's reception history; see as the first prominent example: Gustav Hans Graver, *Die schwarze Spinne. Menschheitsentwicklung und Frauenschicksal nach J. Gotthelfs Novelle* (Schwarzenburg and Bern: GBS-Verlag, 1952).

dialogue with a soprano/tenor duet of vocalises, and the plaintive gesture of the atonal composition open up an ambiguous associative space: here, the male primal fear of the strong woman is articulated just as much as the objection to heteronormative and paternalistic gender norms, and beyond that, a fundamental desire for nonconformity. In any case, the shadow in this version arises from within society and is not cast upon it from the outside. This is evident not only in the alter-ego constellation between Christine and the devil, but also in the playful, pleasurable physical interaction of both with the additionally invented figure of the village fool.

This physicality, which violates etiquette and is therefore commonly suppressed, takes place in two complementary party tableaus. For Sutermeister, the village dance festivity was still an innocent practice that was threatened to be corrupted from the outside. Kelterborn places the celebration of salvation from the punishment of the feudal lord in the vicinity of the legendary medieval dance frenzy (also known as tarantism[17]), the cause of which was identified as spider bites until modern times. As a counterpart on the knight's side, we are later shown the binge drinking of an amoral hedonistic male elite that degrades women into available objects of pleasure. This anarchic unleashing of bodily drives naturally reflects the equally vital and critical spirit of various social movements at the beginning of the 1980s in Switzerland: women's movement, sexual revolution, advance of a self-confident youth culture and rebellion against a repressive elite with its bourgeois double standard.

The Spider Opera of the Future?

The linking of this liberation energy to the basically very domesticated physique of (sometimes half-naked) human actors and trained animals seems somewhat old-fashioned today, in the age of post- and transhuman visions. At the very latest, the appearance of a real tarantula as the final monster crosses the line into the unintentionally comical. Does this mean that the plot no longer has anything to say to us today? Recent adaptations of the story suggest the opposite. In his 2012 setting, which is stylistically close to rural operetta, composer Peter Roth equated the devil's pact with the release of nuclear energy. Accordingly, the black spider mark on Christine's face becomes a radiation warning sign. In

17 The tarantella dance from Southern Italy supposedly evolved from a therapy for tarantism. For the detailed history of this phenomenon, see: Rieken, *Arachne und ihre Schwestern*, 136–40 and Gregor Rohmann, *Tanzwut. Kosmos, Kirche und Mensch in der Bedeutungsgeschichte eines mittelalterlichen Krankheitskonzepts* (Göttingen: Vandenhoeck & Ruprecht, 2013).

Roth's work, the short-sighted energy pact is explicitly entered into by the guilty collective as a whole, while Christine, as a single mother, warns of the late consequences for the children's generation. This approach to actualization seems quite coherent, but its dramaturgical design is kept deliberately unambitious.

Today, an association of the spider with fears and desires aroused by the intelligent interconnection of cybernetics and robotics would be more likely. In the 2017 Basel theater production, the entire ensemble imitated the creepy spider-crawling with their fingers, which can be read as a literal translation of digital, i.e.: finger-related impulses with analog means. The production was also remarkable in that, unlike previous adaptations, it broke with the norm of frontal presentation in theatrical and cinematic performances. Instead, the audience was placed around the performing area. The omnipresence of danger in the midst of us, as depicted by Gotthelf, thus became more tangible than in the frontal setting of a standard stage, but it still remained dutifully enclosed. As a continuation of this approach, it would be conceivable to translate Gotthelf's "Bauernstube" (room of a farmhouse) into a thoroughly organized smart home, in whose surveillance network the visitors to the house become entangled. Perhaps a walk-in multi-sensory installation would be an adequate form with which contemporary music theater could address the inconceivable ubiquity of the monster that Gotthelf so concisely evoked. The line of development of radio and TV opera could just as well be continued with an Internet opera that goes viral. In any case, Gotthelf's spider metaphor remains a worthwhile challenge for opera composers. The kinetic energy that his text generates just by reading it is still waiting for the ultimate transfer into composed music:

> Thus, it was that the spider was now here, now there, now nowhere, now down in the valley, now up on the hills; it hissed through the grass, fell from the roof or sprang up from the ground. […] It would fall upon people's faces at night, it would encounter them in the forest or descend upon them in the cattle shed. No one could avoid it, for it was nowhere and everywhere; no one could screen himself from it while he was awake, and when he was asleep there was no protection.[18]

18 Jeremias Gotthelf, *The Black Spider* [1842], trans. H.M. Waidson (Richmond: Alma Classics, 2009), 169. ("So war die Spinne bald nirgends, bald hier, bald dort, bald im Tale unten, bald auf den Bergen oben; sie zischte durchs Gras, sie fiel von der Decke, sie tauchte aus dem Boden auf. […] Sie fiel des Nachts den Leuten ins Gesicht, begegnete ihnen im Walde, suchte sie heim im Stalle. Die Menschen konnten sie nicht meiden, sie war nirgends und allenthalben, konnten im Wachen vor ihr sich nicht schützen, waren schlafend vor ihr nicht sicher." Jeremias Gotthelf, *Die schwarze Spinne*, in *Jeremias Gotthelf. Ausgewählte Erzählungen II*, ed. Walter Muschg [Zürich: Diogenes, 1978], 70–1.)

Dissolving and Emphasizing the Physical in the Digital Age

Reality, Appearance, and Virtual Perspectives in Alexander Schubert's Work

Rainer Nonnenmann

Abstract: *Digital media have a profound impact on production, distribution, presentation, communication, self-perception, and world perception in all areas of life. The decoupling of original and image, as well as cause and effect, makes it increasingly difficult to distinguish between manipulation and authentication, simulation and identification, media representation and real presence. Alexander Schubert (*1979) creates digital settings with a high level of technical skill, sociocultural reflectiveness, and aesthetic intuition. His projects allow performers and participating audiences to act in reality and at the same time experience unreal transformations of their own actions through digital technology as well as the bodies and actions of others. In* Point Ones *(2012), the conductor himself produces electronic sounds by means of motion sensors. In* Codec Error *(2017), the musicians on stage appear to be pixilated into digital images or holograms by stroboscopic flashes. In* A Perfect Circle *(2019) the participating audience interacts in pairs together through VR glasses. In the real-life computer game* Genesis *(2020), visitors logged in via the internet. Of central importance in all these works is both the disembodiment of people and their movements through flat monitors, and the existential emphasis on physical proximity and kinesis through touch, eye contact, or bodily interaction.*

> "I go to the window and I am opened."
> Peter Handke, *The Innerworld of the Outerworld of the Innerworld* (1969)[1]

1 (Trans. Stephanie Schöberl) "Ich gehe zum Fenster und werde geöffnet." Peter Handke, *Die Innenwelt der Außenwelt der Innenwelt* (1969). The shorter german version of this article "Auflösung und Betonung des Körperlichen im Digitalzeitalter—Sein, Schein und virtuelle Perspektiven bei Alexander Schubert" is published in *Musik & Ästhetik*, vol. 1 (2023): 27–45.

> "Late in the afternoon, the teacher turns off the lights. Like everyone around him. Like thousands throughout the city, re-enacting their boring, quiet lives of yesteryear in virtual rooms. Back then, when they still had a function."
> Sybille Berg, *GRM–Brainfuck* (2019)[2]

The term "digital revolution" is a misnomer, as the technological developments since the 1940s have taken place in countless independent steps, causing effects on professional, social, and private lives occurring in several spurts rather than as a revolution all at once. For the generation of "digital natives" born around 1980, this term is above all an atavism because the digital upheaval–if there ever was one–is long gone. As early as 1998, the director of the Media Lab at the Massachusetts Institute of Technology (MIT) Nicholas Negroponte proclaimed: "The digital revolution is over."[3] For at least three decades digital means of production, storage, distribution, and presentation have been the natural rule rather than the rare exception in all areas of life. Thus, the term "post-digital" emerged as early as 2000. It describes the fact that everything digital, including the internet, social media, and a plethora of ever-new apps have profoundly changed human self-portrayal, world perception, communication, and interaction and have begun to influence non-digital aspects of analog life as well.[4] Within a few years, mobile devices have changed the behavior and movement patterns of private and public life, just as the hygiene and distance rules imposed in the course of the Corona pandemic re-choreographed all interpersonal interactions within a few weeks. What was initially experienced as a disruption of the social status quo soon established itself as a new convention and form of interaction. The use of smartphones, screens, touchpads and Bluetooth reconfigures the haptic and audio-visual perception of self and the world. Therefore, Immanuel Kant's classic essential questions resurface: What can I know? What should I do? What may I hope? What is man?

Today, almost all information can be digitized, edited, and thus manipulated. Digital media not only depict reality, but also create realities, identities, corporealities, and virtualities that could exist in any number of modifiable possibilities without having to correspond to anything that physically exists in the

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2 (Trans. Stephanie Schöberl) "Am späten Nachmittag löscht der Lehrer das Licht. Wie alle um ihn. Wie Tausende in der ganzen Stadt, die in virtuellen Räumen ihre langweiligen, ruhigen Leben von früher nachstellen. Damals, als sie noch eine Funktion hatten." Sybille Berg, *GRM–Brainfuck* (2019).

3 Kim Cascone, "The Aesthetics of Failure: 'Post-Digital' Tendencies in Contemporary Computer Music," in *Computer Music Journal*, vol. 24/4 (2000): 12–8, 12.

4 Ibid., 12–8.

analog world. In many cases, the digital representation of people, actions, and things allows little or no conclusions concerning their real presence. Original and representation, cause and effect are decoupled. The distinction between manipulation and authentication, simulation and identification, transparency and non-transparency is becoming increasingly difficult. The concepts of reality and appearance are merging into simulacra. At the same time, the social acceptance of virtual content in real life is growing.[5] In large stadiums, tens of thousands no longer follow the competition of real soccer teams on the field, but the duel of gamers playing the computer game FIFA or other popular e-sports and e-games on large video screens. They control game characters, which in turn are modeled on well-known real-life soccer stars, and likewise hold proper tournaments based on the model of national leagues and international championships.

In Japan, the emphatically artificially designed anime figure Hatsune Miku appears as the lead singer of a rock band playing on stage in real life. Instead of a physically present singer, this projected hologram is cheered on by thousands of fans as if it were a real person. The augmented reality game Pokemon Go, which has been played by millions since its release in 2016, places computer figures at predefined locations in public spaces all over the world that can be found, captured, and collected by using smartphones and GPS. Real places turn into the scenery of the computer game. Common computer programs for image processing allow subtle retouching as well as serious transformations such as morphing, face-swapping, and style copies of portrait photos as charcoal drawings, pencil sketches, oil paintings, classical, impressionist, or cubist portraits. In YouTube videos and TV satires, facial expressions and speech movements of one face are transferred to another, making appearances of real politicians with fabricated gestures and statements that seem so realistic that they can only be unmasked as fake by elaborate digital multimedia forensics.

Thanks to tablets and smartphones, there has long been parity in public space and passenger transport between the media representation of absent people and the presence of real people. In Amsterdam, the Nxt Museum opened in 2020 as one of the first exhibition houses for immersive digital media art. The founder of the Tesla company, Elon Musk, had a chip implanted in the brain of a pig in the summer of 2020 with the hopes of using the research to optimize

5 Alexander Schubert refers to some of the following examples in *Switching Worlds: Postdigitale Perspektiven*, dissertation for the award of the academic degree doctor scientiae musicae at the Hochschule für Musik und Theater Hamburg 2019/20. In this study–published Hofheim: Wolke, 2021–of almost three-hundred pages, the composer mostly systematized considerations that he had previously published in essays.

the cerebral memory and communication abilities of humans in the near future. Halo wristbands, which tell the wearer how they are feeling at any given moment, are already commercially available. Social media like YouTube, Facebook, Twitter, WhatsApp, Instagram, and TikTok are increasingly designed to suit certain age groups and usually show content specifically produced for these platforms and peer groups, in which the boundaries between private and public are blurred. Furthermore, bloggers, influencers, fake accounts, automated social bots, and trolls obscure the differences between private opinions and commercial advertising, documentation and fiction, critical reporting and targeted disinformation, factual enlightenment and manipulation that endanger democracy. Rankings and hit lists of intermediary search engines and streaming portals such as Vimeo, Spotify, Soundcloud, or Pinterest often do not document actual preferences, but are bought and are therefore more an expression of tangible economic interests of marketing, prestige, and image cultivation than they are a yardstick for reliable quantities or even quality. Companies, politicians, YouTubers, and artists invest in fake likes, comments, user-, follower- and click-statistics, which are "legitimized" by fictitious people in order to advertise for comments, services or consumer goods.

Hidden manipulation and its influence on the forming of opinions has always existed and is present everywhere. However, what is new are the mechanisms and dimensions made possible by cookies, Google analytics, filter bubbles, and big data, with which digital media both open up and distort the world, or even create new virtual realities. The proportions are reversed. Those searching for something via Google are at the same time found by the search engine. They open an internet page and are opened. They surf the World Wide Web and are pupated into a highly personalized filter bubble tailored to their search- and streaming behavior. Freely adapted from Kant, enlightenment is nowadays becoming increasingly necessary as a way for man to emerge from his self- or third-party-imposed filter bubble.

Disembodiment and Embodiment

In music, multimedia works have become increasingly popular since the 2000s, with more and more pieces exhibiting the use of computers, live sampling, video, and graphic programs. Only later did composers increasingly focus on the consequences of the use of digital technology for production, presentation, and reception. The physicality and movement of musicians played a central role in this. After making and listening to music had been exclusively physical—and often also written down—for centuries, the immediate resonance of musical

ideas, notes, playing styles, sounds, and psychophysical reactions was now being replaced by binary coding through the discrete individual values 0 and 1, which elude perception until they are transformed again into sensually experienced continuums, words, images, sounds. R. Murray Schafer already described the decoupling of audible and visible results from the time and place of their causal production in *The New Soundscape* (1969), using the term "schizophony" which he borrowed from psychopathology.[6] However, the phenomenon did not only become virulent through digitization, but already through analog recording, storage, and reproduction technologies, to which artists reacted even at that time.

From the 1960s onwards, Dieter Schnebel and Mauricio Kagel no longer used playing gestures primarily to produce sound, but instead designed movements of singers and instrumentalists in a compositionally, gesturally, and mimically independent way. A little later, Nam Jun Paik transformed the bodies and actions of musicians into videos. Since the 1990s, as a matter of course, more and more composers have been working with live video, video feeds and various editing and manipulation possibilities. Examples include Michel van der Aa, Simon Steen-Andersen, Mark Applebaum, Michael Beil, Brigitta Muntendorf, Stefan Prins, Matthew Shlomowitz, Jogoda Szmytka, and Jennifer Walshe. Performers like Stellarc, Laetitia Sonami, and Suguru Goto hybridize their own bodies with sensors, robotics, video glasses, headphones, and artificial ankles. Using full-body interfaces, body movements control light, videos, and electronic sounds as well as various pneumatic percussion and robotic instruments. As early as the 1960s, Marshall McLuhan understood media analogous to the use of tools as "extensions of man."[7] Technical devices turn the human body into an "extended" or "amplified body" with expanded possibilities for perception, action and communication. The utopia or dystopia of a further development of the human being into a cyborg is emerging.[8]

Moving bodies in the context of media extensions are also at the center of the work of Alexander Schubert (*1979). He studied computer science, bioinformatics, and cognitive science in Leipzig before completing a degree

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6 R. Murray Schafer, *Die Schallwelt in der wir leben* (= rote reihe 30), trans. Friedrich Saathen (Vienna: Universal Edition, 1971), 49.

7 Marshall McLuhan, *Understanding Media. The Extensions of Man* (New York: McGraw-Hill, 1964).

8 Cf. Stefan Drees, *Körper, Medien, Musik—Körperdiskurse in der Musik nach 1950* (Hofheim: Wolke, 2011), and Rainer Nonnenmann, "Spielweisen, Figuren, Gebärden, Extended Body: Gestik in neuer Musik nach 1950," in *Musik und Geste. Theorie, Ansätze, Perspektiven*, ed. Katrin Eggers and Christian Grüny (Paderborn: Brill/Fink, 2018), 23–48.

in Multimedia Composition in Hamburg. With a high level of technical skill, socio-cultural reflectiveness, and aesthetic flair, he addresses aspects of interpersonal interaction, self-perception, perception of others and body perception. Schubert explicitly sees his work as a "tool for making digital effects visible and to sensually experience them in the analog world."[9] Like other artists and composers—in whose context he explicitly sees himself—he uses interactive control possibilities such as live electronics and live video to illuminate the function of performers and the relations between action and effect through dysfunctional interference.[10] In performative, music-theatrical, and installation projects, he lets the performers and the sometimes actively involved visitors act in reality and at the same time experience unreal transformations of their own actions and bodies through digital settings. On the one hand, he demonstrates the rampant disembodiment of the human being through flat monitors and, on the other hand, emphasizes the existential significance of proximity, corporeality, and kinesis, both through bodily presence in space and through participation and mutual observing, touching, grabbing and virtual body exchange. Schubert turns the fundamental realization that virtuality and deception are inherent components of every digital mode of working into a "virtual imperative" in order to address precisely this in his pieces.[11] Thus, he represents the media-critical approach of making it possible to experience the altered expectations and modes of perception and action brought about by digital technologies. By refraining from evaluating the phenomena he demonstrates, he aims to make the immersiveness of his multimedia productions and the ambivalence of the "post-digital" in all areas of life all the more forceful for the audience.

The following chapters evaluate selected works by Schubert, ranging from the sensor-based interactive performance *Weapon of Choice* (2009) to the most recent real-life computer game *Genesis* (2020), with regard to the relationship between moving bodies and their technical transformation. The technologies used for the purpose of increasing virtualization are developing rapidly. Whereas in the beginning it was electronics, sensors, and light in predominantly conventional concert and stage situations, later it expanded to include VR glasses, internet, and computer-game settings in complete

9 Schubert, *Switching Worlds*, 9 (trans. Stephanie Schöberl): "Werkzeug der Sichtbarmachung und des sinnlichen Erfahrens von digitalen Auswirkungen in der analogen Welt."

10 Cf. Alexander Schubert, "Die Technik der Bewegung: Gesten, Sensorik und virtuelle Visualisierung," in *Positionen* 91 (March 2012): 22–5.

11 Alexander Schubert, "Virtualität und Täuschung—'When I Told You These Things, I Was Lying,'" in *MusikTexte* 158 (August 2018): 18–27, 18.

buildings with actively involved visitors, including the detachment of bodies and movements from their physical bond to space, time, and person. On the one hand, Schubert follows the principle that Mauricio Kagel had already formulated in the early 1960s: "As soon as a musician enters the stage, there is also the aspect of dramatization/presentation."[12] On the other hand, Schubert establishes media-related set-ups, the function of which he disrupts in the course of his pieces, thus making their fabricated nature and effectiveness discernible: "A mistake's characteristics also point to the functioning of the underlying system."[13] The following contribution does not so much aim at a fundamental theorization of the artistic engagement with virtual reality as at an empirical description of post-digital perspectives during the 2010s using the example of works by Alexander Schubert, experienced live at premieres and subsequent performances.

Sensor-Based Performance

Schubert developed his first interactive composition *Weapon of Choice* for violin, sensor, live electronics, and live video (2009) with and for the violinist Barbara Lüneburg.[14] The violin bow is equipped with a motion sensor and serves as a "weapon of choice" for the musician in a "duel" with the technology, like a foil. By tilting the bow from vertical to horizontal and rotating it around its own axis, control voltages are triggered depending on the speed of the movements, which activate predefined sound and graphic programs. Bow and instrument serve only secondarily to generate violin sounds, and primarily as an audio-visual interface, whether in combination with conventional playing techniques or completely independently of them. The instrument and the musician's embodiment merge with the digital set-up, forming an analog-digital hybrid. Kinesis,

12 Alexander Schubert, "Binäre Komposition," in *MusikTexte* 153 (May 2017): 46–50, 46 (trans. Stephanie Schöberl): "Sobald aber ein Musiker auf der Bühne steht, kommt der Aspekt der Inszenierung/Präsentation hinzu."

13 Schubert, "Binäre Komposition," 48 (trans. Stephanie Schöberl): "In der Charakteristik des Fehlers findet sich auch immer die Funktionsweise des dahinterliegenden Systems."

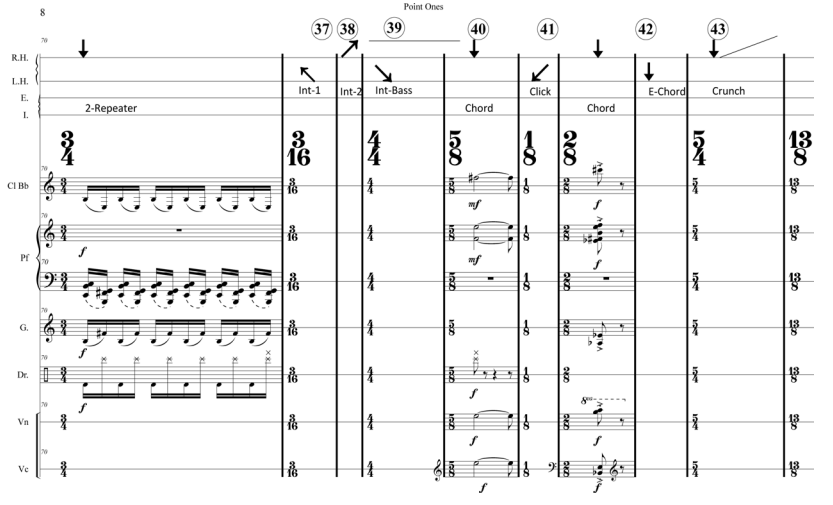
14 This co-operation is documented in: Stefan Drees, "'… kreativ mit den Vorgaben umgehen': Entstehung und Aufführung von Alexander Schuberts 'interactive sensor pieces,'" in *Proben-Prozesse—Über das Entstehen von Musik und Theater* (= Rombach Wissenschaften, series "klang-reden: Schriften zur Musikalischen Rezeptions- und Interpretationsgeschichte," vol. 22), ed. Wolfgang Gratzer and Christoph Lepschy (Freiburg: Rombach, 2018), 153–86.

which is otherwise treated as secondary in music-making, is moved to the center and expanded theatrically. A video screen behind the performer shows her gestures enlarged and processed abstractly in color, tempo, and time. The musician draws black-and-white or colored structures with the bow as if with an oversized Apple Pencil on a magic board, constantly overwriting the hatchings and erasing them again after a few seconds as if by magic. Guiding the bow through the air, for instance, causes fan-like patterns to unfold and fold back together in slow motion. Likewise, col legno accents are multiplied into repetitions by means of delay, whose pitch and timbre then modify silent bow gestures. The actions are not specified in detail in the score because the performer is also supposed to react spontaneously to the events she produces. Schubert merely provides an interactive framework in which the performer acts with her specific motor activity.

Figure 1: *Video still* Weapon of Choice *with violinist Barbara Lüneburg (2009). © Alexander Schubert*

In *Point Ones* for extended conductor, small ensemble, and live electronics (2012), the usually silent conductor produces sounds by means of movement sensors on his wrists. Not an instrument, but the human body itself serves as the interface here. The conductor's task is not so much to coordinate the ensemble, to beat time, to give cues, or to shape tempo and dynamics. Instead, by moving his hands and arms up, down, right, left, hard or soft, he accesses numbered "cues" with pre-produced electronic sounds and live trans-

formations of the amplified ensemble.[15] The score notes arrows for the left and right hand as well as keyword-like events of electronics and instruments for the purpose of coordinating the "E" and "I" systems as exactly as possible. At first, the ensemble acts analogously to the conductor's gestures with glissandi, repetitions, runs, staggered or synchronous beats. Conducting and ensemble-playing converge so that the audience experiences the usual unity of visible signs and audible sounds. Later, however, there is increased divergence between conducting and playing. The conductor's gestures coincide with pauses and cause divergent or no reactions in the ensemble, only silence or instrumental or electronic sounds played from offstage. The connection of visible cause and audible effect is disturbed. The functionality of conducting and ensemble is dysfunctionally decoupled and thus becomes the center of attention.



Music example 1: Point Ones *for extended conductor, small ensemble, and live electronics* (2012), *bars* 70–78. © *Alexander Schubert*

In the course of the piece, the discrepancies between audible electronic and instrumental sounds and visible actions of the conductor and musicians increase even further. In places, the "augmented conductor" is no longer supposed to conduct the ensemble, but to act like a soloist with powerful, wild movements. During a cadenza (bars 180 to 184) he completely abandons his

15 http://www.alexanderschubert.net/works/Point.php (accessed 11 July 2016).

traditional role and semantics in order to make his range of motion theatrically independent.[16] His bizarre gestures take on "a visual intrinsic value" in order to "entirely fathom the connection between sound and body language, thus making the interplay of those components directly tangible for the audience."[17]

Figure 2: *Enno Poppe as conductor in Schubert's* Point Ones *with Ensemble Mosaik 2014, video still of the conductor's solo.*
© Evy Schubert

What Schubert says about the conductor's role as a whole applies in particular to this cadenza: "Think of the conducting for the piece as a choreography." Although no instrumentalist plays during the solo, high-energy electronics beat

16 Schubert's *Point Ones* stands in its own tradition of special solo compositions for conductors. Cf. Rainer Nonnenmann, "Das Klingen des Stummen: Überformungen von Sehen und Hören am Beispiel auskomponierten Dirigierens," in *Die Musikforschung*, vol. 71/1 (2018): 43–66.

17 Drees, "'… kreativ mit den Vorgaben umgehen,'" 168 (trans. Stephanie Schöberl): His bizarre gestures take on "einen visuellen Eigenwert," in order to "den Zusammenhang zwischen Klang und Körpersprache vollkommen auszuloten und damit die Wechselwirkung dieser Komponenten für das Publikum unmittelbar erfahrbar zu machen." Depending on the conductor, the "conductor solo" turns out very differently, as Drees' comparison of recordings by the conductor of Daan Jaansen's premiere with later performances by Vasilis Tsiatsianis and Enno Poppe shows.

down on the audience, since every gesture evokes sound files: buzzing, crackling, snapping, droning, booming. Since every twitch is accompanied one-to-one by sound, the causal chain seems to be reversed. The conductor leaves the impression that he is not controlling the electronics, but that he himself is under high voltage: the maestro as a wriggling marionette.

Digitalization through Light

Schubert's "interactive sensor pieces"—as he refers to them[18]—allow the bodies and movements of musicians to appear as themselves, despite all the enhancements by audio and video electronics. Pieces with strictly timed sound and light impulses go one step further in the medial transformation of living bodies. In *Lucky Dip* for midi-drum kit, keyboard, electric guitar, light, and projection (2013) as well as in *Scanners* for string quintet, choreography, and electronics (2013, rev. 2016), and *Supramodal Parser* for singer, electric guitar, saxophone, percussion, piano, electronics, and light (2016), Schubert dissolves the continuous presence of the actors. Their positions on an otherwise completely dark stage are only made to appear through rapid blinking lighting. The discontinuity of the light resembles the binary 0 and 1 grid of digital codes. The musicians are not simply illuminated, but switched on and off, as it were, like a sample. Binary coded, their bodies and gestures appear flattened, pixelated and fragmented like video clips. They lose their three-dimensionality and turn into liquidities or virtualities that can be switched on and off at will: "The individual on stage is transformed into many small virtual, digital clips in real time. The continuous presence of an expressive performance gives way to a series of isolated, mechanical image sequences."[19] The performers no longer appear merely "extended," but hybridized with the technical set-up to such an extent that they appear two-dimensional, depersonalized and disembodied, and it is no longer possible to distinguish whether they control the technology or are merely a manifestation of the multimedia set-up.

In *Sensate Focus* for electric guitar, bass clarinet, percussion, violin, live electronics, and light animation (2014), four musicians act side by side on a pitch-black stage, each two meters apart. They are microphoned, coordinated by click track and connected via an interface to a computer program that only

18 http://www.alexanderschubert.net/works.php (accessed 11 July 2016).

19 Schubert, "Binäre Komposition," 49 (trans. Stephanie Schöberl): "Der Mensch auf der Bühne wird in Echtzeit zu vielen kleinen virtuellen, digitalen Clips transformiert. Die kontinuierliche Präsenz einer expressiven Darbietung weicht einer Reihe isolierter, mechanischer Bildfolgen."

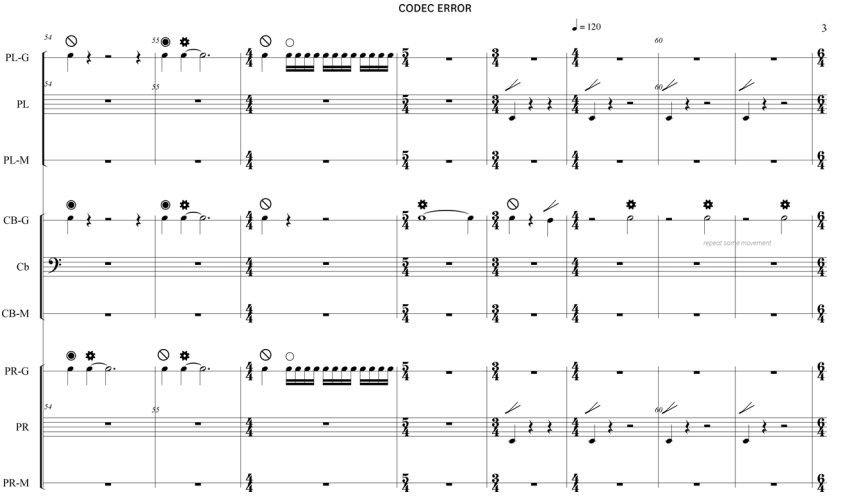
casts bright cones of light on the musicians and activates electronic feeds or live electronic distortions during short playing gestures or silent turns, tremolos, freezing poses, etcetera. The "Technical Rider" explicitly demands loudspeakers and subwoofers that are suitable "for a techno club and not for subtle amplification of chamber music."[20] The high speeds, volumes, standing drones, hard beats, piercing basses, and clanging highs of Schubert's music and the physical-gestural access to the instruments, which are electronically reshaped by microphones, amplifiers, and loudspeakers, show a strong affinity for genres such as metal, industrial, electronica, noise, hardcore or free jazz and club culture. The haptic sound production aims at an immersive extension of "mere" listening into a comprehensive, particularly an overwhelmingly powerful physical and vegetative experience for all senses, as is common at rock concerts or rave parties. Schubert's music thus follows a paradigm shift that can also be observed in contemporary theater and dance: away from the aesthetics of the work, towards physical performativity and eventfulness.[21]

In *Sensate Focus*, the instrumentalists are illuminated by LED spotlights with stroboscopic flashes for only tenths of a second. Instrumental and electronic extremes correspond to the alternation of light and dark. Short crackling sounds and long reverberations suggest spatial proximity or rather distance, narrow or wide sound spaces. The design levels of light, sound, acoustics, and gestures follow the poles of light-dark, instrumental-electronic, dry-echoed, with or without instrument. However, the simple parameters on their own generate an extremely complex overall audiovisual event in various combinations. The strict parallelism of seeing and hearing creates the impression—like the conductor's cadenza in *Point Ones*—that it is not the musicians controlling the electronics, but that they themselves are video projections which can be switched on and off, that seem to buffer during rapid strobe flashes and get caught in loops. For example, as the musicians play silent tremolos, one hears electronic rattling and sees equally rapid flashes of light. Parallel to the synchronously accelerating and slowing sequences of beats, the blinking of the light cones also accelerates and slows down. The performers appear like remote-controlled robots or animated artifacts of a digital automatism. As the speed of the light flashes continues to increase, however, at some point the musicians can no longer keep up. The ensemble

20 Alexander Schubert, Technical Rider to *Sensate Focus* (2014), "PA & Monitoring", 5.

21 Cf. Erika Fischer-Lichte, *Ästhetik des Performativen* (Frankfurt am Main: Suhrkamp, 2004) and Regine Elzenheimer, "'I want to be loud'—Über die Grenzen von Musik und Körper. Eine polemische Selbstverteidigung," in *Musik & Ästhetik* 79, vol. 20 (2016): 88–98.

beats and further accelerated flashes therefore diverge, resulting in surreal overlaps. Contrary to anatomical possibilities, some movements suddenly seem to run backwards like the spokes of a wagon wheel rotating in a film. Other movements stand still, as they are continuously repeated in accordance with the frequency of the light pulses. As long as the spotlights are slightly offset, the cones of light flash across the stage. At the end, the musicians, caught up in the world of machines, tremble at the playing symbol "⚡" with their hands, arms and whole bodies to the loudly crackling electronics. When the power is turned off, their upper bodies topple over as if dead. At the stage of total exhaustion, their staged collapse also serves as a bow for the final applause.[22]



Music example 2: Codec Error, *score, bars* 54–61. © *Alexander Schubert*

In *Codec Error* for double bass, two percussionists and light (2017), Schubert extended his work with light to the entire stage. Remote-controlled spotlights direct colored light at any point with great precision and speed. The three parts each consist of three systems in the score: 1. choreographic gestures performed independently of the instrument in all directions and at varying speeds and dimensions—stopping, turning, freezing, tremolo-like repetitions, etc.; 2. actions with the instrument including conventional playing styles; 3. different positions on stage. The musicians act via click track precisely synchronized with light

22 Cf. Rainer Nonnenmann, "Der Mensch denkt, die Maschine lenkt: Ein Porträt des Komponisten Alexander Schubert," in *MusikTexte* 153 (May 2017): 33–42, esp. 41f.

flashes and audio electronics. All visible and audible events therefore appear as a unity in which the performers seem like holograms due to markedly artificial movements and color-shifting stroboscopic flashes. When the players move very slowly to the flashes of light, they appear as lifeless sculptures shifted in space as if by magic. If they change their position quickly during dark phases, they look like photos or video samples shifted on the computer screen during the next flash of light. Rapidly flickering illumination in red, green, and blue from different parts of the stage finally create effects like those of defective video files whose offset image structure falters and is shifted by a few pixels.[23] The title *Codec Error* aptly names these staged coding errors.

Figure 3: Codec Error, *production photograph. © Alexander Schubert*

In the commentary on the work, Schubert describes the intention of his piece as follows: "It examines the body of the performer and its representation in the digital age."[24] The musicians appear as images of themselves as in video clips, staged, manipulated, pixelated, in cuts, excerpts, and slow motion. The media unreality is additionally reinforced by flashes of light that hit the audience head-on, brutally blinding them so that the technical set-up cannot

23 Cf. Alexander Schubert, "Die Ästhetik des Fehlers—Bruch der Kodierung als Chance ein System zu verstehen," in NZ*f*M, vol. 179/2 (2018): 14–19.

24 Alexander Schubert, Program Notes to *Codec Error* (2017), 2.

be grasped. It is only in the middle of the piece that the complete setting is revealed. Apparently as a result of a computer crash, the stage lights suddenly turn on and for the first time the audience overlooks the stage space, instruments, tablet computers, microphones, spotlights, and loudspeakers, which then also allows the coordinating click track to be heard in the hall. All at once, the operating system reveals its functional mechanisms. Previously, digital technology simulated the stage as a video screen or hologram. Now it demonstrates itself as a disenchanted technical apparatus that allows the actors to take the place of media representation in their own corporeal presence. The digital framing loses its immersiveness and provides the audience with the opportunity to draw conclusions from the degree of their previous amazement in the concert hall to the degree of digital penetration of the general "Lebenswelt" (lifeworld). The complementary stage situation—virtual illusion versus sober technology—follows a central strategy of Schubert: "I understand my compositional work as a tool to describe and explore the dividing line between the analog and digital worlds [...] or also to make visible the invisible of the digital."[25]

Virtual Reality

In his most recent works, Schubert expands the digital setting to include video cameras, microphones, virtual reality glasses, and headphones. In addition, the entire space of the performance is captured and the audience is included in a participatory way. Interfaces and collisions between real movements and sensations and simulated images, bodies, and sounds are staged to provoke a constant comparison between virtuality and identity. By both connecting and separating incorporeality and corporeality, distance and proximity, machine and human being, Schubert wants—in the sense of artistic research—to make it possible for the audience to experience the unconscious transfer of digital modes of representation, perception, and action to the analog world:

> One opportunity of contemporary multimedia composition can be to depict and address this change of perspective. In this context, a work of art can be thought of as a tool to promote sensitization, visualization, or a change of perspective. Since the crucial area of the post-digital runs pre-

25 Schubert, *Switching Worlds*, 60 (trans. Stephanie Schöberl): "Ich begreife meine kompositorische Arbeit als ein Werkzeug, um die Trennlinie zwischen den analogen und digitalen Welten zu beschreiben und zu erforschen [...] oder auch das Unsichtbare des Digitalen sichtbar zu machen."

> cisely at the interface of the analog and digital worlds, this art form can be a suitable tool because of its proximity to both worlds.[26]

The one-and-a-half-hour performance installation *Control* (2018)—created for the Ultima Festival Oslo—provides the audience with three phases of thirty minutes each, during which the visitors experience more or less the same thing three times from three different perspectives. A first group of visitors walks with VR glasses, headsets and attached webcams including a microphone through an empty building like through a labyrinth. In the rooms, twenty performers create small situations, pretending to be homeless people, drug addicts, psychopaths, or epileptics. Aspects of control and hierarchy are addressed and interactions are provoked. One moment visitors are asked to sit on a chair, take a seat at a table, start a game with someone, or take a broom in their hand. The next moment, someone lies on the floor as if fainting, or people squeeze through a dark corridor where they can hardly get past each other. Various props are used, including a piano, a computer, screens, mirrors, and a camera, which focus on the relation between the original and the image, live music and technical reproduction. The visitors can only see everything as media modification through their VR glasses, slightly darkened, pixelated and with a limited field of vision that is displaced by a few centimeters in relation to the visual axis of the eyes. Furthermore, it is only through headphones that they hear the atmospheric charges, which can be either pleasant or threatening, as well as pleasant sounds, drones, banging gunshots, and disturbing electronic noises. Events recorded by each visitor using their camera and microphone are simultaneously transmitted to a screen and loudspeaker in a control room, where another visitor from a second audience group observes how the visitor from the first group assigned to him makes his way through the building. Since the visitors in the second group have previously walked through the building, they can now give instructions and advice to the following visitors via their headphones as to where they should go and how they should behave. The real, but primarily media-mediated experience onsite is thus followed in the second group by a spatially separated, purely media-mediated audio-visual image of what is happening.

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26 Ibid., 174 (trans. Stephanie Schöberl): "Eine Chance der zeitgenössischen multimedialen Komposition kann es sein, diesen Perspektivwechsel abzubilden und zu thematisieren. Ein Kunstwerk kann hier als ein Werkzeug der Sensibilisierung, Sichtbarmachung oder Perspektivveränderung gedacht werden. Da der kritische Bereich des Postdigitalen genau an der Schnittstelle der analogen und digitalen Welt verläuft, kann diese Kunstform durch ihre Nähe zu beiden Welten ein passendes Werkzeug darstellen."

Due to the head start in experience, the second group has a certain responsibility towards the following first group. At this point, each visitor has to decide how to communicate with their assigned visitor in the first group: in a commanding or collegial way, informing or irritating, caring or inconsiderate. At the same time, the second group also receives text instructions on the screen, for instance telling the assigned visitor from the first group to lie down on the floor. The participants of both groups then have to negotiate with themselves and the other whether they want to follow these orders or if they prefer to maintain certain boundaries and refuse. In a third stage, the visitors of the second group finally arrive in a supervision room where they follow the entire proceedings without having the possibility to interact themselves. A third group now sees on monitors both the inside view of the VR glasses of the visitors of the first group in the building and the instructions and reactions of the visitors of the second group in the control rooms, who in turn now become the observed. Finally, the supervision room also gives the organizer the opportunity to monitor the entire building including all participants in order to intervene if necessary.

In *Unity Switch* (2019), Schubert positions each performer across from a visitor at a table. They sit opposite each other wearing VR goggles with video cameras and microphones that allow them to see and hear what they are actually seeing and hearing, only transmitted through the media. The half-hour "Interactive Virtual Performative Installation" is moderated by recorded voices that give explanations and call for small actions: putting hands on the table, looking at hands, joining hands, synchronizing with the other person, imitating small actions, striking a tuning fork, listening, clapping, flicking. Then letting the other person take a picture of them with their mobile phone, signing a contract for the video documentation of the ongoing performance, putting the pen back, finally taking off the headphones and glasses, and leaving the room. Mobile spotlights provide for changing lighting situations: frontal on the opposite person, profile from the left and right, or as in the case of interrogation directly into one's own face with the silhouette of the other person remaining dark. All audio and video channels can be interconnected via a central mixing console—the eponymous *Unity Switch*. Initially, only the channels of the performers and visitors assigned to each other are switched so that they no longer see the realistic video of the person sitting opposite them on their VR glasses, but instead see themselves from the perspective of the other person. The self-perception and the external perception, the internal and external perspective are exchanged. One's own actions and interactions with the partner can now only be controlled and synchronized by means of the other person's external view of oneself. While a participant is interacting with their own mirror image, they sense at the same time that the real person behind it leads a motoric-haptic life of their own that

deviates from the movements of their own mirror image. The digitally mediated sense of sight and the physical sense of touch are decoupled. Instead of small, more or less trivial actions, the focus is on one's own view, movement, and joint communication. In a second step, the previous pairings are finally dissolved and the audio and video outputs of different people are combined. The previously established view of self and others by the partners at the table is now replaced by the perspectives and actions of completely different people from completely different tables. When performers and visitors touch each other in real life, they see completely different people who are either also holding hands or doing something completely different. By virtually reshaping physical reality through convergent and divergent videos, Schubert once again provokes the participants to compare the analog and digital spheres.

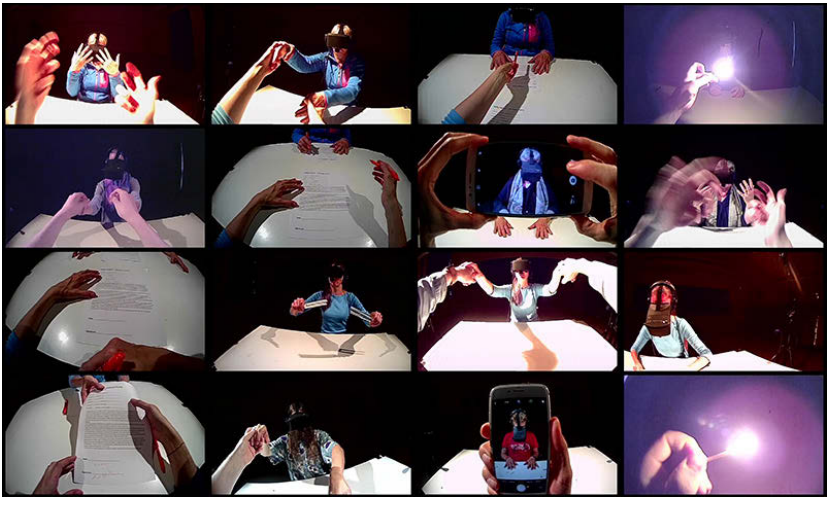

Figure 4: Unity Switch. © *Carl John Hoffmann*

Real-Life Therapy and Game

In A *Perfect Circle* for audience, two announcers, two assistants and supervisor (2019), Schubert likewise works with pairwise assignments. Instead of performers and visitors, however, he brings two visitors into interaction with each other. In a "Real Room," twenty people sit in pairs on yoga mats facing each other. As in *Unity Switch*, they initially see each other through VR glasses until

the video image is switched and the people see themselves from the perspective of the other's video camera, as if in a mirror. An assistant plays sounds over headphones and a female announcer gives instructions to perform small actions in a heavily electronically altered voice. These are discreet, cautious, and careful at the beginning, but then demand intensification. The visitors are to turn their heads to the left and right, stretch out their arms, shake hands, touch each other's shoulders, caress each other's cheeks, feel each other's warm breath, hug each other, tighter and tighter … The participants of the forty-minute "therapeutic group session"[27]–this is Schubert's characterization in his commentary on the work–have to decide for themselves and together how far they want to commit to these instructions or whether they prefer to keep their distance. Do they feel kindly guided by them to a togetherness or coerced and brought into line by an anonymous authority? Do they feel suggestively supported by warm wellness sound currents or manipulated by technoid, aseptic electronic sounds?

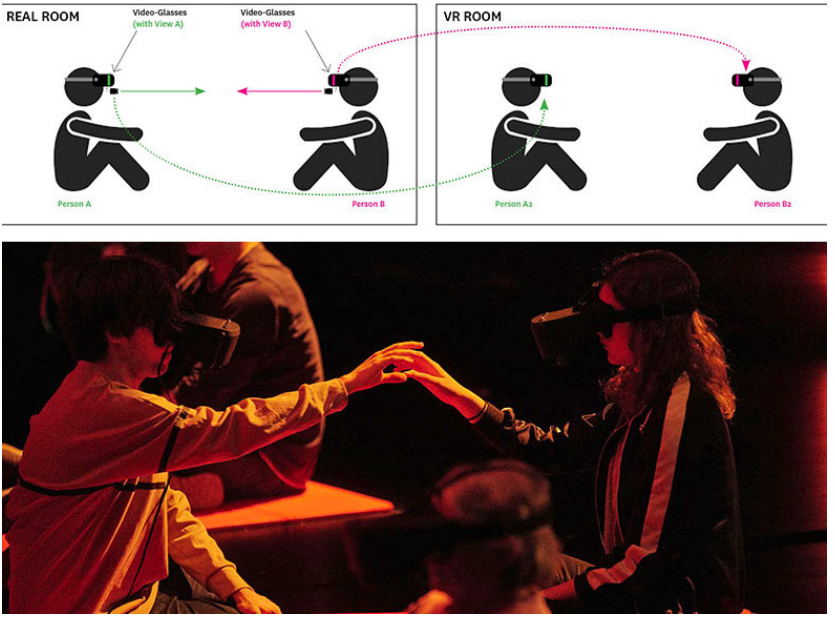

Figure 5: A Perfect Circle. © *Carl John Hoffmann*

27 Alexander Schubert, Program Notes to A *Perfect Circle* (2019), 1 (trans. Stephanie Schöberl): "therapeutische Gruppensitzung."

Simultaneously, another twenty people sit in pairs on yoga mats in a second, so-called "VR Room." Instead of seeing their physical counterpart, however, they see the image of the video camera of a person from the "Real Room" through their VR glasses. Instead of their own gaze, they see another person through their VR glasses from another person's point of view. In the process, the people in room 2 follow the same instructions as in room 1, in that they also move, touch, and hug each other. Instead of their own hands and the partner sitting opposite them in real life, however, they see the hands and bodies of two completely different people. The real touches on the spot collide with completely foreign gazes. The palpable body of the person sitting opposite them is overridden by the media-mediated appearance of a completely other body with a different appearance, gender, and age. Reality and unreality intertwine to form a virtual intermediate sphere. The sensorimotor unity of seeing, hearing, feeling, and acting is disturbed. Disembodied medial distance intrudes into the experience of real physical proximity. Vice versa, the media distance also creates a voyeuristic closeness to real distanced bodies that can be observed undisturbed from a distance and even virtually touched with the hands of other people.

Schubert created *Genesis* (2020) for the fifth Hamburg International Music Festival. Like the story of creation in the first book of Moses, this "real-life computer game" lasts a full seven days from Monday to Sunday, twenty-four hours non-stop. In the historic Bille power plant in the east of Hamburg, four members of the Decoder Ensemble see and hear everything only by means of a video camera and microphone via VR glasses and headphones. The audience connects for one hour each via the internet on their home computers to see and hear what a performer assigned to the visitor sees and hears on site via VR glasses and headphones. Although physically completely separated from the situation, audience members (or players, as they are in this case) can follow the action up close through the eyes and ears of the performer. The play is real and live, but for the audience it only takes place online. Just like in the computer game Minecraft, you see the hands of your "game figure" in the foreground of the room they are in. You give verbal instructions to the player via your home computer microphone. Simultaneously, three other players do the same with their characters, so that one can let them interact with each other. Conversely, each "computer game character" can also give its player elementary feedback or ask questions via short messages: "Yes. No. Please be more specific. Thank you. Do you really want this? Unfortunately, this is not possible!"

Via a menu bar, the player can select five objects from a pool of hundreds, which his character can then pick up at a distribution point and put to use. Depending on when a player logs in, he or she will already find various objects in the room, such as plastic sheets hung up like tents, spotlights, furniture,

machines, tools, record players, television sets, household objects, items of clothing, or instruments such as electric guitars, keyboards, and drums, which can be played on, moved around, changed and added to. Instead of merely passively receiving, the player should actively navigate and become creative. Everyone has control over what happens, whether it is exciting or boring, constructive or destructive. As in the "survival mode" of Minecraft, a diagram in the upper right corner of the home monitor provides information about the physical condition of the game character (thirst, hunger, tiredness, body temperature), as each participant is responsible for their game character, who sometimes also needs refreshment or rest. In reality, of course, it is a human being who does not have any number of lives, but only one.

Since the players do not act with an animated computer figure as is customary, but rather give verbal instructions to a living human being, they are not merely spellbound as in an immersive computer game, but are challenged by the one-to-one relationship with their "avatar" to reflect on their own ability to control and on the other's to be remote-controlled. Moreover, it provokes them to confront the fact that the duality of a person and a medium is transformed here into the virtuality of a medial person and a humanized medium. In particular, the lack of content in the action, which does not reveal any given theme or narrative, makes the player and his or her actions the focus of attention. Everyone has to think about what they do and do not expect of their player. The player puts himself in the position of his human game character in a way that is not the case with merely animated computer game characters. Schubert's claim to let the players of *Genesis* create a new world is admittedly ambitious. For the time being, creating something out of nothing is reserved for the gods—for now! However, the technical interconnection of people and places with other people, places, devices, and media-mediated sensory impressions via the internet across all spatial distances reaches a level of virtual reality in which a new post-digital in-between world is emerging. In any case, we are not far off from what Werner Heisenberg once anticipated in 1953: "Perhaps later the many technical apparatuses will belong just as inevitably to human beings as the snail shell belongs to the snail or the web to the spider."[28]

28 Werner Heisenberg, "Das Naturbild der heutigen Physik (1953)," in *Die Künste im technischen Zeitalter*, ed. Bayerische Akademie der Schönen Künste (Munich: R. Oldenbourg, 1956), 38 (trans. Stephanie Schöberl): "Vielleicht werden später die vielen technischen Apparate ebenso unvermeidlich zum Menschen gehören, wie das Schneckenhaus zur Schnecke oder das Netz zur Spinne."

The Danced Sound Sculpture

Julia H. Schröder

Abstract: *Interactive sound art installations can be triggered by a person via sensors. Mostly, the audience may interact physically with the installation or sculpture, thus influencing the sounding result. In this paper, dance with sound sculptures by Peter Vogel and Jutta Ravenna is analyzed. On an artistic and aesthetic level, the following questions arise: Can live dance structure its accompanying music? Can the potential sound of an interactive sound installation structure the choreography? The answer to both questions would be: yes, to a certain degree. Aesthetically, dance and musical sound will always relate either to the dancer's style or the instrument's possibility. If the 'instrument' is a hybrid between composition and instrument, as I would argue for the analyzed examples, each performance will result in a similar sounding result: a variation or a predetermined style. The composer/sound artist has planned the potential musical result, the dancer shapes the actual outcome in real-time. The analytical section considers this musical potential as well as the choreographic possibilities an interactive sound sculpture offers a choreographer/dancer.*

When the dancer Tomoko Mio danced with Jutta Ravenna's *Data Window* sound sculpture *SesamSesam* (2017), her gestures influenced the sound or indeed the music that the sculpture emitted. In the following, such interactive "danced sound sculptures" are analyzed. A sound sculpture is an art object which emits sound, as the one by Jutta Ravenna or the sounding sculpture-relief *Rythme d'ombre* (rhythm of shadow) by Peter Vogel. They are both interactive: if a shadow from a visitor falls on one of the light sensors in Vogel's relief, a new soundtrack starts. Thus, the dancer becomes the interpreter of the music evoked by her gestures.

Peter Vogel's Sound Sculptures

While experiencing Peter Vogel's sounding sculpture-relief *Rythme d'ombre* (2004) in a gallery (figure 1),[1] I was struck by the way the art work made me move: when my hand passed a sensor, a sound started, beginning with a fast bass drum pulse (the bassline). Wanting to explore more sounds, I moved on. One after the other, I triggered some percussion rhythms, then an electronic, melodic pattern and finally a kind of looped bongo-pattern. They were triggered directly, as a one-to-one mapping of gesture to sound. But the individual soundtracks played for a while before fading out—until being triggered again by walking back. The result was a composition of different rhythm tracks, patterns, and recurring short melodic fragments, like an electronic dance music piece.

And indeed, Peter Vogel called a similar sound sculpture, created for the *Sonambiente* sound art exhibition in Berlin in 1996, a "techno sound wall," and gave it the title *Rhythmic Sounds*. It has eighteen tracks, i.e. eighteen sensors, and is almost six meters long.[2]

On Vogel's website, a video of the 1996 dance performance by Bridge Markland and *Rhythmic Sounds* exists.[3] One can see the relief mounted at approximately chest height on a wall, with the dancer moving in front of it (see figure 2). The lighting makes her shadow fall on the relief. When she moves past one of the eighteen light sensors, her shadow starts a new sound track. There is a build-up in both dance and music; she moves progressively faster and the music gets denser accordingly. In Markland's techno interpretation, one starts to lose the notion that she triggers the sounds. Perfectly synchronized dance and music meld together, and her repetitive gestures equal the looped soundtracks: Dancing the music is entrainment.

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1 Peter Vogel, *Rythme d'ombre*, Mixed Media (Sound), ca. 400 cm x 16 cm, 2004 at DAM Gallery Berlin 2018, gallerist: Wolf Lieser, accessed 5 May 2021, https://damprojects.org/kuenstler_ui/peter_vogel/?lang=en. A video of Peter Vogel playing one of his "Klangwände" can be watched at the beginning of the documentary *The Sounds of Shadows* by Jean Marton and Conall Gleeson (Mainz: Schott, 2010), accessed 3 May 2021, https://www.petervogel-heritage.de/the-sounds-of-shadows/.

2 Peter Vogel, *Klang, Bewegung, Licht. Ein Werkbuch*, ed. Städtische Museen Freiburg, Museum für Neue Kunst (Freiburg im Breisgau: modo, 2007), 86.

3 Peter Vogel, Website: http://www.petervogel-objekte.com/PerfTanz.html, Bridge Markland (accessed 3 May 2021).

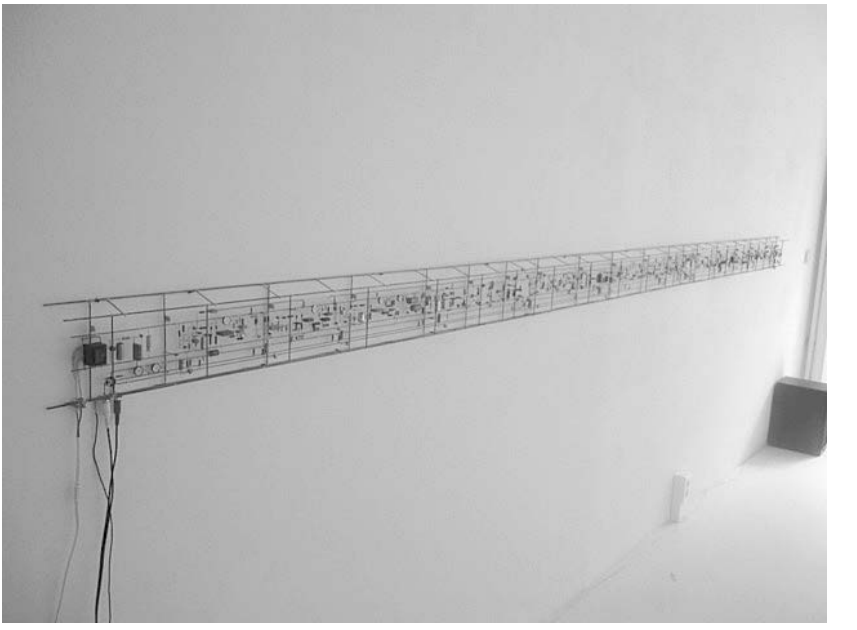

Figure 1: *Peter Vogel*, Rythme d'ombre, *Mixed Media (Sound), ca. 400 cm x 16 cm (2004), photographed at DAM Gallery Berlin 2018. © Julia H. Schröder*

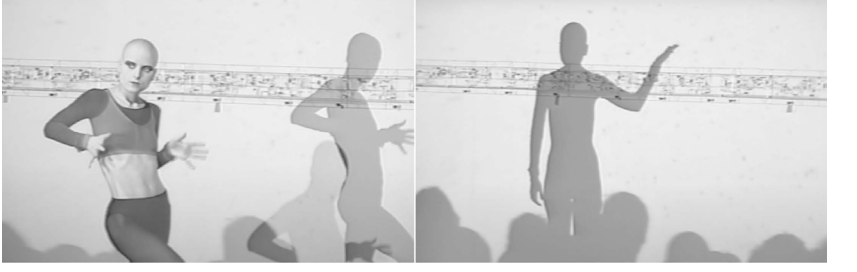

Figure 2a and b: *Bridge Markland dancing with Peter Vogel's* Rhythmic Sounds *"techno sound wall"-Sculpture at E-Werk Freiburg in 1996; video still from http://www.petervogel-objekte.com/PerfTanz.html. © Peter Vogel's estate and Bridge Markland*

While the artist classifies the "Klangwände" (sound walls) as 'installations' and formerly in an upright form "Klangstelen" as 'environments',[4] I would categorize them as 'sound sculptures'. They are clearly confined objects, and would thus be classified as sculptures rather than installations. The fact that they need lighting and emit sound into the room could be understood as installation-like, as well as the fact that there are loudspeakers attached, which might stand in another corner of the room. Usually, the loudspeakers are not integrated into the relief.[5] But the acoustic extension into the room holds true for any sound sculpture, whereas a sound art installation is commonly understood as an artistically created space or extended outdoor art work. A sound art installation cannot be reduced to an object and is often ephemeral.

The visible structure of Vogel's "Klangwände" lies in their components, which are electronic circuitry elements like transistors, oscillators, capacitors, etc.[6] They form an intricate structure, with a certain resemblance to a five-line staff in musical notation. Vogel spoke of "materialized scores"[7] to stress the fact that his sculptures were not sounding by themselves, and only emitted sound when 'played' by a visitor or a dancer.

During his student days, Peter Vogel danced, choreographed, and composed electroacoustic music while studying to be a physicist. Combining his interests in his artistic work, he started in the late seventies with interactive "environments"[8] which were also danced in. In 1975, Vogel installed three of his upright interactive sound sculptures with four photocells at the contemporary music festival Donaueschinger Musiktage; these were activated by the visitors. Two years later, the same three sculptures were first danced with at the Music Biennale in Zagreb. From his experience with dancers in his environments, he developed the first horizontal wall-mounted sound sculpture for dance in 1979. Later he adjusted the concept to current musical genres, such as minimal music[9] and electronic dance music. In fact, the dance and the musical style are markedly diverse, being updated with new styles in new periods.

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4 Vogel, *Klang, Bewegung, Licht*, 75–6.

5 There are exceptions which include the loudspeaker cone into the relief, such as *Zufall und Notwendigkeit* (2014), *Rekurs* (2014), *Perpetuum* (2015).

6 Peter Vogel shows how he constructs his sound walls in the documentary *The Sounds of Shadows*.

7 Vogel, *Klang, Bewegung, Licht*, 77.

8 Ibid., 84.

9 In the "minimal music" sound walls one could vary the order of the tones in some of the sensors. Each of the approximately fifteen sensors triggered repetitive structures with different meters, thus one could work with phasings.

Vogel writes that he usually works with individual dancers for a while.[10] They improvise with possible musical structures and the dancers get to choose their favorite sounds, which they then start to relate to certain dance gestures. At this point, Vogel selects the definite sounds and the dancer determines the dramaturgy of the macro form, whereas the meso and micro form will be improvised during the performance. The dancers should react flexibly to the sounds.

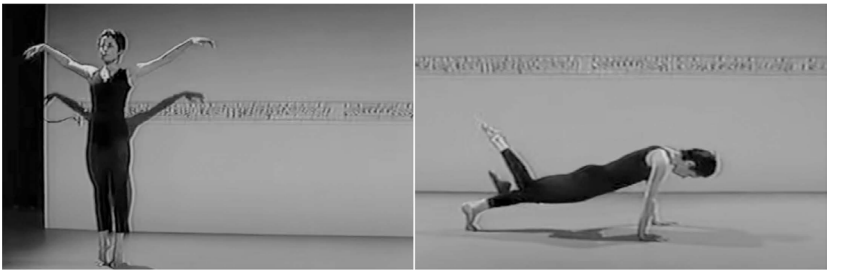

Figure 3a and b: *Modern dancer Christine Brodbeck dancing with Peter Vogel's first* Große Klangwand *sculpture in Zurich in 1979; video stills from http://www.petervogel-objekte.com/PerfTanz.html. © Peter Vogel's estate and Christine Brodbeck*

In the 1979 sound sculpture, there were thirteen sensors with pitched sounds,[11] some of them single tones which either reacted immediately or only after being shadowed for a while. Other sensors started melodic fragments. Vogel calls the tone repertoire "atonal." This first sound wall was danced with by the modern dancer Christine Brodbeck.[12] Whereas Bridge Markland's dance for the Techno Sound Wall was based on repeated, fast paced rhythmic loops—a list of the musical patterns is published,[13] but could equally be transcribed from the video documentations or the sound sculpture itself—and included dancing along the row of sensors, Brodbeck chose different areas of the sculpture to explore their different sound possibilities (figure 3a). During her dance, she repeatedly moved in a low position (figure 3b) as to not throw any shadows on the sensors until she had reached another area and thus other sounds

10 Vogel, *Klang, Bewegung, Licht*, 86.

11 In this early sound wall Vogel already employed synthesized sounds, which were not sampled but synthesized by the sculpture itself.

12 Peter Vogel Website: http://www.petervogel-objekte.com/PerfTanz.html, Christine Brodbeck (accessed 3 May 2021).

13 Peter Vogel, "Klangvorrat *Rhythmic Sounds* (Techno-Klangwand)," in *Klang, Bewegung, Licht*, 89.

(e.g., a silent floor episode [1 min. in the video excerpt], or moving to the high frequency at the end of the video excerpt [3:30 min.]).

A third dance style with this type of sound sculpture, Japanese Butoh, was performed by Mitsuyo Uesugi in 1994.[14] In the beginning we hear mostly percussive sounds and Uesugi dances in an almost robotic way—very slowly exploring with one arm, adding sideways torso movements, imitating the melodic pattern. After establishing a complex but minimalistic sounding rhythmic pattern, she moves away from the sculpture (1:30), listening to the music and continuing on to face the other end of the relief. At 1:40 she moves towards the right end of the sculpture, now facing it, which adds a different melodic pattern resulting in an almost chaotic musical moment, until the first pattern fades out and the new one takes over. She dances to it with gracefully undulating arms (figure 4a) on the right side of the sculpture, demonstrating how the music fades away when she moves into the room (2:30). In the last part she triggers the same melodic pattern again, but in a hunched position with high shoulders and fists (figure 4b), as well as strained and repetitious movements, changing her interpretation of the same music through different dance expression.

Figure 4a and b: *Butoh dancer Mitsuyo Uesugi dancing with Peter Vogel's Sound Wall sculpture at gallery TOM in Tokyo in 1994; video still from http://www.petervogel-objekte.com/PerfTanz.html. © Peter Vogel's estate and Mitsuyo Uesugi*

In Vogel's interactive sculptures for dance, the adaptability to different dance and musical styles was unexpected. Although a certain position in relation to the sculpture is needed to trigger a specific sensor at a specific time, the triggering gesture is irrelevant, as is the body part: it can be triggered by the shadow of the hand, a raised foot, a passing head or torso. The dancers are free in their stylistic choices of movements.

14 Ibid.

Summarizing, I would call the Terpsitone a musical instrument which aims at a full body performance, not a sound sculpture.

We find similar systems of non-touch sound-control,[22] or 'hands-free natural user interface' frequently today. The systems are often video-based, monitoring the camera-field and acting if motion occurs in specific parts of that field, as in Jutta Ravenna's *SesamSesam*. Another example is David Rokeby's *Very nervous system* (1986–90).[23] Other interfaces use different sensors, e.g. light sensors in Peter Vogel's sound sculptures. Technically, they belong to the research field of human-computer-interaction (HCI). Interfaces between the machine and the human user govern new musical instrument design. Well-known examples include composer-performer Laetitia Sonami's gestural controller "Lady's Glove," and Michel Waisvizs' "The Hands". The community exchanges their inventions at The International Conference on New Interfaces for Musical Expression (NIME).

Equally, we find gestural controllers in video games. Musical computer games can be divided into 'rhythm action games,'[24] like *Dance Dance Revolution* (1999) in which one steps on given points of a platform (the controller), or *Guitar Hero* (2005) in which the gamer presses keys on a guitar-shaped controller synchronous to the playback of a song. The gamer in these examples synchronizes his movements to a given song.

'Electronic instrument games,'[25] on the other hand, do not necessarily use a special controller, but they offer the possibility to influence the musical outcome, either in the form of improvisation or even composition of some elements; they are also called 'sound toys.' Since Andrew Dolphin defines these 'sound toys' as interactive ("sonic-centric systems in which the end user may trigger, generate, modify, or transform sound"[26]) I would call them 'music toys.' They often allow for improvisation in a specific musical style. In this respect, 'music toys' resemble Peter Vogel's sound sculptures.

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22 In dance, we do not necessarily have "control" of the sound, but at least a form of non-touch controller to trigger a cue.

23 See David Rokeby's website, accessed 7 July 2022, http://www.davidrokeby.com/vns.html (last modified: 24 November 2010).

24 Axel Stockburger, "Sound-Image Relations in Video and Computer Games," in *See this Sound. Audiovisuology Compendium. An Interdisciplinary Survey of Audiovisual Culture*, ed. Dieter Daniels and Sandra Naumann (Vienna and Cologne: König, 2010), 128–39, accessed 7 July 2022, http://see-this-sound.at/kompendium/abstract/34.html.

25 Ibid.

26 Andrew Dolphin, "Defining Sound Toys: Play as Composition," in *The Oxford Handbook of Interactive Audio*, ed. Karen Collins, Holly Tessler, and Bill Kapralos (Oxford: Oxford University Press, 2014), 45–62, 45.

Looking at dance games or 'rhythm action games,' we could compare their controllers to the Terpsitone. Both are new forms of interfaces to control an instrument, i.e. the computer game or the electronic music instrument.

In experimental music these types of interfaces of musical control are even more diverse, ranging from data gloves[27] to fifteen meter long wires connected to an internet outlet.[28] In dance performances, various sensors can be used to influence the music in the performance, including accelerometers which measure the movement of a dancer in space.[29]

If the dancer can control many sound parameters with her movements in real-time, does she become the composer of the resulting live-electronic music?

Sonification vs. Composer-Dancer

The technical possibilities can be viewed in two ways: theoretically, we can sonify certain features of a dance easily. Sonification means an automatic translation into an acoustic signal. A controller can translate an arm rotation into a rotating sound—or any other sound type specified. If we understand the dancer as having musical agency on the other hand, we would consider her to be the composer who selects and arranges the musical material through her dancing. There are certainly steps in-between, such as music that is automatically synchronized to a dancer's gestures, or the notion of the dancer as a musician who interprets a composition. If we see an automatic translation of dance into sound or understand the dancer as composer, I would ask: is the result music? If I consider the dancer as musician, I would ask whether she achieved a musically satisfying interpretation (figure 5).

My last example is about limited musical improvisation by dance with a sound sculpture as well. It employs non-touch sound control and a variable

27 Cf. Laetitia Sonami and Michel Waisvisz.

28 Atau Tanaka, Bert Bongers, and Kaspar Toeplitz, *Global String*, accessed 5 May 2021, http://ataut.net/site/Global-String. Cf. Brandon LaBelle, *Background Noise: Perspectives on Sound Art* (London: Bloomsbury Academic, 2015), ch. 17, 217ff.

29 Chris Salter with Marije Baalman, Michael Schumacher et al., *Schwelle II* (2007), accessed 5 May 2021, http://www.chrissalter.com/schwelle-part-ii/. Cf. Chris Salter, *Entangled: Technology and the Transformation of Performance* (Cambridge, MA: MIT Press, 2010).

mapping of sounds to gestures, which allows for a modification of both in real-time. In this case, the metaphor of the dancer as a conductor has been used.[30]

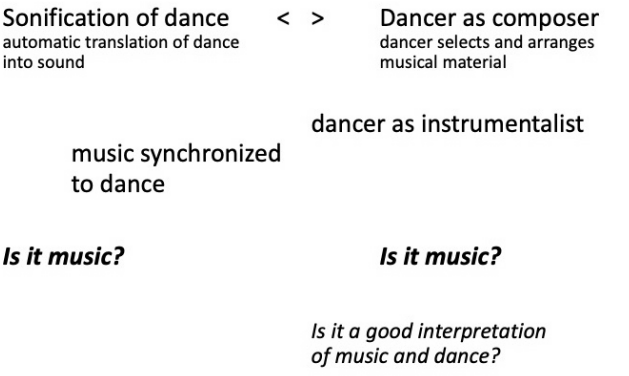

Figure 5: *Graphic depiction of functional roles and resulting analytical questions in danced sound sculptures. © Julia H. Schröder*

Jutta Ravenna *SesamSesam*

Jutta Ravenna's *SesamSesam* (2017) is an interactive sound sculpture, which can be performed with via bodily motion and influenced via smartphone or other mobile devices with internet access. It was installed 2017 at a festival on sonification, curated by Jutta Ravenna herself, and reflects her double interest in sonification of mobile data and bodily motion.[31]

30 Jutta Ravenna and Sabine Sanio, "Tomoko Mio: *Dancing Sound–Conducting Data* (2017), three dances with an interactive sound sculpture," in *Sonifikation: Transfer ins Musikalische / Sonification: Transfer into Musical Arts* [Programbook for the Sonification festival of BGNM 2017, curator: Jutta Ravenna], ed. Julia H. Schröder (Hofheim: Wolke, 2017), 49–50. Cf. Stephanie Schroedter, "Virtuelle Körper und digitalisierte Klangräume: Tanz im Kontext von elektroakustischer Musik, Sonifikation und Medienkunst," in ibid., 109–11.

31 *Sonifikation*, 46. Text and photos at Jutta Ravenna's website, accessed 5 May 2021, http://www.jutta-ravenna.com/en/installationen/sesamsesam.

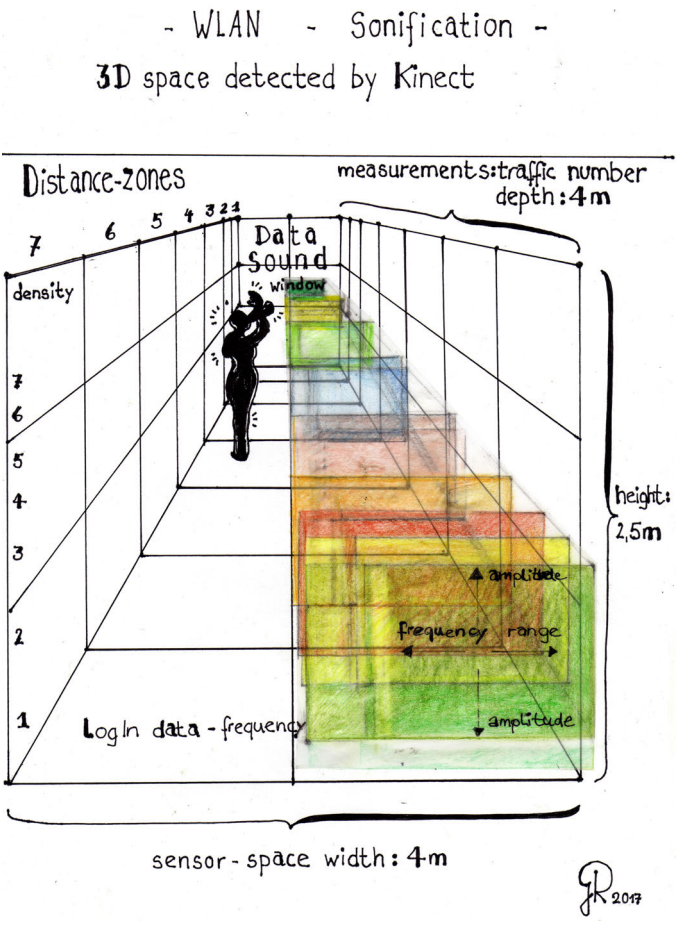

Figure 6: *Jutta Ravenna's sketch for* SesamSesam *(2017): Sensor space with dancer in front of the interactive sound sculpture* Data Soundwindow. *© Jutta Ravenna*

In front of the sculpture, a conical space of approximately six meters is scanned from inside the sculpture by a camera—actually a natural user interface called Kinect, developed for video games as well as medical research and surveillance. The dancer's positions are analyzed in a real-time process and allow for a more complex mapping of sound parameters on gestures. It is a three-dimensional sensor, meaning the analysis program can distinguish human movements such as turning and arm gestures, and it maps them to specific sound events, composed by Ravenna. Ravenna pre-defined a movement vocab-

ulary that was mapped onto a sound archive of composed musical material. There she specified certain arm movements, but also head-rolling and so on. That means there is, for example, an entire repertoire of arm movement for the dancer to learn, including which movements control certain sound events; the dancer's position in space governs parameters such as the dynamics, tempo, and duration of the sound event triggered. Could a random dance result in an interesting musical result? Possibly, but not necessarily. In that sense the sound sculpture would sonify the dance–simply making it audible. Depending on the dancer, her style, and the specific sounds the sculpture was equipped with, different results would be achieved.

In the published sketch (figure 6) Ravenna visualizes the space in front of the Sound Sculpture, the *data window*, as partitioned into seven zones of distance from the sculpture and two sides, thus fourteen different fields. If a bodypart enters one or several of these fields, it is analyzed and triggers specific musical structures or elements. As a video documentation of one of the three dance performances, *Dancing Sound–Conducting Data* (2017) by Tomoko Mio shows (figure 7), the back area of the room at the beginning and the end of the excerpt were eliciting percussive sounds. When the dancer moved to the front, one could hear pitched sound events. This mapping of specific sounds to areas can change and there are states with extended sound textures added.

Tomoko Mio danced with Jutta Ravenna's sculpture several times over the course of the three-day festival in the foyer of the Villa Elisabeth in Berlin in October 2017. This way, she was able to show a range of possible interactions with the sounding sculpture *SesamSesam*. The dancer and the sound artist had worked together for a period before its final installation on-site. In this development of the movements and the sound mapping, they laid the foundation for the performance *Dancing Sound–Conducting Data*.

SesamSesam is part of a series of sound sculptures, including *Sound Windows*, which Ravenna started in 1995.[32] They are assembled from recycled computer circuit boards and use their specific sounds, mostly consisting of beeping and clicking and whirring. Ravenna called this "reanimation," as in the

32 E.g., *Traum und Wahrheit: 10^n Operationen in 10 Stunden für die Sicherheit einer Stadt*, *Data Sound Window* (*Field 3*), reanimated computer circuit boards, two ultrasound sensors, four audio channels, computer, amplifiers, four loudspeakers, documented in Carsten Seiffarth and Markus Steffens, eds., *Singuhr – Hoergalerie in Parochial. Sound Art in Berlin. 1996 bis 2006* (Heidelberg: Kehrer, 2010), 36–7, 151, audio track 4. Cf. Helga de la Motte-Haber, "Einleitung," in *Klangkunst. Tönende Objekte und klingende Räume*, ed. Helga de la Motte-Haber (Laaber: Laaber, 1999), 32.

sculptures consist of "reanimated computer circuit boards."[33] They are sonically reacting to visitors, for example to their movement and distance, as measured by ultrasound sensors. Another realization is a sounding column of these circuit boards, in this instance installed in the foyer of a German radio building from 1930 where it formed the title-giving "ninth column."[34] Apparently, Ravenna included light and humidity sensors as well, thus changing the art works of this series constantly.

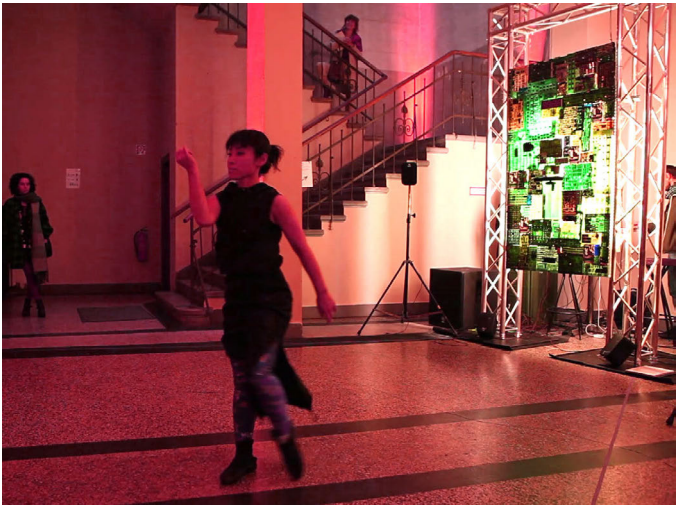

Figure 7: *Tomoko Mio dancing with Jutta Ravenna's sound sculpture* SesamSesam *(2017) in the foyer of Villa Elisabeth, Berlin (October 2017). © Arata Mori*

This sculptural aspect is also present in the *SesamSesam* (2017) installation: when I asked Jutta Ravenna whether a passing dog would make music with her sculpture, she answered that firstly, the sensorial system recognizes human beings and is even used in border surveillance between South and North Korea—thus stating the agency of the human dancer—and secondly, *SesamSesam* was designed to be active for the whole day, for several days of

33 Ibid.

34 E.g., *Die neunte Säule*, Haus des Rundfunks Berlin, 1998. Cf. Sabine Sanio, "Autonomie, Intentionalität, Situation. Aspekte eines erweiterten Kunstbegriffs," in *Klangkunst. Tönende Objekte und klingende Räume*, ed. Helga de la Motte-Haber (Laaber: Laaber, 1999), 114–6.

the festival. That means that the busy and the non-eventful phases are all part of the sound sculpture's musical output; it is a sound sculpture and thus performs for a longer duration than an individual would listen to. The extended duration of the musical component is one of the defining aspects of sound installations.[35] *SesamSesam* is a sound sculpture with installation qualities, namely the fact that it was installed for three days and nights, and was not accessible to the public afterwards. Additionally, it filled the whole entrance area including the staircase with music and defined a space in front (the sensor space) where the surrounding speakers gave the person in that area not only the best surround sound experience but also the possibility to interact with the sculpture's music through bodily movement.

Potential and Limitations: Danced Sound Sculptures

To summarize, interactive sound sculptures do not equal musical instruments—that is what makes it possible for them to be danced. It is easier to achieve a musical result than with an instrument, but stylistically the musical possibilities are limited and accordingly predetermined.

The Terpsitone, the musical instrument that is played with full-body movement, cannot be danced with freely, since every dance gesture would mean losing control over the sound-producing instrumental gesture. The performer is limited to the 'choreography' of playing music.

Both Peter Vogel and Jutta Ravenna created their sculptures with audience interactivity as well as dancers in mind. Both worked with specific dancers for a dance performance: Vogel selected his musical material in accordance with each dancer and period; Ravenna adjusted reaction times and gesture-mapping according to the dancer's suggestions. Both sound sculptures can be danced with. In these two cases, the dance style influences the selection of movement and sound structures in the development before the performance. The dancer can create a planned choreography.

The dancers also act as improvising musicians when dancing. In a way they are composing while they create their choreography. But the compositional aspect is limited to a choice from a pre-selection of material. The system-builder, in this case Vogel or Ravenna, composes the potential sounds—or even the potential music of the danced sound sculpture.

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35 Volker Straebel, "On the early history and typology of sound installation art," in *Sound Studies and Sonic Arts Reader*, ed. Volker Straebel and Julia H. Schröder (Hofheim: Wolke, 2022), 9–38.

Openings in *A Love Supreme*[1]

Daphne Leong

Abstract: *In relating dance and music, choreographer Salva Sanchis aims to create "an opening for the audience to read something, to place their experience." This chapter demonstrates how such openings are made in Sanchis and Anne Teresa De Keersmaeker's 2017 choreography to John Coltrane's* A Love Supreme. *In the first movement ("Acknowledgement"), the dance embodies, simplifies, and opens out the processes of the music, answering improvisation with improvisation. In the last movement ("Psalm"), the dance sculpts sonic unity and melodic drama, fleshing out fully improvised music with fully choreographed dance. The silent Prelude inverts the relationship of music and dance, of choreographed and improvised, of solo and ensemble; it "opens" the space for what is to follow.*

Winner of the French dance press's *Prix de la critique* for best performers, Salva Sanchis and Anne Teresa De Keersmaeker's 2017 choreography to John Coltrane's *A Love Supreme* brings dance composition and improvisation together in a unique response to the iconic album.[2] Sanchis told me: "My objective is always to add some sense of dimension—to create a space in

1 I am grateful to Salva Sanchis for a generous video interview, 7 September 2020, which made this work possible. My thanks also to Sanchis and Hans Galle for making a video of the full performance of *Love Supreme* available. Photographs of *Love Supreme* choreography, by Anne Van Aerschot, are reproduced by kind permission of Rosas. Anya Cloud introduced me to contact improvisation and provided astute comments on a draft of this chapter; Keith Waters provided helpful feedback; and Kara Yoo Leaman gave insightful suggestions on an early version of this work (Daphne Leong, "Embodying Music: Three Questions from Practice," plenary presentation, Society for Music Theory Annual Meeting [online, 2020]). I am grateful to Stephanie Schroedter for the opportunity to take this work further.

2 https://www.rosas.be/en/news/574-dancers-of-ia-love-supremei-win-the-iprix-de-la-critique-2017i-for-best-performers, accessed 15 June 2022. This chapter addresses the 2017 choreography. Sanchis both danced in and co-choreographed (with De Keersmaeker) an earlier version, *Raga for the Rainy*

which there is the opening for the audience to read something, to place their experience."[3] This image—that of an *opening*—differs from common ways of describing relations between music and dance. Rather than parallelism and counterpoint, complementarity and interaction, composite form and mutual implication, Sanchis's goal explicitly involves the audience, in an invitation to interpret.[4]

I find the metaphor of an *opening* suggestive, and will explore how composed and improvised processes—or, more broadly, the "known" and "unknown"[5]—carve open such a space in *A Love Supreme*. In this space, words, music, and dance play: words turn into music and music into words, dancers into musicians and musicians into dancers.

Each dancer embodies one member of John Coltrane's quartet (figure 1): Thomas Vantuycom is John Coltrane's saxophone (and voice); Bilal El Had, McCoy Tyner's piano; Jason Respilieux, Jimmy Garrison's bass; and José Paulo dos Santos, Elvin Jones's drums.[6] Each dancer dances only when his musician plays; and each—for the most part—improvises when his musician does. The fourth movement, as we shall see, shakes up the relationship among the four dancer-musicians.

Coltrane's *Love Supreme* is a four-movement suite, half an hour in duration. Of the four movements, the first ("Acknowledgement") and fourth ("Psalm") are

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Season / A Love Supreme (2005) (https://www.rosas.be/en/productions/376-raga-for-the-rainy-season-a-love-supreme).

3 Sanchis, 2020 video interview with author.

4 Stephanie Jordan provides an excellent overview of work on dance-music relations, considering intermedia theory and choreomusical theory in the context of Western theater dance. "Mutual implication" is taken from Claudia Gorbman's discussion of relations between music and image in film. Mariusz Kozak includes discussion of how dance-music relations contribute to connections between audience and dancer in De Keersmaeker's *Violin Phase*. Stephanie Jordan, "Choreomusical Conversations: Facing a Double Challenge," in *Dance Research Journal* 43/1 (2011): 43–64; see also Jordan, "Introduction," in *Music and Dance: Special Issue on Choreomusical Analysis, Journal of Music Theory* 65/1 (2021): 3–9. Claudia Gorbman, *Unheard Melodies: Narrative Film Music* (Bloomington, IN: Indiana University Press, 1987), 15. Mariusz Kozak, "Anne Teresa De Keersmaeker's *Violin Phase* and the Experience of Time, or Why Does Process Music Work?" in *Music Theory Online* 27/2 (2021).

5 "The improvising dancer tacks back and forth between the *known* and the *unknown*" (Susan Foster, "Taken by Surprise: Improvisation in Dance and Mind," in *Taken by Surprise*, ed. Ann Cooper Albright and David Gere [Middletown, CT: Wesleyan University Press, 2003], 3–4).

6 In *A Love Supreme*, Jones plays drumset, timpani, and Chinese gong; I will refer to his instruments collectively as "drums," per the usual jazz practice.

musically the most open-ended.[7] They also exemplify opposite choreographic strategies. My discussion therefore focuses on the first and fourth movements; it also touches upon the silent danced prelude to the work.

Notational Conventions, Terms, and Abbreviations

- Pitches in register are labeled following the Acoustical Society of America: middle C = C4.
- { } represent unordered sets.
- Standard row form labels are used: P for the prime row form, and R for its retrograde. Subscripts indicate order numbers; for example, P_{5-8} indicates elements 5–8 of row P.
- For the discussion of "Psalm," scale degrees for C melodic minor are indicated by ordinary numbers for the octave C4-B4 (1–7), italics for the octave above (*1–7*), and underlines for the octave below (1–7). B♮ is scale degree 7, while B♭ is ♭7. Recitation tones are indicated by the suffix r.
- I will occasionally refer to the piano / bass / drums (El Had / Respilieux / dos Santos) as the "rhythm section" (per common jazz parlance).
- Videos: This study relies heavily upon video of a full performance of A Love Supreme. The video is not publicly available, and excerpts of it cannot be reproduced here due to copyright restrictions. References to such video excerpts are crossed out in the text; where available I have substituted published photographs supplied by De Keersmaeker's dance company Rosas.[8]

7 The second and third movements follow chorus structure: the second, "Resolution," features a 24-measure theme "composed of three groups of eight measures" (with slightly altered endings), while the third, "Pursuance," uses a fast 12-measure "minor blues" theme in B♭. Coltrane interviewed by Delorme and Lenissois, 1965, reproduced in John Coltrane, *Coltrane on Coltrane: The John Coltrane Interviews*, ed. Chris DeVito (Chicago: Chicago Review Press, 2010), 246; see also Lewis Porter, *John Coltrane: His Life and Music* (Ann Arbor: University of Michigan Press, 1998), 234–5.

8 The photographs (figures 3, 5, 8, 11, 12, and 13), by Anne Van Aerschot, are found in Salva Sanchis, Anne Teresa De Keersmaeker, and Rosas, *A Love Supreme* (Brussels: Rosas, 2019); they are reproduced by kind permission of Rosas.

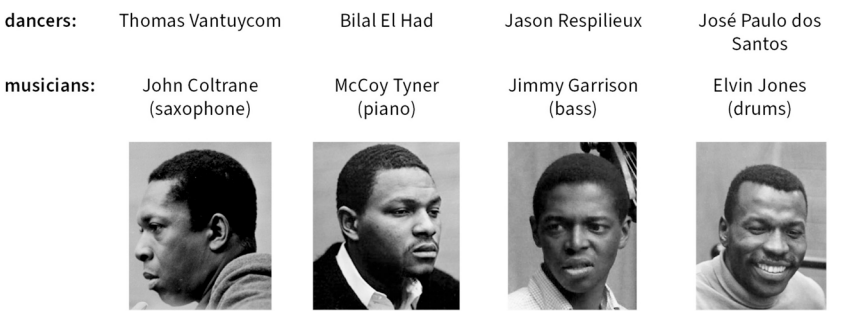

Figure 1: *The dancers / musicians.*[9]

I. "Acknowledgement"

The movement proper begins with the solo bass ostinato shown in music example 1.[10] Underlying the entire movement, this ostinato serves as rhythmic pulse, bassline, and melodic motive combined.[11] As is clear when comparing studio and live recordings, it is one of the movement's few preconceived elements.[12]

The ostinato pairs <short-long, short-**long**> with metric <off-**on**, on-off> and articulative, dynamic, and pitch stress on the final "long," to express a circular energy; the movement's opening dance gesture (video 1) beautifully mirrors those parallel, flipping, and circular aspects. It also highlights the hands, a particular focus that we shall see throughout the choreography.

9 For copyright reasons, we are not able to reproduce the dancers' headshots. Please see Figure 3 for the dancers' images. The photographs of Coltrane's quartet (Coltrane, Tyner, Garrison, and Jones) are reproduced by kind permission of Chuck Stewart Photography.

10 The suite opens with a fanfare, which Sanchis and De Keersmaeker do not choreograph.

11 "Assigning the role of invoking both melodic line and rhythmic pulse to the bassist was nothing new for Coltrane"; "Olé" and "While My Lady Sleeps" are antecedents (Ashley Kahn, *A Love Supreme: The Story of John Coltrane's Signature Album* [New York: Penguin Books, 2002], 100).

12 Lewis Porter, "John Coltrane's 'A Love Supreme': Jazz Improvisation as Composition," in *Journal of the American Musicological Society* 38/3 (1985): 612.

Music example 1: "*Acknowledgement*": *bass ostinato. © Daphne Leong*
Video 1: "*Acknowledgement*": *opening hand gesture. Click to view* (1:25–1:29): *https://youtu.be/Dog1egx5OTU?feature=shared&t=85*[13]

Both ostinato and opening dance gesture point forward to the climax of the movement: a revelation of the ostinato as the words "a love supreme." Just preceding that moment, Coltrane's saxophone takes over the bass ostinato and repeats it, for a total of thirty-six successive statements. I call this series of statements the "ostinato chain." Figure 2 charts the beginning pitches of the statements; they cover the entire chromatic pitch range from C3 to E♭4 (saving E♭3 for the transition to the second movement). They begin on F3 (F is the movement's centric pitch class) and conclude, after rising through a scale D3-E3-F♯3-G3-A♭3 (F♯ completes the pitch-class aggregate), again on F3 (stated eight times).[14]

At this point Coltrane reveals the origin of the ostinato; he chants "a love supreme" on the F3 ostinato motive sixteen times, then moves down to E♭3 (four times) to transition to the second movement.[15] In the movement, then, the ostinato travels a journey of revelation: it opens as a bass motive, pervades as bassline and ground for improvisation throughout, intensifies its presence in the ostinato chain, and finally takes its essential form as the mantra "a love supreme" at the end of the movement.

13 From excerpt of world premiere performance (2017) published online by Rosas.

14 Porter provides a transcription. He also documents Coltrane's earlier interest in using Schoenberg's twelve-tone method (*John Coltrane: His Life and Music*, 243, 231).

15 In Coltrane's words: "I had one part that I was singing on [...]—well not singing, chanting [...]." *Coltrane on Coltrane*, 249. The first "a love supreme" is very faint.

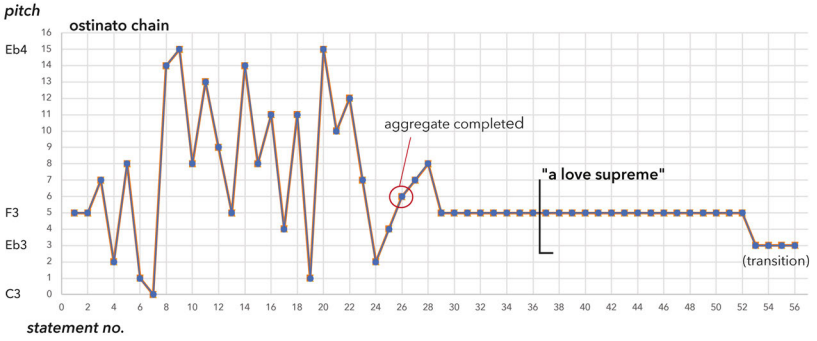

Figure 2: "*Acknowledgement*": *ostinato chain and chant. © Daphne Leong; Click to listen (4:54–6:42): https://youtu.be/vMCHDC2Lurk?feature=shared&t=294*

The dance follows a similar journey. A dance phrase (~~video 2~~), corresponding to the twenty chanted statements of "a love supreme," serves as the source material for the entire movement.[16] Sanchis describes the phrase as developing aspects of the bass ostinato and the opening dance cell. Like the ostinato and the cell, the phrase is repetitive without literal repetition. It carves its way by moving forward, reversing direction, and then reinitiating forward movement. It circles in space, twirling and turning. At times it compresses downward and then expands upward. The hands form a focus throughout, delineating space, rhythm, and dynamics.[17]

Creating such a phrase, says Sanchis, is "an excruciatingly slow process," "almost like a sculptor, but in motion."[18] The phrase must be well-defined so that the improvisation can be strong:

> The fact that *A Love Supreme* appears to be improvised is not because the written material [the dance phrase] looks open and improvised. In fact, it's the other way around: the set material is so precise, as precise as possible, that it forces the improviser to then be equally precise. One could say that the phrase relates to the improvised transformations like the theme of a

16 It functions as what Jeff Pressing calls a "referent." Pressing, "Cognitive Processes in Improvisation," in *Cognitive Processes in the Perception of Art*, ed. W. Ray Crozier and Anthony J. Chapman (Amsterdam: Elsevier Science, 1984), 346.

17 Sanchis (2020 video interview) explained the term "dynamics" to me: "how you approach a shape, pass through it, and let it go." It involves "continuity and momentum, play with balance, the motion of the body in space."

18 Salva Sanchis and Anne Teresa De Keersmaeker, "An Improvisation with Gravity," interview by Wannes Gyselinck, April 2017, in Sanchis, De Keersmaeker, and Rosas, *A Love Supreme* (Brussels: Rosas, 2019), 7.

> fugue relates to its development. One can't just deploy any theme when drafting a fugue. There are certain qualities both in music and in movement that can make such a development more interesting for the performers and for the audience because it offers direction. I want to improvise in such a way that you believe that everything that I do is all I could have done. And that I did exactly what I intended. I don't want you to see that I am *trying*, that I am looking for what exactly to do at that moment. I want my improvisation to look as clear and precise—as "determined," if you will—as possible.[19]

Figure 3: *Basic dance phrase: cell 15 (from left to right: Bilal El Had, Jason Respilieux, Thomas Vantuycom, José Paulo dos Santos). Photograph by Anne Van Aerschot. © 2019 by Rosas*

The phrase underpins the movement in a clear-cut way. ~~Video 3~~ shows the source version of the phrase (that setting the chanting of "a love supreme") again. I number the cells of the dance phrase from 0 to 23: each cell matches one

19 Sanchis and De Keersmaeker, "An Improvisation with Gravity," 7. It is common to use a dance phrase as the basis for improvisation: Susan Sgorbati provides an exercise in which a dance phrase is to be varied in multiple ways (repeating segments, retrograding; changing dynamics, textures, spatial patterns, etc.); Dana Reitz describes an exercise in which a short movement phrase is to be explored in different pathways; William Forsythe works with "set phrases of material that can be 'operated on' by dancers improvisationally"; to name just a few examples (Melinda Buckwalter, *Composing while Dancing: An Improviser's Companion* [Madison: University of Wisconsin Press, 2010], 18, 23, 28). For a recent example, Sasha Waltz choreographs dance improvisation to Terry Riley's *In C* by creating 53 sets of movement figures, corresponding to Riley's 53 musical fragments. The dance was premiered in 2021 (https://www.nytimes.com/2022/04/26/arts/dance/sasha-waltz-in-c-bam.html, accessed 15 June 2022).

measure and one chanted "a love supreme." Figure 3 shows cell 15. (Cell 24 has a special function, which we shall discuss later.) Since the chanting completes after twenty measures, the final four measures of the dance phrase form a codetta (with gestures that are less marked and more relaxed). I label the series of 24 cells "P," like a musical row.[20]

Jason Respilieux (the bass) has the most straightforward as well as foundational role. Figure 4 shows how P appears in his dancing in the movement. Figure 4g, which sets "a love supreme," is the source phrase. (Dance cell numbers appear below each row.) Figure 4f shows the ostinato chain, set by the retrograde of the basic dance phrase, labeled R. Since the ostinato chain occupies thirty-six measures, the basic dance phrase is expanded internally by two measures, and then augmented with a four-measure transition (shown in dark grey/blue) in which the dancers face the back of the stage, a two-measure turn to face forward (shown in an open box), and four additional measures (labeled 0_{2H}) that preface the basic dance phrase to follow.[21] ~~Video 4~~ shows the passage represented by figure 4f. (The phrase is danced by the "rhythm section," behind Vantuycom. Note that, in the retrograde phrase, the gestures themselves—and not only their order—are reversed.)

As shown in figure 4a, the movement proper begins with the P dance phrase. Its opening is extended: cell 0 repeats for eight measures, shown as 0_{1H} (with one hand) and 0_{2H} (with both hands), followed by two measures using cells from the movement's end (shown in dark grey/blue); cells 1 through 23 then complete the phrase. The phrase can be seen in Respilieux's dancing in video 5 (part of the phrase is off camera).[22]

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20 De Keersmaeker speaks of using a "limited and coherent choreographic vocabulary" for any given piece. "I generally organize in one or more basic phrases" composed of "cells" (which may be quite short or longer). The phrase may be perceived "like an ongoing variation, a variation without a theme"; it may be subjected to transformations such as retrograde, canon, mirror symmetry, fragmentation, repetition, and successive addition, techniques that De Keersmaeker borrows from musical practice, as a means of making limited material "fruitful." "Chorégraphier Bach: incarner une abstraction," lecture, Collège de France, 10 April 2019, 32:40 and 1h:04, translated by Daphne Leong (accessed 2 June 2020, https://www.youtube.com/watch?v=SHxf8d1an9I).

21 The basic dance phrase concludes just as Coltrane completes the pitch-class aggregate with F#. The transitional material comes from the movement's closing gestures. While each dance cell takes up one measure in the ostinato-chain and chanting sections, this is not always true elsewhere.

22 Video 5: "Acknowledgement": opening dance phrase. Click to view (1:19–2:37): https://youtu.be/Dog1egx5OTU?feature=shared&t=79

Figure 4 as a whole shows that Respilieux's dancing in the movement proceeds straightforwardly through alternating P and R rows, except at figures 4d and 4e, where the rows involve only cells 10–23 (at first in R, and then in P). Cell 24 (not shown in figure 4) acts as a flexible hinge between P and R row forms.[23] (Figure 5 shows dos Santos and Respilieux dancing cell 24 behind Vantuycom and El Had.)

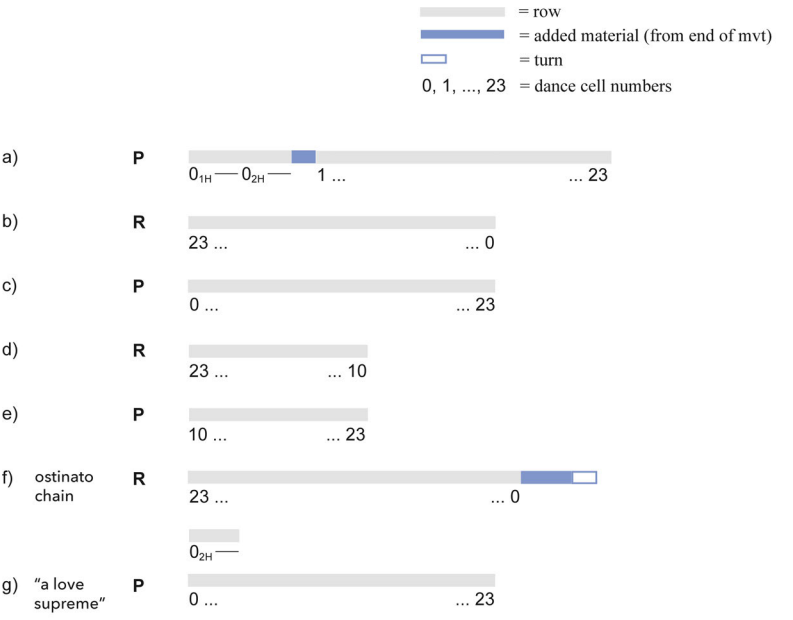

Figure 4: "*Acknowledgement*": *Respilieux's use of the basic dance phrase.*
© *Daphne Leong*

23 Cell 24, danced both forward and backward, takes up the space of a single cell between figures 4a and 4b, and between figures 4c and 4d; at the beginning of the ostinato chain (figure 4f) it combines with cell 23 to form a single, composite cell; and at the end of the source phrase (figure 4g) it forms a cell of its own.

Figure 5: *Dos Santos and Respilieux dancing cell 24 behind Vantuycom and El Had. Photograph by Anne Van Aerschot.* © *2019 by* Rosas

The dancers elaborate upon this choreographic substrate by taking on distinct roles, movement characteristics, and degrees of freedom. All of the dancers draw from the basic dance phrase. Respilieux, as the bass, has the most set role: he must complete the basic phrase by the end of each section, moving through its materials sequentially. Dos Santos, as the drums, also traverses the phrase. He remains linked to the bass, moving ahead or behind him in the sequence of movements, within a constrained range—and this is true spatially as well. Dos Santos can play with attack and acceleration. El Had, the piano, also works slightly behind and ahead of the others, but in a more staccato way, moving from pose to pose—performing the piano's "comping" function.[24] He bridges the space between the drums and bass and the saxophone solo; he dances on the line between the bass and the saxophone. Vantuycom, as the saxophone, is free to improvise, drawing from the phrase as he wishes.[25] The dance phrase, like the bass ostinato, therefore, plays multiple roles, in

24 Short for "accompany" or "complement," "comping" in jazz refers to the rhythmic commentary provided by the piano or guitar. Thanks to Keith Waters for this definition.

25 Sanchis, 2020 video interview with author.

both foreground and background;[26] it provides the material for the dancers' enactment of characteristic relations among jazz rhythm section and soloist.

Vantuycom was instructed to "dance as if you *are* the saxophone." Thus, though his dance parameters are much freer than those of the others, he is paradoxically "much more tied to and constrained by the music. […] Remember that Thomas isn't dancing to *live* improvised music, which would continuously surprise him." Rather, "we treat this improvised recording as a type of score […]. It isn't written down in notes, but, much like a score, it's a kind of residue, in the very literal sense a *record*, the registration of a musical performance."[27]

Vantuycom listened to the recording repeatedly: his improvisatory freedom was fueled by his ability to anticipate exactly what would happen musically and when. In rehearsal all four dancers sang the music as they danced (switching their singing from instrument to instrument).[28]

Dancing to a fixed recording also afforded a clear choreographic plan. Figure 6 shows the entry of the instruments and their associated dancers one by one at the beginning of the movement (figure 6a) and their exits in reverse order at the end (figure 6b). Horizontal lines indicate unison dancing. As they enter, the rhythm section dances in unison—until the entrance of the saxophone. Thus, in the first P row, cell 0 through the downbeat of cell 7 (the saxophone entry) are danced in unison. Thereafter, dancers undertake differentiated roles, as described earlier. (Respilieux, as the bass, continues with the P row gestures.) Video 5 shows this opening and the move from unison to differentiated dancing.[29]

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26 De Keersmaeker, asked about the improvisation tools available to the dancers in the piece, speaks about "basic phrases linked to musical themes, spatial loops, short cells that correspond with the bass lines and are therefore repetitive yet can be arranged freely on a spatial level" (De Keersmaeker and Sanchis, "Rosas Dances Coltrane: Interview with Anne Teresa De Keersmaeker and Salva Sanchis," by Michaël Bellon, FringeArts, 3 September2017, accessed 18 August 2022, https://fringearts.com/2017/09/03/rosas-dances-coltrane-interview-anne-teresa-de-keersmaeker-salva-sanchis/).

27 Sanchis in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 6–7. Sanchis himself improvises in tandem with musicians; see, for example, his performances with pianist Kris Defoort (e.g., *Action in Strombek*, 2010, accessed 5 June 2022, https://www.youtube.com/watch?v=m8eRumS0Yx4).

28 Sanchis, 2020 video interview with author.

29 Video 5: "Acknowledgement": opening dance phrase. Click to view (1:19–2:37): https://youtu.be/Dog1egx5OTU?feature=shared&t=79

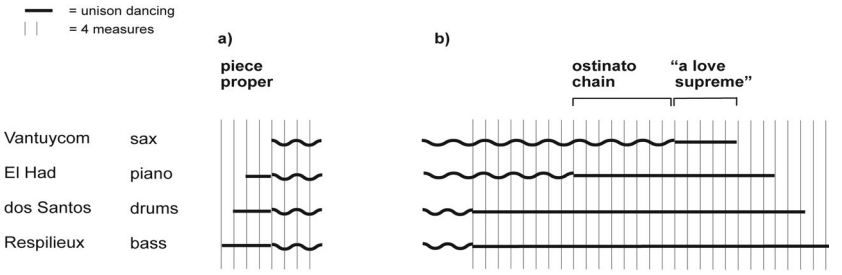

Figure 6: "*Acknowledgement*": *unison dancing (beginning and end of movement).* © *Daphne Leong*

Towards the end of the movement, unison dancing reappears additively: first, as shown in figure 6b, between Respilieux and dos Santos (bass and drums), then adding El Had (completing the rhythm section) and finally Vantuycom (the entire quartet). The rhythm section unison highlights the ostinato chain, and the quartet unison punctuates the arrival of the chanted "love supreme."[30] The complete basic dance phrase (in its source, P, form) comes to the fore only here. Thus unison dancing frames the movement and creates a dramatic sense of emergence for the chanting of "a love supreme."

Aspects of the composition of this opening movement are reminiscent of principles found in other De Keersmaeker choreographies. Video 6 shows the gesture of the hands in "Come Out,"[31] similar to *Love Supreme*'s opening gesture in its circularity and fluid motion. The temporal and qualitative variations on *Love Supreme*'s repeated dance cells, if different in quality from those of De Keersmaeker's Reich choreographies, nevertheless remind one of them in their constructive principle and in the choreographer's use of pulling apart and

30 The stretching out of the preceding R phrase, figure 4f, further emphasizes the moment.

31 Video 6: "Come Out" – hands. Click to view (1:31–1:37): https://youtu.be/HpPmH4Wc5AM?feature=shared&t=91, from *Fase / Trailer* (2012). The choreography to Steve Reich's "Come Out" was created by De Keersmaeker with Jennifer Everhard; the dancers are De Keersmaeker and Tale Dolven (De Keersmaeker, "'The Greatest Step of Them All': Anne Teresa De Keersmaeker on Passing *Fase* on to the Next Generation," interview for Institute of Contemporary Art, Boston, 13 August 2019, accessed 3 June 2022, https://www.icaboston.org/articles/greatest-step-them-all-anne-teresa-de-keersmaeker-passing-fase-next-generation).

coming together.[32] One finds here both parallelism and counterpoint, sameness and difference—and space.

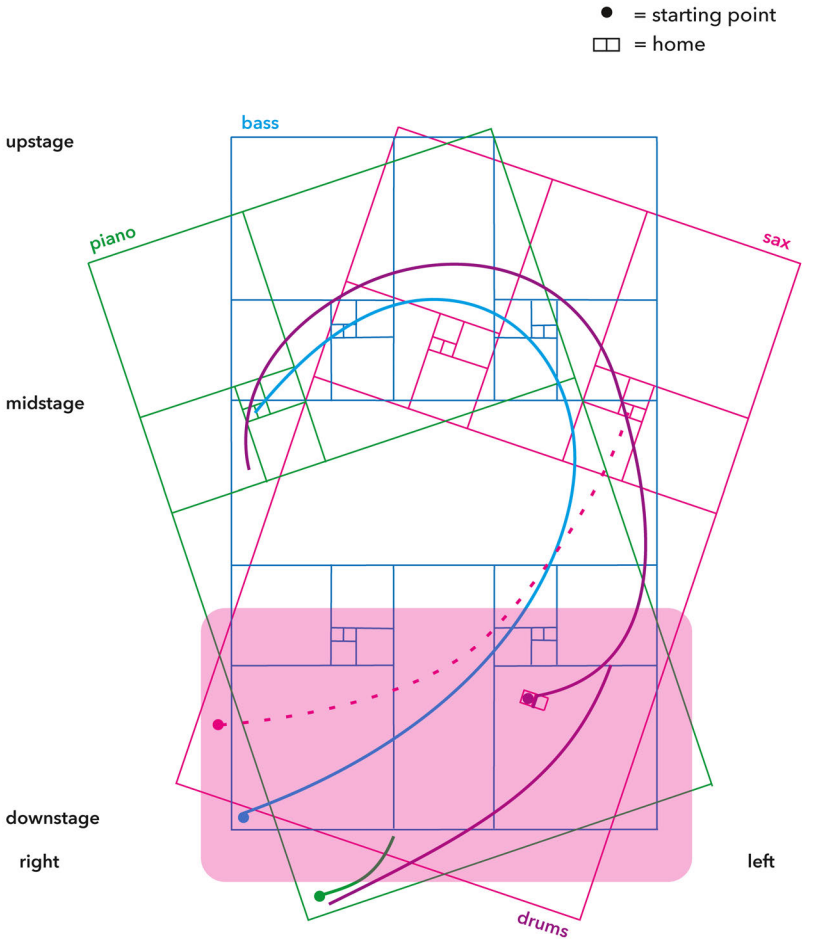

Figure 7a: "*Acknowledgement*": *floor map.*
Figure 4a and b: P row (extended) and R row. © *Daphne Leong*

32 This principle is discussed by De Keersmaeker at 1:53 in "Dance Can Embody Abstract Ideas," *Tate Shots*, 2012, accessed 4 February 2022, https://www.youtube.com/watch?v=DojShMLN9Zk2012.

In literal space, the *Love Supreme* dancers spiral through three rectangles (representing the Fibonacci series) taped on the dance floor. The paths, again, are the same but offset, staggered and inverted in time—pulling space open. Figure 7 shows the rectangles (color-coded online).[33] Each dancer uses one rectangle: as labeled on the figure, the bass uses the middle, the piano the left-slanted, the saxophone the right-slanted, and the drums (labeled on the bottom) the right-slanted, but with the small squares flipped to the lower half. The smallest squares in the rectangles are "home."

The row structure from figure 4 is traced in the spirals of figure 7. Figures 7a, 7b, and 7c show the spirals for the three sections of figure 4 respectively: the first two row forms (figure 4a and b), the middle three (figure 4c, d, and e), and the final two (figure 4f and g). Each row form is represented by movement one way (upstage or downstage) on a spiral; except for the final P (on "a love supreme"), P rows move upstage and R rows downstage. (The curves on the figure are approximate, based on the video of the full performance; Sanchis described them to me as spirals moving through the Fibonacci squares, from the 1–1 "home" through the squares representing 2, 3, 5, 8, 13, 21, and 34—or in reverse.[34])

In the opening P and R rows (figure 7a), the bass spirals from his rectangle corner at downstage right to his "home" and through to the "home" of the left-slanted rectangle, then back in retrograde. The drums accompany the bass's motion, beginning at "home" on his rectangle.[35] The saxophone begins at his downstage right rectangle corner, and dances much of this portion of the movement freely in the front third of the stage, represented by the shaded area on the figure. The piano begins at the downstage right corner of his rectangle; after the saxophone enters, the piano dances on the line between the saxophone and the others.[36] Figure 8 shows bass and drums upstage (at cell 15 in their spirals), saxophone downstage, and piano on the line between bass/drums and saxophone. By the end of the section, the bass and drums have returned downstage, and

33 The basic grid is shown in Sanchis, De Keersmaeker, and Rosas, A *Love Supreme* (Brussels: Rosas, 2019)—a representation that only approximates the actual grid taped on the dance floor.

34 Sanchis, 2020 video interview.

35 Corresponding to the stage markings, only the smallest squares of this flipped rectangle are shown. (The rectangle's outline is the same as that of the right-slanted rectangle.)

36 One has the impression, upon the saxophone entrance, that the dancers' locations relative to one another parallel spatial locations on the *Love Supreme* stereo masters: saxophone at "hard left," drums at "hard right," bass at "right-center," and piano at center (Kahn, A *Love Supreme*, 95).

the saxophone reaches his "home," midstage left. (The dotted line on figure 7a shows the saxophone's eventual trajectory.)

Figure 8: "*Acknowledgement*": *Stage locations. Bass and drums upstage (cell* 15); *sax downstage; piano on line between. Photograph by Anne Van Aerschot. © 2019 by Rosas.*

The following group of three row forms (figure 7b) begins (P) with bass and drums spiraling from downstage to upstage, as before, and the saxophone moving downstage from his "home." For the partial row forms that follow, bass and drums begin their spirals back towards downstage ($R_{23–10}$), but do not complete them, remaining at the back half of the stage and returning ($P_{10–23}$) to their "homes." Thus, for this middle portion of the movement, the saxophone solo remains at the forefront and the rhythm section in the background.

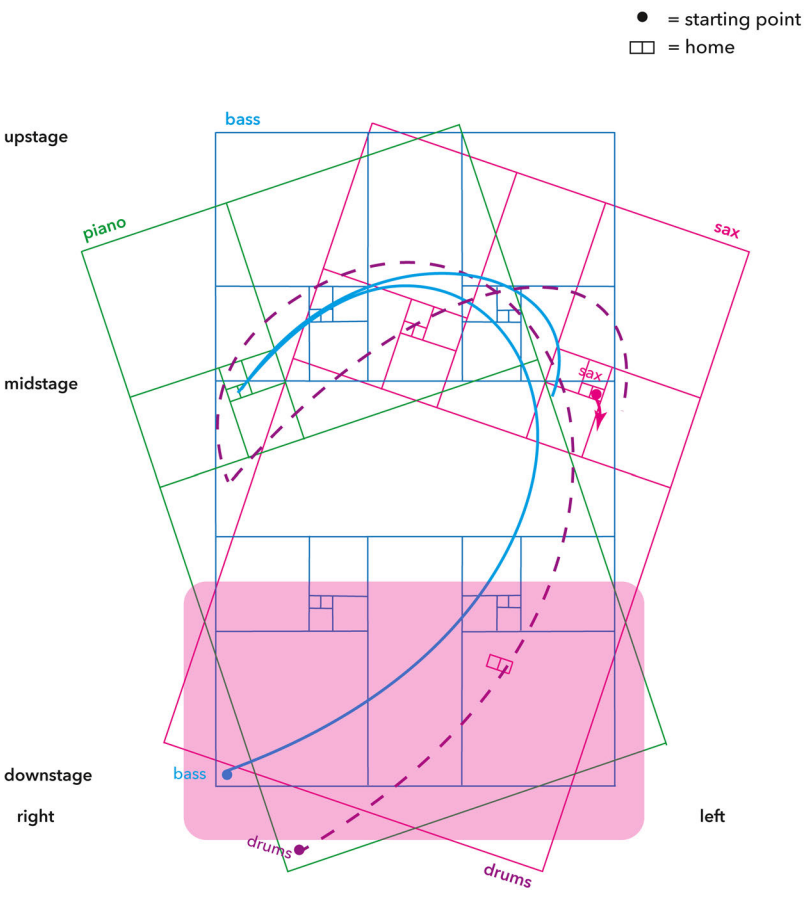

Figure 7b: *"Acknowledgement": floor map. Figure 4c, d, e: P and partial R and P rows.* © *Daphne Leong*

The final two row forms (figure 7c) correspond to the ostinato chain and the chanting of "a love supreme," respectively. The rhythm section dances in unison. For the R row form, the three instruments begin upstage right, on the outer endpoint of their spirals, and dance back a short distance to their "homes" (indicated by diamonds on the figure). During the P row form, the three instruments return to the downstage points from which they began "Acknowledgement," while the saxophone spirals upstage, all four dancers now dancing in unison. The saxophone is soon to exit: at dance cell 10 the saxophone and the rhythm

section cross over, the saxophone now dancing behind the rhythm section; after reaching the middle rectangle "home" (dance cell 20), he exits.

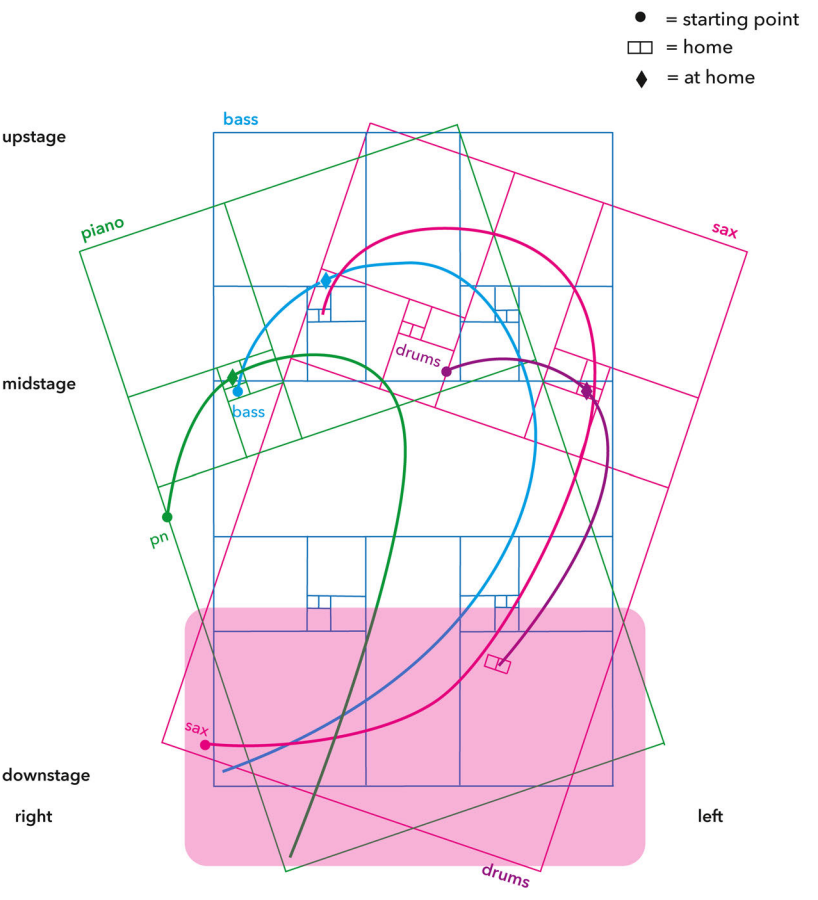

Figure 7c: "Acknowledgement": *floor map. Figure 4f and g: extended R row (ostinato chain), and P row (chanting "a love supreme").* © *Daphne Leong*

The basic spatial trajectories in "Acknowledgement" are thus very simple: bass, drums, and saxophone spiral from downstage right to upstage right, and in reverse, with the rhythm section doing so at twice the speed of the saxophone, and in the opposite direction, and with all instruments skewed left or right from

one another. The same trajectory is thus paralleled but counterpointed through differences in time, space, and degree of freedom.

So, in "Acknowledgement," the dance simplifies musical relationships and processes, portraying musical roles among soloist and rhythm section through physical space and freedom and quality of movement. It articulates the musical progression towards Coltrane's ostinato chain—and ultimately his chanting of "a love supreme"—through the presentation of the dance phrase at different levels of literalness. The formal process—bass, drums, and piano entering one at a time, in unison; splintering into different levels of improvisation on the basic phrase when the saxophone enters; then eventually building back towards unison dancing, one instrument at a time, culminating (at the climactic chanting) in all four dancers in the full P dance phrase—sets out a clear formal structure, foreground-background relations, and unified though qualitatively differentiated movements. It thus, in Sanchis's words, "frames the music and points at what is happening already"; rather than adding complexity it aims to make the music more readable.[37]

IV. "Psalm"

Unlike "Acknowledgement," in which prepared and improvised processes loosely parallel one another in dance and music, in "Psalm" carefully choreographed dance interprets open, improvised music. The contrasting approaches in "Psalm" paradoxically allow the choreography to reflect, on a deep level, much of the spirit and structure of the music.

Preaching the text

The music of "Psalm" is freely improvised without set meter, harmonic progression, or fixed form, in the modal framework of C melodic minor. As Lewis Porter has shown, Coltrane vocalizes, on his saxophone, the words of the psalm that he has published in the liner notes. The playing is almost syllable for syllable.[38]

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37 Sanchis, 2020 video interview with author.

38 Porter, "Coltrane's 'A Love Supreme'." Porter (*John Coltrane*, 247), lists a few adjustments to the text, for which I supply the following corrections. Although Porter notes that the phrase "I have seen God" is left out, it is clearly present (see music example 6). For "Thoughts—deeds—vibrations, etc. They all go back to God," "They" is indeed present, in a subtly repeated F4. At times Porter's

Porter describes its pitch structure and relates it to the tradition of black American intonational preaching:

> Each section of several lines has an arched shape—an ascending phrase, a recitation on one tone, and descending phrase. The recitation tones ascend as the piece builds in intensity. The roots of this solo seem to grow out of formulaic procedures used by preachers in black churches. […] Jeff Titon, in his paper "Tonal System in the Chanted Oral Sermons of the Reverend C.L. Franklin," describes the procedure of black American preachers for intonational chant. The chant is divided into sections according to pitch apexes, for which we may use the more familiar term *recitation tones*.[39]

Porter's description is largely accurate, but pitch apexes need not function as recitation tones (though they often do). Figure 9 displays my transcription, in pitch and time, of Coltrane's line, taken from the iconic 1964 recording.[40] Most of the highest pitch apexes involve recitation, but apexes 3 and 4 (indicated in diamonds) do not. As Porter has shown, "reciting," particularly on scale degree 5 (G4 and G5) and to a lesser extent, scale degree 1 (C5), plays a prominent role. Coltrane often begins a section by rising to an apex on E♭4, followed by an apex on G4.[41] The line ascends to progressively higher points—C5, E♭5, and ultimately G5—accompanied by increasingly lower descents (dropping the initial "floor" of C4 to G3 and even F3). The drama is intensified through ever more extended and complex climbs and falls.

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assumption of syllabic playing results in awkward text declamation; occasional two-syllable melismas produce a more natural word-music alignment.

39 Porter, "Coltrane's 'A Love Supreme,'" 613–4. Titon's (unpublished) paper was presented at the annual meeting of the Society for Ethnomusicology, Wesleyan University, 17 October 1975. I supplement Porter's analysis with information from a later article (Jeff Titon, "Reverend C.L. Franklin: Black American Preacher-Poet," in *Folklife Annual* 1987: 86–105). C.L. Franklin, a leading practitioner of black American chanted preaching, was widely influential through his recorded sermons and preaching tours (Titon, "Reverend C.L. Franklin," 89).

40 My thanks to Logan Banister for technical assistance. We used Sonic Visualiser to identify note onsets manually, adjusting by ear. The transcription shows note onsets only, without regard for rests or the sustained duration of notes. It does not display pitch nuances such as bends or slides.

41 This matches the preaching pattern described by Titon ("Reverend C.L. Franklin," 104): "At the beginning, Franklin establishes a main phrase pitch apex a minor or neutral third above the tonic; very soon after, he moves the pitch apex up to a perfect fifth above the tonic."

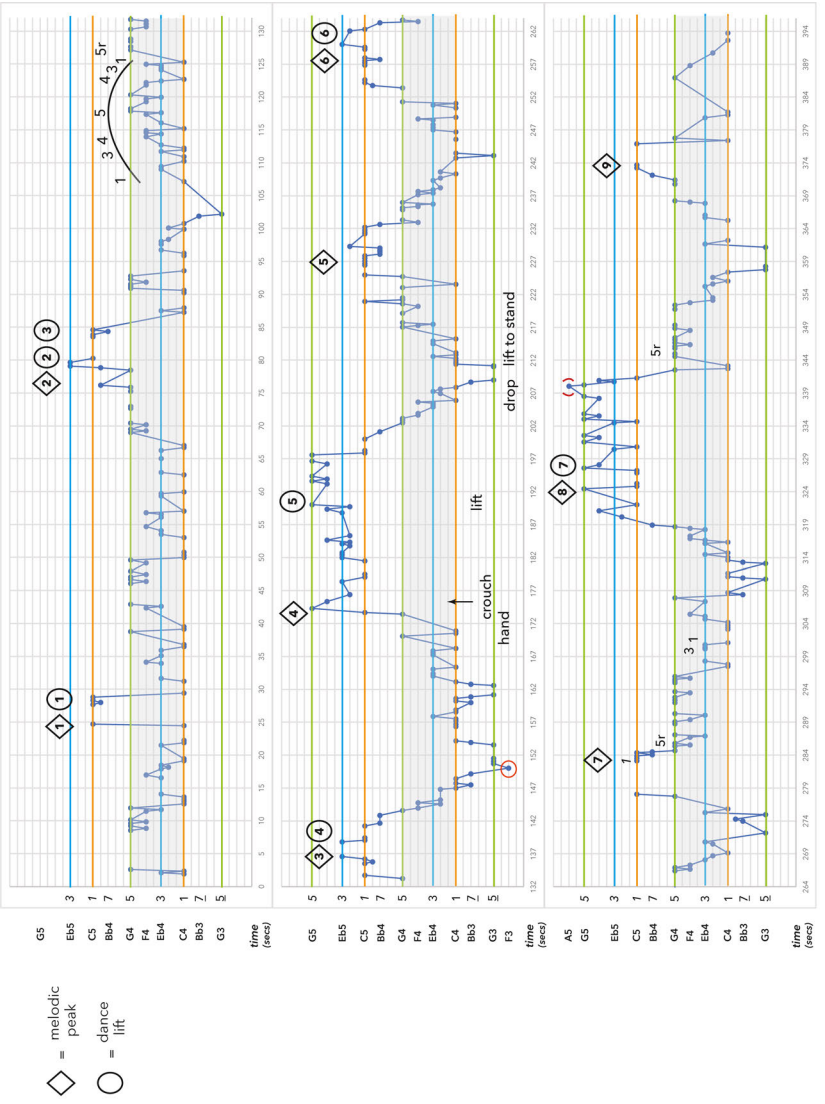


Figure 9: *"Psalm": pitch-time transcription, saxophone line. © Daphne Leong*

The general phrase types of Reverend Franklin's preaching, described by Titon, also apply to Coltrane's line: "By its music, Franklin's chant falls into three types of [...] musical phrases: auxiliary, main, and secondary phrases." An auxiliary phrase is "brief and formulaic (e.g. 'O Lord'), tends to gain Franklin time, and establishes the tonic pitch by ending strongly on the tonic." A main phrase

"starts at or quickly rises to the pitch apex […] and then falls toward the tonic, usually by thirds (e.g., 5–3–3–1)." A secondary phrase "follows a main phrase and has a pitch apex below the preceding main phrase's pitch apex, usually a minor third above the tonic. Secondary phrases usually end on the tonic."[42] (These phrase types will be referenced below.)

In this tradition of black American preaching, intonational chant provides the emotional climax—"the sweet spot"—at the end of the sermon. In *A Love Supreme*, "Psalm" is the final movement, the intense close to a four-movement suite. As with intonational chant, it arises out of what precedes: it was recorded as a single track together with the third movement. As a "psalm," a song sung to musical accompaniment and a deeply personal yet communal expression of faith, Coltrane's vocalization resonates with the black American practice of intoning not only sermons, but also extemporaneous prayers.[43]

Pitch contour

I begin by tracing the features of Coltrane's melodic contours, relating them to their source text and to the preaching phrase types. The detailed description of phrase shapes and timbres prepares the subsequent discussion, which shows how Sanchis and de Keersmaeker's choreography dramatizes Coltrane's pitch peaks and floors.

Coltrane's line, in C melodic minor, uses both B♭ and B♮. D appears rarely, and A♭/A never (with the possible exception of an A5 hinted at near the end). Scale degrees 1, 3, and 5 predominate; the core ambitus (shown in grey on figure 9) orbits {C4, E♭4, G4}. In the following, musical examples without rhythmic values transcribe Coltrane's note onsets proportionally.[44] Reference will be made to the pitch-time graph of figure 9, with locations identified in seconds (").

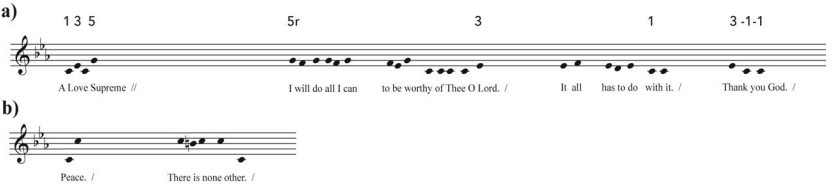
The movement opens by introducing its fundamental features. As shown in music example 2a, Coltrane begins with the psalm's title, "A Love Supreme," arpeggiating upwards through the core pitches. Though set apart from the poem's body, the title, together with the opening lines ("I will do all I can to be worthy of Thee O Lord. It all has to do with it. Thank you God."), form the first

42 Ibid.

43 See ibid. (86, 88, 94) on these features of intonational chant. Kahn (*A Love Supreme*, 94–5) documents Coltrane's plan to record the third and fourth movements as a unit, and references engineer Van Gelder's belief that the suite was to be in three parts. For the biblical term "psalm," from the Greek *psalmos* and the Hebrew *mizmor*, see Gerald Wilson, *The NIV Application Commentary: Psalms—Volume I* (Grand Rapids, MI: Zondervan, 2002), 21.

44 My thanks to David Kirtley for assistance with engraving these music examples.

musical phrase. The pitch shape is classic: ascent through scale degrees 1-3-5 to recitation on 5, followed by descent to 1; "Thank you God" (Titon's "auxiliary phrase") is played on the formula 3-1-1 (later also 5-1-1 and other variants).



Music example 2: "*Psalm*": *Phrase 1 and Peak 1. © Daphne Leong*; *Click to listen* (0:00-0:30): *https://youtu.be/gta2GOqvjVE?list=RDgta2GOqvjVE*

Nine pitch peaks follow (defined here as ascents to C5 or higher), labeled in diamonds on figure 9. The first, as shown in music example 2b, is a simple octave leap C4-C5 on the word "Peace," leaping back down almost immediately on "There is none other."[45] Motion to successive pitch peaks becomes increasingly complex.

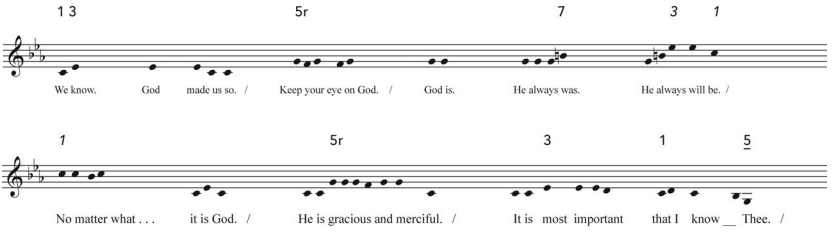
Peak 2 (music example 3) is reached more gradually, arpeggiating through 1-3-5r-7, reaching up a diminished 4th to 3, falling back immediately to 1 (C5). The words are "We know. God made us so. Keep your eye on God. God is. He always was. He always will be" (climactic clause underlined). Although this pitch peak, E♭5, surpasses C5, it is but an embellishment of the basic motion B♮4-C5. Coltrane again almost immediately drops back down the octave to C4, but then expands the descent: from the high 1 he arpeggiates slowly through 5r-3-1 and then, for the first time, drops below C4, to 5.[46] At this nadir, on the phrase "It is most important that I know Thee." (lowest point underlined), Coltrane pauses for almost five seconds.

This drop sets in motion two extended and complex ascent-descents. As shown on figure 9 (just after 105 seconds), the ascent to Peak 3 begins with a slow arc 1-3-4-5-4-3-1. The melodic incantation is inspired by the fragmented nature of the words: "Words, sounds, speech, men, memory, thoughts, fears and emotions—time—all related … all made from one … all made in one. Blessed be His name." The arc builds to recitation on 5 ("Thought waves—heat waves—all

45 The octave leap on "Peace" forms the movement's first melisma; the rare melismas in "Psalm" are never more than two notes to a syllable.

46 The C4-B♭3-G3 motion, descending, or (in reverse) ascending, will become characteristic.

vibrations—"), which leaps up to C5 and then E♭5 ("all paths lead to God"). From this peak, Coltrane wends his way down through a series of ellipses "His way … it is so lovely … it is so gracious" arpeggiating a Gmin7 chord, bringing new emphasis to the notes B♭, D, and especially F—the latter providing the nadir (F3, circled) of Coltrane's entire soliloquy. This sweeping descent through almost two octaves prepares the dramatic ascent to follow.



Music example 3: "*Psalm*": *Peak 2. © Daphne Leong*;
Click to listen (1:01–1:44): *https://youtu.be/gta2GOqvjVE?list=RDgta2GOqvjVE&t=61*

The ascent to Peak 4 (music example 4) begins with "Thank you God," not on 3-1-1 or 5-1-1 as usual, but rising through 5-7-1. This ascent is repeated to fuel a slow rise through 5-1-3-5 ("and they all go back to God … everything does. Thank you God.") "Have no fear" then inspires two bold leaps upwards (5-1-5), attaining G5, the movement's apex, and falling only slightly, to C5, through "believe … Thank you God."

Coltrane sustains this climax, rising again slowly (1-2) through "The universe has many wonders" before accelerating to G5 (3-4-5) on the words "God is all," and reciting, for the first time, on altissimo G5 ("His way … it is so wonderful.") The slow descent to follow traverses every step of the C scale from C5 to G3 (except A/A♭, which does not feature in Coltrane's line in this movement).

One large peak remains, but Coltrane scales back before reaching it. As shown on figure 9, the next two peaks recite on C5 for the first time, Peak 5 touching on D5, and Peak 6 reaching E♭5.

Music example 4: "*Psalm*": *Peak 4. © Daphne Leong*; *Click to listen* (2:33–3:30): *https://youtu.be/gta2GOqvjVE?si=UXbDPVSgV-5f_fWv&t=153*

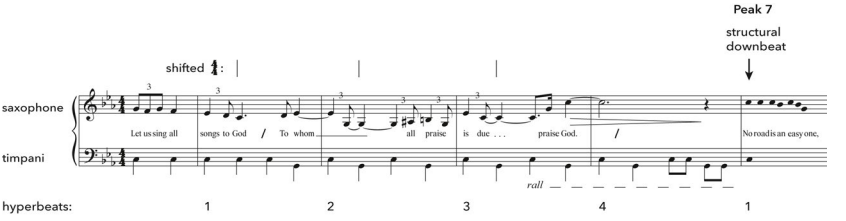
Peak 7 differs from all of the other peaks, and this distinction results, in part, from what happens during the descent from Peak 6. The text ("Let us sing all songs to God To whom all praise is due … praise God.") contains the psalm's only explicit mention of music. For the first and only time in the movement, as shown in music example 5, drummer Elvin Jones establishes a clear duple pulse—he even articulates a straightforward four-bar hypermeter (four bars of 4/4).[47] Inspired, perhaps, by the new rhythmic context, Coltrane colors this phrase richly with pitch bends and slides, and with a singular A♯ leading to B. The durational and pitch emphases of his melodic line suggest a displacement of Jones's meter, by one quarter note later (shown above the music example). The melodic line comes to rest on C4; the final "praise God" with its apparent ascent (G4-C5) is but an "auxiliary phrase"—the only such phrase to rise to C5.[48]

Thus it is the C5 that follows ("No road") that forms the true peak. Articulated with renewed vigor by Coltrane, it forms the arrival point of Jones's dramatic *rallentando*, resolving the displacement dissonance between Coltrane's melodic line and Jones's meter. This peak (figure 9, Peak 7, 283") inaugurates a long descent (a stretched-out traversal of 1-5r-3-1) on "No road

47 The first two pulses, on "let us sing," are tentative; Jones settles into a steady pulse at "songs to God." One other clear duple measure occurs: Jones plays a single bar of 4/4 (alternating tonic-dominant timpani strokes) to conclude the movement, after the final melodic flourish on saxophones (overdubbed by Coltrane).

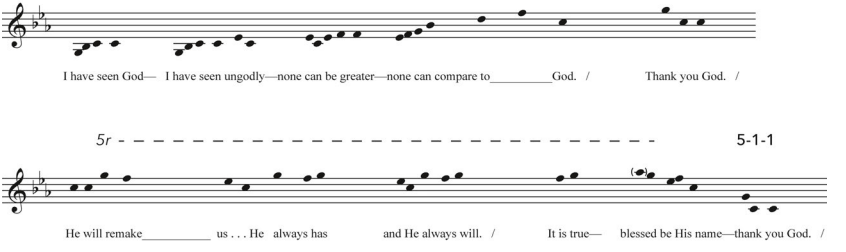
48 Coltrane's fading sustain of the upper note makes clear its diminishing (rather than climactic) function.

is an easy one, but they all go back to God. With all we share God. It is all with God. It is all with Thee. Obey the Lord. Blessed is He." In differing categorically from the movement's other peaks, Peak 7 and its approach prepare the way for the final climax.



Music example 5: "*Psalm*": *Drop before Peak 7. © Daphne Leong*; *Click to listen* (4:24-4:45): *https://youtu.be/gta2GOqvjVE?list=RDgta2GOqvjVE&t=264*

The ascent to Peak 8 (music example 6), as with the climactic Peak 4, requires two starts on G3-Bb3-C4 (here matching the parallel clauses "I have seen God–I have seen ungodly"). It rises through E♭4 ("none can be greater") and then a Gmin7 arpeggiation ("none can compare to God") to conclude on altissimo "Thank you God" (G5-C5-C5). At this peak of intensity, Coltrane, tone hoarse, draws out a recitation on G5, including not only the lower neighbor F5 as usual, but also quick arpeggiations to E♭5-C5 on the climactic words "He will remake us … He always has and He always will. It is true–" An indistinct note (A5?) ends the recitation and cascades quickly down to G4-C4-C4 ("Thank you God").

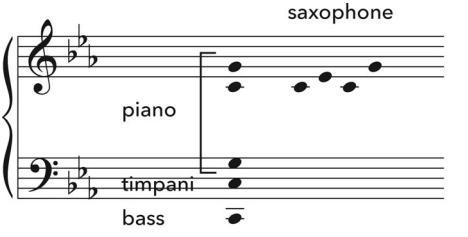


Music example 6: "*Psalm*": *Peak 8. © Daphne Leong*; *Click to listen* (5:10-5:44): *https://youtu.be/gta2GOqvjVE?list=RDgta2GOqvjVE&t=310*

As shown on figure 9 (344"), a lengthy recitation on G4 (the basic recitation tone) begins to close out the movement. There remains but one final, brief peak on Coltrane's laud "ELATION–ELEGANCE–EXALTATION": an arpeggiation from C4 to C5 and back (Peak 9). The movement closes with a final "Amen."

"Carrying the other"

The choreography adds literal and symbolic dimensions to Coltrane's rising and falling line. It also foregrounds the relationship of the musicians–and the dancers–to one another. From the opening sound, it is clear that the fourth movement will differ from the preceding ones. Elvin Jones chooses timpani (supplemented by Chinese cymbal) over drumset, and the resulting resonance creates a sonic space in which Jones's, Garrison's, and Tyner's sounds envelop and amplify Coltrane's leading melodic line.[49] The communal nature of the sound space is illustrated by the four musicians' opening pitches (music example 7), which articulate the lowest partials (overtones) of Garrison's plucked C2 almost exactly (Coltrane plays E♭4 rather than E♮4).



Music example 7: *Sonic unity in "Psalm": opening pitches. © Daphne Leong*

The dancers, likewise, no longer represent individual musicians, but the sonic whole.

49 The ebb and flow of the three supporting musicians calls to mind that of the congregational response to C.L. Franklin's preaching. Listen, for example, to Franklin's 1978 sermon "A Mother at the Cross"; Franklin begins the chanted part of the sermon at 20:06 (accessed 10 June 2022, https://www.youtube.com/watch?v=DlyeBU-krbA). See Titon ("Reverend C.L. Franklin," 102–5) for a transcription.

> It is certainly the first time the dancers touch one another. At this point they take leave of their personal struggles, and of their dance with gravity, and support each other. They help keep each other from falling. What's more, they take turns lifting each other in an upward spiral reflecting the geometric pattern on the ground. The hierarchy between them is entirely suspended; each is freed from gravity, in a sense. This is about taking care of each other by carrying the others with a high degree of physical empathy.[50]

This choreography to "Psalm" seems to reference contact improvisation, the dance movement perhaps best known for experimenting with falling, with gravity, and with shared weight.[51] Even the slow-motion aspects of some of the ensemble dancing resonates with the slow motion used "to elucidate the act of falling" in film chronicling contact improvisation.[52] Here, the slow motion reflects the strain and fatigue expressed by Coltrane's tone, as well as "the dancers' physical state at this point in the performance. They are moving slowly after a long and very exhausting explosion of energy that makes them thoroughly human […]." The physical fatigue lends the scene weight; the dancers "don't need to pretend."[53]

Just as Coltrane's melodic utterances call to mind black American preaching, so too do the dancers evoke sculptural images (figure 10). "You recognize iconic images remembered from art history, without necessarily being able to name them. To that end they are not too specific or concrete, nor too abstract. Ultimately they are dancers lifting each other up."[54] The musical and danced references are both transcendent and specific, archetypal and in the here and now.

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50 De Keersmaeker in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 10.

51 See the film *Fall after Newton: Contact Improvisation 1972–1983* (1987), also Danielle Goldman, "Steve Paxton and Trisha Brown: Falling in the Dynamite of the Tenth of a Second," in *Dance Research: The Journal of the Society for Dance Research* 22/1 (2004): 45–56.

52 Goldman, "Paxton and Brown," 50.

53 Sanchis in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 10. Coltrane's rough tone may also be expressive, "the kind of buzzing raspiness at moments of intensity that signals feeling in black singing," as described by Titon in relation to Franklin's singing and preaching ("Reverend C.L. Franklin," 92).

54 De Keersmaeker in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 10.

Figure 10: "*Psalm*": *Sculptural image (Lift 1). © 2019 by Rosas*

Coltrane's verbal "psalm," too, is at once concrete and unnamed. The liner notes are cryptic: in a letter to the listener, Coltrane writes, "The fourth and last part is a musical narration of the theme, 'A Love Supreme' which is written in the context; it is entitled "PSALM." The reference, of course, is to the long poem, also printed in the liner notes.[55] But even Coltrane's fellow quartet members seemed unaware of the text's role: in speaking with Ashley Kahn about the *Love Supreme* recording session, pianist McCoy Tyner and drummer Elvin Jones focused on how little information Coltrane typically gave them. A text was not mentioned.[56] To Lewis Porter, "Elvin Jones indicated [...] that he was unaware that Coltrane was reciting the poem on his saxophone."[57]

55 Liner notes to *A Love Supreme*, 1964.

56 Kahn, *A Love Supreme*, 92–4.

57 Porter, *John Coltrane*, 247. Porter (332) notes references by Gary Giddins (1974) and Cuthbert Simpkins (1975) to Coltrane playing the words of a poem in the

Coltrane himself, in the live performance at Antibes, France several months later, discarded his syllabic declamation for instrumental virtuosity.[58] Speaking at Antibes about his musicians, Coltrane said, "I never have to tell them anything. […] There is a perfect musical communion between us that doesn't take human values into account. Even in the case of *Love Supreme*, without discussion, I don't go any further than to set the layout of the work." Coltrane then describes the framework of "the last part," "the first part," and "the central part," that is, of III. "Pursuance," I. "Acknowledgement," and II. "Resolution"; he does not mention "Psalm" separately.[59]

Sanchis and De Keersmaeker ultimately read the movement as a testament to human relationship:

> A dancer lifted up horizontally can mean different things: it can mean the person is dead, unconscious, sleeping, ill. In any case, at an abstract level, there is a sense of surrender, vulnerability, and so also trust. A *Love Supreme* suggests a love directed highly, at something that is 'supreme,' but also that the ultimate love is love for one's neighbor. It is a love capable of suspending its own ego by carrying the other, whether literally or through a kind of communal playing like the quartet does, and communicating collectively.[60]

Here De Keersmaeker directly ties the dancers' shared weight-bearing to the quartet's "communal playing."

Further, the music's multi-racial embodiment in Vantuycom, El Had, dos Santos, and Respilieux, in 2017, puts faces to De Keersmaeker's statement: "When you are dancing to music that is so powerful, you inevitably embody an idea of what it means to be human." "During the working process," said Sanchis, "we talked a lot with the dancers about what transcends us. […] There

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last movement; Kahn (*A Love Supreme*, 123–4) mentions this as jazz insider knowledge, quoting Reggie Workman and Branford Marsalis. Doug Pringle's 1965 review noted the text usage early on. But Porter ("Coltrane's 'A Love Supreme'") was the first to document the details of the music-text relation. Gary Giddins, in *The Sax Section*, ed. Dan Morgenstern (exhibition booklet, New York Jazz Museum: 1974); Cuthbert Simpkins, *Coltrane: A Biography* (New York: Herndon House, 1975), 180; Doug Pringle, review reproduced in Chris DeVito, Yasuhiro Fujioka, Wolf Schmaler, and David Wild, *The Coltrane Reference*, ed. Lewis Porter (New York: Routledge, 2013), 319–20.

58 Festival Mondial du Jazz Antibes, Juan-les-Pins, France, 26 July 1965. A recording of the entire suite is included in the Verve Music Deluxe edition compilation cited in the discography to this chapter.

59 *Coltrane on Coltrane*, 246.

60 De Keersmaeker in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 11.

is something out there that we humans plug into, independently, all around the world. […] It's about an experience of the world that predates language. That's why I often find musicians tremendously spiritual, probably because they can communicate beyond the regular language system, and can express experiences that are beyond the linguistic."[61]

Although it is beyond the scope of this chapter, race plays a complex role in this work. In the identities of the classic quartet (Coltrane, Tyner, Garrison, and Jones) as black jazz musicians, in the final movement's indebtedness to the black American intonational preaching tradition, and ultimately in the album's significance as an archetypal symbol, on the one hand, of African American experience and, on the other, of universal values,[62] *A Love Supreme* stands for much more than its acoustic trace. Pair this with the Spanish and Belgian background of the two choreographers, the Belgian base of De Keersmaeker's dance company *Rosas*, and the international identities of the four dancers (Dutch, Moroccan, French, and Brazilian)—and the danced *Love Supreme* is truly transnational, yet deeply grounded in both African American and European traditions.

Dance contour

The synthesis of sound and dance also unites the ineffable and the concrete. The metaphor of pitch rise and fall plays into the dancers' bodily lifts, and into their play with and against gravity.

> One can't dance in such a way that one leaves the ground we stand on. Dancers are bound to the laws of physics […]. This renders dance abstract and concrete at the same time: bodies moving in time and space, with gravity as their grounding, counterforce, and restriction.[63]

I use the word "contour" here in parallel to pitch contour—that is, to refer to the vertical dimension of the dance. Specifically, I will discuss lifts at or above the level of the shoulders, and drops to the floor. All such lifts are labeled in ovals on figure 9. Each of pitch peaks 1–4 (rising through C5, E♭5, and G5) is choreographed with an ensemble lift at or above the level of the shoulders. After attaining the highest melodic apex at Peak 4 (G5), each subsequent peak higher than C5, that is, Peaks 6 and 8 (E♭5 and G5 respectively), also receive such an

61 Sanchis in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 9, 11.
62 Tony Whyton, *Beyond* A Love Supreme: *John Coltrane and the Legacy of an Album* (New York: Oxford University Press, 2013), 112–9.
63 Sanchis in Sanchis and De Keersmaeker, "An Improvisation with Gravity," 11.

ensemble lift.[64] Each lift differs in motion quality and character, and together with the line unfolding in music and dance, narrates emotion and story.[65]

In the chart below, I list the primary lifts and drops. The descriptions on the right should be considered part of the main text of this chapter. The reader is invited to read each description in tandem with the corresponding musical example, and then to watch the accompanying ~~video~~. (The video examples in the chart have been replaced with the images listed in the leftmost column; audio links are found in the second column.)

64 Peak 5 is higher than C5, but merely touches on D5.

65 "Story" is one of Mary Overlie's "Six Viewpoints"—space, shape, time, movement, emotion, and story—perspectives used in theater and dance to create and interpret performance (Buckwalter, *Composing while Dancing*, 25).

Image	Example	Peak	Lifts and Drops
Fig. 10	M.Ex. 2b Audio: https://youtu.be/gta2GOqvjVE?t=24	Peak 1	Lift 1 (Vantuycom) On this first, straightforward melodic leap up the octave and back down, C4-C5-C4, dos Santos lifts Vantuycom in a circular turn, putting him back down as the pitch drops back down the octave.
	M.Ex. 3 ("He always was.")	Peak 2	Lifts 2 and 3 (El Had, Respilieux) El Had and JRespilieux are lifted in turn, El Had corresponding to the Eb5 apex, and Respilieux to the C5 that immediately follows, each being put back down as the pitch descends.
	Fig. 9 (132"-)	Peak 3	Lift 4 (Vantuycom) With circling at multiple levels, this lift happens just after the pitch apex Eb5, on the C5's of the "Thank you God" melodic formula.
			Drop: Floor (dos Santos) As Coltrane reaches C4, and drops to the nadir C4-Bb3-F3-G3 to conclude the phrase, dos Santos slides to the ground. At the beginning of the next phrase, G3-Bb3-C4, the other three dancers huddle low over dos Santos.
	Fig. 9 (162"-) Audio: https://youtu.be/gta2GOqvjVE?t=162	Peak 4	Crouch then Lift 5 (Vantuycom)
			Crouch: On the C4 just before the bold leaps upward, Respilieux stretches his arm out, hand on Vantuycom's chest, both dancers' weight on that hand, before Vantuycom crouches down in anguish, fists to his face, on Coltrane's F5 (G5-**F5**-D5).
			Lift 5: At Coltrane's leap back up to G5 (F5-D5-G5r) Vantuycom is lifted high on his back, almost as if dead, held motionless for the held G, and gradually turned during the recitation.
			Drop: (Vantuycom) As Coltrane reaches Eb4-Eb4-F4-C4, and drops further to the G3 ending the phrase, Vantuycom begins to fall, and ends almost prone, on his back parallel to the floor, as Coltrane's tone diminuendos to a dusky G3.

Image	Example	Peak	Lifts and Drops
Fig. 11			Rise to Peak 5: Lift to standing (Respilieux) Coltrane's tone becomes more energetic as he begins the rise from G3. As Respilieux pulls Vantuycom up, Respilieux's weight brings him to the floor, where he lies as if dead or ill, until his three friends lift him to standing on the G4 recitation.
		Peak 5	Jump downwards (Vantuycom)
Fig. 12		Peak 6	Lift 6 (Vantuycom) Vantuycom is lifted on all fours.
	M.Ex. 5 Audio: https://youtu.be/gta2GOqvjVE?t=264	Drop & Peak 7	Pull up (El Had) We have already discussed how this drop and Peak 7 stand out, particularly because of the hypermetric underpinning of the timpani. The choreography responds to this pacing as well as to the G4-C5 tag and to Peak 7. Hyperbeats are marked on music example 5.
			At hyperbeat 1 and during Coltrane's scalar walk from 5 down to 1, Vantuycom and El Had entwine arms and lean on one another, walking backwards. They release their mutual hold at hyperbeat 2. At hyperbeat 3, where the phrase cadences melodically (Eb4-C4), Vantuycom and El Had slide to the floor. They mark the syncopated ascending tag (G4-C5) with a rapid leg/head motion, while in prone position. Since the phrase has already completed melodically, hyperbeat 4 is not articulated choreographically. Rather, to lead to the following structural downbeat, Vantuycom somersaults to standing and El Had rolls onto his back.
			At the structural downbeat and true peak (C5), Vantuycom, in a striking gesture, curves his hands down to meet El Had's outstretched hands, grasps them, and pulls El Had up. This marked "lift" presages the final climactic peak to come.
Fig. 13	M.Ex. 6 Audio: https://youtu.be/gta2GOqvjVE?t=310	Peak 8	Lift 7 (Vantuycom) This is the most extreme of the pitch peaks. Coltrane recites for about 15 seconds on altissimo G5, his tone hoarse and breaking just before the final G5. For this lift, a bent and bowed El Had carries Vantuycom on his back, turning laboriously.
		Peak 9	The dancers have separated, no longer touching one another. We will see how this plays into the overall form of the choreography.

Table 1: "*Psalm*": *Peaks and Lifts*

Figure 11: *Respilieux descending as he pulls up Vantuycom. Photograph by Anne Van Aerschot. © 2019 by Rosas*

Figure 12: *Lift 6. Photograph by Anne Van Aerschot. © 2019 by Rosas*

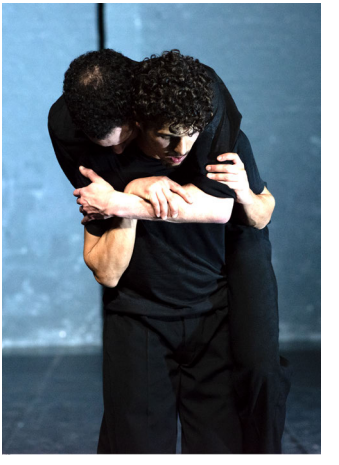

Figure 13: *Lift 7: El Had carrying Vantuycom. Photograph by Anne Van Aerschot. © 2019 by Rosas*

To summarize, Peaks 1–3, which move upwards from C5 to E♭5, feature twirling lifts (of Vantuycom, El Had and Respilieux, and Vantuycom) fairly short in duration, matching the durations of the peaks. They culminate in Peak 4 (G5r),

at which Vantuycom first crouches in anguish, and is then lifted up as if dead and held aloft. After this climax, Peaks 5–7 diminish in pitch height (D5, E♭5, C5). Peak 7 (C5), with a unique hypermetric setting, marks a structural downbeat with Vantuycom reaching down to pull up a prone El Had. This dramatic gesture presages the final climactic Peak 8, where a hoarse Coltrane, reciting on altissimo G5, is matched by a weary El Had, bearing Vantuycom on his shoulders. The most emotionally laden images—Vantuycom as if dead (Lift 5) and Vantuycom borne by El Had (Lift 7)—mirror the emotional intensity of Coltrane's highest recitations and the sonic drama surrounding them.[66]

All major pitch peaks in the movement are represented by ensemble lifts, as described; there are no other ensemble lifts at or above the level of the shoulders. All of the lifts, except the last, involve all four dancers.[67] The move to two dancers on the last lift is significant; Vantuycom and El Had mirror or parallel one another at the beginning of the movement and again at the end.

As shown in ~~video 13~~, after El Had gently lets Vantuycom down, El Had is pulled back by his fellow dancers, opening out into the two-armed upward extension familiar from the first movement's dance phrase. From this point onwards, the dancers no longer touch one another. A series of gestures recalls earlier ones, including dance gestures from the first movement's basic dance phrase. The dancers exit one by one, first dos Santos, then Respilieux. When only Vantuycom and El Had remain, they dance a fragment referring directly to cells 15–18 of the P dance phrase, before El Had exits and Vantuycom concludes, again quoting cells from the original phrase (2, 18b). The cycle as a whole thus concludes by referencing the metaphorical source for the entire composition: "a love supreme."

Ingrid Monson has discussed "the capacity of aural signs to signify in multiple directions—their ability to simultaneously constitute structure and a broader field of human relationships."[68] In "Psalm," the choreography draws out the extremes of pitch contour in Coltrane's oration, the raw timbres of the saxophone, and the striking sonic interdependence of the ensemble, embodying these mu-

66 Speaking about *A Love Supreme*, Coltrane said, "When I go from a calm moment to extreme tension, it's only the emotional factors that drive me, to the exclusion of all musical considerations. For Elvin, I think that the musical considerations are the most important" (*Coltrane on Coltrane*, 246).

67 Lift 3, which follows immediately on the heels of Lift 2 (almost like a paired, compound lift), involves three dancers.

68 Ingrid Monson, *Saying Something: Jazz Improvisation and Interaction* (Chicago: University of Chicago Press, 1996), 186.

sical interrelationships to powerfully signify deep human interconnection and mutual support.

Silent Prelude

The suite's choreography begins with a thirteen-minute, danced, silent prelude—the dancers dressed as if warming up. As an opening of the space between music and dance, dancers and spectators, the silent prelude reverses the relation of music and dance. Here dance precedes music; it is dance that eventually ushers in sound.

The prelude consists of three traversals of fourth-movement choreography. The first traversal frames energetic third-movement material with the opening and closing of the fourth movement. It begins with the ensemble choreography of the fourth movement rotated to face the back of the stage; it ends with the closing sequence of the fourth movement, in which the dancers exit one by one, leaving only Vantuycom. In the second traversal, Vantuycom follows a task that reduces his fourth-movement material to an enigmatic succession of pedestrian movements: he stands, turns, walks, looks ahead/up/to the side.[69] The extended sequence, full of pauses, includes a few stances identical to fourth-movement ones, in reverse order.[70] The third traversal concludes the Prelude: Vantuycom dances the entire fourth movement alone (in spite of its ensemble premise); he omits some ensemble portions and adjusts others. His closing gesture—that is, the last gesture of the entire suite—thus functions at the end of the Prelude to wave in Coltrane's opening fanfare. ~~Video 14~~ shows a) the fourth-movement opening, b) the rotated fourth-movement opening that begins the Prelude, and c) Vantuycom's solo version of the fourth-movement opening in the Prelude.

In rotating spatial orientation, transforming complex choreography into pedestrian movements, and reducing ensemble to solo dancing—all in silence—the Prelude begins *A Love Supreme* with a question—a space, as it were—"for the audience to read something, to place their experience." In its silence, "it tunes our perception."[71]

69 Sanchis, e-mail correspondence with author, 2 June 2022.

70 I believe this sequence is a retrograded reduction of the fourth movement.

71 Sanchis, 2020 video interview with author.

Conclusion

The suite encompasses a journey.[72] Sanchis speaks of the "dramaturgical accessibility" of *A Love Supreme*; "it was a kind of spiritual revelation, […] a short opera of sorts." He references its "intensity" and "expressive excess," De Keersmaeker its "beautiful connection between joy and gravity."[73]

The dance "opens up" *Love Supreme* in vastly different ways in the first and last movements.[74] In the first, composed and improvised material in the dance responds to that in the music: the basic dance phrase to the bass ostinato and its verbal source, the dancers' roles to the roles of jazz rhythm section and soloist. Vantuycom's virtuosity embodies Coltrane's. Unison dancing highlights the introduction and eventual transformation of the bass ostinato into the chanted "a love supreme."

In the last movement, composed dance interprets improvised music. The dancers' physical interdependence incarnates the musicians' sonic unity. Bodily lifts and drops depict Coltrane's melodic climbs and falls—further, they dramatize Coltrane's timbral nuances and the musicians' interplay.

In the first case, the structure of the dance embodies and simplifies that of the music, supplying a framework within which improvisation (in both dance and music) can be understood. In the second, the dance frames the music in concrete, affective, and spatial dimensions—telling a story of mutual human support. In so doing, it connects to both the visceral and transcendent elements of the music, and creates new spaces within which audience members can place their own readings.

Discography

Coltrane, John. *A Love Supreme*. John Coltrane (tenor saxophone), McCoy Tyner (piano), Jimmy Garrison (bass), Elvin Jones (drums). Recorded 1964. Deluxe edition compiled 2002. The Verve Music Group 589 945–2.

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72 In conceiving of the album as a suite, Coltrane chose a less common jazz form—one that surprised audiences such as the one at the Antibes Jazz Festival (Michel Delorme in *Coltrane on Coltrane*, 242).

73 De Keersmaeker and Sanchis, "Rosas Dances Coltrane"; De Keersmaeker, "Chorégraphier Bach," 1h:03 (author's translation); Sanchis and De Keersmaeker, "An Improvisation with Gravity," 9–10.

74 Sanchis said that, in his view, dance "doesn't just visualize music in a straightforward way, doesn't counter it or question it; it just opens it up" (2020 video interview with author).

Videos

A Love Supreme. 2017. Choreography by Salva Sanchis and Anne Teresa De Keersmaeker. Danced by José Paulo dos Santos, Bilal El Had, Jason Respilieux, and Thomas Vantuycom.
Excerpt of world premiere performance, Kaaitheater, Brussels, February 23, 2017, accessed 20 October 2020, https://www.youtube.com/watch?v=Dog1egx5OTU
Video of full performance provided by Rosas.

"A Mother at the Cross." 1978. Sermon by Reverend C. L. Franklin. New Bethel Baptist Church, Detroit, Michigan. 14 May 1978, accessed 10 June 2022, https://www.youtube.com/watch?v=DlyeBU-krbA

Fall after Newton: Contact Improvisation 1972–1983. 1987. Words and narration by Steve Paxton. Featuring Nancy Stark Smith and Steve Paxton, dancers. Videoda film, 22:45 minutes, accessed 3 May 2022, in three parts:
https://www.youtube.com/watch?v=k768K_OTePM
https://www.youtube.com/watch?v=_iGtJSxNUpI
https://www.youtube.com/watch?v=vMj3Coktu40

Fase / Trailer. 2012. Film by Thierry De Mey (2002). Choreography by Anne Teresa De Keersmaeker (1982), accessed 2 June 2022, https://www.youtube.com/watch?v=HpPmH4Wc5AM

Artistic Research with Sound and Performative Movement

Mickey Mouse is Innocent
Reciprocal Exchange in the Art of Dance Accompaniment

Philip Feeney

Abstract: *The practice of matching movement closely with music, the so-called practice of mickey-mousing, has been long denigrated as restrictive, over-literal and tautological, whereby one art form is placed in a subordinate status to the other. But a fresh view of the close alignment of music to dance leads us to examine the approach employed by dance accompanists, and their search for a musical language that can both illustrate the dancers' movement as well as create a vibrant and complementary musical environment to support that movement. It is argued that the cohesive element that binds otherwise unconnected musical gestures together is the formation of articulated musical phrases and strategic control of the ongoing phrase structure. As live music is created at the same time as the dance movement, a reciprocal exchange between dancer and musician occurs whereby both disciplines simultaneously reflect the quality of the other, and when musical phrase is finely aligned to dance phrase, dance and music become inseparably woven together evolving into a new and highly articulate language.*

Introduction

At the heart of the rapport between dance and music in choreography lies the perennial chicken and egg conundrum of which came first, the music or the dance. Underlying that question is the assumption that one of the art forms needs to take a leading role. One would like to think that the most successful collaborations between music and dance would almost certainly obviate the need for that question, with both dance and music seeming to operate as a single integrated entity. Dance nowadays, however, is very rarely created at the same time as music. In some traditional cultures, and in some explorative improvisational contexts both dance and music are still formulated and articulated

simultaneously. In these cases, dancers genuinely can "dance the music rather than dance to the music."[1] But in most cases in Western societies, dance tends to be created to music that already exists, often emanating from a sound source or a device, which allows the dancer no chance to influence the music's progression and expression, suggesting a reactive, secondary impulse and response.

There are of course scenarios in which the opposite is the case, where it is the movement that is created first with the music subsequently responding and reacting to it, a musical spin off if you like. Take, for example, dance classes accompanied by a musician located in the studio. Here, the physical movement is articulated and demonstrated by the dance teacher or ballet mistress/master. This then becomes the 'score' for the musician to follow, who will be searching for a musical equivalent to the shape, quality and dynamic expressed in that movement. It is as if the visuals act as a trigger, as a springboard for the ensuing synthesis of dance and music. So, in the dance and music 'which came first' question, could it simply be a question of *a priori*, in that chronological priority inevitably confers precedence in the creative process and dictates the overall shape of the material? In other words, in the 'who-follows-whom' dilemma, precedence is generally given to the 'I was there first' position.

When choreographing to music that already exists the choice that the dance maker has is to either go with the music or go counter to the music, and most successful dance-making would employ both strategies. When it is perceived that the visual content matches the sound in its shape, line and quality too closely, it tends to be seen as overly literal. Such an over-reliance on the music creates a form of tautology, dance and music totally parallel, whereby both are saying the same thing in the same way, leading inevitably to an accusation of mickey-mousing.

The concept of mickey-mousing originates in the early years of cinema, probably in the era of silent movies. Musical accompanists, usually pianists, would construct music that was designed to be intrinsically synchronized with the action, making the musical progression, and ultimately form, entirely contingent on the visual content of the film. This was not strictly a new development. In the silent era, composers would openly acknowledge the *leit-motif* composition technique established by Richard Wagner as a major influence in structuring their scores.[2] Musical content, from themes and motifs

1 Wayne Siegel, "Dancing the Music: Interactive Dance and Music," in *The Oxford Handbook of Computer Music*, ed. Roger T. Dean (Oxford: Oxford University Press, 2009).

2 Jeongwon Joe, *Wagner and Cinema* (Bloomington: Indiana University Press, 2010).

to boings and zaps, would have a direct corelation with what was happening on the screen, proving a remarkably efficacious way of binding an often impromptu film score together, one that would be not only heard but could also be "read" by the film-goer, hearing with the eyes, one might say.

The actual term mickey-mousing came into existence in the early years of the "talkies" whereby the film studios wanted to demonstrate their mastery of synchronizing sound and action; in particular, it refers to the Walt Disney cartoon short, *Steamboat Willie* (1928), the very first film in which the iconic character of Mickey Mouse makes an appearance. In it he can be seen happily and gratuitously making music from anything and everything in the steamboat sailing down the river—the point being that the sound and the visual content were completely and perfectly synchronized. As this synchronization technique developed and expanded throughout the industry, it became clear that it works just as well both ways—music mimicking movement, as well as movement mimicking music. In dance, this would entail an overly figurative interpretation of the music, and in music created for dance, it could give rise to a music that slavishly illustrates the movement's shape and dynamic, ironically giving it a heightened cartoonish quality. The outcome would be that the music had no real existence outside its role in supporting the dance content.

It is in this sense that the idea of mickey-mousing became derogatory, epitomizing music that used an over-simplistic approach, ruthlessly following the contours of the movement, and unable to create any kind of counterpoint between the two artforms. Indeed, composer John Cage criticized this kind of parallelism to be found in the music written for dance: according to Laura Kuhn, "he didn't like the idea of one art supporting another or one art depending on another."[3] Indeed, in his collaboration with choreographer Merce Cunningham, he developed an aesthetic whereby "music and dance could exist independently within the same performance—the dancers' movements would no longer be tied to the rhythms, mood, and structure of music. Instead, all forms of art could stand alone, simply sharing a common space and time."[4] Here, then, the relationship between music and dance, which for many was interdependent and deeply entwined,[5] was to all extents and purposes dissolved. Each art form

3 Laura Kuhn, in Beth Weinstein, "The Collaborative Legacy of Merce Cunningham," in *Places Journal* (March 2011), accessed 10 January 2023, https://placesjournal.org/article/the-collaborative-legacy-of-merce-cunningham/?cn-reloaded=1.

4 Laura Kuhn, in "Four Key Discoveries: Merce Cunningham Dance Company at Fifty," in *Theater*, vol. 34, no. 2 (summer 2004): 104–11, 105.

5 Siegel, *Dancing the Music*.

would therefore exist in its own right, perceived, understood, and assessed as such.

The Relation of Music to Dance in the Art of Accompaniment

John Cage first experienced creating music for dance early in his career as a dance accompanist at the Cornish School, Seattle in 1940. It is fair to say that he was not just a standard dance accompanist. For one thing, according to dancer and choreographer, Remy Charlip, "John couldn't keep a beat and couldn't follow the phrasing of the dancing;"[6] for another, he would accompany classes using cowbells, rice bowls, car parts and temple gongs, anything he could lay his hands on, almost like Steamboat Willie! Indeed, his famous prepared piano was originally explored in the creative environment of Cornish. So, if its primary function is not keeping time, it rather brings into question the role of the dance accompanist—what is playing for dance trying to achieve?

The first fundamental point about the art of dance accompaniment is that it completely inverts the role that music generally has vis à vis dance,—ie. not dance following the music, rather music following the dance. So, it is not a combination of dance steps set according to the template of an existing piece of music, but it is rather a movement phrase that has no inherent or at least no apparent musicality—it has instead, and perhaps more acutely, a latent musicality which is given a new musical context when the musician begins to play. The result is a music whose form, sound quality and musical material is designed to be able to support either a specific movement phrase or movement quality, or to provide more generic underlying support, creating a texture and an ambience conducive to the nature of the movement.

Music as Underlying Support for Movement

In the case of the latter, music designed to create an appropriate atmosphere that sits well with the movement, which is effectively what John Cage is doing with his rice bowls and repurposed vehicle parts, the precise relationship with the movement is not in itself specific. Likewise, the music and the movement need not necessarily be synchronized. It is more about sound quality and about defining musical space, allowing for an empathetic synergy between music and

6 Sarah Kaufman, "John Cage, with Merce Cunningham, revolutionized music too," in *Washington Post*, 12 August 2012.

dance. The musical atmosphere is established, or defined as we like to say, by the initial aural impact that the music has, not only on the dancer or the listener, but on the actual physical space itself. So much happens in that opening musical gesture—it will immediately determine how much music there is, how present it should be, and it will probably go on to influence the way the music will proceed across time. Moreover, for the musician, communicating an atmosphere so that it colors the room and creates an evocative dance environment usually entails the control of crucial elements of musical construction, in particular control of volume, density and weight, which does not at all mean that, say, full movement will necessarily imply voluminous musical texture. But if we allow that a kinetic response to a particular musical texture will tend to instinctively enhance the dancer's movement, then that full movement quality will be reciprocally reflected in the volume and capacity of the music.

That opening moment, just before the onset of the dance, holds within it the nature of the dance/music relationship about to be experienced. Just before the dance starts one can sense a physical empty space, a neutral space. Likewise, music is generally preceded by a silence, an empty space, yes, but latent with potential. As the music and the dance begin, they color and define that space, and if there is a congruence between the movement's quality and that of the music, the specific character of the two art forms comes quite clearly into focus, music and dance in harmonious fusion. Because the musician is not attempting to match specific dance combinations, it is more about creating a sound world conducive to the movement and helpful for the dancer.

This will be apparent with different sorts of dance movements and styles, whether they be angular, open, narrow, lyrical, percussive, funky etc. The nature and character of the dance movement creates a series of signals to the musician who will react to them and build up a dialogue with them. It is not a question of strictly following the dancer, which could be unsatisfactory, and might even lead to a potential mickey-mouse scenario. It is rather more trying to create a satisfying counterpoint with the dance movement, and this counterpoint is subject to a precarious balance. Too much counterpoint leads to music that seems to contradict and to cancel out the dancer's movement expression, generating music that feels jarring or obtrusive, seemingly inappropriate or even a mismatch. On the other hand, too little counterpoint may provide the dancers with too few impulses and become, very quickly, quite bland.

Naturally, questions of style come into play, as certain musical styles correspond more aptly to certain dance qualities and certain dance techniques. The issue of whether particular dance styles inevitably imply distinct musical styles is somewhat beyond the scope of this paper, but suffice it to say that cultural memory and legacy can play an enormous part. Even the very sound

of an accordion or of ethnic acoustic drums in a dance class can clearly delineate the nature of the dance movement that ensues. A pianist's choice of musical style can very forcibly condition the way the dancer moves, the recognition of a familiar style of music may immediately trigger a familiar kinetic reaction. Conversely, the movement the performer is executing may directly or indirectly prompt the musician to reference a certain style of music, both through the movement's character and weight together with any figurative stylistic allusions it may engender. Certainly, such traditional stylistic musical/dance relationships can be based on often very powerful time-honored cultural associations. The musician would therefore have the option of specifically referencing and reinforcing these stylistic associations, or to some extent counterpointing them.

Kazuko Hirabayashi, legendary teacher of the Martha Graham technique of modern dance, would distinguish between "essential" movement and "mere style"; "essential" movement was movement that came from deep within the body, whereas "mere style" was gesture and articulation applied from the outside, stylistic influences being principally derived from culturally learned responses.[7] By alluding to different musical styles that are not immediately suggested by the movement, the accompanist can arrive at an interesting perspective, whereby dance movement may be perceived afresh, movement and music complementing or even contradicting each other rather than simply offering a parallel reiteration of style by running along the same lines. The effect of such stylistic dialogue, often a co-existence of not only artistic disciplines but of culturally dissimilar languages, can be startling, but unusual juxtapositions of music and dance can cause the dancer to move in a different and unpredictable way, responding physically to perhaps an unexpected and surprising musical impulse.

When creating music as underlying support for movement the decision about how much impetus and momentum it should possess may lie with the dance teacher, or with the company in general, or it may be a choice left to the musician. Tempo and meter will tend to have a proactive effect upon the movement, whether the movement is improvised or set. The body is likely to respond naturally to the pulse in the music, whether it be ongoing and motoric, or slower and more measured. The energy provided by the impetus that music containing a pulse has can be a real catalyst for dance movement. When the music is spatial, with lots of suspension and even silence, the impulse for movement is likely to come individually from the dancer. The moment there is some kind of a beat, there is a newer, perhaps more physical response that kicks

7 Kazuko Hirabayashi, "Curso Internacional de Danza," Burgos, 2009.

in. This is surely still the case if the dancer holds back and does not go with the rhythmic injection, moving slowly to counteract the sense of pulse; even here, the body will nevertheless be feeding off the metrical impulse, which will inform and characterize the movement.

If the musician can be said to be painting aural colors on to space, defining its character and giving it a musical articulation which the dancer can respond to, then pulse and tempo will have a major impact upon the atmosphere created, and the demarcation of time that comes from that. Dance accompanists who generate their music using loop stations are able to set up an initial rhythmic pattern and can generate momentum by superimposing additional layers, overdubbing to create a multi-textured sound. Because the recurrent nature of the loop process is inherently cyclical, the music will not specifically follow the dancer's movement but will create an immersive multi-textured sound, allowing the dancers to submerge themselves in it, and to counterpoint the music with their own accents and rhythmic patterns. There is no sign of Mickey Mouse here. Dance and music rhythms are in a free counterpoint, each having an organic life of its own as well as being closely related to what else is going on, sharing the space and co-existing in time. Rather than mickey-mousing, dancer and musician are in the process of creating a communal bi-disciplinary narrative.

Music Designed to Support Specific Dance Movement

The dance accompanist's craft requires different techniques and strategies when the music is designed to support specific dance movements and specific dance phrases. This is most often the case in a ballet or contemporary dance class where the teacher sets the exercise, a sequence of dance steps designed to warm the body up in preparation for a day of dancing, as well as working on the dance technique that an elite dancer must attain. It is the musician's role to provide appropriate music as what is usually termed "accompaniment." The contribution the music makes is of course far more than that. It is not merely playing alongside the dance movement, as some kind of aural accessory, as a complementary soundtrack; rather, it is designed to provide in depth support to the movement itself and it can even impart detailed information about how the dancer should technically approach each given step set by the teacher. And in all of this, the musician is given a much stricter phrasing template in which to operate. So, for the accompanist in the studio, what does this entail?

The tempo and meter are most often pre-ordained. These are set by the teacher at the outset, usually quite specifically, at the optimum speed best

suited to fit the properties of that particular exercise, and while at the beginning of the exercise there can often be some flexibility, some re-adjustment in line with the dancers' performance of the exercise, this will normally settle down to a stable tempo after a few bars. But beyond questions of how fast to play, the music invented by the musician will be contingent upon two imperatives: to underscore the physical movement by matching both its kinetic and its poetic quality. The task will primarily be to mirror the movement in detail, in its rise and fall, in its stasis and movement, so that the music can be said to "fit" exactly. The accents in the music will parallel the accents in the dance. In this way, the quality of the music, together with its individual musical components, will correspond closely to the movement and will be best able to support the dancer's execution of the step.

The dynamic of the *grand battement*, the throwing of the leg, is the classic example. The musician will be instructed to not play anything too heavy, too grounded, as this will impede the dancer and prevent them from getting off the ground. Instead, music will be devised that has an upward trajectory, usually finishing with a staccato note and a slight suspension creating a pocket of air, giving a sense of lift off and suspension—dancers will comment that the music will actually help them do the physical step, that it is "less effort" when accompanied by the right music.

Jumps are even more a case in point. To assist the dancer's elevation, the music must contain a natural bounce, what is referred to as a sense of *ballon*. *Ballon*, a concept particularly aspired to in classical ballet, is "a term encompassing the desirable qualities of lightness, ease and rebound when jumping";[8] Elizabeth Sawyer puts it more metaphysically, describing it as "a rhythmic release from the body's earth-bound existence."[9] It certainly implies a natural and effortless co-ordination in the act of getting off the ground, and without it a jump looks laboured and uncoordinated. The quality of the music is critical. Music that is too dense in texture, or too dark or too low in its register, will seem to the dancer to be too earth-bound. The music must instead possess a natural bounce, creating the aforesaid pocket of air, that gives the dancer an innate buoyancy and a real sense of being off the ground. This is making music with holes, with space for the dance, and accents that figuratively coincide with the dancer's elevation. And the precision is meticulous and finely detailed—so much that the question of whether they are in the air on the beat or jumping

8 Gretchen Ward Warren, *Classical Ballet Technique* (Tampa, FL: University Press of Florida, 1989), 375.

9 Elizabeth Sawyer, *Dance with the Music* (Cambridge: Cambridge University Press, 1985), 79.

up on the beat is critical, as it requires the lifting accent to be on the right part of the bar. Not merely playing with the dancer, the musician is breathing with the dancer.

Undoubtedly, this is both about the kinetic response to music and the perception of the dynamic in the music that not only mirrors the physical action but facilitates it. The dancer's aural response to the music becomes channelled into a physical response. The quality and dynamic in the music therefore has a direct causal relationship with the physical performance. The dancer hears the music not simply as an aural signal, but as a trigger for physical endeavour.

So, in a *grand battement* exercise each throw of the leg, each high kick, should, if we accept that one of the roles of the music is to assist in the execution of the step, be accompanied by music that accurately reproduces the physical impulse musically, shadowing the body's shape, mirroring the dynamic and matching the patterning of the exercise. Yet perhaps there is jeopardy here. Is this all becoming dangerously close to the world of Mickey Mouse, where high-pitched head notes mean *rélevé* and pointe-work, and low notes imply depth and floorwork? By playing for class sympathetically, sustaining the dancers with music that directly reflects the physicality and the shape of the movement, is the musician ultimately providing music that is so subservient that its *raison d'être* can only be as a support for the dancer rather than making very much sense as music? And if that is the case, then of its two main functions, that of matching both the physical articulation and the aesthetic poetry of dance, it offers only the former—there is no aspiration towards what pianist, John Sweeney, calls the "music for the soul."[10] And this is the point where the notion of phrasing comes in.

The Alchemical Properties of Phrasing

Phrasing, of course, is common to both dance and music. The concept, as the etymology of the word implies, is borrowed from language, and in music and dance it does the same thing as it does in language, namely it adds punctuation to a string of otherwise unconnected elements and shapes them into a unit. By combining disparate elements into a sentence, the process of phrasing enables them to hang together, thus allowing them to make sense as communication, in this case, of articulated movement or of articulated sound. In the final analysis, phrasing is about signification. In the same way as unrelated underarticulated

10 John Sweeney, Lecture at the Piano Circus, International Conference "Il Corpo nel Suono," Accademia Nazionale di Danza, Roma, 2018.

words make no sense and are simply understood as gibberish, so unphrased dance is mere body language, and music without phrasing is potentially shapeless and amorphous. Phrasing could therefore be said to be at the very heart of both communicating art forms. It acts as a conveyor of meaning.

Non-homogenous and eclectic musical elements can make clearly articulated musical sense once they exist as part of a distinct phrase structure. One of the fields in which this can be seen is in the world of loops and backing tracks. Often, especially in a music technology that embraces samples and other extraneously sourced material, these can made up of distinct individual parts, either as short unconnected musical phrases, or as separate sound gestures that may have nothing in common with the previous sound and have no aural connection with the existing musical palette. By organizing them as constituent parts in a constructed phrase unit, (often of eight count duration, but not necessarily so), they become increasingly welded into a homogenous identifiable grouping as the phrase gets reiterated and exponentially looped, repetition ultimately making audible sense of the disparate musical elements. This is also the case in dance. A movement phrase can be understood effectively as a collection of individual gestures or steps, "made up of simple elements that become meaningful purely in virtue of their combination."[11] A clearly articulated initiation gives the phrase what Jaqueline Smith-Autard calls "shape and a logical time picture."[12] It has ultimately gained an identity. Now, as part of a movement phrase, each individual dance step or gesture exists in relation to the other steps or gestures within the phrase.

The nature of the phrase is that it is essentially additive.[13] One musical phrase will give rise to another, complementing or expanding upon it, and the new phrase will be followed by another as it progresses across time. Musical compositions can then be considered the summation of a sequence of phrases. Similarly, dances could be said to be a result of the accumulation of movement phrases, each responding to and developing from the preceding phrase; effectively it is the phrase structure that delineates the shape and duration of the dance. Indeed, set dance routines are still often called "combinations," or in ballet, "variations" or "*enchainements*," emphasizing their composite make up. When dance and music co-exist in the same time bracket, their ongoing phrase patterns will necessarily proceed across time simultaneously. Musicians and

11 Frédéric Pouillaude, *Unworking Choreography: The Notion of the Work in Dance*, trans. Anna Pakes (New York: Oxford University Press, 2017), 204.

12 Jacqueline Smith-Autard, *Dance Composition* (London: A&C Black Ltd., 2000), 59.

13 Glenn Spring and Jere Hutcheson, *Musical Form and Analysis, Time, Pattern, Proportion* (Illinois: Waveland Press, 1995), 25.

dance performers will naturally be articulating their individual phrase patterns according to the vernacular of their own discipline; the way they approach their phrasing, and the strategies they adopt will automatically be communicated to the observer/listener. But the dancer and the musician will also be responding to the phrase articulation offered to them by the other discipline. For the observer/listener there is a potent clarity when both dance and music phrasing is aligned. It is as if a blurred image has come into sharp focus, and there is one clear articulation for eyes and ears to equate. With such synchrony the music is translated into movement, and the movement is qualified by the sound–the dancer will become the music and the music will become the dance.

There are two types of phrasing a dance accompanist can use to support dance movement: phrasing that closely demarcates the movement phrase without specifically matching its constituent parts, and phrasing that meticulously mirrors the detailed articulation of the individual dance elements that make up the phrase. In the case of the former, the overall phrase patterns will respond closely to each other, their shape and duration distinctly aligned, so there is a clear demarcation of the individual phrase, and the way phrases hang together. The musical content will be of an analogous quality and feeling without it shadowing the dance elements too specifically or too literally. Because the musical phrase lengths match those of the movement phrases, with, say, the last gesture finishing on a musical cadence, the relationship between the dance and the music will feel close and needed. The dance and the music will appear to proceed together interdependently in time.

With music designed to underscore the dance movement more specifically, the accompanist will search for musical equivalents that, as we have seen, individually match a given dance step in detail, figuratively and qualitatively, whilst still taking care to tie each individual component into a well-honed musically satisfying phrase. There are two things happening here, governed by two different and often conflicting imperatives; (i) to interpret each step with the fine line of a sketching pencil, depicting the shape clearly and interpreting the physical dynamic of each movement in music; (ii) to connect these micro phrases, these sketched gestures, into musically logical and cohesive phrase patterns, whether through a unifying harmonic progression, melodic contour, rhythmic control, or indeed all of the above. To illustrate the process, I would propose a short case study, highlighting the accompanist's approach to creating a satisfactory musical structure for the *rond de jambes* exercise in a classical ballet class.

The *rond de jambes* exercise is amongst the exercises habitually present in a ballet barre, and frequently in a contemporary class. Its role within the class is

to facilitate rotary motion and to loosen up the hip.[14] Very often the exercise is structured by combining different groups of steps, all of which are functional in expanding the dancer's technique, and while they are all visually distinct, all of them can be depicted beautifully in music more or less figuratively. The potential pitfall of over-literal depiction in music, a classic case of mickey-mousing, is very apparent, but it is still possible to illustrate each individual movement so that it retains its identity while still binding them all together into a cogent musical phrase, satisfying both the aural support for the dancer engaged in executing the technique, as well as creating an aesthetically satisfying piece of music. Moreover, because it is possible to do this in many diverse ways, and of course each musician will do it with their own individual voice, there will be potentially hundreds of different interpretations of the same exercise, giving the exercise a new musical context, indeed a new identity, each time the exercise is done while always respecting and mirroring the movement phrase. This is achieved because the dance phrase structure is reflected perfectly in the musical phrase structure, whether it be the composition of its micro-phrase structure or of its macro-phrase structure.

Redemption, then, for Mickey Mouse?

Conclusion: The Case for M. Mouse's Innocence

This paper argues that it is perfectly possible and aesthetically desirable to closely match music and dance. The charge against Mickey Mouse is that the desire to create an exact audio parallel with the visual content, a musical commentary on what our eyes are seeing and, in some ways, enhancing what we are seeing, relegates the role of music to a mere supporting act, or to less than that, a series of sound effects. As John Cage suggested, one art has been placed into a subordinate status in relation to the other. But what creates the sense of anti-musicality in cartoon music is its existence outside the parameters of musical phrase structure. There was a point in composing my ballet score for Milwaukee Ballet's *Peter Pan* when I thought that the music had become too cartoonish—depicting the Lost Boys in the undergrowth by scrubbing around with twigs ingeniously provided by the percussion department, or rapid darting fairy music portraying an enraged Tinkerbell. However, choreographer Michael Pink assured me that, while there was no disputing its color and immediacy, as well as a tendency towards some kind of epic musical sonic

14 Grazioso Cecchetti, *Classical Dance*, A *Complete Manual of the Cecchetti Method*, vol. 1 (Roma: Gremese Editore, 1995), 50–1.

adventure, the score still held together as a coherent piece of music. More than that, the score provided a compelling musical narrative that supported, and indeed, drove the dramatic narrative that was taking place onstage. The idea that vividly descriptive music cannot operate within a finely wrought musical structure is clearly misguided. Indeed, Mendelssohn's fairy music in *Ein Sommernachtstraum* works well enough!

If by description we mean a movement phrase translated into words that search to depict it accurately, then this translation should not be seen as of no value, but as what it is: an attempt to articulate non-verbal expression in words. And it is the same with descriptive music. A musical representation of the movement shape, line, and dynamic has an identity defined by that movement's shape, line, and dynamic; effectively this amounts to a figurative interpretation that has undergone a cross-disciplinary translation, and surely, that in itself must be noteworthy.

But of course, it is not just that; we have not considered the fact that it is a two-way process. In dance, it is fair to say that descriptive music is likely to go beyond mere description—there will always be some reciprocity involved. The visual information that the musician receives *from* the dancer, is then returned *to* the dancer in musical form. Therefore, we should acknowledge the fact that while the musical phrase may seem on the face of it to be entirely dependent upon the dance steps and to be merely illustrative, in reality, it has the capacity to lead the dancer to execute the movement in a different way, to communicate it in a more articulated and musically eloquent manner. And the breath inherent in the musical phrasing will allow the dancer to, as it were, *sing* the movement; so rather than be restrictively figurative, the music has given musical context, color, and even meaning to the dance phrase. Herein lies the reciprocity. Music that closely follows the dance will, yes, transform the dancer's execution of the phrase, but it will also transform its meaning. It is therefore the formulation of an art expression comprising both disciplines.

Dance that is closely matched by the music need therefore not be diminished, or the music disregarded. Indeed, to the contrary, it can be transformative. The closeness of the music can color the dance, give it an entirely new meaning and a new voice. In the same way as dance is enriched by a lighting change or by a striking costume, music will show dance bathed in a different light. It will contextualize the movement, highlighting particular aspects—the warmth of a *plié*, the exquisite line of a *developpé*, the power of a jump. It can give dance movement musical definition, give harmonic depth to floorwork or melodic coherence to line, and it can give emotional intensity to specific movements. Through the alchemy of complementary phrasing neither art is subordinate, but both combine to create a heightened form of

expression, one that is not dance with music, but a fusion of dance *and* music inseparably woven together, creating a new and highly articulate language. In this hypothesis, I would argue that Mickey Mouse surely deserves clemency.

Contact Improvisation
Gestural Interactions in the Performative Encounter between Dance and Music

Ivo I. Berg

Abstract: *This article examines how dancers and musicians interact in free improvisation performances. It assumes that the improvisational context uniquely connects the participants, creating a contact surface for mutual perception and reference between the arts. Based on interviews with members of two Berlin performance projects, the study used qualitative social research methods including guideline-based expert interviews with video stimulated recall. Findings indicate that reciprocal references stem from performative negotiation processes and individual positioning in different fields of tension. Themes include the role and quality of the performative setting, the overarching category of space, differences in aesthetic perception between sound's omnipresence and vision's distancing perspectivity, and the tension between aesthetic presuppositions and unconscious influences. The interviews confirm theoretical concepts of musical gesture and gestural interaction, offering valuable explanatory approaches and highlighting the diversity of artistic practice.*

The combination of dance and music is a common format in performances of the free improvisation scene. The question of the levels on which dancers and musicians interact with each other, that is, in which ways the two artistic practices are related to each other, is usually open. While at least general musical parameters can establish a common basis for the interaction of musicians alone and ensemble playing suggests a corresponding interaction, these presuppositions are much less self-evident when different arts meet: What relationships arise between dance movements in space and musical sound events? Is one medium transformed into the other? How do dancers and musicians make their performative decisions in this context? Are any references consciously controlled or do the artistic expressions confront each other without intention? To what extent can we speak of a reciprocal influence?

In this paper, I assume that the performative framework of improvisation creates a specific environment that raises these questions and addresses the connection between music and movement in a special way: musicians themselves become agents in the space; their physical presence allows them to become points of gravity of the movement events, even if they sometimes play without visual contact with the dancers; the dancers in turn also find themselves on the level of sonic events via the sounds of movement and breathing, thus staging musical parameters of their movements. The openness and temporality of improvisation, as well as its emergence in the moment, refer both sides to each other, thus questioning the quality of mutual perception and challenging the exploration of possible parameters of interaction.

Concept of the Interview Study

In the following, I will compare the work of two performance projects from the Berlin scene with regard to these questions: the duo Andrew Wass (dance) and Simon Rose (saxophone) as well as the trio BIT with Britta Pudelko and Ingo Reulecke (dance) and Thomas Gerwin (percussion). My aim is not only to develop a theory-based view "from the outside," but also to include the perspective of the artists and to explore their experiences and strategies in practice. To this end, I conducted an interview study in September 2020 with the two musicians (hereafter SR and TG) and one of the dancers from each of the projects (hereafter AW and IR). My approach was based on methods of qualitative social research—in this case in the form of an expert interview with video-stimulated recall—without, however, attempting to completely meet the standards of empirical research.[1] On the one hand, this methodological relativization was based on an explicit theoretical self-interest with which I approached the interviews. On the other hand, as a musician I have improvised with the members of Ensemble BIT in the past, which meant that I was personally involved from an artistic point of view. My approach is therefore determined by a hermeneutic research attitude—especially considering the analysis of the interviews presented here.[2]

1 For a brief overview of common forms of interviews in qualitative social research, see Günter Mey and Katja Mruck, "Qualitative Interviews," in *Qualitative Marktforschung in Theorie und Praxis*, ed. Gabriele Naderer and Eva Balzer (Wiesbaden: Gabler, 2007), 249–78.

2 The interviews were recorded, then transcribed and form the basis of this article as a text source. The sources in brackets refer to the transcripts of the interviews.

The interviews were based on two videos of live performances by the two ensembles in Berlin in 2012 and 2014.[3] The interviews were conducted according to a guideline that I had designed beforehand, which remained unchanged and was only reformulated with regard to the perspective of the interviewee.[4] They began with retrospective questions about the common working method and the basic setting of the performances. This was followed by a review of the performance video with a request to highlight and describe particularly striking and intense moments of interaction. Starting from this stimulus, the focus then turned to aspects of perception action in order to build on this and open up a general level of possible references between dance and music. The final step was for each ensemble to watch the other's performance video, which provided the opportunity to spontaneously comment on artistic impressions on the basis of the thoughts developed.

Theoretical Framework

The basis of this conception is my perspective as a musician and representative of instrumental pedagogy—a subject that in recent years has increasingly come to be understood and researched in a comprehensive sense as "Musizierpädagogik."[5] The connection between music and movement already plays a central role here in terms of learning theory: learning music, understanding music in the sense of procedurally coded knowledge and ability, is linked in many ways to physical processes and physically initiated developmental processes. This includes both the development of cognitive-syntactic structures and the ability to process musical auditory phenomena in an action-oriented way, as well as the level of musical expression and musical understanding of expression.[6] With

3 For the duo Wass/Rose see *Libet's Lag*, December 20th, 2014 at Uferstudios Berlin, filmed by Didi Meier, accessed 27 July 2022, https://vimeo.com/115512490?embedded=true&source=vimeo_logo&owner=2667046; for the trio Pudelko/Reulecke/Gerwin see BIT at "OSM 2012," 2012 at Radialsystem Berlin, filmed by Carlos Bustamente, accessed 27 July 2022, http://www.thomasgerwin.de/listen-and-watch.html.http://www.thomasgerwin.de/listen-and-watch.html.

4 The interviews with TG and IR of BIT took place as individual interviews; with AW and SR I conducted a joint interview.

5 On the concept of Musizierpädagogik, see Martina Krause-Benz, "Musizierpädagogik—A Term with Potential and Perspective," in *üben & musizieren research* (December 2021), accessed 27 July 2022, https://uebenundmusizieren.de/artikel/research_2021_krause-benz/.

6 A central historical starting point for these findings is the development of the subject of rhythmics. Cf. the contribution by Dorothea Weise in this

the concept of embodiment, this basic position has gained renewed urgency in recent years: after all, the corresponding theories of the philosophy of mind put forward the thesis that mental processes are not only based on bodily learning processes, but are tied to a far greater extent to the existence and current role of the bdy than generally recognized.[7] Thus, in relation to music-making, all the movements of a playing person come into focus as potentially meaning-bearing, meaning-giving, or meaning-understanding "musical gestures." I would like to outline a few theoretical points of reference in order to sketch out the concept of "gestural interaction" raised in the title of this article:[8]

- General concept of gesture: The philosopher Vilém Flusser starts phenomenologically from an open concept of gesture, which includes any bodily movement whose mode of appearance goes beyond a purely causal justification. For him, however, the "gesture of listening to music" is not just a movement, but a whole-body attitude that allows the body to be experienced as permeable, in that the body allows itself to be penetrated by music and begins to resonate.[9]
- Musical gestures: Based on the paradigm of embodiment, this research direction explores the gestural potential of all movements in music-making. It is based on a nomenclature of "sound-producing gestures, communicative gestures, sound-facilitating gestures, and sound-accompanying gestures."[10]
- Musical energetics: In the first half of the twentieth century, the music psychologist Ernst Kurth founded a phenomenological theory of how music appears in consciousness. According to this theory, music is inwardly

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book. For a current overview of learning theory research, see Wilfried Gruhn, "Was der Körper nicht lernt, lernt der Kopf nimmermehr … Lerntheoretische Überlegungen zur Bedeutung der Leiblichkeit des Lernens," in *Musik und Körper. Interdisziplinäre Dialoge zum körperlichen Erleben und Verstehen von Musik*, ed. Lars Oberhaus and Christoph Stange (Bielefeld: transcript, 2017), 105–20.

7 Cf. Ivo Berg, "Von der 'Verkörperung' zum 'Embodiment'? Ein neues Paradigma aus der Philosophie des Geistes und seine Anwendung in der Musikpädagogik," in *Diskussion Musikpädagogik* (January 2017): 12–9.

8 The following theoretical approaches are presented in more detail and summarised under a theory of gestural learning in Ivo Berg, "Gestisches Lernen," in *Musiklernen. Bedingungen–Handlungsfelder–Positionen*, ed. Wilfried Gruhn and Peter Röbke (Innsbruck: Helbling, 2018), 155–76.

9 Vilém Flusser, *Gesten. Versuch einer Phänomenologie* (Bensheim: Bollmann, 1991), 193 (trans. Ivo Berg): "Die Geste des Musikhörens."

10 Rolf I. Godøy and Marc Leman, *Musical Gestures: Sound, Movement, and Meaning* (New York: Routledge, 2010), 23.

felt and imagined in physical categories of movement, space, matter, and energy.[11] The metaphor theory of George Lakoff and Mark Johnsen, in turn, assumes that linguistic concepts are based on basic bodily experiences.[12] The metaphorical nature of musical energetics could therefore be traced back to bodily processes.

- Gestural model of communication: Michael Tomasello assumes from an evolutionary-anthropological perspective that pointing gestures and iconic gestures form the starting point of human communication both phylogenetically and ontogenetically. However, their function is not exhausted in pointing to or depicting reality. Rather, their communicative success is linked to a cognitive structure that reveals itself in a mutual knowledge of a shared background.[13]

Some possible interfaces between dance and music can be derived from these theories: from the dancers' point of view, it could be asked whether the perception of music takes place in the bodily resonance that Flusser postulates and whether the conceptualization of music in bodily categories can form starting points for reference in dance. From the point of view of the musicians, it could be asked whether the awareness of the gestural potential of their own musical movements suggests links to dance movements or whether, conversely, such awareness is motivated by contact with dance. Finally, a "gestural interaction" between the two sides could be assumed if a "shared background" could be postulated in the performative events, which becomes the basis of a mutual understanding and improvisational shaping in the ensemble.

Ways of Relating between Dance and Music

The following analysis of the interviews is structured according to themes that emerged both from the structure of the guideline and the individual dynamics of the conversation. It becomes apparent that references to the theoretical approaches mentioned can be made again and again. However, the statements of the artists will not be used to establish a meta-theory of the interaction

11 Cf. Ivo I. Berg, *Musikalische Spannung. Grundlagen und Methoden für den Instrumentalunterricht* (Essen: Die Blaue Eule, 2014), 106–18.

12 See George Lakoff and Mark Johnson, *Metaphors We Live by* (Chicago: The University of Chicago Press, 1980), 14–21. For a critical overview of this theory see Lawrence Shapiro, *Embodied Cognition* (New York: Routledge, 2011), 86–9.

13 Cf. Michael Tomasello, *The Origins of Human Communication* (Frankfurt am Main: Suhrkamp, 2009), 15.

between music and movement. Rather, the aim is to use the theoretical approaches conversely to expand the diversity and complexity of the approaches in practice. In this sense, overlaps and cross-connections can always be found between the topics chosen here.

The Impact of the Performative Setting

Developing References as a Process of Artistic Research

Both ensembles establish their artistic collaboration on improvisation. This concerns the concept of the performances as a whole as well as the preparation and rehearsal processes leading up to them. In the background of both ensembles there is also a reflective and partly also scientific examination of the underlying themes.[14]

In both cases, the starting point of the performance is a previously determined setting that provides a framework for open-ended improvisation and at the same time sets a creative impulse from which reciprocal references can develop. This role and quality of the setting is reflected both in the starting point of the collaboration and in the further course of the rehearsal. Rehearsing here, however, means neither automating and refining forms of movement or sound events that have already been found, nor rehearsing a self-contained performance concept. Instead, the improvisational form pervades the further development of the collaboration: instead of rehearsals in the sense mentioned above, there are "sessions" in the sense of improvisations in potential concert mode, which are recorded on video to be discussed later (as in the case of the duo). The subject of this reflection, in turn, seems to be less the concrete references between dance and music in the sense of choreographic questions and more "the quality of communication" (TG) itself. Performances in front of an audience, using the same setting in the same formation as a starting point, are essential for the ensemble's further development and artistic reflection: "We work on a kind of a continuum. So this is where we got to on this occasion, if

14 See Simon Rose, *The Lived Experience of Improvisation in Music, Learning and Live* (Chicago: Intellect Ltd. Publication, 2017); Ingo Reulecke and Heike Gäßler, *Radikale Echtzeit. Tanz, Musik, Sprache als Moment-Komposition* (Berlin: HZT, 2021); Andrew Wass, "Aristotle and Husserl Go Dancing: Solo Improvised Dance-Making and the Noetic Cycle," in *Choreographic Practices* 11, no. 1 (December 2020): 29–42; as well as the contribution of Simon Rose and Ingo Reulecke to this volume, pp. 361–374.

you like" (SR). In this context, references are negotiated less explicitly on a conceptual level, but rather against the background of their performative success, as the continuation of a dynamic or as the discarding of certain additions: "In that [the performances and sessions] we then developed something like that together, so that rather happened" (IR).

The Setting as an Energetic Space

Especially in the case of the trio, the setting seems to function as an essential starting point for this success by opening up an energetic space and motivating references on the basis of its elements: the percussive playing and sound material together with a small table, which marks the beginning and end as a spatial center of gravity; the joint beginning sitting in silence, then the agreed sequence of a "kind of expansion into the space, conquest of the space" (TG) by IR with a final return to the starting position. In addition, there is the agreement to maintain a strategy of "reduction" for as long as possible, both in sound and in the range of movement.[15] The theme of reduction is nourished by the percussive sound spectrum of the few everyday objects used by TG (e.g., stone, stirring rod, chain). Just as the beginning of the joint work is described in an exploration of this special set of instruments, listening to the sounds is an essential starting point of the performance:

> It was about reduction, but I kept to that the least; because that provoked such a tension, this enduring of the reduction, in the interplay with Britta but above all with the sounds; extremely enervating, that triggered a lot in me; and then at some point the switch was flipped and it went off; I had to make an effort to always find my way back to the reduction (IR).

The immediate success of this initiation of hearing and movement through the "triggering" (IR) of the sounds and sound actions leads to the build-up of tension out of the reduction, which finally energetically expels a form of "arching" (TG) in the space.

The sensation and artistic realization of this tension, in turn, happens in different ways and shows the participants in their artistic individuality. If the initial scene is still characterized by a collective feeling into oneself, by "settling in, tuning in for this thing with the small group" (IR), then "when the switch is flipped" (IR, see quote above), performative roles develop, which in turn enable a general form of reference: one sits "super formally at the table," while one "freaks out" and the second dancer takes up postures at the table that "turn

15 This part of the performance is not part of the edited video used as a basis here.

it into the absurd" (IR). Not only does this offer a variety of possibilities for shaping the three-person situation in changing directions of attention during the performance, but the audience is also offered different "foci or axes of vision" (IR) as it develops. The holding and reduction tension of the beginning expands into a deliberate "discrepancy" (IR) that consistently grows from the playing out of the individual roles and artistic identities.

Although in BIT's performances there is usually only one person acting in the space, the space plays a central role in the concept of the setting: the theme of "expansion into the space" is referred to by the participants both in the gradual dancing conquest of an ever larger playing surface and in the sound, which can fill the space in different ways according to the acoustic conditions and types of play used. In the enormous contrast between the movement ambitus of the dancer (BP), who is stuck to the table and chair and communicates with the musician (TG) in the smallest of movements, and the space-filling escapades of IR, the tension "in playing with closeness and distance" (TG) is realized as a reference theme. It is precisely in the interplay of the visual axes that the spatial effects of small gestures and minimal sound channeling can be explored (TG).

The Setting as a Place for Negotiating Performative Roles

In the case of the duo, too, there is an agreed framework of beginning (standing next to each other in the center of the room) and end (kneeling next to each other, looking at the floor). However, this setting does not function in a comparable way as an immediate energetic impulse. Based on the aesthetic intention not to anticipate possible forms of interaction, but rather to "purposefully seek the lack of interaction and juxtaposition and the going against as a direct one-to-one" (SR), the setting literally aims at "standing next to each other". In this way, the simple question of the common presence in time and space can be established as an overarching theme: "We can do responding to each other but there is something more interesting which is like we're sharing this space. How are we going to spend that time together in this space?" (SR).

This question initially makes no distinction between the respective aesthetic practices of the participants. Here, too, the category of space is essential: SR, unlike TG, who mostly sits at a table, is mobile with the saxophone, moving along different paths during his playing and thus constantly creating new spatial constellations. AW, on the other hand, considers the musician on the conceptual level of the setting first as a partner and reference point in the space: "I think, I actually tend to relate to him more consciously spatially than aurally, than musically" (AW). But the question of the kind of understanding of space is also included in the concept of both performers: while in the case of the duo,

space is successively "conquered" by expanding sounds and movements "into it" (see quotations above)—the work of the duo is based on a geometric-energetic understanding of the performance space to be played. Reciprocal actions are motivated by shifts in emphasis within this space by seeking complementary positions or intentionally condensing the space by means of its gravitational points:

> He came down, so then I curved around towards him, then I left again just to have balance. And he is coming downstage, so then I'm going upstage to like, as I was saying, preserving of having that spatial relationship. And here is the diagonal, you got Doris Humphrey in 1964: The diagonal is the strongest line on stage (AW).

The difference in the understanding of space can be understood in the respective reactions to the beginning of the duo performance: while IR at first perceives a strong tension in the jointly forward perspective, but then cannot understand AW's abrupt change of perspective (gaze turned to SR all at once, rocking movement in the knees, finally a small hop; 00:20-01:34) as an energetically consistent continuation, the duo mainly observes the correspondence of SR's going back and AW's subsequent running backwards (01:38-01:47). However, both performers emphasize that both the impulse to hop as well as the movement to the darker back part of the stage were not based on conscious decisions. Nevertheless, as the reconstructive observation shows, the conceptual setting also acts here as an overriding level of justification for the reference.

Just as in the case of the trio, a corresponding understanding of roles results from the basic spatial constellation in the case of the duo. Here, however, not as a "discrepancy" and polarity of "closeness and distance" (see quotes above), but in the sense of equal presence as the theme of the "Two" (SR)—a role constellation of "two tall men in a space" (SR), which at the same time has an "automatic comedy" (SR) woven into it and for which classic duos such as Dean Martin/Jerry Lewis or Stan Laurel/Oliver Hardy are cited. Thus SR and AW understand their roles as different "archetypes": AW in the role of an "innate awkwardness" in relation to SR in the role of the "straight man." However, real relationship moments also play into these performative roles. After all, the openness of improvisation requires mutual knowledge, a knowledge of preferences with regard to modes of action and a fundamental trust in the productive continuation of impulses: "What I see is someone that I'm sharing a performance situation with, right? And that we have to trust in each other" (SR).

The Role of Aesthetic Preconceptions

Avoiding One-to-One Transpositions between Music and Movement

As has already become clear from the self-reconstructions of the working methods and the creation of the settings, the references are based on a number of aesthetic preconceptions despite the open and free form of improvisation. Both ensembles are united by the basic conviction that direct translations of music into dance or vice versa make little artistic sense and should not be striven for in improvisation. It is not a matter of "simply hearing again what I see, or vice versa" (TG). The principle "'Oh, I hear that kind of thing, I'm going to do this kind of movement'" (AW) does not work as an immediate improvisation strategy anyway:

> Because if what I'm trying to do, meet him when he goes, it's hard to do that because it's improvised. I don't know when it's going to happen, he doesn't know what's going to happen. So trying to create that relationship is impossible (AW).

This basic conviction raises the question: in what sense can we speak of an interaction between the two practices? If one pursues this question in detail in relation to both ensembles, interesting differentiations become visible. Seen from the outside, the conclusion is that the performances, coming from different directions, nevertheless approach the same experiences, or address the same experiences differently.

Constant Reference as a Starting Point for Counterpoint and Independence

While the duo, as seen, starts from "seeking the lack of interaction," the trio begins with an intensive mutual reference: the dancers immerse themselves in the sound of the noise actions and "feel what is going on" (IR). The spatial proximity plays an important role here, as does the inhibition of movement in the still small dance gestures. The initial situation created in this way is described as an intensive reference, as "being sworn in" (IR): "It was like a bond between us that kept changing and coming back, so it was constantly such lines of force, or something" (TG).

In the course of this reference, general parameters are described that establish commonalities based on the music: TG's rubbing sound actions are perceived as "surface and accent" (TG), as "such a contrast of the two-

dimensional with the percussive elements that he intersperses" (IR), which can serve the dancers as "primary orientation within the sound" (IR).

The further forms of reference in the sense of the basic motto of not directly implementing sounds and movements then take place in categories that break up this initially dense interweaving. The aim is "counterpoint: I do so many individual things [with the stirring sticks] and she goes very slowly, against the music" (TG), "going along or going against" or "time-delayed reaction" (IR). In certain situations it is about "not letting yourself drift" (IR), but only reacting subtly, subliminally and at very short notice. It is good "if you can notice a correspondence" (TG), but the "stringency" of one's own action is in the foreground:

> Because I have to, in order for what I do to have a stringency, I have to be for myself in a certain way. I have to be somehow so rounded, but at the same time I have to be so open that I am constantly receiving and transmitting on all kinds of channels as well (TG).

The participants find revealing images for this attitude: IR strives for a "symbiotic state" with the music, from which the freedom of his own action can only arise. The image of symbiosis, which in biology describes organisms which are interwoven with and profit from one another yet remain separate, clarifies here an artistic drive that understands freedom and reference as poles of one and the same thing. IR feels "self-sufficient" and "free" in his actions precisely because he experiences the strong influence of music:

> Symbiosis doesn't have to mean that I then enslave myself in the force field of this particular music, but that I can nevertheless remain self-sufficient; this makes it special and unique, because I then actually make something new out of it (IR).

As seen, TG emphasizes from the musician's point of view the need to "be for oneself" and to "be rounded" in order to consistently persevere in one's own ways. He is interested in references that are on a higher level of themes such as "closeness and distance, counterpoint and correspondence or even emotions" (TG). He summarizes the success of artistic communication within improvisation in the "linguistic" (TG) image: "I have the feeling of having been understood" (TG). References within such communication are negotiated performatively in the course of the interaction, but are not made explicit. The feeling of having been understood is obviously expressed subjectively in a confirmation of one's own course of action. Following Tomasello's theory, one could speak here of a "gestural interaction" that is based on a mutually negotiated "common conceptual background," which, however, only reveals itself in the musical or dance-

gestural action and is subjectively grasped as the "theme" and guiding strategy of one's own improvisation.

Between Conscious Non-Interaction and the Emergence of Relationships

The concepts of interaction, reference, and correspondence mentioned here several times are first clearly questioned by SR and AW. They understand the concept of interaction as a form of "response." The nature of a response, however, for them implies that practices are connected and related to each other, which they do not want to accept as a tacit precondition: "So it goes back to [...] that John Cage thing of not seeking to glue practices together" (SR).

SR thus refers to a well-known quotation by Cage, according to which sounds in traditional music are always related to each other and thus there is a kind of "glue" between sounds. Cage's artistic intention, however, is "to get rid of the glue, so that sounds would be themselves."[16] Transferring this to the relationship between dance and music, we would have to assume a traditional "glue" in the sense of an existing form of correspondence between sound and movement, which would have to be consciously tackled.

Against this background, several dimensions of the duo's approach become apparent. As already seen, the question at the beginning is not: "How can I find this connection and interaction?" (SR). Instead, the situation of being together in front of an audience is addressed, "because audiences, no matter what, with just two people, are going to create one [relationship] themselves" (AW). The category of geometric spatial relationships, on the other hand, acts as an external framework and neutral reference point that tries to avoid the described immediate effect on each other. At the same time, the consciously designed spatial relationship—as already indicated above—contains energetic points of contact: for example, in the question of "how long we were playing in certain areas and what we do" (SR), or in the game of balancing the spatial positions, for example, as a "deliberate facing change as he went sideways [...] to sort of echo that momentarily" (AW).

In the background, however, the immediate impact and influence that formed the starting point for the trio's work can also be discerned in the duo's case. Looking at a scene of mutual rapprochement (05:44-06:33), both note that there is indeed a kind of response to be observed:

16 Quoted from David Nicholls, "Getting Rid of the Glue: The Music of the New York School," in *Journal of American Studies* 27, no. 3 (December 1993): 335–53, 337.

> So, for example this one, I changed, Andrew has shifted or developed, so it's no longer the penguin forward, head roll, now it's gone into something completely different. And I'm sensing response (SR)—Oh yeah, I am definitely responding (AW).

The dance movement is influenced by the sound actions, just as the playing of the saxophone seems to translate the physical approach of the dancer into an intensification and compression of the playing elements. For SR and AW, however, these are moments that are not improvisationally processed on a conscious level. Instead of being the conscious subject of the improvisation itself, for them the mutual perception is more on a level of reflective confrontation.

Influence of Mutual Perception

Listening as Embodiment on the Part of the Dancers

IR's descriptions already reveal an intense perception of the music during the dance. The "enervating" (see quotation above) effect of the sounds is expressed as a physical reaction caused by the music. Listening means feeling at the same time and leads to an inner conceptualization of the music in bodily categories, as can be traced in the language used for this. When music is described as "two-dimensional" (see quotation above), for example, it is imagined as spatial and moving in space (corresponding quotations in AW). At the same time, this movement in space has a specific dynamic that is fed by both the imagined materiality of the sounds and the perceived actions of sound creation, as can be seen in the following scene (01:58-02:20):

> I knew about the chain … that he had it on the table; to play it so noisily, I find it very dominant somehow, almost as if he somehow triggers or almost maltreats us with it, with the noise, but also with the gesture. And then I translated it, if I may say so, into a dynamic, almost whipping movement (IR).

AW, on the other hand, seems to want to distance himself from this direct influence of music. He personally reflects on the bodily and embodied perception of music against the background of a fundamental difference in the phenomenological appearance of both arts. While dance has "only sight," music addresses "sight and sense of hearing" (AW) at the same time through the presence of the musicians. His strategy of searching for a "non-interaction" corresponds to a no less intensive listening to the music, whose presence he describes as impossible to evade: "If you look away from something, you don't see it anymore. But ears,

you hear it, no matter where you are" (AW). So music fills the space even if the person dancing turns away. Thus his descriptions of SR's sound actions are no less interspersed with bodily sensations:

> And so I don't try to interact with Simon. The music, the sounds are always coming in and no matter what, I'm going to react on some level, unless I make a huge, really strong choice [...]. And then especially when he gets going with the baritone, it really ... it was a visceral experience. Love it (AW).

Underlying his examination of how the arts reference each other is the reflection on their sensual mode of appearance, which could be theorized as the "involving" effect of hearing in contrast to the "distancing" function of seeing.[17]

Seeing as Sensing Relationships on the Part of the Musicians

This fundamental aesthetic and perceptual psychological distinction also seems to affect the experiences of the musicians in comparison to the dancers. The descriptions of dance from the musicians' point of view, however, are much less on a level of immediate sensual experience. Nevertheless, SR also initially adopts a phenomenological perspective in his reflection. The perception of the dance during the performance cannot be understood as the registering seeing of something that simply exists: "Because you don't ... it's like, if you kind of open the box and look and say 'Oh, what do I see? I see ... in the box I see this and I see ...'" (SR). Rather, perception is fundamentally linked to the relationship to the partner within the performative situation:

> What I see is colored by the fact that we're in a performance situation firstly, right? We're in a special situation together. What I see is someone that I'm sharing a performance situation with, right? And that we have to trust in each other (SR).

17 Cf. Ursula Brandstätter, *Musik und bildende Kunst im Dialog. Ästhetische, zeichentheoretische und wahrnehmungspsychologische Überlegungen zu einem kunstspartenübergreifenden Konzept ästhetischer Bildung* (Augsburg: Wißner, 2004), 112 (trans. Ivo Berg): "Das Sehen ist ein *distanzierender* [emphasis in the original] Sinn, der auf einer klaren Trennung zwischen wahrnehmendem Subjekt und wahrgenommenem Objekt beruht. [...] Diese *involvierende Tendenz* des Gehörssinns kann besonders deutlich beim Hören von Musik nachvollzogen werden: Indem Musik direkt auf den Körper einwirkt und damit vielfach eine physisch-psychische Gestimmtheit auslöst, macht sie den Körper des Hörenden selbst zum Ort des musikalischen Geschehens."

In turn, he attributes seeing and understanding the dance movements to his own learning process. From the experience of the joint work, he sees in himself the ability to increasingly perceive stylistic features of movement and improvisational strategies of dance. Even if from this he draws the impetus for his own explorative attempts as a musician, this hardly seems to have any influence on the way he directly perceives the movements. It almost seems as if they actually have more the character of a given for him in the above sense.

In case of TG, too, there is no exact and perpetual observation or sensation of movements, as would correspond to the omnipresence of sound mentioned above. Perception seems to take place in the background of attention, as it is not uncommon to play without visual contact or with closed eyes. And even if there is visual contact, seeing is more like playing from a score with the support of memory:

> Well, I don't watch it all the time, so to speak. It's like … when you know the piece by heart, but you still have the sheet music in front of you. And maybe you look at it again from time to time or read it in your mind. But you don't read it and really play what you see there. But you already know so and so and so and so, a bit like in your memory. So I don't analyze it or anything. It's just the way it is (TG).

TG refers here to perceptual-psychological processes in playing from a score. Due to the abundance of information to be processed simultaneously, reductions through chunking and anticipation of known patterns play an essential role. Transferred to the perception of movement during music-making, the abundance and complexity of movement can be condensed into action patterns that can be processed immediately. Instead of a detailed registration and musical depiction of movement in sound, the overarching relationship and presence in the space as well as the performative dynamics of the actions seem to have a stronger influence. A comparable embodiment of movement in perception on the part of the musicians cannot be determined in the interviews.

Aesthetic Transformations between Dance and Music

Polyphony of Expression Versus "Watering down" of Practices

Finally, the question arises as to whether the references between dance and music can also lead to a change in their own practice, i.e. whether "aesthetic

transformations"[18] are motivated precisely by being referred to one another in improvisation.

The most obvious example of such a transformation can be found in the dance actions of IR, who uses a stool that was actually provided for the audience for his solo interludes in the space. He attributes his choice to use the stool to the sounds of the audience, which for him were a defining factor of the "soundscapes" in the theater. He uses the stool as a moving and shifting dance object and consciously incorporates the resulting sounds of pushing and throwing into his performance. IR sees this direct sonification of the energy of movement as a delightful extension of his expressive possibilities. In becoming aware of and incorporating the sound spectrum of his own movements and body, he sees an additional "polyphony" that can lead to a sharpening of his intentions:

> So of course that can also lead to watering down; but I don't have that impression, but rather to sharpen things and to accompany myself and there is a kind of polyphony [...] or such an orchestration, so that is already like that with several body parts. And using the voice in different ways in addition to the noises produced by the body, with the floor and so on, that adds another level of complexity (IR).

AW, on the other hand, is critical of this possibility for dancers to integrate the sounds of their own body movements including breathing, voice, and step sounds. It tends to be a "cliché" and is often a means for beginners who want to establish relationships in this way. However, it is not a "creative tool." He alludes to the "other side" of "transformation": the feeling of "watering down" (IR) aesthetic practices, of moving into areas where one does not have professional access.

Gestural Qualities of Music Making Movements

SR describes the concern of "watering down" as a general problem and a source of inhibition on the part of the musicians. If they were to attempt to integrate dance movements into their playing, a tension would inevitably arise with the physicality of the technical movements on the instrument. These are all too often subject to the requirement of traditional training that any additional movement that does not serve to produce sound must be avoided.

Interestingly, however, this is precisely where IR and AW start in their perception of musicians. For them, musicians are "movers" per se, especially in

18 Cf. Ursula Brandstätter, *Erkenntnis durch Kunst. Theorie und Praxis der ästhetischen Transformation* (Cologne: Böhlau, 2013), 120–7.

their technical movements (IR); the exact coordination between movement and sound is fascinating in music-making movements, which often even draws attention away from dance (AW).

Both thus open up a view of music-making movements that—as described at the beginning—was raised in musical gesture research. This directs the view to the variety and different functions of movements on the instrument, each of which can take on a gestural quality. In relation to individual sounds, this includes the body movement in preparation for a sound action, its shaping for the duration of the sound, but also the reverberation, its intended time of effect.[19] Moments of such gestural music-making can be assumed in many places in both videos—also or precisely because both musicians tend to show a non-extroverted technical style of playing on their respective instruments.

Primacy of the Body?

The thesis of this gestural way of music-making can be extended by another facet, especially on the basis of the duo's work. The performance is entitled *Libet's Lag* and alludes to the experiments of physiologist Benjamin Libet, who postulated in the 1970s that in the case of simple physical actions, the neuronal impulse in the motor cortex precedes the actual awareness of the decision to perform this action.[20] Libet thus raises the question of consciousness and the origin of decisions. AW describes a corresponding experience from the perspective of the dancer:

> So there are times when we are performing and [...] or in a studio, working together, and I'll do a movement and then I'll hear a sound and I think "Oh, did I respond to that or did I not?" I don't know because I feel like the movement was executed and then I heard the sound but then there is sort of that lag question of "Did I already hear the sound and then I moved and then I became aware of the connection after the fact?" (AW).

Transferred associatively to the improvisational context of the performances, one might ask whether gestural expressive qualities of music-making in the sense described above might not also follow a primacy of the body.[21] In other

19 Godøy and Leman, *Musical Gestures*, 22.

20 Cf. https://de.wikipedia.org/wiki/Libet-Experiment (accessed 27 July 2022).

21 Pavlos Antoniadis has described such a primacy of the body in relation to the interpretation of complex piano music with the term "bodily navigation." Cf. Pavlos Antoniadis, "Körperliche Navigation. Verkörperte und erweiterte Kognition als Hintergrund der Interpretation komplexer Klaviermusik nach

words, the question is whether it is precisely the thematization of the physicality of music-making and the physical mimesis in the performative situation that motivates the resulting sound actions. An example of such a passage in the trio could be the sound action of TG's stirring sticks (04:06-05:06). Here we can observe how the music-playing is preceded by a subtle bodily settling in, which takes up the gestural quality of the dance and thus seems to gesturally anticipate the sound action. In terms of the nomenclature of musical gestures, these movements would therefore have to be classified even before the gestures that actually trigger the sound. There is no direct confirmation of this thesis in the interviews. TG at least sees the possibility of his own playing "becoming more performative" through the interplay with dance, without, however, feeling like a dancer himself.

SR confirms the artistic engagement with Libet's theme, but does not mention any corresponding experiences on his part. His strategy of moving in space, however, can be interpreted as a transformational bridge to dance. Admittedly, he does not attempt to present his own movements as dance. But by including spatial positions as parameters of his playing, he not only stages acoustic changes of the sound source—as TG does occasionally—but also offers himself in his physicality as a musician as a reference to dance

Gestural Interaction?

The interviews bring up a variety of aesthetic experiences and artistic procedures. In view of the abundance and inner interconnectedness of the statements, it hardly seems appropriate to search for a single theory or a singular aesthetic principle of mediation between music and movement. Rather, the topics of the interviews open up a broad field of possible references that can nevertheless be structured internally. Viewed as a whole, the references within this field are in a state of tension between conscious preliminary decisions and unconscious influences. They show themselves as momentary processes of negotiation that range from allowing an immediate influence and direct translation to the seemingly intentionless emergence of relationships. Accordingly, in the interviews, in addition to concurring basic attitudes and experiences, there are also different images and modes of individual implementation and positioning. This confirms the thesis put forward at the

1945," in *Verkörperungen der Musik. Interdisziplinäre Betrachtungen*, ed. Jörn P. Hiekel and Wolfgang Lessing (Bielefeld: transcript, 2014), 203–8.

beginning that it is precisely the improvisational situation that challenges the exploration of mutual perception and reference.

A central role is played by the performative setting, which is the result of a constantly evolving process of artistic-research interplay and forms the impulse and starting point for these explorations. Between the two ensembles, the category of space can be identified as a basic reference point: space as a performance space that is played in and energetically interpreted together; space as a common projection space for sounds and movements; space as a place of presence and of mutual referral, which gives rise to performative roles and relationships; space, finally, as a space of possibility for aesthetic transformations in which music becomes physical and bodily movements are charged with musical parameters.

The theoretical framework of "gestural interaction" outlined in advance of the evaluation is echoed again and again in the interview statements. The "gesture of listening to music" as affecting a permeable, opening, and resonating body seems to be a central experience, especially for the dancers. Within this attitude of listening, music appears—according to the thesis of musical energetics—in an embodied world of imagination and sensation and unlocks common categories between sounds and movement. At the same time, in the sense of "musical gestures," the real gestures of musical movements come into focus, whether as an unconscious quality of expression of one's own movements on the instrument or as a possible starting point for dance movement design.

However, these theoretically derived aspects—according to a possible thesis that could be derived from the participants' reflections—do not form a necessary or sufficient basis for concrete references. Rather, they seem to point to a space of possibility which, in the sense of the "gestural communication model," can open up negotiation processes of a shared background of a concrete artistic interaction. These negotiation processes can come to consciousness as themes of improvisation in general terms such as reduction, enduring tension, counterpoint, development of material, going against or letting oneself drift. These, however, cannot be reduced to a specific aesthetic principle, but remain in need of interpretation themselves.

This relativization of theory is also suggested by the thematization of the concept of interaction within the performances. What interaction is or can be, in which forms it expresses itself and to what extent it becomes an artistic concern at all is put up for discussion by the actions and strategies of the participants themselves. Possible forms of interaction can be considered from several perspectives: as a temporally coordinated sequence of actions on top of each other; as an immediate influence in the quality of an action; as a deliberately directed response or consciously set counterpoint; as a decision not

to interact and to maintain personal stringency. Part of this questioning of a one-dimensional concept of interaction is the reflection of the respective sensory perceptions: the imbalance between an involving omnipresence of sound and the distancing perspectivity of vision. It could be assumed that behind the expressed reluctance of musicians to transform music directly into dance, for example, there is not only a discourse of professionalism, but that a border of sensory mediality must be renegotiated here.

Finally, in the artists' self-experiences, the perspectives elaborated here appear in polar opposites and seem to form the breeding ground for artistic decisions precisely from this. This polarity is reflected in the images of one's own playing position: in the image of symbiosis, which at the same time means enabling freedom; in the image of being for oneself, out of which openness and responsiveness emerge; in the image of practices not sticking to each other, into which the awareness of subcutaneous influences and emergent relationships is woven. Decisions in the event stream of improvisation reveal themselves as individual localization within a continuous line between these polarities. Gestural interaction thus proves to be a polyphonic mesh of points of reference and contact between the participants and their artistic procedures, which are constantly being renegotiated.

The Dialogue of Sound and Movement in Improvisation

Simon Rose and Ingo Reulecke

Abstract: *How does interdisciplinary improvisation in dance and music manifest in the moment? What strategies, techniques and ideas facilitate the development of this interdisciplinary practice? Over five-months of dedicated research Rose and Reulecke focused these questions through studio work and reflective practice. The research privileged ongoing improvisation (rather than seeking to establish a reproducible product). An overarching openness provided for development as awareness and attention became principle shared themes. Within this holistic approach, essential difference was valued as a source of heterogenous creativity. Disciplinary mores and boundaries became questioned—the distinction between practices softened and engagement took place in a less separated, more* trans-disciplinary *manner. Working collaboratively through shared interdisciplinary improvisation requires an enquiring attitude, we want to discover, thus, engagement with improvisation in sound and movement can offer in-depth learning.*

IR: As a dancer, I've been involved with this sort of practice for about twenty years—working in sessions with musicians in what I describe as real-time composition. I like to make this reference to the Echtzeitmusik (real-time[1] music) scene in Berlin.[2] I'm curious as to how we make sense out of what we are doing in movement and sound: how do we manage to improvise coherently and create real-time composition? How can we better understand such composing, that manifests in the moment, without specific pre-planning? I find such

1 Simon Rose and Raymond MacDonald "Improvisation as Real Time Composition," in *The Act of Musical Composition.* Studies in the Creative Process, ed. Dave Collins (London: Routledge, 2012).

2 Burkhard Beins, Christian Kesten, Gisela Nauck, and Andrea Neumann, eds., *Echtzeitmusik Berlin: Selbstbestimmung einer Szene/self-defining a scene* (Berlin: Wolke Verlag, 2011).

creativity regularly in sessions with dance and music. Together, over a dedicated period of five-month's research period, we've focused on these question through intensive work in the studio and through discussion. I've been interested in how a development of shared practice might take place alongside a deepening of understanding of the complex processes at work. Through our research design we immediately reflected verbally and kept a spoken record of that which has occurred in activity. This has supported the flow of iterative activity within the ongoing process. Often, we found an immediate reflective response with substantial thoughts and ideas concerning the relation between music and dance/sound and movement. I guess we are able to reach this level quickly, as we've been involved in extensive work in this field for many years.

SR: Over the months since we began this systematic research approach, turning over what the nature of our practice together is, this simple word *shared* has become a constant. Shared is referred to in its broadest sense—the shared agreement to do something together—even if this is activity that can be oppositional or have great juxtaposition—the shared-ness remains. Collaboration is happening, and this is an important theme of improvisation, but this shared-ness, or willingness to share, seems to go to a deeper level of mutual understanding.[3] Perhaps because, in addition to collaborating through disciplinary improvisation, we're engaged in interdisciplinary activity that calls for a particular kind of openness. It is certainly to do with working with sensitivity. At the level of embodiment and intuition we already know what is going on; after all, we successfully perform together, and this is, in large part, due to knowledge and skill that we are bringing from our respective fields. But the challenge here is to articulate this embodiment in words. Of course, *shared-ness* can suggest a "touchy-feely," cocooned kind of activity that may be more suited to privacy and in which consensus is the likely main goal. Incubatory activity is certainly nurturing but I think we are dealing more in terms of having left the nest—we're not spring chickens! Shared-ness here is more towards the development of a professional performance practice.

This performance practice is situated; the context is instrumental for creating. And this shared-ness of performance practice extends to the audience. So, shared-ness involves a robust, dynamic, communicative activity and working closely, with immediacy with the other who is simultaneously involved in a practice other than your own; this calls for a kind of heightened sense of sharing. Truly being there for one another in a creative, public context requires

3 For a more general discussion of creative collaboration see: Keith Sawyer, *Group Genius: The Creative Power of Collaboration* (New York, NY: Basic Books, 2007).

commitment in terms of time, energy, and thinking and I experience this as felt in our collaboration.

Although the large baritone saxophone can be cumbersome, it has its own strong bodily presence and I am fond of it. Now, the logic could be, if you wish to work with dancers—play a piccolo or use voice but I have developed a love of the sound-world possible with the baritone saxophone; this is my main musical interest, one that I choose to contribute with in collaboration in any artistic context. I'm consciously working with the resistance and limitations created by the choice of instrument. So, in my case the somatic ideas that we're exchanging are processed through such limitations. In our practice I realized early on that, given the musical constraints, working with spatial awareness and developing movement and certain positions, it is the relational choices that provide for a way of working with consideration of the dance while also supporting the music's embodiment.

The interdisciplinary connection you make to Berlin's *Echtzeitmusik* is interesting. This music scene is now an umbrella term for a wide range of music practices—you can find noise, string ensembles, electronics, jazz-based, new-music compositional procedures, and much more. However, beyond tendencies, styles, and labels, a closer look reveals improvisation, in different degrees, as a thread that runs through, connecting musicians. Typically, musicians are able to collaborate and perform together within this array through some shared understanding of processes of improvisation—even if the outcome may be fixed. In this way improvisation forms a connectivity, much as how we are using it.

IR: What I've experienced in sessions with musicians, as well as dancers, I find very special. These moments of shared space and time tend to occur more often with musicians than with dancers—currently I'm performing more frequently with musicians. Often what takes place is not described or discussed in advance. Rather, the process of composition is integrated and unfolds as a time-based practice. This is in high contrast to rehearsing in order to construct a fixed dance piece or product. I find the former more productive and creative. We are immersing ourselves, together, in a zone of openness, an open field. This is a particularly interesting participatory moment. The idea of shared space, in which we are paying attention, together, is really important. I describe this in terms of the space working for us. This supports the outcome of the improvisation.

The quality of attention in practice needs to be highlighted. And this is informed by experience; there's a discernible difference when we encounter those who have developed a conscious quality of paying attention via work on awareness, listening and so forth through which empathy in practice becomes

possible in the moment of improvising. This enables a kind of flow to develop between us.

SR: Since I began working with dancers my interest in the body has gradually deepened. While musicians are often preoccupied with an instrument, we undeniably share this theme of body; we have an equal bodily presence. So, the dancer's bodily knowledge offers ideas and material arising from the field and rightly becomes foregrounded in our explorative exchange—looking at strategies for approaching movement and sound together—such practice offers huge interdisciplinary potential.[4]

Initially, I found the idea of working together in sound and movement, on the face of it, a beguilingly simple idea, yet it turns out to be fascinatingly complicated! And as I was becoming more interested in the potential of developing interdisciplinary work with dance, I saw an established dance company in Berlin. The dancers were working with "classical" musicians and it was clear that there was a thematic choreographic decision for the dancers to work in close proximity and in contact with the musicians' movements. But, as they did so the feeling from the musicians was one of compliance—there was an awkwardness. I felt there was a lack of consideration given to the embodied nature of music—the choreography overlooked the musicians' already highly honed form and sense of embodiment that leads from the requirement for the maintenance of technique so prized in classical music. In working together in sound and music, there are bigger, more in-depth questions beyond how can we draw musicians into dance. Conversely, when some enthusiastic musicians work with dancers in improvisation there can be an uncritical compulsion to move with or try to mirror the dancer. Of course, a lot of this is to do with intention, interpretation and experience, and how much interest, time, and care is afforded to development. There are many more sides to this, but by acknowledging the complexity of what we're working with, we can develop a more useful understanding for the development of practice in sound and movement.

For the musician, we can consider this developing of practice in sound and movement via a more holistic attitude that builds from increased interdisciplinary bodily awareness. But this also builds from the acknowledgement of *difference* in the two activities. From a musician's perspective, we are already

4 For more on different disciplinary approaches to improvisation see: George E. Lewis and Benjamin Piekut, eds., *The Oxford Handbook of Critical Improvisation Studies* (Oxford: Oxford University Press, 2016).

wholly engaged in an embodied activity, with our instrument (that is also itself a body). This has its own demands for the aesthetic production of music and sound and, of course, this calls for its own perspectival awareness. The musicians' embodiment contributes to the shared development of improvisation in music and dance. So, what is the nature of the musician's embodiment? And how does this relate to the dancer's embodiment? Such questions aren't straight forward and may give rise to contradictions, for example if you look at instrumental pedagogy, in purist saxophone teaching and practice, movement may be frowned upon as it alters the alignment of body/instrument posture and resultant sound production. Saxophonist Wayne Shorter is an interesting and humorous thinker; he is rare in that, even in his eighties, he is constantly seeking to be inventive and creative, he says don't tap your foot, by doing so you are introducing a limitation via a bodily diktat—a limitation to the temporal, improvisational possibilities. He's saying don't move! Or, rather, don't introduce extraneous movement. His preference is to free the musical possibilities by dedicating all activity to creativity in sound without the hinderance of additional movement. This is an interesting, informed position, and here Shorter is not referring to working with dancers; nevertheless it indicates the challenge to overly simplistic thinking about the relation or translation between the two disciplines, particularly in terms of initiating activity and pedagogy. Limitations and resistances form part of the sharing and these will also suggest frameworks for action and creativity. For example, I cannot work successfully without the resistance of the reed in my mouthpiece and we are both working with the limitation and resistance created by gravity. One initial, introductory way of forming an explicit acknowledgment of the nature and differences in our activity is to simply consider that we have a *spatial plane* and a *sonic plane*, simultaneously, and we situate ourselves in relation to these—we can develop varying degrees of awareness of these, and in sound and movement in improvisation make informed choices by considering either or both. This framing can open the space, and leave the door open for everyone, regardless of experience, skill, level of interest, or instrumentation. The interdisciplinary nature of the shared practice is achieved through a clarity of approach that acknowledges and values the other.

Let's discuss some specific examples of ways we worked together somatically in our studio sessions. You introduced the idea of what you call "the four corners of the feet" for our improvisation work in music and dance. I found this increased bodily awareness useful for our shared practice; as a musician I don't much consider how I am standing, or moving, and the very basis, the contact with the ground is fundamental.

Figure 1: *Ingo Reulecke (dance) and Simon Rose (baritone saxophone)*
© Gesina von Schroeder

IR: I find the awareness of the extremities very important in dance as it connects us physically with the space and the environment. The feet carry such fundamental importance for our movement. Directing and enhancing our perception of how the feet engage with the ground is very important for me. The four points are: inner ball, outer ball, inner heel, outer heel. By aiming to experience these more fully we may achieve an increased conscious approach to grounding. We also increase awareness of how our body's weight is distributed through parts of the feet. My approach in this work on awareness and perceiving is to focus upon one part of the body, and from there direct the concentration to other parts. We then expand our perception, making us more present, more concentrated. I think of this part of the practice as becoming tuned. This work prepares us for open improvisation. And, it's worth registering how precise preparatory work may influence and determine the quality of the open improvisation that follows.

SR: I found the manner in which you introduced me to slowly concentrating and developing awareness of my contact with the ground also led to a kind of calming, sort of meditative state, and when we began the improvisation I was inclined to continue rather than break this feeling and connectedness with the ground. So, in that respect, through improvisation the exercise informed the composition of the music. You also introduced the idea of the "four dignities."

IR: The four dignities are: sitting, standing, lying, and walking. I like to introduce simplicity, be it with dance or dance plus music. By paying close attention to something that is very familiar and simple we can open new perspectives of how we move, and how we experience spatially. We employ these postures all the time, yet we're not necessarily conscious of them. The task in the exercise is to carry these out more consciously, to feel and become more aware of our embodiment within the posture as well as how we move from one posture to the next, what happens in transition, and how we create a posture, or dignity, with our presence. This activity can move from an exercise to a kind of score that is limited by choices regarding the four dignities. This can become as challenging and complex as participants choose it to be, depending upon ability, but the important thing is to retain the awareness found in the exercise. I find this work necessary in moving towards individual and group improvisation as it opens up the space to the body—participants may begin to experience an increased sense of proprioception as a tool for improvisation work. By spending time paying close attention to what we usually think of as the simple things, increasing awareness of these, we can fly high in improvisation. Through this kind of activity, I often find a kind of meditative or highly concentrated state with which I play.

In free exploration I'm often astonished by how much we share in dance and music—the intensity of shared experience, which is multi-layered. It goes far beyond, say, a spoken conversation. Daily, more pedestrian activities rarely reach a deeper level of awareness and communication. There is huge potential for communication and experience in this codified art space when we dig into the shared process.

SR: You introduced a further focus on perception through work on looking and seeing as a way into developing awareness and compositional ideas in activity. It's a useful, equally open point of reference for dancers and musicians, a means of developing further awareness within the shared process of improvisation that can also lead to material. I found this engaging: increasing perceptual awareness; noticing and considering the elements of the given space; and how we may relate to and within the given space as well as with one another. This subsequently led to your reference to William Forsythe's idea of making the eyes go out of focus as an extension of the seeing exercise—a technique aimed at overriding habitual patterns of moving by creating a different sense of the body as we move.[5]

5 William Forsythe, *Improvisation Technologies. A Tool for the Analytical Dance Eye*, CD-ROM (Ostfildern-Ruit: Hatje Cantz, 1996).

Developing awareness through such activities became a consistent focus within our sessions. And, immersing in the somatic and sensory work led us to reflect upon awareness-of-awareness; what it means to be more fully present and available in sound and movement; and, more generally, the nature of consciousness in relation to this work. This all arose within the setting of shared somatic practice. It seems that what we do is most obviously asking questions of my body, the musician's body, and this simply doesn't arise in the everyday culture of musical practice. Typically for a musician, it's only if you have a physical problem that you begin to seriously consider the body and the practice more ergonomically. However, sharing such ideas by using the sensory as a reference opens a world of interdisciplinary possibilities.

Figure 2: *Ingo Reulecke (dance) and Simon Rose (baritone saxophone)* © *Gesina von Schroeder*

Of course, listening in improvisation is an important theme of music and this can become interdisciplinary.[6] Listening offers an equally relevant means of

6 Simon Rose, "When Law Listens," in *Critical Studies in Improvisation/Études critiques en improvisation* 12/1 (2017), accessed 17 July 2022, reflected interdisciplinary research of music and law.

entering the shared activity of improvisation in sound and movement. Pauline Oliveros' *Deep Listening* is a useful reference and began as a way of thinking about engagement with sound, music, and composition and is now a much more encompassing multidisciplinary practice.[7]

IR: Awareness is a necessary part of our sharing. In a way, the aspect of listening is a holistic one, and in this sense, covering the sensory and even the proprioception. I have the feeling that to some degree I'm able to listen with my skin and the layers of the body (muscles, bones). But I refer to the whole instrument of the body as listening, or aware, in the best case—this can be something to aim for. I apply all kinds of fine-tuned work to get close to this kind of awareness—different practices such as mindfulness training (concentration, meditation, awareness exercises). I believe this is more significant than aiming to become virtuosic on an instrument or as a dancer. And I connect to Pauline Oliveros' *Deep Listening*—she used different methods and techniques to develop the capacity for listening, in a very broad sense. You can fine-tune yourself as a receptive being and you can also fine-tune a way of exchanging information with the outer world in an improvisation in which you are communicating with others in time and space. I appreciate a receptive and aware partner as a co-improviser in the space and do view this as a holistic process. The whole situation of improvising in performance across artistic disciplines is so complex we need to be fully equipped on many levels to be ready for these huge challenges. I believe strongly that in improvisation in sound and movement everything in time and space matters; the other performers as well the audience in any given context is important and this can become addressed through the practices that we choose to engage with.

Sound and Movement in Improvisation: Developing a Transdisciplinary Practice

SR: For improvisation in sound and movement the fine line between interdisciplinary and transdisciplinary offers a pivot for thinking that can offer clarity for practice and pedagogical thinking. Interdisciplinary is understood here as those with different disciplinary knowledge and skill sharing in a common aim; transdisciplinary as when this disciplinary knowledge and skill is pooled and

7 Pauline Oliveros, *Deep Listening: A Composer's Sound Practice* (New York: Deep Listening Publications, 2005).

a third way emerges. Being clear about the value of our disciplinary perspectives and that of our partners, it is the interdisciplinary nature of our working together that allows for the development of shared practice. The activity is founded in interdisciplinarity through which it may develop in more holistic, transdisciplinary ways. We need each other, but are not co-dependent; rather, the more identifiable and rigorous the practice of the other, the deeper their knowledge and skill, the more there is to play with. The acknowledgement of interdisciplinarity creates an even playing field for development from a basis of understanding towards *mutual composing*[8] in sound and movement. And from this understanding the multiplicity of tendencies, opinions, and beliefs found across the field can be welcomed.

How does this practice become transdisciplinary—how does a focus with different disciplines balance with the more holistic character of our experience of working together? Firstly, to enter the field of music and dance requires a curiosity and motivation to share with the other practice creatively. This is assisted by our experience of learning in different ways. Within a metacognition of learning, the work on learning styles suggests different individuals may prefer to approach a problem in their own way: this may be kinesthetic, visual, aural (Learning Skills and Research Centre, 2004).[9] However, learning styles are more usefully considered as indicative rather than prescriptive and we adopt different approaches to learning in everyday ways that may not be overtly acknowledged. For example, I recently attended a dance class held by Maria Colusi (Berlin 2020) in which we were guided to develop improvisation within the frame of *staccato* and *legato* movement, and Colusi demonstrated the development of "phrases" by means of "your inner music." Without discussion, everybody in the group of dancers appeared to grasp the intention via the use of interdisciplinary terms from music. Earlier we referred to the sonic plane and the spatial plane in order to delineate and establish a focus that is capable of embracing both fields simultaneously, without assuming a bias. But of course, sound and music are also spatial and, as we see, dance is experienced as musical. Nevertheless, the possibilities and opportunities arising from contemporary improvisation in dance and music ask that we more consciously develop awareness of ourselves and the other in order that we can be discerning in the shared moment of improvisation. By going deeply into the practice we become not only

8 Simon Rose, "Mutual Composing: Practice Led Research: Improvisation in Dance and Music," in *Tanzpraxis in der Forschung—Tanz als Forschungspraxis*, ed. Susanne Quinten and Stephanie Schroedter (Bielefeld: transcript, 2016), 217–22.

9 For more on improvisation in music and learning see: Simon Rose, *Improvisation, Music and Learning: An Interpretive Phenomenological Analysis* (PhD dissertation, Glasgow Caledonian University, 2013).

more aware but more appreciative of the other's history of practice, as distinct from our own. This deepens the intrinsically relational aspect. Such an attitude supports our more intuitive, impulsive, and spontaneous responses to the other in improvisation.

Developing from this informed basis, improvisation in sound and movement is freed, enabling a more *trans*disciplinary activity. As the distinction between practices softens in collaboration, we become engaged in a less separated *third way*. Through shared, open improvisation in performance, we can enter a "not-yet-known"[10] space, together. We also refer to guitarist Derek Bailey's description of "non-idiomatic" or not-predetermined free improvisation through which outcomes are discovered in the course of performance.[11] The use of not-predetermined here describes the creative process that takes place together forming through a shared unknown. While individuals will have familiar ways of working, it is participation in the shared unknown that is the site of improvisation in sound and movement. Improvisation is often characterized by a searching quality, discovering together, and in our work improvisation has fittingly been both the subject of investigation and the primary means of exploring questions through performance practice. This not-predetermined feature of free improvisation intersects with Borgdorff's description of the significance of "not-yet-knowing" in artistic research contexts, and what Kershaw describes in performance studies as the necessary state of unknowing that forms a "lacuna" of transdisciplinarity.[12]

This transdisciplinary aspect, working through the unknown, is also the most challenging to articulate beyond the act of performance. Our entire exchange can be understood as a concern for an articulation of the conditions that allow for this unknown, not-pre-determined, not-yet-knowing that is a site of shared creativity. Paradoxically, the holistic nature of improvisation in sound and movement may seem disrupted by the need to attend to the specifics of, for example, the development of awareness through exercises that support the whole. However, the aim of exploring not-yet-known territory benefits from preparation.

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10 Henk Borgdorff, *The Conflict of the Faculties: Perspectives on Artistic Research and Academia* (Leiden: Leiden University Press, 2012), 173.

11 Derek Bailey, *Improvisation: Its Nature and Practice in Music* (New York: Da Capo Press, 1993), 18.

12 Baz Kershaw, "Performance Practice as Research: Perspectives from a Small Island," in *Mapping Landscapes for Performance as Research: Scholarly Acts and Creative Cartographies*, ed. Shannon Rose Riley and Lynette Hunter (New York: Palgrave Macmillan, 2009), 3–13.

In the artistic field, improvisation in sound and movement is characterized by a diversity of approaches and practices and this is significant for thinking about pedagogy. The content of shared improvisation develops from the interests of those involved. The myriad possible ways of doing things means there is great opportunity for individuality within the group setting, for this reason we have avoided being prescriptive.[13] This is an inclusive activity in which difference is key for creativity. Improvisation offers the individual the opportunity to assert identity through artistic choices while at the same time working creatively by allowing and supporting the other in group contexts.

Maintaining the moment of shared improvisation activity as *performance event* is important. In our research approach in the studio, open improvisation activity was preserved and the other activity, such as exercises that develop awareness, supportive. The development of practice is incremental and benefits from support: confidence can be nurtured through empathic instructions and simple structures that value imagination and experimentation while engendering trust. The development of improvisation in sound and movement from playful initiation to independent artistic activity can also be thought of systematically via Vygotski's Zone of Proximal Development (ZPD).[14] ZPD is the movement from what is known towards that which is currently unknown by means of degrees of support. *Scaffolding* has become an interchangeable term. ZPD provides an acknowledgement of an important intertwining of *the unknown as a condition of learning and of open improvisation*. In improvisation, for example, with guidance, musicians new to collaborative activity with dance may simply consider their spatial relationship to the dancer, and then begin to experiment with this in a compositional manner without guidance. Simultaneously, we need to be mindful of the potential complexity arising through the "not-pre-determined" character. In transdisciplinarity we are transitioning from the known towards an acceptance of the unknowing as the condition of practice.

Shared and personal reflection can offer an important supportive role for the development of practice. In embodied action we pass through moments that

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13 For examples of this diversity in sound and movement see Jenny Hack's Sound Dance Festival, accessed 10 January 2023: https://archiv.soundance-festival.de/programm-2020/?_gl=1*1elrdjt*_ga*MTM4Mzk5MzM3MS4xNjU4MjI0ODUz*_ga_XHXVD5HGTX*MTY1ODIyNDg1My4xLjAuMTY1ODIyNDg1My4w&_ga=2.202807505.1792038313.1658224853-1383993371.1658224853. And for more on the diversity of improvisation in dance see: Vida L. Midgelow, *The Oxford Handbook of Improvisation in Dance* (Oxford: Oxford University Press, 2019).

14 Lev Semonovich Vygotsky, *The Collected Works of L.S. Vygotsky*, ed. Robert W. Rieber and Aaron S. Carton (New York: Plenum Press, 1987).

may be unrepeatable and value can be had through reflection that benefits from staying close to the felt transdisciplinary experience. For this reason, reflection that takes place following embodied activity is of particular value. In an ongoing manner this can establish a pattern that becomes a learning cycle. The same qualities of awareness and listening valued in the improvisation activity also carry over to reflection that is shared. Reflection upon the experience has a different function from that of discussion—the task of the listener is heightened—the quality of listening is of equal importance to that which is said. In this way reflection becomes a precise learning tool, one that can also contribute to personal as well as more formal assessment. Carefully handled, reflection is an opportunity to draw out and share less tangible yet important aspects of improvisation, such as the sense of intersubjectivity found in improvisation. Intersubjectivity occurs in improvisation as we internalize the psychological state of the other by means of empathy. Doing and subsequent reflection form an iterative learning cycle that offers secure continuity for ongoing development.[15]

Collaborative improvisation in sound and music, at any level, depends upon the quality of engagement; the level of commitment; and affinity. It is an opportunity to share tacit disciplinary knowledge and the process extends participants' knowledge through increased awareness and understanding of the other and of the self. In improvisation we primarily develop knowledge through doing; this can be at odds with dominant modes of thinking, a theme Chrysa Parkinson has described—how in the art world the *concept* is valued over the *act* or *craft*.[16] The recontextualization of our own practice in the inter-/transdisciplinary setting can lead to a reflective reappraisal of our own work. In music it is notable how those attracted to improvisation can typically engage in an ongoing process of artistic development that is likely to continue as long they remain active—it can form a lifetime of engagement, and, as Roscoe Mitchel has commented, you may need more than one lifetime to achieve all that is wished for in music.[17] While working in improvisation with those of another discipline, we bring this enquiring attitude within the development of improvisation practice—we want to discover what "makes them tick." In these ways, engagement with improvisation in sound and movement is a process

15 Deniz Peters, "Musical Empathy, Emotional Co-Constitution, and the 'Musical Other,'" in *Empirical Musicology Review* 10/1 (2015): 2–15.

16 Chrysa Parkinson, *The Value of Dance as Practice*, podcast (Audiostage, 2016), accessed 17 July 2022, http://audiostage.guerrillasemiotics.com/chrysa-parkinson-the-value-of-dance-as-practice/.

17 Simon Rose, *The Lived Experience of Improvisation: in Music, Learning and Life* (Bristol: Intellect, 2017).

of in-depth learning. The depth of knowledge within the other's history of practice may reflect decades of disciplinary experience and achievement from which a well of new artistic knowledge is available for the other.

A version of this chapter is included in the book *Relational Improvisation. Music, Dance and Contemporary Art*, ed. by Simon Rose (New York: Routledge, 2024). The focus of *Relational Improvisation* is with improvisation through which collaboration and interdisciplinarity in arts and beyond are explored. © 2024 by Routledge, reproduced by permission of Taylor & Francis Group.

CORPUS Versus BODY
The Cello as a Corporeal Performative Instrument

Ulrike Brand

Abstract: *By juxtaposing the biological body of the performer and the sounding body of the cello, I am concerned with clarifying the multi-layered relations between both.*[1] *As the cellist not only performs functional movements but also moves in space relating to dancers and the audience, these interactions are revealing multi-layered role changes.*
The relation of the different bodies opens several interesting questions: How does the body/corpus relate to the dancers in the performative situation? Do the dancers react more to the musician's body or that of the cello? Can traditional connotations of the instrument and its sound be overcome and what about the different kind of energy involved? Is the cello object, tool or icon?

Introduction

In the performative context described here, three acting figures appear: a rolling cello, a performing cellist, and dancers interacting with her. Their manifold interactions, their different kinds of confusion and disguise provide the opportunity to reflect, at least to a certain extent, on some questions that exceed the original "setup," such as those about the different roles and their dissolution, about the function of the musical instrument and its aura, and, last but not least, about the relationship between the human body and the corpus[2] of the instrument.

1 The German term "Körper" will always be translated with "body" or, in case I want to emphasize, with "human body," meanwhile "Korpus" as the instruments body will be translated with "corpus."

2 The German term "Körper" will always be translated with "body" or, in case I want to emphasize, with "human body," meanwhile "Korpus" as the instruments body will be translated with "corpus."

Acting Figures

The Cello

The shape and size of its corpus suggest a comparison of the cello with the human body. Its tonal register from C to c3 corresponds to the registers of the human singing voice from bass to soprano. If the cello is moved from its seated position to an upright, rolling position, this similarity is reinforced.

Figure 1: *Video still from* Korpus, *Ulrike Brand and Ingo Reulecke, 2016. © Helena Lingor; https://www.hylynyiv.com*

Working with dancers, I felt the need to overcome the forced immobility of the seated playing position. I felt that being an immanent part of the choreography through visual appearance, without being able to move with the instrument in space, was a counterproductive restriction. At first, I experimented with elastic bands, with the help of which I tied the corpus directly in front of my body. This made it possible to play standing upright, but only allowed me to walk to a very limited extent, and also made it difficult to grasp certain positions on the instrument with the left hand. Then I had a small wheel built which attaches to the cello pin and allows me to place the neck of the instrument loosely on my left shoulder and thus move forward, backward, and in circles while walking with the cello. Subsequently, with the support of dancers, I developed different techniques to play squatting, kneeling, sitting, or lying down on the floor. The

communication with dancers is therefore amplified around the theme of the levels in space.

Figure 2: Korpus, *Ulrike Brand and Ingo Reulecke at Hoffmann Collection, Berlin 2018. © Sven Hagolani; https://www.hagolani.com*

One consequence of removing the cello from the traditional playing position and the mobility thus gained is, on the one hand, an emancipation of the corpus, which—removed from its function—appears more as an object. On the other hand, the playing techniques necessarily change. It is true that traditional playing techniques are partially restricted—the lower neck positions cannot be fully grasped, the pressure ratios in the left hand are altered, and the unrestrained lateral rotation as well as the vibration of the corpus during rolling make bowing more unstable. On the other hand, the sitting position with the cello flat on the knees, for example, offers new percussive possibilities; while standing, the cello can rotate and be played on the top, back, and sides. The rolling itself, due to different floor textures, produces diversified rhythmic sounds, to name just a few techniques.

The Performing Cellist

With the movable instrument, the cellist necessarily becomes a performer; her role is no longer limited to purely "producing music." She moves through the

space and she moves independently of the functional instrumental playing gestures. Suddenly she is no longer holding and moving a highly developed tool, but is carrying a body-like object with her, which henceforth in addition produces sounds accidentally. The movements of the performing cellist have gained autonomy; they take place on and around the instrument without specifically intending to produce sounds. Touching the instrument with the body, hands, or feet (with or without bow) has a different, specific sound quality due to the omission of intention. The corpus thus appears as a second body, largely independent of that of the cellist; another independent character has entered the stage.

This transformation offers numerous possibilities for thematization within a performance. In the ongoing performance project *KORPUS* with the dancer Ingo Reulecke, this theme is varied again and again according to the changing spatial context. The first image of this performance always consists of the "3 bodies" (title of one part of the performance): the cello lying on the floor in the middle, the female body to the left, the male body to the right. This image triggers associations that can usually be understood from an existential interpretation: religious representations of the crucifixion, questions about the whence and whither of man, about his corporeality, about the conflict between organic and inorganic life, and, last but not least, the relationship between the living and the dead body.

The cellist's body becomes the felt body of a mover, and numerous movements independent of cello playing are possible. This opens up the realm of dance. The movements are still largely connected to the instrument, but no longer have the function of producing optimal tonal results in the sense of traditional playing technique—they are liberated into physical expressive movements. They also may produce sounds (by this I mean the entire acoustic output, distinguished only by its overtone spectrum, spread out between tone and noise), only these sounds caused by dance movement are less intentional than accidental. The resulting sounds become a "by-product" of the movement, whereas in classical playing technique every movement aims at a specific sonic result. Classical instrumental training goes so far as to demand from the musician a complete merging, a becoming one with the instrument.

Another aspect of the cello in motion, the above-mentioned "emancipation" of the musical instrument, is the object character of the cello that emerges as a result. The object, relieved of its original function as a tool, is now simply "there"; it is an object that on the one hand has to find its place in the performative context, and on the other hand, with its resistance, represents a challenge for all those acting.

Figure 3: Korpus, *Ulrike Brand and Ingo Reulecke at Hoffmann Collection, Berlin 2018. © Sven Hagolani; https://www.hagolani.com*

The Dancers

The particular challenge for the other performers lies in the demanding synthesis of various incoming information on all levels of perception. Dancers act and react with their bodies and, as with all interdisciplinary communication, overlapping translation processes take place constantly in their reception. The interactors necessarily experience a fluctuating selection of multiple information.

Sounds are mainly perceived by the ear and by bones and skin, with the special aspect that they cannot be simply avoided by closing the eye like visual information, but rather penetrate the body persistently. In addition, many dancers describe to me a purely physical perception of sounds, a direct perception of the sound waves in space, so to speak. If this is true, it is even more so for a low instrument such as the cello, since slower frequencies also have a stronger effect on the body due to their stronger amplitude. In addition to the movement of the dancers, the instrument in motion now also shifts the sound source in space, combined with the inherent noises produced by the rolling propulsion.

This auditory complex, extremely variable in all its parameters, behaves in practice partly consonantly and partly contradictorily to the visual information.

Visual and auditory information can reinforce each other or be in conflict. Extremely soft playing movements, for example, can produce rough sounds on the cello; a fast movement through the space can as well be associated with static sounds. Apart from the cellist's body acting and interacting as a dancer with other dancers, also in the sense of contact improvisation, the body of the cello is present at the same time as the "elephant in the room," so to speak. The corpus is static itself, but it vibrates, rolls, can be erected, laid down or rotated around itself and can be perceived as a person, a puppet, an emblem, or an icon through its anthropomorphic form. As an object the cello can hardly be liberated from its omnipresent aura and everything it represents as a classical instrument. The greater the experience of the dancers with the situation of having to "switch on reception" on all channels at the same time, the more varied and interesting is the result of performative and dance exchange with the instrument in movement.

Figure 4: *Ulrike Brand and Valentina Bordenave at soundance festival Berlin 2021. © soundance festival / Aïsha Mia Lethen Bird*

Performative Context

The performative context within which the situations and processes described here take place is open, both in terms of the spaces and the creative processes.

My reflections mainly refer to the improvisational practice with musicians and dancers of the Berlin real-time music scene. Seen from close up, there are of course also evident differences there—as in every microcosm—as far as the development and rehearsal techniques are concerned. The question is whether the influence of the aspect "body versus corpus" is relevant for these differences.

Creative Process (Improvisation/Composition)

For the exchange of information in performance, the same conditions apply to composed music (or choreographed movement) as to improvised music (or dance improvisation). The differences lie in the creative processes, which are, nevertheless, quite comparable. This comparability, however, presupposes that composition and improvisation are not understood as antinomies, but as processes of musical production that flow into each other.

If we agree on a floating line between improvisation and composition and then look at the process of creating music based on its parameters and their determination, the artistic processes become comparable. An analysis of the parameters and their determination—both in the form of notation and in practice—quickly shows that there were historically always parameters in music that were not notated, either because there was an interpretive tradition or because the parameter in question was irrelevant to the specific style. If one also looks at the degree of specification of a parameter, one comes to the same conclusion. If one applies this question against the background of a broader understanding of parameters of improvisation, one discovers several agreements concerning the parameters, whether actively expressed or passively assumed.–Some of these agreements include: pluridirectional reactivity, the equality of playing gestures and expressive movements, the equal correspondence between auditory, visual, spatial, motoric, instrumental, and vocal actions, and the inclusion of inherent sounds of the space or its environment in the performance. All these parameters may be based on a general understanding or on a deeper and more specific agreement with a higher degree of determination.

If interaction—the reversible play of action and reaction—is a parameter of the artistic shaping of sound and movement, then the learning of reaction patterns by the respective artistic partners and their playing with them is a thoroughly predictable, and to a certain extent, plannable element. The decision to notate such interactions integrates them into a structural discourse; the decision not to specify leaves room for the creative added value of the gradual differences that grow out of the moment.

Spaces

In 2020/21, the number of outdoor performances and performances in public spaces increased enormously due to the pandemic-related contact restrictions. If site-specific performance adds the openness and unpredictability of public space to the improvisational approach, the need to perform outdoors and at a great distance from the audience further expands the creative conditions.

Everything described in the above section about the "acting figures" remains valid, but takes on different dimensions in the outdoor performance. The paths become longer and more uneven and the distance requires acoustic adaptation, such as amplification of the cello or voice. The audience, which I have otherwise not taken into account in these considerations, covers distances walking with the performers and becomes part of the performance.

In this new, expanded situation, my experience of the cello corpus as an independent object has intensified once again. The cello has accompanied me to football fields, parks and forests, fortresses and ramparts, balconies and roofs, pedestrian zones, shop windows and showcases. Not only the sounding body of the cello has accompanied me, but also a receiving and perceiving sound body that absorbs the vibrations—of outside acoustics, of wind, birdsong, and street noises—like a transducer and emits them transformed.

Roles

Classical instrumental playing is based on learning how to use a highly developed traditional tool. Each movement aims at a clearly defined sound result and yet there is an aspect of reciprocity in the movement patterns. The extremely differentiated sound penetrates through the corpus back into the body of the player, who, by making minimal corrections and adjustments, in turn adjusts her fine motor skills to it. Ideally, body movement and sound merge into a motor-auditory-visual unit. The sounding body of the corpus, thus statically anchored in space, reacts and has an effect on the movers dancing around it, who are in turn permeated by the sound in their circles.

When the cellist moves in space, she marks distances and draws lines and pathways. She thus enters a space reserved for dance and assumes the role of the mover. She leads the corpus of the instrument, which in its static nature is both a challenge and an obstacle for the dancers. The performing cellist has freed her body from the fixed sitting position, but not from the corpus of the instrument. The cellist's dance is always in relation to the corpus, which she pushes, pulls, tilts, turns, puts down or carries; that is to say, her dance is by all means primarily a *dance with the instrument as a body*. The two *corpi* can only

react to the other actors in agreement; conversely, for the dancers, body and corpus are inseparable and can only be weighted differently through a different focus. So now the dancer also dances with the cello's corpus.

The new playing positions change the handling of the instrument. Dancing movements and playing gestures are no longer separable. The arms can sink out of the air onto the corpus and produce wiping sounds or falling, tapping sounds; the cello can come into contact with the body of the cellist over its entire surface, on the top, bottom, and sides and produce the most varied sounds, such as patting, grinding, rustling, scratching, or squeaking. It is also possible for the dancers to come into contact with the corpus of the instrument, which may lead to the production of specific sounds. The dancer not only dances with the cello as a body, but also perceives the corpus as a sounding object at every moment, even to the point of producing sounds on it in the dance.

It is the role of the musical instrument that changes the most in this setup—from corpus to body, from object to character, from transformer to transformed. The cello enters the stage in an emancipated manner, walking upright, but at the same time retains the character of a stick puppet, a marionette. Its original function is alienated, its aura broken, its semantics questioned, yet it remains trapped in its "Gestalt."

Masks

In order to overcome the dominance of the physical presence of the "classical musical instrument" with its semantic background, producing noise has been introduced to contemporary music since the beginning of the twentieth century, leading to an often striking contradiction between sound and visual perception.

Starting from my experience in interpreting contemporary composed and notated music, in a first step I tried experimentally not only to alienate sounds, but also to inhibit my musically functional movements by blocking my own body, or rather my body's motor function, for example by playing with gloves or handcuffs made of fabric. Since even in this extreme experimental arrangement the learned instrumental motor function strongly asserted itself, I proceeded to make changes to the instrument. I prepare the corpus with different materials, wrap and modify it.

I tie up strings of different material and diagonally over the instrument, use other objects instead of the bow, play with only the bow hair instead of the bow, and much more. One consequence of these experiments is certainly the change in my own approach to the instrument. What I originally wanted to achieve—the "ghosting" of the learned instrumental motor skills—has now

occurred as an overcoming and a different, freer handling has opened up. There are clear parallels to contact improvisation: weighting, perception, assimilation, extension happen here between a human body and the corpus of the musical instrument. This applies similarly in collaboration: other performers learn to behave in relation to a body, which in turn holds a corpus and is held by it.

Figure 5: *Ulrike Brand and Ingo Reulecke at NOW! Festival Berlin 2019. © David Beecroft; https://www.davidbeecroft.de*

Corpus and Body

Gilles Deleuze's idea of the "organless body" offers only a pseudo-solution to the conflict between corpus and body. The human body is subtracted to an assumed state before the formation of an organized interplay of body parts and thus brought to a level comparable to the inanimate object.[3] This model may

3 "La signifiance colle à l'âme non moins que l'organisme colle au corps, on ne s'en défait pas facilement non plus. Et le sujet, comment nous décrocher des points de subjectivation qui nous fixent, qui nous clouent dans une réalité dominante? Arracher la conscience au sujet pour en faire un moyen d'exploration, arracher l'inconscient à la signifiance et à l'interprétation pour en faire une véritable production, ce n'est assurément ni plus ni moins difficile qu'arracher le corps à l'organisme." Gilles Delauze and Félix Guattari, *Mille Plateaux* (Paris: Les Èditions de Minuit, 1980), 198. "Signifiance clings to the soul just as the organism clings to the body, and it is not easy to get rid of either. And how can we unhook

work very well in connection with the use of electronic sound[4] but experience has shown that it is not applicable in the practice of improvisation in music and movement with acoustic instruments.

Jean-Luc Nancy's body theory, despite its mystification, opens up the concept of corpus and thus ascribes permeability to the body. Referring to the "corpus" Nancy writes:

> To sound is to vibrate in itself or by itself: it is not only, for the sonorous body, (which is always at once the body that resounds and my body as a listener where that resounds, or that resounds with it) to emit a sound, but it is also to stretch out, to carry itself and be resolved into vibrations that both return it to itself and place it outside itself.[5]

I would like to paraphrase Nancy's sentences on the relationship between sound and the human body regarding the relationship between the body and the cello: The cello is always simultaneously the sounding body that *and* my playing and moving body, through which it sounds, and which sounds from it. For the sounding body of the cello, this means not only emitting sounds, but also expanding, transferring the vibrations to the playing and listening body

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ourselves from the points of subjectification that secure us, nail us down to a dominant reality? Tearing the conscious away from the subject in order to make it a means of exploration, tearing the unconscious away from signifiance and interpretation in order to make it a veritable production: this is assumedly no more or less difficult than tearing the body away from the organism." Gilles Deleuze and Félix Guattari, A *Thousand Plateaus*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 160.

4 "The choreographer, composer and designer must all give up trusted paradigms. The traditional model, in which a choreographer engages a designer or composer to build a 'setting' for their dance has little relevance to work of this kind. Interactive systems are not 'a kind of stage set'! They require a new kind collaboration between artists—it is more intense, involving more sacrifice. The composer, for example, may have to give up considerable control over how the music sounds as it may be played by a group of dancers through their movements in space." Frieder Weiss in the manual of the interactive sofware "eyecon," accessed 10 January 2023, https://frieder-weiss.de/eyecon/Manual/Essay/rw-essay-concl.htm.

5 Jean-Luc Nancy, *Listening*, trans. Charlotte Mandell (New York: Fortham University Press, 2007), 8. "Sonner, cèst vibrer en soi ou de soi: ce n'est pas seulement, pour le corps sonore, (lequel est toujours à la fois le corps qui résonne et mon corps d'auditeur où ça resonne) émettre un son, mais c'est bel et bien s'étendre, se poter et se résoudre en vibrations qui tout à la fois le rapportent à soi et le mettent hors de soi." Jean-Luc Nancy, À *l'écoute* (Paris: Editions Galilée, 2002), 22.

and dissolving completely in these vibrations, which simultaneously relate the sound to themselves and set it outside themselves.

The use of the cello in the performance leads to changes on different levels. The trained playing gestures lose their instrumental functionality and become dance-like, visually connoted gestures, which in turn produce new sounds. They are created both in the body of the instrument and through the body of the cellist, connecting the sounding body and the human body and at the same time reaching far out into space. The classical instrument cello is allowed to move as an object in space, which emphasizes its physical aspect.

All the aspects of the performance that I have described in this text are dynamic: through their changing sounds and diverse forms of movement, they enable maximum openness, in which sound and movement intertwine and animate each other.

Missing, Not Knowing, Taking Care[1]
Reflections on *A Study on Effort*

Keir GoGwilt and Bobbi Jene Smith

Abstract: *This dialogue is centered on choreographer Bobbi Jene Smith's work,* A Study on Effort, *made and performed in collaboration with violinist Keir GoGwilt. Beyond discussing the work and the process of its making, we parse some of the cultural histories undergirding dance and music collaborations. A few themes recur throughout our dialogue: the historical disciplining of performing bodies; the role of improvisation in navigating personal and traditional expressions; the relationship between effort and pleasure; the relationship between gesture and abstraction; and the imaginative labor that interdisciplinary work requires. We bring in a host of interlocutors whose work influenced the piece: Malcolm Goldstein, James Tenney, Judson Dance Group, the Batsheva Dance Company, JS Bach, and Johann Paul von Westhoff. And we are in dialogue with thinkers like Eduard Hanslick, George Lewis, and Holly Watkins, whose writings help us to parse the webs of influence holding our work and thought.*

Introduction (Keir)

"What does effort look like for you, on the violin?"–This was the first question that Bobbi asked me as we began working towards our duet version of *A Study on Effort* (hereafter referred to as ASOE), first premiered in June 2016. Given the customarily invisible role of instrumentalists in dance, Bobbi's curiosity was disarming. Looking back now, the motive behind Bobbi's question has become clearer. Her work stages a spectrum of physical and emotional efforts, which

1 Special thanks to Sima Belmar, Ay Cimini, and Celeste Oram for their encouraging, insightful, and discerning commentary on this essay in its many stages; to Malcolm Goldstein and Marta Miller for their generous guidance in the making of ASOE; to Matthew Aucoin, Jen Chen, Zack Winokur, and AMOC for our continuing work together.

often go unnoticed in daily life, and which tend to be suppressed in classical images of virtuosity. These include the affective labor of partnership, the physical/psychological effort of holding a strenuous position, or the intellectual labor of critically examining one's social and cultural contexts. In ASOE, Bobbi and I seek out the pleasure and ritual of effortful practice. We present our effort, or labor—both in the space of performance and the everyday—as continual attention, maintenance, and care, rather than as work with clearly defined outcomes.

ASOE initially included six sections, based around prescribed efforts devised by Bobbi: "missing," "lifting," "drawing a line," "pleasure," "not knowing," and "taking care." Much of our earliest process involved finding ways for me to support, engage, or match Bobbi's physicality on the violin. In certain cases I accompanied her through the gradual movement of oscillating tones. In others, we found a register of sonic-gestural improvisation that amplified my bodily actions of improvising on the instrument. Elsewhere, I performed baroque dances for solo violin, providing a musical armature for Bobbi's movement.

This essay on ASOE takes the form of a dialogue between Bobbi and me, developed out of our work together over the last five years. We discuss the common ground of musical and physical movements: bodily gestures, emotional shifts, and patterns of musical tones and structures. Our conversation extends beyond the world of ASOE, to the personal and cultural histories that shaped its making. For Bobbi, this often means drawing from her experience of testing the limits and effects of her body's movement through various stages: as a veteran dancer for the Batsheva Company, as an expecting mother, as a choreographer re-adjusting to her body postpartum. Her reflections on her changing body carry over into her attention to the movement of other bodies and beings. She describes this attention as a kind of imaginative, empathic becoming, grounded in the people she choreographs with and the unique qualities of their thought, movement, and effort.

My own reflections on the creative process tend towards the cultural histories determining my work as a musician and scholar. In particular, I consider the enduring aesthetics of musical formalism for instrumental music. The nineteenth century music critic Eduard Hanslick made the most explicit case for formalism, arguing that musical meaning was entirely contained within the composer's handling of musical form and materials.[2] This aesthetic paradigm contributed to a pedagogical tradition that understood performing

2 Lee Rothfarb and Christoph Landerer, *Eduard Hanslick's "On the Musically Beautiful": A New Translation* (Oxford: Oxford University Press, 2018).

bodies as a material means for expressing the abstract meanings embedded in musical works. I see a natural alliance between Bobbi's attention to musicians' bodily labor, and my own interest in modes of expressivity that stay with the bodily and gestural thinking of instrumentalists. Rather than simply looking to compositional structure as a way of directing bodies, in ASOE we explore affective and emotional meaning arising out of interactions between our musical-corporeal movements.

Parts one and two of our dialogue focus on the first two sections of ASOE: the efforts of "missing" and "lifting." In the effort of "missing," I play James Tenney's *Koan* to support Bobbi's movement through various bodily shapes and formations. In the effort of "lifting," I begin with my own improvisations, which amplify the impulsive, bodily gestures of my playing. We find a helpful interlocutor in the violinist-composer Malcolm Goldstein, who visited our early workshops for ASOE. I sought out Malcolm after meeting him and hearing about his early experiences composing, improvising, and performing with the Judson dance group. Malcolm's writings on improvisation and gesture became helpful points of reference as we worked through the contexts shaping our work. Parts one and two of this essay hone in on the opposition between the structural legacy of nineteenth-century formalist aesthetics and more personal, experimental modes of inquiry articulated by Malcolm. Malcolm's writing presents improvisatory exploration as the assertion of individual voice against the de-personalizing structures of classical pedagogy. We seek a nuanced view that both remains critical of Euro-logics grounded in the occlusion of performing bodies, and also acknowledges the ways in which our individual voices are mediated by collective culture.

Part three of the dialogue turns to the following three sections of ASOE: "drawing a line," "pleasure," and "not knowing." Over the course of "drawing a line" and "pleasure," I perform the "Sarabande" and "Double" from Johann Sebastian Bach's *B minor Partita*. In "drawing a line," I walk slowly across the space, and Bobbi walks at her own pace behind me holding a sandbag and drawing a thick line of sand, which eventually bisects the stage. During the next section, I remain at the end of the stage while Bobbi moves a dozen fifty-pound sandbags from one end to the other, and finally mounts the last one and pleasures herself on it. This section underpins one of the primary motivations of ASOE: to find and follow pleasure in one's effort and labor. As a direct staging of a body following its pleasure, it stands in sharp relief to customary depictions of female sexuality in dance. The section reframes pleasure-making and seeking as labor rather than leisure, and as an activity that the whole body follows, not simply the mind and the organs of perception and sensation.

In the effort of "not knowing," I play Johann Paul von Westhoff's *Partita in D minor* on one side of the line of sand, with Bobbi dancing on the other. This section presents the clearest conversation between our disciplines. Rather than simply framing my performance as the aural complement to Bobbi's dance, we attend to the expressive elements of physical gesture that arise from playing an instrument. In performance, Bobbi amplifies and dialogues with my movement through her improvisatory responses. Our discussion here turns to some of our collaborations beyond ASOE, in which musical structure, more than bodily gesture, becomes a guiding narrative arc for Bobbi's choreography. This alternation between bodily gesture and musical structure grounding stage narrative again draws attention to the multimedia movements—bodily, tonal, formal—intersecting music and dance.

Part four of our dialogue turns to the last section of ASOE, the effort of "taking care." In "taking care," Bobbi grafts a plant to her chest and slowly falls, holding herself up, supine. I play Malcolm Goldstein's *Gentle Rain Preceding Mushrooms*. The grafting of the plant, Bobbi's trembling effort against gravity, and the direction of Malcolm's piece to connect the ricochet motion of the bow to one's breath, direct attention to the material and environmental contingencies beyond our crafted control. Our instruments measure the *physis* that escapes us: involuntary shakes and tremors of the bow, body, and breath; shapes and sounds that fly out of us without landing or achieving; the sprawl of the plant and soil that Bobbi grafts to her chest. This image leads us to reflect upon our ritual efforts, which are seemingly insignificant in the face of globally unfolding ecological crises. In particular, we ask how to continue cultivating the giving, taking, and receiving of care.

Throughout ASOE, we negotiate personal meaning, cultural inheritance, and the limits of physicality. We make visible the pleasure of labor and the labor of following pleasure. Despite parsing different personal and cultural histories, we find common cause in seeking out more nuanced descriptions of performing bodies and the efforts, expressions, and meanings intrinsic to them. Our collaborations, in performance and dialogue, remain grounded in our expansive understandings of movement, gesture, and the imaginative becoming of missing, not knowing, taking care.

Part 1: The Chasm That Yawns between ("missing")

Keir: The music for the first and last sections of ASOE came from the violinist, improviser, and composer, Malcolm Goldstein. He visited some of our rehearsals when we were first putting the piece together in Montreal.

Bobbi: I remember he was watching the first section, "missing." We were trying to find your part in relation to the forms I was making, holding, and moving out of. I knew I wanted you to walk the perimeter of the stage, but we were stuck on what you would play.

Keir: Malcolm suggested James Tenney's *Koan*, which begins with the violinist bowing across the low G and D strings, and progresses in a continuous, almost imperceptible slide up to an octave above the high E string. It's a meditation across the pitch spaces of the instrument, which follows the physical gesture of the bow arm's constant movement over alternating strings. I found that by blurring the string-crossings, so that I was actually often playing a double-stop weighted to one string or another, I could in some cases create an intense beating effect, as well as combination/difference tones, which hung above the fundamental pitches of the bowed strings.[3]

Bobbi: It heightened the physicality of your sound and gave me the sense of moving through a textured, sonic field. It supported my movement.

Keir: Malcolm actually gave me one of the copies of the original postcard on which Tenney scored *Koan*.[4] Tenney wrote *Koan* for Malcolm—the two of them were close friends. Malcolm's interpretation of *Koan* is markedly different from my own. He never aspired to play the string crossings in a perfectly even way—the piece engaged and activated the idiosyncrasies of his bodily execution. For my part, I wanted to give the piece a lot of tonal consistency—to create this thick, durational texture that would hold your movement.

Malcolm taught me how the piece worked before showing me the score. And yet, moving the piece from his body to mine—from his proximal relationship to Tenney to the role that *Koan* plays in ASOE—created a separation. Malcolm writes of this in the context of European art music, that "we separate the person playing from the object [i.e. the score] being performed and, in the process

3 Hermann von Helmholtz describes combination and difference tones as such: "These tones are heard whenever two musical tones of different pitches are sounded together, loudly and continuously. The pitch of a combinational tone is generally different from that of either of the generating tones, or of their harmonic upper partials." Hermann Helmholtz, *On The Sensations of Tone*, trans. Alexander J. Ellis (New York: Dover Publications, 1954), 152–3.

4 *Koan* was one of Tenney's postal pieces, which he wrote on postcards and mailed to friends. Frank J. Oteri, "James Tenney: Postcards from the Edge," in *New Music Box*, accessed 2 May 2021, https://nmbx.newmusicusa.org/james-tenney-postcards-from-the-edge/.

of realization, what often is expressed/experienced is the chasm that yawns between. How then shall a piece-of-music/the-musician become whole?"[5]

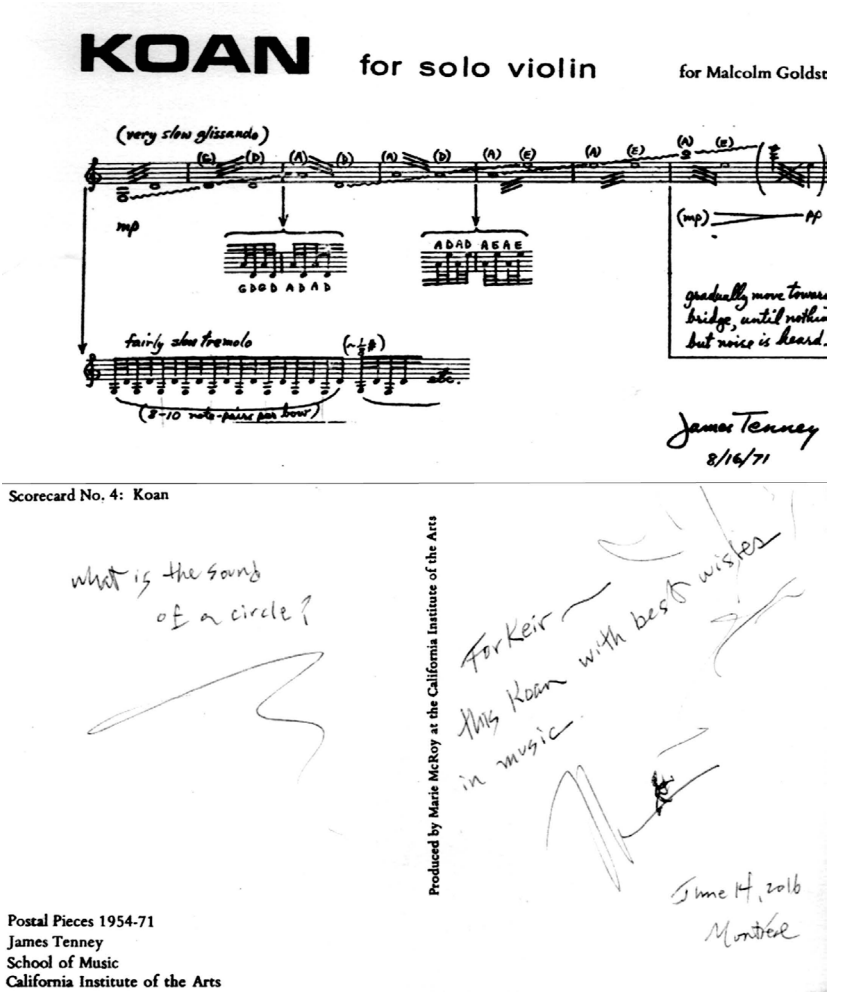

Figure 1a and b: Koan *by James Tenny. a) Scan of a postcard to Keir by Malcolm Goldstein, b) other side of the postcard, with Malcom's writing. © James Tenny.*

5 Malcolm Goldstein, "Towards a Whole Musician in a Fragmented Society," in *I.S.A.M. Newsletter* XII, no. 2 (May 1983): 6.

Bobbi: That statement reminds me of the time we put on ASOE at UNC [Carolina Performing Arts at University of North Carolina Chapel Hill]. I was pregnant, and Ariel [Friedman] did my part. Going into it I had so many doubts about how separable the piece was from my performance, but watching it from the outside, it almost felt like the piece itself was more whole for having another person bring herself into it.

As I've begun choreographing larger pieces I've become more comfortable stepping outside of my work. But that comfort only comes from having the time and process to build trust and context with dancers. *People* make a piece work; and that's where I agree with Malcolm. Abstracting a score from the people who've made it—if it's done without care it can come close to appropriating someone's personal movement as your own.

Keir: There's something about the immediacy of your movement-making that's very foreign in the contemporary world of classical music. As classical musicians we inherit nineteenth- and twentieth-century musical discourses, for example, in which it was very common to discuss performance as the faithful reproduction of composers' musical works and ideas.[6] Theodor Adorno's monograph describes performance as the reproduction of the musical work, facilitated by the historical abstraction of notation.[7] But according to Adorno, even within this history of progressive abstraction, some trace of the body's gestural, impulsive reflexes still endures, playing an operative role in interpretation.

Malcolm's statement about the "chasm between" similarly refers to the distance between his contemporary classical musicians and the historical music they interpreted—a distance that he saw as a symptom of societal fragmentation. It was partly geographical, partly historical/cultural: he was looking at the classical establishment in the States at the time and wondering why they were continually replaying canonical European literature, while he was working with experimental composers and improvisers in NYC, at Columbia, Judson, or in Sheffield, VT. For him, creating music came very much from reflexive, impulsive, and gestural motion—an improvisatory practice that to some degree remains illegible to the tastes and techniques cultivated in classical music.

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6 In his book *Beyond the Score*, musicologist Nicholas Cook takes issue with music theorists Adorno and Schenker, who base their analytical methods on a common understanding of performance as the reproduction of musical works and structures; Nicholas Cook, *Beyond the Score* (Oxford: Oxford University Press, 2013), 89.

7 Theodor W. Adorno, *Towards a Theory of Musical Reproduction: Notes, a Draft and Two Schemata*, trans. Weiland Honban, ed. Henri Lonitz (New York: Wiley, 2014), 168.

Bobbi: But I think that whether you're inside or outside a piece, or a culture, you always have a fragmented picture. Even when you make all of your own movement, or direct others from outside a piece, you're playing but one part.

Keir: Perhaps contra Malcolm's desire for restoring "wholeness," the effort of "missing" was always about making visible the vulnerability that comes with feeling apart. I've always seen the difficult shapes that you hold in "missing" as a physical manifestation of the affective labor involved in maintaining relationships at a distance.

Bobbi: Absolutely. At the time I first started making the earliest, solo versions of ASOE, I had just left the Batsheva Dance Company in Israel, my now-husband, and what had been my home. I danced for Batsheva for ten years—I had started there when I was twenty-one. "Missing" was my attempt to express the effort of this physical and emotional displacement in my body—in all the shakes and quavers and falls that happen when I move through these positions. It wasn't just missing others; it was also missing a sense of oneself—who I was or continued to be in this moment of transition. And when we've come back to the piece after I gave birth, missing those muscles that had been cut in the cesarean section—it made this section of ASOE that much harder, and more visible.

Part 2: The Role of Improvisation ("lifting")

> What does improvisation ask of the performer
> that is so different from printed, through-
> composed pieces of music?
> ... perhaps: "Who are *you*?";
> "How do *you* think or feel about this moment/sound?"
> Malcolm Goldstein, *The Politics of Improvisation*[8]

Keir: The experience of working with Malcolm was revelatory, insofar as he had managed to uncouple his movement from conventional practices in an incredibly rich and expressive way. Reading accounts of him taking part as a dancer in Judson, reminds me of participating in your own movement workshops and warm-ups. When I'm in that world, my whole body feels engaged as an expressive agent—I become aware of parts of me that get somewhat muted by inherited logics of instrumental pedagogy. I had certain teachers and coaches,

8 Malcolm Goldstein, "The Politics of Improvisation," in *Perspectives of New Music* 21, no. 1/2 (Autumn 1982 – Summer 1983): 89.

for example, who would criticize aspects of my movement that weren't directly related to the act of playing the notated score, as though our bodies were only there to serve some preordained ideal of sound. Physical movement was always a way for me to more viscerally experience the music I was playing, and working with you reminded me of how much I had consciously silenced it.

Bobbi: In the context of building movement, improvisation has always been fundamental, since it marks something individual about the person. It's their way of moving in the world—and that's exactly what I want them to bring to any creative process. On the other hand, it's not necessarily a solution—an individual's improvisatory practice can be easily used or appropriated. There has to be so much care taken in a choreographic process that involves asking questions of your artists, unlocking their personal sounds and movements, and then weaving them into a larger piece. And there are all sorts of limitations around improvisation in this context: the concept of the piece, its dramatic world, your relationship with other characters.

Keir: That's why I feel somewhat ambivalent about Malcolm's portrayal of improvisation as a way back to a holistic musicianship. He posits improvisation as a way to achieve wholeness in a fragmented society, but there's no detailed accounting of the way in which improvisation is mediated in the context of groups, or by a collective historical culture. This idea of getting to "you"—to the un-mediated subject or sound—still runs the risk of reproducing structuring ideologies of European classical culture. In Paris Conservatoire pedagogy, for example, there was a whole lot of rhetoric around finding one's individual sound, voice, and style, while also serving an institutional paradigm that quite literally took creative agency out of performers' hands.[9]

In George Lewis' article, "Improvised Music After 1950: Afrological and Eurological Perspectives," he quotes Malcolm: "Who are you? How do you think or feel about this moment/sound?" next to Charlie Parker: "'Music is your own experience, your thoughts, your wisdom. If you don't live it, it won't come out of your horn.' The clear implication is that what you do live does come out of your horn."[10] This tenet of Lewis's "Afrological" music-making—that you are "'telling your own story'"[11]—is certainly practiced by Malcolm (as suggested by Lewis); and it's an important counter to claims of autonomy for the musical works

9 Kailan Rubinoff, "Toward a Revolutionary Model of Music Pedagogy," in *Journal of Musicology* 34, no. 4 (2017): 473–514.

10 George Lewis, "Improvised Music After 1950: Afrological and Eurological Perspectives," in *Black Music Research Journal* 22 (2002): 215–46, 243.

11 Ibid., 241.

and sounds made by modernist Euro-logics. There's a long history of erasing the lived experience of performing bodies in European music—a history which culminates in claims of absolute music, musical structuralism, and the weird and tortured relationships many classically-trained musicians have with their bodies (i.e. the "chasm" that Malcolm refers to).

At the same time, while finding your own sound is really a cathartic experience, my sense throughout making ASOE was that we were as much attending to our own stories as we were to the cultural and social contexts around us: inherited understandings of classical order, disciplinary pedagogies, and cultures of ensembles or dance groups revolving around dominating personalities. In order to make our own labors seen and heard, we had to think through the ways in which they were controlled and mediated.

Bobbi: Done right, being on stage can give your actions more attention and visibility, but there is so much life around that moment on stage that enables it—buying the plant for the last section, "taking care"; renting the Airbnb; feeding your artists; buying the sandbags; finding sand with the right consistency. And that's only the work that happens in the weeks leading up to the performance. I can imagine that having an authoritative score, and a long history of interpreting it, could feel like a really secure thing to keep your art going. But you're right that there's a lot of space between the magic of something that falls into place against all odds and a well-oiled machine that you play your designated role within.

In ASOE, I wanted to put the work of staging next to the work you normally see on stage. And by staging I mean not only the logistics of putting the show together, but the emotional expenses: the precarity of needing the stage, personally and professionally; the lost-ness of finding your way back to it; the feeling of not knowing how people around you manage to be so at ease (seemingly) in their daily lives.

The effort of "lifting"—the second section of ASOE—was perhaps the clearest physical representation of the feeling of this labor. I'm hoisting my arms up and then down again, until I don't know which direction I'm going anymore. The disorientation accompanying this movement captures something of this feeling I have of casting off my movement all around me, with no appreciation or sense of it landing or achieving.

Keir: One of your early questions for me as we began working towards this section was, "what does lifting look like for you, with the violin?" This was a moment in the piece for me to explore a musical action that wasn't mediated by the reproduction of a pre-existing score or pedagogical procedure. If your

lifting was representing intense labor removed from a recognizable task or outcome, mine also came detached from conventions of patronized music-making. I began with this gesture of just lifting the bow, listening to the rhythms and speeds it brought out of my body. It was more staged than the "pedestrian movement" that Malcolm explored with Judson Dance,[12] but there was a similar feeling of putting a spotlight on something before or around the actual act of sounding the instrument. There was also a similar feeling of rhapsodic re-discovery in this disorientation from the instrument, which Malcolm describes: "Touch releasing things into motion; gesture realized/resonances of texture becoming song. (Music: the process of living, sound.) [...] An overflowing of myself in space."[13] This was where I most closely experienced the feeling of "freeing" myself from the classical understanding of the body as a kind of mechanism for the transmission of the composer's ideas and spirit.

At the same time, I also knew that I was orienting these improvisations in reference to the kinds of physicality you followed in your own "lifting." That is to say, I wasn't exploring musical ideas or figurations—there was no system of "language types" like those structuring the improvisations of Anthony Braxton.[14] Though I was listening to solos by Braxton and Roscoe Mitchell while working up this section, to get a sense of how they created spaces and movement with a primarily monophonic instrument. I started from a corporeal place: different zones of engagement with the instrument that moved my body in different ways. For example, there were multiple speeds of lifting the bow, sounding it through the air; there was a gestural action of digging and ripping from the low strings, which could bleed into a kind of false-fingering gesture on the high strings, or these shuddering movements of the right arm that would draw my whole body down into the instrument.

Bobbi: Sometimes I feel your improvisations here—and elsewhere in our work—wanting to become more "musical," in the sense of moving towards understandings of form, proportion, or melody. In these cases I've always felt that it actually takes away from the rawness of seeing you move like this with the instrument. Because it's something that goes against your training, it really represents something "outside" the circumscribed space of the musician in dance, whose body is normally obscured, or entirely absent.

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12 Jay Arms, *The Music of Malcolm Goldstein* (master thesis, University of California, Santa Cruz, 2012), 12.

13 Arms quoting LP jacket of Malcolm Goldstein's *Soundings for Solo Violin* (1980); Arms, *The Music of Malcolm Goldstein*, 40.

14 Mike Heffley, "The Solo Music's Axis (Tradition/Innovation)," in *The Music of Anthony Braxton* (Westport and London: Greenwood Press, 1996), 212–57.

Figure 2: *Image from "lifting"; taken at the Invisible Dog in Brooklyn, NY, 2016. © Maria Baranova*

Part 3: Bach and Westhoff ("drawing a line," "pleasure," "not knowing")

Keir: I find that Malcolm's writing posits certain dichotomies: the European establishment versus American composer-performers; historical canons versus experimental practices; orchestral players versus improvisers. There's language noting a "European approach" to violin pedagogy,[15] as opposed to revelatory experiences in which Malcolm says things like "I *heard* the violin."[16] For him, the way out of the system of un-thinking musical reproduction is described as exceptional acts of listening–to the sound itself, or to the particulars of the sound-making subject ("who are *you*?")–in a way that certainly feels cathartic and necessary for any musician seeking some way out of the most stringent orthodoxies of the classical discipline. Still, I find that this characterization of an unmediated individualism of the player misses a more detailed parsing of all the cultural histories that articulate that self.

Bobbi: When I first saw Malcolm moving with the violin, there was a freeness there that was incredibly expressive and emotional. He had uncoupled the

15 Arms, *The Music of Malcolm Goldstein*, 38.

16 Arms quoting interview with Dan Warburton in the *Paris Transatlantic* (April 2006); Arms, *The Music of Malcolm Goldstein*, 38.

instrument from his body in a way that you don't see with most classical musicians. We wanted to put that freeness in the same space as a really personal interpretation of Bach, or of Westhoff. To acknowledge all the emotions in that music. Because how you hear and play Bach is the result of many individual lives experiencing the same pieces.

Keir: In ASOE, I draw on solo violin partitas by J.S. Bach and Johann Paul von Westhoff. These partitas consist of dance movements—the "Allemande," "Courante," "Sarabande," and "Gigue"—which emerge from a musical tradition of violinists serving as dance-masters.[17] We are calling upon the historical image of the violinist as a figure keeping rhythm and liveliness in a ballroom, but in a way that appears to fly in the face of classical music's contemporary cultural identity as an aspirational, bourgeois endeavor.

Bobbi: Which is to say, you wouldn't go to a classical concert held in an industrial warehouse to watch some woman mounting a sandbag.

Although it really wasn't my intention to make fun of classical music at all. Just in the same way that the effort of "pleasure" [section five of ASOE] was completely earnest, contrary to my somewhat flippant description just now. In this section, you're playing the "Sarabande-Double" from Bach's first *B minor Partita*, while I carry a dozen fifty-pound sandbags from one end of the stage to the other. Once I've moved the last one, I mount it and begin to pleasure myself on it. Given how often choreographers depict female sexuality in dance, I wanted to just show—this is what pleasure looks like. What it does to a body. What a body has to do to achieve it.

In a conversation I had with the dance critic/scholar Sima Belmar, she mentioned that this section was significant to her for countering some popularly-held beliefs: that the depiction of sexuality is more "proper" than the taking of proper pleasure; or that a labor that one takes pleasure in is no longer labor.[18]

This is something that links seeking pleasure and making art. Yes, pleasure is this private act with great reward, but it also takes work when done with care and attention. A lot of critics assumed the climax was fake, but I get there every time. The effort of pleasure is not done for the sake of thumbing a nose

17 David D. Boyden, *The History of Violin Playing from Its Origins to 1761 and Its Relationship to the Violin and Violin Music* (Oxford: Oxford University Press, 1990).

18 Sima Belmar and Bobbi Jene Smith, "Dance in Conversation: Bobbi Jene Smith with Sima Belmar," in *The Brooklyn Rail* (February 2019), accessed 2 May 2021, https://brooklynrail.org/2019/02/dance/BOBBI-JENE-SMITH-with-Sima-Belmar.

or anything; it's also not simply some generic symbol of female empowerment. The point of performing the effort is to really do the work, and that means it's neither self-indulgent nor a flippant representation of the action.

Keir: We chose the Bach *B minor Partita* [the "Sarabande" and "Sarabande-Double"] for the simple reason that I had it well in my memory and fingers—though its historical relation to dance also presented a sort of justification. Of course, the justification we needed for any of this only came from trying it, and seeing how the music might shape these sections. I remember when you told me the tasks that Bach would complement—drawing a line of sand, moving the sandbags, mounting a sandbag—I was a bit unsure, but also intrigued. It only felt right after several performances, as it became a sort of ritual whose meaning we weren't trying too hard to curate.

Bobbi: Of course not. I never want to over-determine the world of a piece—the audience, and the performers, need to have the freedom within it to find their own stories.

Keir: That being said, I haven't stopped trying to interpret it for myself. I keep coming back to the fact that Bach looms large as this composer whose music was seen as operating within the realm of the intellectual/spiritual. As Bach's music was revived in the nineteenth century, it became imbued with the idealism of the era, to the point that the violinists teaching and physically playing his works were describing the music as transcending their bodies entirely.[19] This is a big part of the story of how performers and their bodies—in the classical tradition—get written out of score- and composer-centric histories and aesthetic theories of European art music.

Bobbi: I choreographed your performance of the Bach "Chaconne" for later pieces that we worked on together [*With Care* and *Lost Mountain*]. I remember hearing so many stories within the piece. But whereas *ASOE* really focused on your physicality as a player, those later pieces were more narratively driven. Something about the movement and architecture of the "Chaconne" does feel like it moves into a world beyond the body playing it.

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19 For example, the well-known twentieth-century violin pedagogue, Leopold Auer writes: "It has been said and truly that these Sonatas, 'notably in the movements in polyphonic style, represent the victory of the spirit over material limitations,' and this applies especially to the 'Ciaconna.'" Leopold Auer, *Violin Master Works and Their Interpretation* (New York: Carl Fischer, 1925), 21.

Keir: Absolutely. And the process of watching you build movement on the "Chaconne" really reinforced how narrative that music is. The quartet version of "Chaconne," which appears both in *Lost Mountain* and *Caldera*, turns the piece into two dialogues between two coupled partners. There's this dramatic moment in *Lost Mountain*, right at the transition to the D major section of the "Chaconne," in which you suddenly notice Or [Schraiber], run to him and fall into his arms. This transition is one of only two harmonic modulations in the piece and, given the fact that the whole movement is in variation form, it becomes this really significant moment that is customarily marked by a sudden, affecting shift in timbre. But actually seeing musical shifts, like this one, play out in relationships between people, brings more color and life to this harmonic, structural narrative. It's amazing to see the "Chaconne," a dance movement which Bach abstracts into this grand formal structure, provide the armature for this intimate story told through you and Or, Ariel [Friedman] and Yiannis [Logothetis].

Figure 3: "*Not Knowing*"; *taken at the Invisible Dog in Brooklyn, NY, 2016. © Maria Baranova*

Bobbi: I think that performing Westhoff [*Partita in D minor*] with you in ASOE prepared the grounds for that later collaboration with the "Chaconne." This section, the effort of "not knowing," was about trying to catch each other's meaning. Often times I would start by just standing there and listening, both

to your body and the music. I always wanted more gestural information from you because it was something that I could pick up and transmit to the audience.

Keir: This section staged a collision of practices. There's the context of Westhoff's composition, which represents a nascent practice of solo violin concert music—as opposed to dance music. But then there's Malcolm's world of "gesture realized/resonances of texture becoming"; this unlearning of classical pedagogy, and a turn towards bodily impulse as the unlocking of a more personal "song." I felt pulled between these worlds, until I realized that actually this tension creates a third term. That is, the choreographed movements of playing repertoire, like the Westhoff, create their own impulsive reverberations through the body. And given how much documented attention has been given to the bodily discipline of the violinist since the turn of the eighteenth century, we have this resource of bodily thinking, which might be mobilized in expressive ways. That is, subtly extending or exaggerating the choreographed gestures of violin-playing created some more common terrain between the two of us—a kind of rhythmic and affective flow that traveled between the music and our movement.

Part 4: Effort and Ecology ("taking care")

> Listening to music, we unconsciously experiment with being other. Music creates a multitude of virtual worlds, or virtual configurations of space and time, that listeners can vicariously experience as alternative forms of embodiment, affect, spirit, thought, or some combination thereof.
> *Holly Watkins, "On Not Letting Sounds Be Themselves"*[20]

Bobbi: In the last section of the piece, the effort of "taking care," I am holding a plant to my chest. I am holding the plant against me and holding myself up off the ground. The strain of holding myself up makes the plant tremble. And my voice also trembles when I begin to hum with you.

Keir: I'm playing Malcolm's *Gentle Rain Preceding Mushrooms* (1992), a piece that he wrote in memoriam for John Cage after he passed. The first four notes of the piece, sounded and then held over three strings for an extended period, spell C-A-G-E. After these notes are held, Malcolm instructs the violinist to drop

20 Holly Watkins, "On Not Letting Sounds Be Themselves," in CR: *The New Centennial Review* 18, no. 2 (Fall 2018): 76.

and ricochet the bow across the strings, playing these four notes in different configurations. Eventually we begin humming–first you, and then me as well.

Bobbi: This is the first time in the piece when we really sit together, without moving. It's also the first time that either of us uses our voice. People love interpreting this image. Does the dirt represent death, burial? Does the plant represent re-birth?

Keir: What strikes me, more than the symbolism of the image, is how much goes into cultivating it. Every time we do ASOE you spend hours traveling to different shops to find the perfect plant, with just the right amount of color, height, and sprawl.

The plant is itself an expressive instrument that echoes and projects your trembling, and your singing. Just as, in *Gentle Rain*, my breath is the impetus that sends the bow bouncing, connecting these somewhat uncontrolled movements to my exhalation. It mirrors the way in which the soil clumps and breaks across your chest. The plant's movement is fused with yours, but its materials retain their own patterns of movement and dispersal.

Bobbi: Actually, so often what motivates my choreography is this idea of identifying as something totally foreign to myself: a mountain, an arrow, an anchor, a long dirt road. Each thing has its own movement, its own inner speed and momentum. Just this exercise of identifying with animate and inanimate things whose experience I'll never have creates so many questions: How does it move? What is the sensation of its growth? How does it engage our eyes, bodies, and imaginations?

Keir: The relative stasis of this last section of ASOE draws attention to the connections between our bodies, instruments, and voices; the movement of my bow, connected to my breath, and to my humming (as per Malcolm's score). This singing is connected to your singing, which is connected to the effort of holding yourself up. And all the resulting trembles are heard both in your breath and in the movement of the plant and soil on your chest.

This cycle of empathic becoming, which you describe as a fundamental choreographic method, really underlines the commonalities between music and movement. Holly Watkins describes music as a medium that "spurs to imagine creating, being, or undergoing an almost endless variety of dynamic movement that […] need not be heard as expressions of human subjectivity

or embodiment."[21] Rather than pointing to an exceptional act of listening that reveals the individual subject, Watkins is describing the "dynamic movements" of music, which allow us to "experiment with being ither" than human.

I read Watkins' attention to music's empathic potentials as a strategy to expand our ability to imagine the present climate crisis. I don't think that we're making such a direct argument, but part of the work of ASOE was that it forged connections I hadn't previously seen in a lifetime of playing the violin: connections between instrumental practice and the study of affective and intellectual labor, the representation of sexuality and the effortful pursuit of pleasure, the elements of our work that never escape the cultural contexts of our histories, or the physical constraints of our bodies in the world. Thinking through my culture and craft continually nudges my personal work closer to the paralyzing precariousness of this existential moment, and has allowed me to keep making in spite of it, in relation to it.

Bobbi: In this section, "taking care," the world of the piece suddenly becomes much smaller, more intimate. It allows the audience to focus on the movement of the plant and our voices. You were talking earlier about the idea of performance as the global reproduction of revered works, and I see it too in the industry emphasis on internationalism, constant touring, being all over for everyone. I think this moment, with Malcolm's elegy for his friend, is the opposite of that. It's about paying attention to what you have in front of you, mourning what you've lost, growing what you can. Finding the rituals that keep you going so that you can be in a position to give and take care.

This was always the aim in ASOE. To find the basic tasks to make our labor visible. Doing the tasks is difficult, but if they are clear you don't have to worry about making them more than what they are. Over the last five years they've become a measure of personal growth and decay. There's something beautiful about noticing what becomes harder for your body. The parts of yourself that you can no longer control, that were there but now are missing. But in that missing, in that loss, there is the potential for new growth.

Conclusion

This paper/dialogue points to another labor that is traditionally thought to lie outside the space of performance, and yet plays an outsized role in creative work. This is the labor of research and reflection: the acquisition and synthesis

21 Ibid.

of knowledge that may or may not be articulated in scholarly terms. Underlying any artist's approach to the act of making music or movement is a set of philosophical precepts that often go unnoticed and unquestioned. What we perform in the space of our dialogue is the work of excavating these precepts, holding them at a distance, and deciding what parts of them to keep, and what to shed.

The process of making and performing *ASOE* allowed me (Keir) to explore common misgivings about inherited tenets of the classical discipline: its preoccupation with historical genius, its work and score-centeredness, its uncompromising directions, structures, and hierarchies. Also, its erasure of the world outside of it—a neglect that is baked into the inherited wisdom of classical music's historical objectivity. Joining the craft of violin-playing with Bobbi's study on effort helped me to approach sound as the extension and reverberation of extramusical considerations, rather than as the outcome of a predetermined goal. Still, the studied craft of playing an instrument is precisely what allows me to engage a collective history built by generations of other bodies and minds. It is its own effortful practice, the labor and pleasure of which grounds me in the work of people before and around me.

In this essay, we have endeavored to show how dialogical reflection enriches opportunities for creative collaboration across our disciplines. Beyond this, we have found a productive dialectic between personal experience and specific modes of cultural-historical research. While we seek to better understand the contingencies of each other's lives and labors, we also understand the ways in which they are grounded in contexts beyond our individual experience. Our hope is that this synthesis of craft, bodily knowledge, and scholarly research, helps us speak more personally and truthfully in relation to our present cultures and ecologies.

SoundWave Surfing
Gaming, Interactivity, and Contemporary Dance

John Toenjes

Abstract: SoundWave Surfing *is an improvised competitive game performance within a motion-activated sample remix "machine" that requires complete integration of music and dance. The article starts with a discussion of attitudes about the relationship between music and modern dance. The author makes a case for a complete unity of these arts as artistically and scientifically valid, coining the terms "movician" to describe a performer who both mover and musician, and "musment" for an inseparable fusion of music and movement. A brief discussion of game theory precedes a description of a performance of* SoundWave Surfing *that pits two teams of "movicians" against each other, each trying to make the most interesting "musment" mix, as judged by the audience. Information about the tracking and control systems then follows. The article ends with a discussion of aesthetic design considerations for interactive performance tracking systems.*

Aesthetic Bias about the Music and Dance Relationship

Since the early years of modern dance in America, composers and choreographers have been debating about the most preferred, most aesthetically valid relationship between music and dance. Some composers have said that the music should be closely tied together with the choreography. Others have claimed that the music should be a loose "frame" around the dance. Some have asserted that the music must be as interesting in itself as the choreography; some have insisted that music that could stand on its own aesthetically was not suitable for modern dance.[1] And later in the twentieth century, the radical idea arose

1 John Toenjes, "Musicians of the Movement: The 'Composer-Accompanist' in the Formative Years of Modern Dance," in *International Guild of Musicians in Dance Journal*, vol. 3 (1994): 24–39.

that the music or a sound score could have no relationship with the dance at all, other than sharing the same time and space.

Many, if not most, contemporary modern dance artists subscribe to the idea that music should provide context for the choreography and perhaps some rhythmic impetus at times, but not illuminate the same information or illustrate the same picture that the dance does. In this relationship, each partner in the music-dance collaboration contributes something to which the other can respond. While this is certainly a valid point of view, it assumes that there *is* a difference between the music and the dance.

This isn't necessarily the case in cultures that have no separate words for music and for dance.[2] But, in modern and contemporary western-European-based culture, the distinction is severe. What is the nature of the difference? Both music and dance are time-based arts, constructed along certain structural templates or concepts. Both communicate to the human spirit in non-verbal, non-literal ways. In both, bodily movement is the activator of the art. They both exist in space, as well. But here is where the fundamental difference lies: music's space is the auditory, air space, and the dance's space is the visual, earth space.

And what is the difference between musician and dancer? The choreographer José Limon delivered a convocation address at the Juilliard School, entitled "Dancers are Musicians are Dancers"[3] that attempted to unite the two arts by illustrating how dance can be heard in the music of Bach, as dance ideas and forms were at the heart of his art. But on a more fundamental level, one can consider that a musician is *creating* music by blowing their breath through a tube or rubbing a bow back and forth on a string. Musicians are indeed moving while the music is being produced and heard. But because the musician's movement is generally not as extravagant as the dancers, and usually is not thought of as having communicative value in and of itself, much of the separation happens physically, too, where the musicians are relegated to the "pit" or situated offstage.

However, this attitude is not grounded in evidence. According to researchers, musicians actually *do* participate in the expression of content through their movement. In a study published in the journal *Psychology of Music*, Mary Brougton and Catherine Stevens discovered that "expressive body movement plays an important role in the communication between [...]

2 Jerome Lewis, "A Cross-Cultural Perspective on the Significance of Music and Dance on Culture and Society, with Insight from BaYaka Pygmies," in *Language, Music and the Brain: A Mysterious Relationship*, ed. Michael Arbib, Strüngmann Forum Reports, vol. 10 (Massachusetts: MIT Press, 2013).

3 José Limon, Convocation address, Juilliard School, October 5, 1966.

performer and audience."[4] This supports the theory of "kinesthetic empathy" which has been extensively researched since it was introduced in the 1930's by critic John Martin. Beyond kinesthetic empathy, Ryan Ingebritsen posits a concept of "auditory kinesthesia," which is "a part of the body schema that involves a direct mapping between the auditory and sensorimotor system [...] and can also contribute to kinesthetic empathy between audience and observer."[5]

Orchestra conductors such as Nicolas McGegan[6] move gracefully in a conducting "dance" in kinesthetic response to the music, which is mirrored back to the players in the orchestras he conducts and the audiences who watch and listen. This highly visible motor movement, both in response to and guiding the music making, moves towards the perception and conception of music and movement as one inseparable entity. And of course, in certain genres such as ballet folklorico, flamenco, and tap dance, the dancers make rhythmic sounds with their feet and/or hands, providing the music at the very same time as the movement. In these cases, there is no separation between dancer and musician.

And now, with computer motion capture and interactive media systems, the distinction between dancer and musician—even in forms that are not based on body rhythm—can be challenged and even erased. What if the music's space is the aural/air space *and* the visual/ground space? Conversely, what if the dance's space is the visual/ground space *and* the aural/air space, manipulatable through movement? In motion capture environments, the air space around a freely moving dancer is now the physical play space. The air space now feels tangible, physical. Then, similarly to the flamenco dancer, the computer-assisted dancer can truly be musician and dancer at the same time.

This is where my art resides in terms of the music/dance relationship: I generally want the dancer and the musician to be one and the same person, which I term a "movician." With the tools available through computer technology, the new movician can have control over not only percussive rhythmic sounds, but also over traditional musical elements such as melody, timbre, texture, and musical structure, as well as more modern elements such as digital effects and audio space shaping, sampling, and the "mix." My

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4 Mary Broughton and Catherine Stevens, "Music, Movement and Marimba: an Investigation of the Role of Movement and Gesture in Communicating Musical Expression to an Audience," in *Psychology of Music*, vol. 37 (April 2009): 137–53.

5 Ryan Ingebritsen, *Auditory Kinesthesia: A Framework to Facilitate the Design and Performance of Interactive Music Systems* (PhD dissertation, University of Illinois, 2022, unpublished), 32.

6 Conductor of the Philharmonia Baroque Orchestra among other orchestras around the world.

works, such as *Leonardo's Chimes*, *Songs of the Elastic Halloon*, and *SoundWave Surfing*,[7] are systems designed to create *movicians* through the construction of a *musment*—music + movement—environment. *Leonardo's Chimes* is a movician game where the mover and audio controller are in a duet looping guessing game. *Songs of the Elastic Halloon* uses a musment improvisational environment to create a form of poetry that I call "recurring strophic," a type of reiterative song-poetry that is constantly changing and reforming based upon the movement of a performer in the interactive environment.

I have heard complaints more than once from contemporary choreographers that they are tired of seeing someone in front of a camera "swooping" their arm, for example, and having the music "swoop," too. This is an attitude born of the "framing" idea that doesn't consider that contemporary artists at this moment are still trying to figure out just what the aesthetics of technology-enhanced movement art is. Given that they don't rail against tap or flamenco dancers making sounds with their feet, I find complaints about a one-to-one mapping of sonic qualities to movement gesture puzzling. Much work is being done on gesture recognition to arrive at more sophisticated and multifaceted mappings of movement to music. As a matter of fact, gesture recognition machine learning algorithms are taking this field into the realm of sonification of the meaning behind gestural movement, rather than its measurable, physical patterning. This involves theories of the meaning of gesture, both within and across cultures, which is a deep and complicated realm of investigation ripe with possibility.

This attitude is lately being broken by other strong influences, particularly street/hip-hop culture. In this culture there is an interplay of rhythm and movement that is improvisatory and relates directly to the beat and to the rap recited along with the music. There is also a competitive aspect to it, and individuality and spontaneity are prized. Remix is central to this aesthetic as well. The current liberal emphasis on "decolonizing" art might just be breaking the prejudice against dance aligning closely with music's rhythm and structure in the modernist aesthetic.

However, taking the criticism of those modernist choreographers seriously, what I *do* find aesthetically crucial is to become more sophisticated in the "mapping" of movement to sound. New possibilities in mapping allow for new conceptions in structure and effect and purpose in the art of *musment*.

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7 These can be seen at https://sites.google.com/jtoenjes.com/cv-works/selected-work-samples/interactive-dance (accessed 16 July 2022).

Game Structure

Although the immersive tools used in arcade style and virtual reality video games have the potential to create movicians and musment, generally, commercial game designers are not taking advantage of this power to make a move toward creating movicians. Games such as "Dance Dance Revolution" and "Just Dance" use motion tracking to encourage imitative movement through keeping score of how well the player imitates the movement of an onscreen dancing avatar, or how closely the player can match the rhythm of a song with their movement. In these cases, motion tracking is a tool for teaching mimicry and rhythmic accuracy, but not for an iterative integration of creator and created. This is due in a large part to the need of a game to have a standard against which to keep score. Instead, the art dance/performance world is where we see the emphasis on integration developing, where score keeping is not the top priority.

In keeping with the theories of kinesthetic empathy and auditory kinesthesia mentioned above, one of my artistic missions is to engage the audience physically in various ways in movement-based interactive performance. Various works of mine have used different tactics in doing this. *Critical Mass* used our custom phone application LAIT[8] to engage the audience in conversation and photo sharing around the performance. It allowed them to democratically change the course of the dance through voting and gave them license to come onstage to experience the performance in close proximity to the dancers, encouraging multiple perspectives on the stage set and its dynamic graphics.[9] A later work, *Alternate Reality*, uses the mobile phone as a game controller and communication device to challenge the audience to work together to collectively solve riddles related to the concept of reality, and makes them travel to different spaces and even to learn a dance themselves to arrive at the complete answers.[10]

My latest interest in this regard is to create works that use game structures to engage a generation of people that grew up playing video games. Video games

8 "LAIT—The Laboratory for Audience Interactive Technologies: Don't 'Turn it Off'—'Turn it On!' Proceedings of the 21st International Symposium on Electronic Art," accessed 16 July 2022, http://www.isea-archives.org/docs/2015/proceedings/ISEA2015_proceedings.pdf, 334–7.

9 https://sites.google.com/jtoenjes.com/cv-works/selected-work-samples/interactive-dance (accessed 16 July 2022).

10 https://sites.google.com/jtoenjes.com/cv-works/selected-work-samples/interactive-dance (accessed 16 July 2022).

have become central to the experience of many people across the world. In *Reality is Broken*, a seminal book on the influence of video games in contemporary culture, author Jane McGonigal emphasizes that "97% of youth play computer and video games."[11] The gaming lens can grab the attention of an audience in a more immersive way than traditional passive theater performances. I feel that the impact of video games on a changing society makes it crucial for artists to investigate their ability to drawing together the elements of "musment," competition, social connections, immersive experience, and machine interactivity to make art in the twenty-first century.

According to McGonigal, essential to the definition of any game are the following elements: a goal, rules, a feedback system, and voluntary participation.[12] Competition and art have been strange bed fellows for centuries. Their goals are not neatly aligned. One values defeating an opponent or overcoming obstacles, the other prizes individual or collective expression of feelings or cultural values. Traditional performing arts have virtually none of the essential elements of a game. However, as digital media and computer games have begun shifting the idea of performance from a passive experience to an active model, where an audience can have agency over it, competition has found its way into the performing arts. This can be seen in a variety of arenas, such as in audience-approval shows like *So You Think You Can Dance* and in the power of choice that comes with the ability to quickly swipe through TikTok videos to create one's own playlist of favorites.

In order create art that is also a game, the artist must ask themselves: what goal can I construct for my performers to reach? How do I construct rules that make the game compelling and give it structure? What is the feedback system or systems that the performers and/or audience will rely upon to feel like the art is progressing along a line of inquiry? Lastly, how do I get the audience to participate in the working out of this artwork?

SoundWave Surfing

SoundWave Surfing is an improvised "musidance" competition that requires the integration of "musment" and "movicians" within a game that is played by the performers and judged by the audience. This dance participates in and celebrates some aspects of hip-hop culture through its competitive nature, its

11 Susan McGonigal, *Reality Is Broken: Why Games Make Us Better and How They Can Change the World* (New York: Penguin Press, 2011), 22.

12 Ibid., 30.

emphasis on individuality and spontaneity, the freestyle movement and vocalizations, and the sampling and overdub/remix musical structure. This dance has gone through two iterations, one as a duet competition and one as a team competition. Both versions are similar in structure, but the team version involves the audience in deciding which team is the winner as judged by the enthusiasm of their response to the performances. In this writing, I will focus on the team performance.

The *goal* of the game is for the movicians to create an interesting mix of music and dance and to have the audience decide that one team or the other has achieved the better mix. As the emcee says to the audience in his opening script: "you're not judging just how good the movement is, or how good the vocals are, but how well they come together in a new and innovative way." The *rules* are that members of both teams, each comprised of three movicians, must both vocalize a completely spontaneous sonic challenge for their other team members to "surf," and then to "surf" through their other team members' vocalizations to contribute to the team remix. The *feedback system* is provided by a visualization of the sound wave with a shaded loop area that moves with them in real time, and of course, the audio mix in the speakers. *Voluntary participation* is a given, since both audience and performers have willingly come to the performance.

At the start of the performance, an emcee warms up the audience, instructing them to cheer for their preferred performers to determine the winners. This allows the computer programming to calibrate the microphone that is used to capture the audience response for each performance and cues the audience as to how to behave in the theater; cheering on your team is not usual behavior in an art dance context. After introducing the team members, the emcee demonstrates the workings of the technology to the audience. This is done because, as I wrote in my article "Composing for Interactive Dance," "most artists agree that audiences tend to enjoy and understand interactive dance works better when they perceive the connection between the performers and the interactive system."[13] I have found through post-performance feedback sessions that audiences are still quite unfamiliar with such systems. Audiences are curious about how things work, and don't fully give themselves over to a performance if the magic of how these computer-assisted improvisational environments work is too hard to comprehend. Explaining its functionality gives them insight into the production so they can better appreciate and enjoy it.

After this introduction, the competition gets underway. Each team takes a turn: one team member vocalizes a completely spontaneous and unrehearsed

13 John Toenjes, "Composing for Interactive Dance," in *Perspectives of New Music*, vol. 45, no. 2 (Summer 2007): 28–50, 37.

improvised phrase that is recorded by the computer and immediately begins playing back in a long loop. Another of the team members then enters onstage as the "surfer," who dances through the sound wave and remixes a musical composition, their motion tracked by video cameras. Moving across from stage left to stage right and front to back, the surfer controls the tracking with the buttons on a Wii® controller they are carrying. The surfer's position left to right determines the midpoint of the loop, and the perceived width of their body in the camera's view determines the length of the loop. The volume of the track is controlled by the center position of the dancer upstage and downstage, tracked by an overhead camera.

Figure 1: *A red team "movician" surfing the sound waves.*
© John Toenjes

As the movician surfs the sound wave, the sound wave and loop sections are projected in real time on the screen behind them for the audience to see. This involves the audience visually and aurally in what is going on in the looping functions. It's a challenging task for a team member to come up with an engaging vocalization that adds to the audio that has already been created yet contributes something more that the surfer can work with. Once a suitable portion of the recorded challenge is isolated by movement, the dancer uses the Wii® controller to lock the sample into place. The sample then starts to loop, and the dancer can choose to dance with that sample, and then later again use the Wii® controller to unlock that loop and find another spot in the sound wave to loop. If there are already two or more recorded tracks looping, they can use the controller to scroll up and down through those tracks to unlock the loops that have already been established by other team members. A variety

of musical textures can be created by unlocking and shifting loops among the various tracks, creating interesting mixes from the various vocalizations.

As the remixes progress, several other digital audio filters are available for the performers to use to manipulate sound quality. The filter parameters are controlled by the speed of the dancer's movement and their location on the stage. This brings the list of the mappings of movement to music to:

- The loop start is mapped to the position of the dancer from left to right on the stage.
- The loop length of the sample being manipulated is mapped to the perceived width of the performer's body.
- The volume of the sound sample is matched to the position of the dancer from upstage to downstage.
- Various parameters of sonic filters are mapped to positions from stage left to stage right and upstage and downstage, and to the perceived amount or speed of their movement.

The game consists of several rounds. In the first round, there are only two tracks for the team to remix. Instructions are given for them to vocalize in a somewhat melodic manner. There are certain musical parameters that seem to work better than others for this round. Melodies that quickly vary timbre and pitch give more opportunity for creating interesting loops than those that do so more slowly. In the second round, three tracks are vocalized for surfing, and the musical parameters are opened up to include more rhythmic utterances. The complexity of three tracks challenges the virtuosity of the movicians. In the third round, called "Anything Goes," the movicians are instructed to vocalize anything they want, from melodic pitches to screams and guttural noises to nonsense poetry. This creates a wide and wild variety of tonal variations in the four-track mix.

The attentiveness to how one must move while paying instant close attention to both how the audio is sounding and to how it feels in their body demands a complete immersion into the experience by the movician. Much is lost internally if the movician drops out of that attentive state, and the audience can sense a lack of concentration. This is the primary virtuosity demanded of the *SoundWave Surfing* environment: nearly any movement or sound will work, but the integration of the music and movement is where the effort and attention lie.

When each team is finished with their mix, the audience is asked to cheer for their favorite, and the team scores are projected onto the screen. A final tally of all three rounds declares a winner at the end of each performance.

Audience Reactions

Young audiences seem to enjoy and appreciate this dance work. The dancers have fun, too, as it is exhilarating and challenging at the same time. There is also a sense of community among the entire population at the performance; movicians and audience participate in the experience together and the fourth wall is more than broken—it is shattered. A quote from a student audience member illustrates how it reached them:

> [I] found everything new and fresh [...] The first reason [...] is that different from the formal type of dance performance, this dance is more like a competition, which is a form I have never seen before. The innovation of combining the concert performance with the gaming form is a part of the contemporary media culture, and this novelty makes me feel creative and unique about this dance. This form asks the dancers to interact with each other frequently and also interact with the audience. By doing this, audiences felt more engaged in this performance and had more fun at the same time. When I was watching this performance, I felt like I was also a member of this performance [...] Also, in my perspective, this show inspired me to generate a new idea about the relationship between the music and dance.[14]

As a theatrical producer, I found myself walking a line between camp and art in this last production of *SoundWave Surfing*. I was attempting to create an engaging, entertaining "game show" ambiance to inspire enthusiasm and receptivity in the audience, all the while trying to keep the focus squarely on the artistic experience of the remix and the integration of the sound and movement, and the virtuosity required to achieve "movician" status. This is a balance that is important to weigh in this context.

More on the Feedback System

Ideally, the "movician" is physically and artistically reacting as quickly as possible—within milliseconds—to what they are hearing, integrating their movement with the sound in an immediate feedback loop, unifying sound and movement as closely as possible. How does the tracking mechanism affect the relationship between the mover and the sound they are hearing and creating? This interface is what manifests the relationship between mover and sound, so one must question how its design helps or interferes with the direct connection between sound perceived and movement executed and then sound perceived

14 Excerpt of a school paper, University of Illinois, Department of Dance, 2022.

again. What role does the performer's "intuition" play in this? Can the interface be designed in a way that increases the performer's sensitivity to the immediate experience?

This design problem has been at the center of the various tracking and control mechanisms I have experimented with over the years in various interactive movement/music works. I have found that there needs to exist a balance between the complexity of the control system and the ability of the performer to utilize its functions while meeting the demands of performance. As accuracy and reliability of tracking systems have improved, I have found that a super-accurate tracking system encourages a level of trust that can dull the awareness of the moment. I have decided that I prefer a certain amount of variability and unpredictability—in other words, a certain amount of "slop"—in such systems. This forces the performers to be in constant dialog with the unexpected, listening at every moment for how their actions are affecting the sound.

In the team version of *SoundWave Surfing*, I pared down to a simple color-tracking system that draws a bounding box around the "surfer" which locates them in relation to the loop position and length, and I simplified the button choices on the Wii® controllers. To get a show onstage by opening night, I had to strip down the tracking to something the performers could handle. The demands of "intuitively" yet knowledgeably and judgmentally responding to what they were hearing and producing with their movement was great enough that if I added the extra burden of a complex tracking and control system, the "intuitive" connection was lost. It is simply quite demanding to attempt to completely integrate movement and music into one corporeal whole while improvising in real time and simultaneously controlling an interactive environment.

Ideally, however, movicians in this system would be able control more subtleties to create more sophisticated musical results. Musical parameters such as dynamic contours and tonal variations are not readily deduced from a simple bounding box. Thus, virtuosity in using a system with more control is needed to get more complex results. Certainly, there is an amount of practice involved in learning any system, and virtuosity can be achieved with an adequate amount of practice. But what sorts of multi-modal systems are best, and which are enough to not be so complex as to interfere with the spontaneity of a performer trying to integrate sound and movement into one being? Is there a limit to which the designer can expect any human to be able to respond in an immediate and intuitive way?

Another question arises: what is an accurate or useable mapping of movement to sound in terms of defining a standard of perceived movement and sound integration? Is the mapping where the modernist choreographer could be appeased or thrown off the track? And how does the mapping contribute to

or harm the seemingly intuitive responses of the performer to the stimuli and media they control or find themselves immersed in?

Investigating these questions within the context of a performance piece is at the heart of using *SoundWave Surfing* as a tool for design study. A tracking system that forces the performer to constantly re-evaluate and recalibrate their body's spatial relationship to sound is an effective tool for making a true movician. In this sense, *SoundWave Surfing* is a sensitivity practice tool, a musical instrument, a game, and a dance environment. To *SoundWave Surf*, means to integrate all these aspects into an engaging and aesthetically valid staged game/art performance.

Six Memos for a Pianist and a Self-Playing Piano
Sketches on an Artistic Investigation of Spatial Phenomena

Hanne Pilgrim, Adrián Artacho, Leonhard Horstmeyer, and Markus Kupferblum

Abstract: *In this article we share sketches from our research process investigating spatial qualities in a specific set of audio-corporeal practices, within the context of the artistic research project* Atlas of Smooth Spaces (*funded by the Austrian Science Fund*, AR640). *We are particularly interested in those emergent qualities of space that exist outside of—but not without—the performer, and seek to develop concepts and methods for mapping them. Based on the premise that we can never capture and notate these spatial qualities from one singular perspective, we produced descriptions from different disciplinary views. The six case studies "for a pianist and a self-playing piano" conducted by Hanne Pilgrim, Adrián Artacho, Leonhard Horstmeyer and Markus Kupferblum are seen as an intermediate step in the process of approaching our research goal of notating, creating, and communicating spatial phenomena. The text guides the reader through the artistic research methods and tools set in place.*

Introduction

The objective of the artistic research project "Atlas of Smooth Spaces"[1] is to investigate spatial phenomena in the audio-corporeal arts. Audio-corporeal artistic practices share an alertness for and a certain tacit knowledge about space.[2] We seek to notate, create, communicate, and eventually compose

1 Fund by the Austrian Science Fund (FWF) AR640.

2 Guillemette Bolens, *The Style of Gestures: Embodiment and Cognition in Literary Narrative* (Baltimore, MD: Johns Hopkins University Press, 2012); Susanne Quinten and Stephanie Schroedter, ed., *Tanzpraxis in der Forschung – Tanz als Forschungspraxis* (Bielefeld: transcript, 2016); Annegret Huber, Doris

spatial phenomena. Here we are not concerned with the metric properties of spaces but instead with the emergent qualitative spatial qualities of spaces that exist outside of—but not without—the performer. The emphasis lies specifically on these spatial qualities rather than on metric quantities.[3] We pursue a methodological investigation of such spaces in the audio-corporeal practices. In the following sketches from our ongoing research we introduce a series of case studies involving artist-researcher Hanne Pilgrim and the self-playing grand piano CEUS by Bösendorfer.[4] These brief case studies investigate the concept of spatiality in its different facets, leading into a cycle of short pieces titled *Six Memos for a Pianist and a Self-Playing Piano* after Italo Calvino's unfinished lecture series *Six Memos for the New Millenium*.[5]

Within the artistic research community there have been notable works, such as the projects "Contingent Agencies,"[6] "Choreo-graphic Figure: Deviations from the Lines,"[7] and "The Choreography of Sound,"[8] which also investigate spatial qualities and their notation in the performing arts. What we consider to be a distinguishing feature of our research is firstly the application of specific methodological steps[9] according to our disciplinary research which

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Ingrisch, Therese Kaufmann, Johannes Kretz, Gesine Schröder, and Tasos Zembylas, ed., *Knowing in Performing: Artistic Research in Music and the Performing Arts* (Bielefeld: transcript, 2021); Frédéric Pouillaude, *Unworking Choreography: The Notion of the Work in Dance* (Oxford: Oxford University Press, 2017); Carrie Noland, *Agency and Embodiment: Performing Gestures / Producing Culture* (Cambridge, MA: Harvard University Press, 2009); Stephanie Schroedter, ed., *Bewegungen zwischen Hören und Sehen: Denkbewegungen über Bewegungskünste* (Würzburg: Königshausen & Neumann, 2012).

3 Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (London: Continuum, 2004), 322 (1987), 484–5.

4 CEUS Computer-Controlled Grand Piano, accessed 23 November 2022, https://iwk.mdw.ac.at/ceus-grandpiano/.

5 Italo Calvino, *Six Memos for the Next Millennium* (Cambridge, MA: Harvard University Press, 1988).

6 Accessed 23 November 2022, https://contingentagencies.net/.

7 Accessed 23 November 2022, https://www.choreo-graphic-figures.net/publications/book/.

8 Gerhard Eckel, Martin Rumori, David Pirrò, and Ramón González-Arroyo, "A framework for the choreography of sound," in *Proceedings of the 38th International Computer Music Conference* (ICMC) (2012), 404–511, accessed 23 November 2022, https://www.researchgate.net/project/The-Choreography-of-Sound.

9 Here we refer to the methodical elaboration of nullspaces in the respective disciplines which we apply as basis for any transdisciplinary research, accessed 23 November 2022, https://the-smooth.space/w/index.php/Main_Page; Leonhard Horstmeyer and Hanne Pilgrim, "Dialectic Attempts in Artistic

focuses on modes of collision. There we created a framework with tools and concepts from experimental physics, mathematics, and complexity science. Secondly, we are specifically concerned with what we call "audio-corporeal" practices in the selected disciplines of dance, eurhythmics, choir conducting, and direct sound.

This article is structured as follows: first we present the methodology used for this research. We then introduce the self-playing piano CEUS by Bösendorfer as a research tool. Subsequently we outline six case studies—each investigating different spatial qualities—with frequent excursions into the different disciplinary perspectives to convey a more sophisticated description of said spatial phenomena. We conclude the article by presenting the output of the case studies.

Investigating Spatial Qualities—a Cartographic Methodology from Six Perspectives

In this section we discuss the methodological approach used in our investigations. What do we mean by spatial qualities? What do they pertain to? When do they arise and how may one explore them? Spatiality has long been elevated from a purely physical quantity to a more relational—and partly abstract—concept. The work of Descartes in particular has paved the way for embedding relational phenomena into a spatial context via the so-called Cartesian coordinate system. But also the notation of music has profited from the projection of qualities such as pitch or duration onto some spatial representation of musical phenomena. Here we refer to spatiality as encompassing relational aspects, textural and structural spatial aspects, directional and intentional aspects, as well as experiential aspects. The relational aspects include such concepts as constraining, containment, adjacency, segmentation, marginalization, and voidness. The textural aspects include smoothness, friction, stickiness, and striation. The directional aspects include rising and sinking on scales or ladders, the changing chromaticity, but also attack and rebound of bodies. Intentional and experiential aspects both pertain to a subject, with the distinction that the former are directional in nature, while the latter are not. Experiential aspects include the sensations of

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Eurhythmics Practice, Towards a Notation of Spatial Qualities Through an Iterative Multi-Layered Description," accepted for publication in *Le Rythme* (2022).

floating, of being dragged, or of resting. Each of these examples have spatiality pertaining to them, not exclusively but significantly and sometimes vastly.

In order to explore these respective spatial qualities we have developed six case studies that cover relational, textural, structural, directional, intentional, and experiential spatial aspects. Each case study focuses on a subset of these aspects. The subject of study is a performer, in our case a pianist, and a programmable grand piano. Additionally we also have a physical space in which they are situated, and one or two observers. One of the observers is a capturer, namely a videographer.

The exploration of a plentitude of spatial qualities through a set of case studies forms the core of our cartographic approach. Each case study is like a little chart of an atlas of spatial qualities. This is the overarching guiding methodological theme of this research. Since some studies share a spatial aspect, there is an overlap that allows one to go from any chart to an overlapping adjacent chart. This process of passing from one chart to another can be thought of as a transition map between two charts. When turning the page of an atlas one will find that certain geographic landmarks are present on both charts. This is the overlap that allows for a transition between charts.

Figure 1: *Sequence of stills from the 5th case study,* Molteplicità *for a pianist and a self-playing piano. © Markus Kupferblum*

How can one pursue the charting of spatiality through case studies? Our approach in this regard focuses on a particular artistic practice and a particular setting, namely the relation between a pianist, a programmable self-playing piano, and the ambient space. Both the pianist as well as the composer iterate for each study on a theme that facilitates and illuminates a certain spatiality. For each case study we proceed as follows: First we raise the artistic research questions that this study is concerned with. We then evolve the performance, and subsequently discuss the spatial aspect, the processes, and the various

perspectives on the study. A videographer captures the performance, creating snapshots that show one instance of a spatiality portrait. The respective outputs are described in the last section.

A Self-Playing Piano as a Research Tool?

In this particular investigation of space qualities shaped by and created around the performer—a pianist—we use a computer-controlled self-playing piano as a probe,[10] enabling the performer to freely interact with different algorithms and the probe for hidden affordances.[11]

> Certain sound-generation features in computer-generated music, [...] or generative algorithms in musical composition, further unfold into sets of relations that turn the DMI into a probe and cause it to become the other, constituting a phenomenological mode.[12]

By doing this, we attempt to pack complex, multilayered research questions "as multiple, rich, and engaging tasks"[13] for the performer to engage with. The self-playing piano becomes somewhat of a Digital Musical Instrument (DMI)[14] while the added computation changes the mode-of-being of the piano as such,[15]

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10 Gaver already explored the idea of using cultural probes "to enquire further into their agency as far as musical composition and performance are concerned." Bill Gaver, Tony Dunne, and Elena Pacenti, "Design: Cultural Probes," in *Interactions* 6/1 (1999): 21–9.

11 Koray Tahıroğlu, Thor Magnusson, Adam Parkinson, Iris Garrelfs, and Atau Tanaka, "Digital Musical Instruments as Probes: How Computation Changes the Mode-of-Being of Musical Instruments," in *Organised Sound* 25/1 (2020): 64–74.

12 Ibid., 71.

13 Gaver notes that the probes demonstrated that "research questions could be packaged as multiple, rich, and engaging tasks that people could engage with by choice and over time." William W. Gaver, Andrew Boucher, Sarah Pennington, and Brendan Walker, "Cultural Probes and the Value of Uncertainty," in *Interactions* 11/5 (2004): 53.

14 Malloch et al define digital musical instruments (DMI) as "musical instrument whose sound generator is separable from its control interface [...], and with musical and control parameters related by a mapping strategy." Joseph Malloch, David Birnbaum, Elliot Sinyor, and Marcelo Wanderley, "Towards a New Conceptual Framework for Digital Musical Instruments," in *Proceedings of the 9th International Conference on Digital Audio Effects (DAFx-06)* (2006), 49.

15 Tahıroğlu, Magnusson, Parkinson, Garrelfs, and Aau Tanaka, "Digital Musical Instruments as Probes," 64–74.

transforming "musical norms, habits, language and intentions"[16] and fostering a new, specific kind of performance practice.

> If doing phenomenology becomes a way to study our experiences of the world, we can deploy DMIs as scientific instruments or probes in which we further seek to understand our human condition through active musical perception.[17]

The otherness of the computer's generative output is mitigated by a self-imposed restriction to keep the response time window relatively narrow (under six seconds) to maintain the feeling of connection between the performer's actions and the sonic/haptic output. This can be understood as an augmentation of the pianist, who can achieve incredibly intricate textures[18] that would be simply impossible on a regular piano.[19] This haptic quality of the self-playing piano (all across the keyboard, keys are engaged and released seemingly on their own) reverts also into the specific spatial quality of the interaction. This makes the self-playing piano a very interesting epistemic tool[20] to pursue our space investigations.

The generative algorithms run in a nearby computer which communicates via MIDI with the CEUS grand piano.[21] These algorithms are modular and can be stuck in different configurations to achieve different results, allowing

16 "Computation therefore shapes our relationship with DMIs and also transforms our musical norms, habits, language and intentions; it is the DMI's unique mode-of-being in a new performance practice." Ibid., 64.

17 Ibid., 67.

18 The exploration of the furthest possibilities of self-playing pianos has a history possibly as long as the self-playing pianos themselves, with the towering figure of Conlon Nancarrow and his Studies for Player Piano from 1948 to 1992 as one of its most substantial contributions (Philippe Kocher, "Polytempo Composer: A Tool for the Computation of Synchronisable Tempo Progressions," in *Proceedings of the SMC Conferences*, SMCNetwork (2016), 238–42.

19 Self-playing pianos are particularly suitable to explore "machine music" that no human performer could possibly master in terms of speed, loudness, massiveness, and time precision (Philippe Kocher, "The Piano Automaton as an Instrument for Algorithmic Music," in *Proceedings of the Generative Art Conference*, Verona 2018.

20 Thor Magnusson, "Of Epistemic Tools: Musical Instruments as Cognitive Extensions," in *Organised Sound* 14/2 (2009): 168–76, accessed 23 November 2022, http://sro.sussex.ac.uk/id/eprint/46873/1/magnusson.pdf.

21 In this respect, our work is inspired by jazz pianist DanTepfer's similar use of a Yamaha Disklavier (Dan Tepfer, "Natural Machines," personal blog, posted on 27 October 2018, accessed 15 November 2022, https://dantepfer.com/blog/?p=711).

us to quickly iterate different versions while working together. Rather than composing a piece in the traditional sense, we attempted to create different environments for the performer to engage in free play, which ultimately becomes the piece.

> At the core of the composition process is a system which ties together the performer, instrument, audience, performance space and sound. However, this system is never completely fixed, and to boot many of these demarcation lines have become blurred. It requires listening as a probe to retain balance in flux.[22]

Case Studies: Six Memos

Following the cartographic approach we mentioned above, we decided to organize our research around a series of case studies, each of them charting a specific quality of space. We found it useful to use the structure of Italo Calvino's *Lezioni americane* (published in English as *Six Memos for the New Millenium* in 1988) as a prompt to re-imagine the qualities of the space inhabited by the pianist in our investigations. Calvino devotes each of his lectures to one of the literary qualities he values most: lightness, quickness, exactitude, visibility, multiplicity, and consistency. These concepts—loosely appropriated and reinterpreted in the context of the audio-corporeal arts—helped articulate our shared thinking about space, crystallizing in a series of six case studies "for a pianist and a self-playing piano" that each bear the name of one of Calvino's lectures. Note that Calvino died before being able to finish his *Lezioni americane*, leaving everyone to speculate about the content of his last lecture. We nonetheless produced a last case study that explores the concept of consistency from different perspectives.

1. Leggerezza *(lightness)*

> "My working method has more often than not involved
> the subtraction of weight."
> Italo Calvino, *Six Memos for the New Millenium*[23]

What does it mean to subtract weight from a pianistic action? How does a pianist interact with a piano in terms of weight and lightness? The downward

22 Tahıroğlu, Magnusson, Parkinson, Garrelfs, and Aau Tanaka, "Digital Musical Instruments as Probes," 68.

23 Cambridge, MA: Harvard University Press, 1988, 3.

movement of the keys would be unthinkable under normal circumstances without the use of the pianist's body weight (i.e., of the fingers, hands, arms). But what if the piano suddenly starts playing by itself? How does a pianist behave in such situations? How does she interact with the instrument and what new ways of playing may arise from this? What is on the one hand outrageous from the pianist's point of view (is the pianist becoming superfluous?), on the other hand shows completely new ways for the player to relate to the instrument. These range from very concrete physical references (who mobilizes which key?) to musical-dramaturgical references through anticipations, repetitions, doublings, etc.

Figure 2: *Sequence of stills from the first case study,* Leggerezza *for a pianist and a self-playing piano. © Markus Kupferblum*

The piece begins with an erratic rumbling activity of the keys, with no performer close to it. Carefully, the pianist approaches it until she is close enough to hit a specific chord, which stops the keys momentarily. The performer is engaging with the piano in a playful manner and explores the acoustic and responsive range of the CEUS. By exploring the range of dynamics and pitch she opens up the space of possibilities and at the same time constrains them by delimiting the extremes. During one of her movements she probes the highest and the lowest keys of the piano or she probes the simultaneous attack of as many keys as possible, respectively to test the response of the piano. She applies attacks with varying levels of pressure and assertiveness to probe the rebound and the general response of the piano. Here she uses a playing technique in which certain tones are filtered out of a sounding cluster with the effect of creating a harmonic echo. In the end of this first movement, the pianist leaves the piano which is still busy replaying the chords she had played before like a

reverberation of the common interaction. The pedal does a long shaky shadow of her foot movements. The pianist*performer writes:

> As I approach CEUS I try to unburden myself of any expectation and turn to listening and observing the whimsical and at the same time tender own movements of its keys. I take a seat. I stay until I can no longer restrain myself from testing and interacting with it. I have never interacted with a piano like this before. Now the challenge is to elicit a dramaturgy from the play that unfolds from our interactions and to integrate all unplannable events en passant in the process. As the arc of the piece clearly draws to a close for me, I let CEUS play the coda for us alone.

The video concept for *Leggerezza*, in its documentary format, directs all the attention to the interaction between the piano and the pianist. In favor of the presence of the two bodies, the director's presence and the shooting process remain in the background.

The pianist's handling of the piano is akin to the act of searching for an escaped pet in a space where the doors and all conceivable escape routes are closed. The search may be carried out in this constrained space, which nevertheless still leaves a lot of room. In the practice of mathematical research it is also common to delimit a question in this way. One often tests whether a statement holds at the extreme scenarios in order to get a first feeling for it. In testing for the range, the performer makes use of the Newtonian principle of action and reaction, presenting us with a twisted sense of causality as a result; to all accounts, the piano seems to sometimes initiate actions of its own accord. In stark contrast to the experience of a life-long piano practice, here the performer ought to negotiate every action with the instrument, to the extent that we may consider agency to be distributed across the system.

Another spatial aspect that appears—or rather disappears—in this piece is that of the void. On one hand, the interaction between the performer and the piano takes place through subsequent "contact events," where the pianist's body encounters the surface of the keys, portraying manifold variations of pressure, length, velocity … On the other hand, though, the piano keeps sometimes responding in her absence, as though she were present. The concept of a void has inspired generations of physicists and lies at the very core of our metaphysical idea of the world: Is there anything without anything? This question asks about the existence of space without matter. For a long time people have believed that a sort of substance called ether permeates space. Even though this concept has become unfavorable in the light of the Michelson-Morely light-interference experiment, the question remains: What is there where nothing is? This piece poses a similar question by presenting the bodiless gap between the piano and

the performer–the void–as a territory in dispute that shrinks and expands with the advances of each contender. Moreover, the use of the "filtering"[24] technique towards the end of the piece resonates with the notion of negative space, a literal subtraction of the weight that nudges the piece towards its final resting point.

2. Rapidità *(quickness)*

> "Agility, mobility, and ease, all qualities that go with writing where it is natural to digress, to jump from one subject to another, to lose the thread a hundred times and find it again after a hundred more twists and turns."
> Italo Calvino, *Six Memos for the New Millenium*[25]

How many jumps, twists and turns do pianist's hands make when following a musical flow of thoughts in an instant composition? How does she digress while surrendering to a certain movement, texture, harmony, or rhythm? How does she find her thread again? What does quickness even mean for a piano's body?

Rapidità is, perhaps as a result of the high density of action, a brief piece. The principle of tone repetition with consistent hand changes is maintained for the entire course, whereby the pitches change and the movement also alternates between unisono playing and clusters. The pianist*performer writes:

> The first question I ask myself is what quickness is meant to be from a pianistic point of view. Obviously there are so many facets to being quick (mentally, musically, bodily) depending on where you look. Quick reaction and quick release as central aspects of piano playing can be transferred to various activities of the body and mind: movements of the fingers, wrists, arms, feet, gaze, thinking movements in processing and planning, breathing movements. How do I face the discrepancy between what feels fast from my perspective of acting and what feels fast from an outside reception. I assume that sound production and sound effects are often not congruent. Focussing on the conditions of the piano: how can I challenge the piano's body in terms of quickness? The expectation of a good key action is among other things linked to how cleanly and quickly the key returns after being mobilized by the pianist. Tone repetitions are a tool to check and evaluate this. So I throw myself into the competition with gusto and repeat a key. The resulting principle of exertion and recuperation forms the basis for the emerging music.

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24 Here a chromatic cluster is followed by a quiet resonance that is not struck separately but "filtered" out of the cluster, so to speak. This playing technique is used, for example, in Helmut Lachenmann's piece *Filter-Schaukel* from the cycle *Ein Kinderspiel*.

25 Cambridge, MA: Harvard University Press, 1988, 46.

We discuss two spatial concepts that are present in this piece from a mathematical point of view: Accumulation and Resolution. Accumulation is a core concept in the mathematical field of analysis. It is possible and indeed common for a succession or a series of points to inch towards a point that may or may not be reached, as suggested by the quick succession of notes that propel the piece towards some uncertain resolution ahead in time. This is akin to the idea of throwing darts at a target without ever hitting its center. The failed attempts will however accumulate around the center. Resolution of space and time, on the other hand, figures most prominently in the concept of a Fourier transform.[26] Translating a signal from one medium to another, for instance from the fingers to the piano keys and then to the hammer, may result in a lag or a smoothening that effectively alters or crops the high frequency modulations. A repeated attack on a piano key can at some critical attack velocity not be resolved any further due to mechanical constraints of the hammer. The ear for instance cannot resolve very high pitches, because of the ear physiology.[27]

The long chain of repeated notes is not—at least initially—perceived as motivic material, but as belonging to a narrow space conformed by the accumulation of intensities in the Deleuzian sense.[28] The properties of said space seem to emerge from this simple accumulation, rendering the speed at which the performer is able to actuate the keys its most expressive parameter.

3. Esattezza *(exactitude)*

> "To my mind, exactitude means three things above all: (1) a well-defined and well-calculated plan for the work in question; (2) an evocation of clear, incisive, memorable visual images; (3) a language as precise as possible both in choice of words and in expression of the subtleties of thought and imagination."
> Italo Calvino, *Six Memos for the New Millenium*[29]

In his own literary work, Calvino cultivates this quality of exactitude through the use of structural patterns and numerical systems. But which affordances does

26 William T. Cochran, James W. Cooley, David L. Favin, Howard D. Helms, Reginald A. Kaenel, William W. Lang, George C. Maling, David E. Nelson, Charles M. Rader, and Peter D. Welch, "What Is the Fast Fourier Transform," in *Proceedings of the IEEE* 55/10 (1967): 1664–74.

27 David Howard and Jamie Angus, *Acoustics and Psychoacoustics* (New York: Routledge, 2013).

28 Deleuze and Guattari here speak of a smooth space, whose determinations "are connected by processes of frequency or accumulation," Deleuze and Guattari, *A Thousand Plateaus*, 485.

29 Cambridge, MA: Harvard University Press, 1988, 55–56.

the self-playing piano—as opposed to a regular piano—offer a pianist in terms of exactitude? What is a well-defined and well-calculated musical expression? Can we shift the idea of clear, incisive and memorable images from visual to audio-corporeal?

This piece begins with the pianist placing a 13/8 ostinato pattern, which is rhythmically full-beat but has an upbeat effect in the repetition due to the division 222223. Harmonically, the three-part pattern plays with friction and resolution. CEUS takes over the pattern immediately after a run, so that the pianist can add further voices to the looped pattern. At that point, the piece becomes a duo of sorts,[30] the looped pattern dutifully accompanying the successive layers added by the pianist as the piece unfolds. The way these layers fall into place against the backdrop of the looped pattern holds a palpable structural tension until it ultimately diffuses in a fadeout with a ritardando, the voices quietly rippling out of the rhythmical harness that appears to have held the piece together all along. The pianist*performer writes:

> What makes working with CEUS so special is the feedback the piano gives me—not only in the usual form of haptics and acoustics, but in very concrete pianistic (interlocking) events and musical textures. What is transient and fleeting in other repertoire playing can be recycled here and kept moving. In the case of the 13/8 reference pattern CEUS' repetitions of my initial input are precise and inescapable in timing. This circumstance forces my attention to rhythmic accuracy. At the same time I am challenged to be at ease with the asymmetry of the pattern, to place it in a mindful and easy way. After Guilherme Schmidt and Danielsen when being in a groove, the relation of subject and object is almost suspended within a continuous field where the limit between music and musician/listener/dancer has vanished.[31] This describes quite well my experience of interacting with CEUS. The more motives we exchange and loop, the more blurred it becomes as to who is playing what. My impression of the spatial quality can be described as a balancing of weights, fragile and stable at the same time. My kinesthetic gestures unfold between control and devotion.

30 It could be argued that the otherness of the computer-controlled CEUS system is—insofar as it becomes a DMI—"less strong than the otherness found in an alternative human musician." Tahıroğlu, Magnusson, Parkinson, Garrelfs, and Aau Tanaka, "Digital Musical Instruments as Probes," 71.

31 Guilherme Schmidt Câmara and Anne Danielsen, "Groove," in *The Oxford Handbook of Critical Concepts in Music Theory*, ed. Alexander Rehding and Steven Rings (Oxford: Oxford University Press, 2018), accessed 23 November 2022, http://dx.doi.org/10.1093/oxfordhb/9780190454746.013.17.

Figure 3: *Sequence of stills from the 3rd case study,* Esattezza *for a pianist and a self-playing piano. © Markus Kupferblum*

The coordination of sensory input and motoric output and their respective coupling is an active field of research in control theory and more precisely in robotics, but also in communication and information theory. In the control-theoretic formulation the sensorimotor loop can be seen as a problem of proportional, integral, and derivative control. Each control tries to place the motoric response in an optimal way, but the proportional one achieves this through correcting possible mistakes in the magnitude of their appearance, whereas the integral and derivative controls try to steer the motorics in relation to the cumulative deviation or the relative change of the deviation respectively. Also from a communication-theoretic standpoint the sensorimotor loop presents us with an interesting problem. How can sensorimotor systems optimally respond to their environment? How does the rebound of the pedal and the general mechanical feedback on the tactile senses inform an optimal motorical response?

The space surrounding the performer—the keys, the pedaling, etc.—is therefore shaped by the looped ostinato which, akin to a stubborn memory, keeps arising again and again in the same precise pattern. As listeners, we anticipate the repetition and hence become hyper-aware of the slightest rhythmic imprecision. This heightened rhythmic sensitivity informs the performance (must adhere to the rhythmic grid) and allows it to only evolve over time "vertically" by introducing additional layers on top of the ostinato. The "otherness" of the looped accompaniment is expressed visually through the mirror set opposite the performer, giving the impression of an actual piano duo.

4. *Visibilità* (visibility)

> "[This lecture is a] warning of the danger we run in losing a basic human faculty: the power of bringing visions into focus with our eyes shut [...]."
> Italo Calvino, *Six Memos for the New Millenium*[32]

Evoking a (subjective) vision in the listener is a much appreciated effect of musicking as a human activity, even in purely instrumental genres such as piano music. But what happens if the piano seems to enter the space of human expression? What images are triggered by a soundscape relating to a "talking" piano? How does a pianist deal with a talking piano, what images arise in her mind and how does she transform them into (audio-corporeal) expressions?

In this piece, the pianist finds herself confronted with a talking piano.[33] An almost human voice seems to stream from the instrument, an argument of sorts that suggests a space in dispute between one another. We can almost recognize speech.[34] Here the alterity of the instrument is made apparent, the self-playing piano conjuring an almost human agency. The irritation caused by the piano's speech-like gestures initially puts the pianist in a listening and observing position. After careful attempts to fit into the piano's monologue have no great effect on its flow, the pianist begins to take a closer look at it, to examine it visually but also haptically. Starting with examinations and measurements, she gradually surrenders to the touches and palpations that lead more and more to a merging of the two bodies. The narration unfolds in the theater of the observer's imagination.

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32 Cambridge, MA: Harvard University Press, 1988, 92.

33 The method to evoke human speech using a computer-controlled piano was proposed by composer Peter Ablinger and successfully developed by Winfried Ritsch in the early two-thousands (Winfried Ritsch, "Robotic Piano Player Making Pianos Talk", in *Sound and Music Computing Conference* [Padova, Italy: 2011], 1–6).

34 The illusion of human speech is most effective when the "words" are displayed at the same time as the sound is produced. Since that would not be part of the live performance, we decided to omit it from the videos as well and leave meaning intentionally open for interpretation.

Figure 4: *Stills from the video piece for Visibilità, further exploring the space around the performer by means of overlaying multiple perspectives in different ways. The visual concepts for the pieces were largely contributed by theater director and video artist Markus Kupferblum. © Markus Kupferblum*

The pianist*performer writes:

> The piano expresses itself in such a peculiar way with rhythmic keyboard group actions that it takes me a moment to interpret that these strange keyboard gestures are movements similar to language. Different, however, from musical gestures that simply resemble speech, but almost imitating a person with a certain speech habitus. After making my presence felt through some brief pianistic interjections, I find that this kind of dialogue with the talking piano does not lead to the development of a common musical texture and I retreat to interactions through touching and not triggering sounds from various body parts beyond my hands. In the process, of course, I listen very attentively to the piano's speech, commenting, interrupting, supporting it with my movements. I approach the piano's body with my own body; I dance with it, I move through its acoustic and physical, corporeal spaces.

The video to this piece is elaborate and playful. The filming process is consciously present; one sees props and utensils belonging to the filming in the picture again and again. The visual language of the video is intimate. The camera focuses on sections of the two bodies. It then gives rise to forms that are not always clearly assignable. The play with sharpening and blurring reinforces the formation of interwoven image structures, contributing to a polyhedral representation of the space inhabited by the performer. Rather than following a conventional musical development, the piece can be better described as an

accumulation of evocative images conjured by the piano speech,[35] the performer's body movements, and a unique visual language holding it all together. There is a particular spatial quality in the bodies—their forms, colors, skin, landscapes—and in the surreal imagery that results from their fusion, the intimacy afforded by the close-ups, and the relationship of alterity suggested between body actions and piano utterings, insofar as their respective spaces are superimposed, yet not necessarily connected.

5. Molteplicità *(multiplicity)*

> "[Literature] remains alive only if we set ourselves immeasurable goals, far beyond all hope of achievement."
> Italo Calvino, *Six Memos for the New Millenium*[36]

What spatial qualities can be described in a set-up in which four protagonists—present in the same space—create a multi-layered instant composition together? How are the musical actions of the pianist influenced by the observer close-up—even reaching into her kinesphere—while a composer interacts with the piano through multiple interfaces whose actions are being captured by the camera?

What begins as a mystery in *Leggerezza* and remains a mystery in the other memos is deliberately woven into the composition in *Molteplicità*: the beforehand invisible but actively composing parties are now shown. It is a piece which unfolds itself through the focus of the camera. At first, the camera's gaze only accompanies the composer, who controls the piano via MIDI, and only later turns to the pianist, the observer creating attention spaces, and then to himself in the mirror. The pianist*performer writes:

> In this piece, my attention travels back and forth between the physical space and the virtual space created by the camera. In the first, I observe how the pleasantly concentrated focus of the observer looking at the piano and me at close range affects my musical sending. In the second, I look at myself as if from a distance from the perspective of the person accompanied by the camera. My attention thus rotates, expanded by three new perspectives that I seek to integrate into the flow of the music.

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35 This concept of "phonorealism" (as opposed to photorealism) is what initially motivated composer Peter Ablinger to ultimately develop the talking piano together with Winfried Ritsch (Winfried Ritsch, "Robotic Piano Player Making Pianos Talk", in *Sound and Music Computing Conference* [Padova, Italy: 2011], 1–6).

36 Cambridge, MA: Harvard University Press, 1988, 112.

The repeated composition of basic transformations, such as reflection, scaling and transposition in pitch and temporal dimensions creates ever more complex patterns, both in the temporal and the tonal dimension. How can one understand this complexity and its degree? The more often the transformations are carried out, the more intricate, the more fine-grained and the more complex the resulting output appears to become. In the theory of fractals, one frequently encounters and invokes the concept of a Hausdorff-dimension to capture this degree of complexity. The idea is that a one-dimensional thread that is folded again and again and so forth eventually will behave a little bit like a two-dimensional quantity, but not quite. Repeated transformations of two-dimensional qualities behave more three-dimensionally and so on for ever higher dimensions. The extent to which it behaves higher-dimensionally is captured by the Hausdorff-dimension. In some sense, it measures how much new space is created. The space created around the performer is also subject to these fractal multiplications, the whole of it virtually contained in the very reduced contact point between performer and instrument, analogous to how musical textures appear to sprout from relatively simple performer's actions. The abrupt closing of the fallboard at the end seems to make the fragile architecture of the piece collapse in one brutal blow, the resonance of which gives place to an almost oppressive silence …

6. Coerenza *(consistency)*

The last of Italo Calvino's lectures was never written due to the untimely death of the writer. We are left with the title this lecture would have had: *Coerenza* (consistency). We can only speculate what Calvino might have had to say about consistency in literature but what does consistency mean with reference to an audio-corporeal expression?

For this last piece we decided to integrate the algorithmic output generated by the computer with the performer's actions in a way that would behave almost like an extension of her body. One motivation was to push back the feeling of otherness we had sometimes identified in the previous case studies. The musical concept underlying the piece addresses the principle of repetition and variation as the piece progresses. While a simple motive is repeated and shaped, its surroundings are changing in terms of harmonic accumulation, dynamics, and additional feedback layers like changing aggregate states. While the pianist sits at the instrument almost motionless, her kinesthetic gestures are changing in attack and muscle tone. Her gaze oscillates between a focused "spotting" and a softer peripheral view. The pianist*performer writes:

> With the idea of changing consistencies in my mind, I try to look for them in the music, to grasp and move them. This focus triggers changing levels of tension in my playing movements and in my listening. My gaze also changes its spatial reference in a constant change of its quality. Here I perceive the camera as a co-player. It mirrors my constant mental transformation through its constancy and direction.

Coherence is also an important aspect of wave dynamics: two waves are coherent if their phase difference stays constant. More generally the coherence of two waves is a measure of their correlation. If two signals have deviating amplitude or frequency, then the two signals are said to be incoherent. Loosely speaking coherence measures the alignment of two signals. Consistency on the other hand is a property of mathematical theories, namely the lack of logical contradictions. If one argument or theorem stands in contradiction with another theorem, then these two statements are inconsistent. One could also describe *Coerenza* in those terms, stating the (dis)alignment of the computer generated motives with respect to the performer's actions as the main principle structuring the piece, from a highly coherent initial state to a sequence of perturbations, progressively reabsorbed as the system finds its way again to the initial balance.

Figure 5: *Sequence of stills from the 6th case study,* Coerenza *for a pianist and a self-playing piano. © Markus Kupferblum*

The visual treatment of the video introduces different associations with extrinsic spatial qualities (liquid, air, etc.), using transparencies to conjure up in the viewer the sense of the piece being transitioning through different states.

Conclusions and Output

Upon finishing *Six Memos for a Pianist and a Self-Playing Piano* and reflecting on the six case studies as a whole, the question that needs to be answered is

to what extent the applied methodology for the research process was useful to approach spatial qualities. We find that our approach, albeit not necessarily systematic, did help us think anew about space in original ways. This is not to say that the work was without its challenges. Since the different steps in the research process took place in different constellations and settings, we had to constantly realign ourselves and let go of expectations in order to make productive decisions and come to an output which represented the respective spatial topic we were investigating. For instance each of the involved researchers was working partly in peer-to-peer, and partly alone. We had restricted time slots with the CEUS piano. The compositions as musical pieces had different requirements than the audio-visual compositions with video etc. We found that we could face these challenges by working on iterations as different versions of each piece. These we consider to be "snapshots" of a moment in time of the artistic research process. In terms of the musical structure, we found it productive to let go of the pianistic repertoire or through-composed music in favor of loose sketches that allowed the performer to explore the material in-the-moment. We shaped our workflow in order to maximize flexibility at the moment of the performance, which was fundamental in confidently addressing the desired spatial qualities we wanted to map. We therefore focused on the stage where the performer IS in the space, and did not preempt the output by fixing the notation or compositional system too much. We also hope that the output of the project, including the artistic research methods developed for these case studies will provide valuable insights into the artistic research community.

The audio-visual output of the project, the cycle *Six Memos for a Pianist and a Self-Playing Piano* consists of six video pieces presenting each of the case studies. The video playlist can be accessed using the QR code at the end of this paragraph. We recommend that it be viewed together with the sketches that make up this article for clarity.

In order to pursue this artistic investigation, we also developed a library of MaxForLive devices (TesserAkt) that perform all sorts of operations in the MIDI realm. These modules can be stuck in any configuration and connect to one another using MIDI CC messages. This library is open source and freely available for other artist-researchers to use and expand on: https://bitbucket.org/AdrianArtacho/tesserakt/.

QR Code

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Mutated Manipulations
A Musical-Gestural Perspective

Winnie Huang

Abstract: *In the contemporary music performing arts world, an increasing number of "musical-gestural" works are being composed and performed. The interest in these pieces necessitate investigation from an artistic researcher's perspective, in the hope of providing insight and agency for future artists and academics.*
Through an autoethnographically reflective investigation, this article aims to examine the musical-gestural perspective—how pieces are learned, performed, and composed through an exploration on the various skill sets, performance practice methods, and the physical states a performer adopts. It hopes to explore how the performer inhabits the artistic body during the whole compositional/performative process including the exploration on presentness.
Through proactive embodied research, the emergence of new pathways, and collaborative/transmissive experiences, this reflection hopes to expand the collective knowledge gained through a musical-gestural perspective.

Some view their body as their temple—something one treats with respect, adorns or decorates with beauty, and celebrates in this mortal realm. It is what gives us a sense of agency. But for others it feels like a prison—a life sentence with this material matter. An incarceration within an object that doesn't fully represent who we are, our potential, and upon which we are judged so heavily that it hinders our possibilities—a corporal limitation from which we can never escape. On most days, we float somewhere in between these two perspectives. My body is all these things: an open curious matter, seeking ways to taste, hear, see, smell, and touch unexplored territory. It is also the shell from which I sometimes wish to escape, one that can bore me with its repetitive necessary demands and calls for attention. This achy, creaky, bulging, languid, selfish, greedy mass. But it is also the only beautiful body I have, and I'm grateful I can call it my own. With it I get to experience every experience, and it will be what remains with me for the longest time. With it, I communicate, connect, and

participate in my community. With it, I hear and I am heard, I see and I am seen, I give and I receive. I participate in this constant exchange that is living.[1]

For this artistic research, the body is the principal medium. It is both the means and the end, participant in the process and in the performance. Sound, movement, and drama are inextricably linked, since to generate sound we require movement; and through moving, almost always, we produce some version of noise, and in each performative act, there will always be an element of dramatic delivery.

This artistic research defines the pragmatic musical-gestural artist researcher's identity by drawing upon all aspects of their past and current embodied knowledge, in attempts towards a successful creative act. I explore how the musical-gestural artist researcher transcends traditional boundaries and relationships of the mind/body. When taking on this initial research, I clearly saw myself as a performing artist, a musician interested in exploring further afield. As a classically trained violinist, I had viewed my musical instrument as a tool—one which I have spent the most time "studying." My early approach to *that* ideal in classical performance exposes my body as an instrument to service the violin which in turn produces the music. I identified as a translator of the score and/or of the composer's intentions and felt subject to the requirements necessary in performing the Western classical and modern canon: a sort of slave trapped inside the mechanics of this body which had to coordinate every single articulation so as to produce the perfect balance of contact, speed, and weight to yield the ideal sonic phrase, delivered in a way which had to display charm, spontaneity, and fantasy. For a long time, this body—the one that is there to serve the violin (and therefore that whole history that comes with it)—was a heavy burden. A paralyzing responsibility that I consciously or subconsciously needed to find a way out of.

However, I was so fortunate to have been surrounded by the right group of people at the right time: a group of like-minded misfits who wanted to make weird projects in Paris. We formed our ensemble soundinitiative, and over the years I instinctively made myself most available to all the physically dominant performances, which required less violin, and more of what I was simply born with: my performative body. Certain side projects also developed because of that—professional and personal ones. I delved wholeheartedly into yoga and long-distance running, and into absorbing multidisciplinary

1 The following chapter is partly taken from my Ph.D thesis *Sonic silhouettes: musical movement investigating the musical-gestural perspective*, Antwerp: University of Antwerp, Faculty of Arts, ARIA , 2022, https://hdl.handle.net/10067/1870980151162165141

content from dance, drama, and the performing arts world. When this research strengthened, it reinforced the culmination of what I was experiencing in art and life—endurance, virtuosity, physicality, performability, curiosity, connection, intimacy, and a link between sound, movement, and emotivity.

This article is called "Mutated Manipulations," a title chosen intently to evoke the imagery of changes within the contemporary musical scene. Deeply personal and subjective, my method is self-observational and self-reflective—an autoethnographic inquiry of my own thoughts, movements, critique, aims, introspections, dialogues, and creative acts over the last years. These challenges, which I fully accepted, allowed me to celebrate this body as never before. I entirely embraced what I seemed capable of doing while acknowledging the limitations that were obvious. I became a creative artistic body, realizing that what was once perceived as weakness is in fact a superpower.[2]

Musical-gestural works continuously encourage me to experiment with my boundaries; they convince me that it is from innovative and imaginative processes, derived from my experience as a performer and creative artist, that I gain artistic agency in this world, including the agency to compose my own works. In identifying the multifaceted aspects of this field of study, highlighting the constant interplay between known experience and experimental inquiry, musical-gestural works encourage artists to find their versions of their current truths by constructing meaning during their own processes. Through instinctively proactive embodied research, the emergence of new pathways, and the collaborative and transmissive experiences these works afford the artists and audience alike, this critical reflection showcases the expanding nature of these works for all participants.

Musical-Gestural Definition

In the contemporary music world of the performing arts, an increasing number of musical-gestural works are being composed and performed. The rise of these pieces, composers' curiosity in creating them, and the growing demand for these types of performers necessitate investigation from an artistic researcher's perspective, in the hope of providing insight and agency for future creators,

2 In the following, I am also referring to the online extract of my Ph.D thesis *Sonic silhouettes: musical movement investigating the musical-gestural perspective*, https://www.researchcatalogue.net/view/605865/605866 (last access: 29 September 2022)

artists, and academics in this field. In identifying what a musical-gestural artistic researcher is, it is necessary to first define these components.

Many forms of artistic genres or technical emergences have granted various titles to these types of works, including Music Theater, New Discipline, Instrumentales Theater, and post-instrumental practice just to name a few. I, on the other hand, do not present the term "musical-gestural" as a defined genre, but propose it as a perspective of how one can view, absorb, perceive, learn, compose, think about, speak about, and perform these contemporary works. Musical-gestural pieces touch upon almost all aspects of music-theater, performance art, contemporary dance, classical instrumental performance and theatrical drama. Certain works lean more heavily on certain arts, or blend two or more disciplines, and I believe therefore lend themselves to be analyzed or perceived differently by other artists of other disciplines. Despite our expressions comprising of an amalgamation of multifaceted sensorial qualities, our dependence on language means that defining, categorizing, and determining ideas, and the way we use our definitions both clarify and restrict how we can speak about art that straddles the boundaries generally accepted as music, dance, theater, or even the art of the everyday. Therefore, I tentatively use the term "musical-gestural" as a quality towards a practice of creating expression and perceiving expression in certain works. My research is based on my foundation which is rooted in music performance. I chose the word "musical," as music is a perception of how meaning is added to sound. The word "sound" contains a certain neutrality linked to the physical ability—the sense of hearing we humans have—but music is a subjective perspective based on what meaning we make out of those sounds. Whether or not that meaning is useful for each individual or is meaningful at all, is not for me to decide, but it is the notion that music does not hold the same connotation as the word sound that made it more important for me to specifically choose that word.

I chose the word "gestural," as it encompasses so much more than just a movement. A gesture is a movement, but gestures are also concepts of social and cultural behavior—a meaningful physical, mental, and emotional act that cannot be easily removed from connotations.[3] An abrupt gesture to hit someone, a punch for example, is not the same concept as speaking of someone's charitable donation as a gesture of kindness. The way both these words accommodate connotations of intent, meaning, narrativity, expressions of physical sensations and acts, is exactly why I chose to group them together and call

3 The concept of gesture and its varied connotations within music is explained by various researchers including Richard Middleton, "Popular Music Analysis and Musicology: Bridging the Gap," in *Popular Music* 12, no. 2 (1993): 177–90, 186.

the works I am focused on "musical-gestural works"—works that explore sound, movement, intent, story, meaning, and expression, and all the connotations that sit with these words. For myself as the artist, this definition helps me to work with and through this perspective in understanding how I create, view, perform, embody, and comprehend the pieces.

The Evolution

Over the course of the twentieth century, the changes in ideas, values, and possibilities, cross-influenced by the socio-economic-political landscape, saw the rise of avant-garde movements such as Dada, Surrealism, Postmodernism, Futurism, Bauhaus, Fluxus, and many more. These thinkers and doers of all varied vocations radicalized all production in a multitude of domains. The artistic world saw an explosion of profound transformations. The blossoming of musical-gestural works, which we see in today's concert stages and festivals,[4] can be viewed as an evolution in multidisciplinary arts. From the abandoning of the arduous world of ballet into embracing the naturalistic properties of the body in movement, to the emergence of performance art as a defined discipline, and to the creative exploration of experimentation, improvisation, and the general broadening of the concept of sound creations, these fundamental revolutions within each self-contained artistic discipline, including music[5], were also bleeding into other arts.

Today many composers and performers have leaned further into a range of hybrid creations, forming new mutations of multidisciplinary works, alongside the incorporations of changing technologies and radical thought of the last decades. Certain contemporary composers are interested in the acknowledgement of the performers' body on stage,[6] using it as a tool and part of the medium of expression, collaborating with the performing musician by homing

4 Many festivals are including a variety of interdisciplinary works that require performances from a musical-gestural perspective, including Ars Musica, Holland Festival, Spor, Borealis, Donaueschinger Musiktage Festival, Musikfest Berlin, Manifeste, Eavesdropping London, Lucerne Festival, Klang Festival, Bludenzer Tage zeitgemäßer Musik, Internationale Ferienkurse für Neue Musik in Darmstadt, Festival Automne, Ruhrtriennale, BIFEM, Warsaw Autumn among many others.

5 Composers including Mauricio Kagel, Karlheinz Stockhausen, Dieter Schnebel, Luciano Berio, John Cage, Georges Aperghis just to name a few.

6 Jennifer Walshe, Jessie Marino, Steven Takasugi, James Saunders, Matthew Shlomowitz, Neo Hülcker, François Sarhan to name a few.

in on their specific musical and performing skillsets to create truly interdisciplinary expressions. Select festivals and institutions have also encouraged the expansion of this creative field,[7] with the inclusion of artistic platforms, themes, or concepts to especially include multidisciplinary works, with music as the main perspective from which it is presented. Artists themselves have also self-inquired by defining their own genres, from "post-instrumental practice"[8] to "The New Discipline Manifesto."[9]

Identity through Embodiment

My musical-gestural artistic researcher identity is one of a continually proactive, analytical, explorative, critical, and reflective artist, who values the creative process and who recognizes the importance of knowledge gained through the ongoing creative experience. As a performer, my process has been based on what I have learned in all aspects of life, including the interpretation of others' works. This process heavily leans on an embodied practice, the discipline, techniques, and skillset I have gained throughout my life so far, and how to use various tools for the successful delivery of my ideas. Through adapting skills from other crafts and by studying and applying daily life experiences, I develop a deeper vocabulary and lexicon during the process of transmission and gain a greater specificity in matters of physical energies and movements. I have come to understand that every part of my living and performing is about diverse types of energy and that the performance experience is a process whereby we forge an adaptable dialogue, creating an energy of sorts between audience members and performers—a communal conversation, a sharing of energies.

For me, embodiment is not just a physical corporal awareness, not simply what some call muscle-memory, and definitely not a separation of the mind and body, but rather every aspect of my learned experience within this existence with this body I have. Because I am a human and because I have a mind and body, my experience is embodied. How I live my life—what I learn, what experiences

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7 Darmstadt (DE), Borealis (NOR), Klang (DEN), Musica (FR), BIFEM (AUS) to name a few.

8 As defined by percussionist in his doctoral writings: Håkon Stene, "*This Is Not a Drum.*" *Towards a Post-Instrumental Practice* (PhD dissertation, The Norwegian Academy of Music, 2016), accessed 25 August 2022, https://nmh.brage.unit.no/nmh-xmlui/handle/11250/2379520.

9 Composer/Performer Jennifer Walshe's writings: Jennifer Walshe, "The New Discipline," in Milker Corporation, accessed 30 January 2022, http://milker.org/the-new-discipline.

I choose or choose not to have, what I feel is present or absent, how I situate myself within this world—is all embodied knowledge. Ben Spatz, lecturer and practitioner in drama, theater, and performance explains:

> Thought and language are fully embodied processes. Therefore, when I refer to *embodiment* and *embodied practice* [...] I mean to include all of the following: thought, mind, brain, intellect, rationality, speech, and language [...] everything that bodies can do. In addition to the physical, this space of possibility includes much that we might categorize as mental, emotional, spiritual, vocal, somatic, interpersonal, expressive, and more.[10]

Accepting this definition of embodiment and of an embodied practice, whereby we are made up of embodied and personal knowledge, extends further to that of knowledge and experiences of our own cultures, our societies, and our interactions. Researcher Kathleen Coessens supports this view of the embodied practice for the musician and defines it as a "*web* of artistic practice, woven and re-woven by the artist over multiple phases of education, exploration, and creation."[11] The musical-gestural artist's embodied practice is developed with these learnings and techniques. These developed techniques are a "fundamental dimension of embodiment," as they provide "a range of relatively reliable pathways through any given situation."[12] Through invested development in specific techniques with a clear intent, the creation of a practice is made. Researcher Joost Vanmaele identifies a similar kind of performance practice specifically for score-based musical performers through his thesis on a Bio-Culturally informed Performers' Practice (BciPP), which he defines as

> an interconnected array of activities and understandings within the broader category of score-based performership that is underpinned by a shared and active interest in information on generics and particulars in musical action and interaction as a factor in creating a sonic environment from which musical experiences can evolve.[13]

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10 Ben Spatz, *What a Body Can Do* (London: Routledge, 2015), 11.

11 Kathleen Coessens, "The Web of Artistic Practice," in *Artistic Experimentation in Music*, ed. Darla Crispin and Bob Gilmore (Leuven: Leuven University Press, 2014), 69–82, 70.

12 Spatz, *What a Body*, 26.

13 Joost Vanmaele, *The Informed Performer: Towards a Bio-Culturally Informed Performers' Practice* (PhD dissertation, Leiden University, 2017), accessed 25 August 2022, https://scholarlypublications.universiteitleiden.nl/handle/1887/59504, 284.

From my perspective, these theories can apply to all forms of practice, be it a daily yoga practice or a violin practice. I integrate my own studied theoretical, empirical, and practical understandings of the body to help with how I live, think about, make, and perform my work. I constantly meditate on the most fundamental fascinations of the human experience, from our voice and sounds, to our gestures and movements, to our ability to connect through reaching out with our senses. Telling stories, touching, dancing, smelling, smiling, kissing, fighting, etc … I ruminate on how I could communicate these elements of human expressions, from my bones, my muscles and skin, my clothes and posture. I question how to create phrases or structure with this body I have through my musical lens, and what tools I can gain to get me there. This means taking a certain responsibility in how I choose to critically reflect on what I do, how to continuously educate myself, and in which state of mind and body I learn and execute these acts.

Most clearly demonstrative of this is the piece *tend* by Charlie Sdraulig (2019) for gesturing, vocalizing performer, and single audient—an intimate work which explores non-verbal gestural communication and changes of atmosphere through non-spoken interactions. Composed through understanding my past experiences in different vocations, all requiring non-verbal communication and "reading" people, Sdraulig places the performer in a dark space for an audient, in which the results performed both affect and are affected by the audient's presence.

Presentness

The reason I bring up the idea of a state of mind and body is because this is a factor that seems to surround the magic of performance. Many refer to the idea of having a sort of "presence," a powerful and elusive state of magnetism on stage perceived by others, allowing them to feel "present" in the moment with the performer, and felt by the performer as to hold the attention of all watching or listening—a "presentness," a term I have often used when explaining it to others. Personally, I have never romanticized this idea as an "x-factor" or a talent where you either have "it" or not. Though I do respect that technique is something that can be continually developed, I also recognize there are subjective differences between a performance that is captivating where a presentness has been displayed, and one that needs more attention on that aspect, and I do not believe that one is always capable of achieving the same type of presence as another, no matter how hard we train.

How this presentness is developed and crafted seems to resemble what British theater coach and director Patsy Rodenburg calls the "Second Circle." A theory she has worked on for a large part of her life, we share the philosophy that "all is energy" and she also questions the idea of "talent [...] presence ... so-and-so just hasn't got it ..." proposing that "through formal exercises, I began to grasp that the energy of presence could be developed, understood, and enhanced. My instincts and my own fears told me that the energy of presence could only be cultivated and thrive in a safe arena."[14] In believing that all basic movement is energy, she does not diminish the ranges of energies but rather proposes that certain energies are better for certain moments and situations.

Through respecting and appreciating all aspects of embodied knowledge, and through understanding and honing the skills and techniques that form a healthy practice, alongside a power that comes from understanding how to use Rodenburg's circle theory, a musical-gestural artist can create dialogues, collaborations, practice processes, and performances that use the whole mind-body as an exciting tool for innovative and deeply fulfilling art making. Forever a work in progress, we can use our stories and experiences—past, present, lived or dreamed future ones—to tell new stories and experiences.

Multiple Disciplinarities

Sound, movement, drama, and performance are undeniably linked, though sometimes this multisensorial awareness is forgotten in the all-consuming training and specialization of one socially/culturally identified discipline. In the acceptance that they are in fact all interconnected, if approached and applied in a healthy manner (meaning with care to the individual's mental and physical wellbeing), furthering knowledge through conscious attention in other disciplines would deeply assist in one's primary craft and provoke and promote innovative methods and processes that tend towards the multidisciplinary nature.

Diverse disciplines were approached which led to the accumulation of experience which is therefore techniques and knowledge. By participating in a session of week-long theoretical, analytical, and practical training in various methods, such as Rudolf von Laban's (1879–1958) concise and comprehensive Laban Movement Analysis (LMA) classes, I formulated a better understanding in how to crystalize the thought of creating meaningful gestures, and developed

14 Patsy Rodenburg, *The Second Circle: How to Use Positive Energy for Success in Every Situation* (New York: W.W. Norton & Company, 2008), 11–3.

the mechanisms with which to articulate both verbally and physically the intent behind movements in musical-gestural works. This incredibly rich foundation for movement inquiry assisted me in other traineeships in dance, acting, performance art, and general physical awareness: from week-long professional dance workshops with leading Belgian contemporary dance company Ultima Vez, to attending classes for professional actors at L'École Internationale de Théâtre Jacques Lecoq, to spending time with Austrian performance artist Mikki Malör, to becoming a certified yoga instructor, to having a private dance class with Kenneth Ard—an American dancer, choreographer, actor, and teacher from the famous Alvin Ailey American Dance Theater—to online lessons in *Gaga* movement technique during the pandemic, and running marathons in pre-pandemic times.

Figure 1: How to Make a Monster *by Sivan Cohen Elias, performed by Winnie Huang; link to video https://youtu.be/3W6Bwetm7RU. © Winnie Huang*

This continual diverse interdisciplinary training deeply satiated a desire to approach understanding and utilizing the body in a way classical music training does very rarely. A key element that permeated all these workshops and lessons was the willingness to appreciate the possibilities and limitations of one's body. Energy and intent were running themes throughout all the interdisciplinary research: how does one exert a certain energy, but also what is the intent, the meaning, the effort behind that action. Every action, every gesture can be delivered with a certain emotive state, and this can also be contrary to the actual perception of the audience. How a performer thinks and feels, and what they

choose to make perceivable to another is part of the responsibility of the artist. These elements of preparation and premeditation at such an obsessive level of craft is completely in line with musical performance, and to have the opportunity to train the same ideals on the body is invaluable to the musical-gestural artist. Through a deeper understanding of these elements of diverse disciplines, I was able to draw richer material out of existing works and newly developed ones, adding layers to what I thought was originally possible. Especially clear in this regard was my own process with Sivan Cohen Elias' piece *How to Make a Monster* (2017) for solo performer with objects and live electronics, a piece which uses objects in a way that merges between visual dramatic expression and sound production, with exchanges that generate numerous references and associations that evoke various forms of monsters.

In these multiple disciplinary trajectories, what was becoming clearer was not that art forms were so dissimilar, but rather that certain disciplines had more concentration on distinct processes aimed at similar shared values. My own entry into these fields permitted more access to those processes, like the adding of salt to a broth or the inclusion of more pigments in paint, it was a deepening of flavors and colors for the identity of the musical-gestural artistic researcher. Familiar themes of multi-sensorial knowledge collection through multi-layered perspectives, and the mind-body correlation while participating in society supports the idea that

> whether we speak of body-mind or body and mind, we are dealing with what is fundamentally shaped by culture. For culture gives us the languages, values, social institutions, and artistic media through which we think and act and also express ourselves aesthetically [...] that shape not only our bodily appearance and behavior but also the ways we experience our body.[15]

Musical-Gestural Composition

For around two decades, British musicologist Nicholas Cook has argued for music to be viewed "as" performance, moving beyond the score and considering music "as," not just "and," performance emphasizing its social characteristics and how we "think of performers as creating meaning within the structural

15 Richard Shusterman, "Thinking through the Body, Educating for the Humanities: A Plea for Somaesthetics," in *Journal of Aesthetic Education* 40, no. 1 (2006): 1–21, 3.

affordances of compositions."[16] In my own experience as a musical-gestural performer, this supports my past perspectives within projects, but in my own increasingly evolving identities and changing roles, the concept of music has become more aligned to a means of categorizing a certain quality of acts perceived as expression in society, performance being just one of the most obvious acts. The concept of music is not just a piece conceived by a composer but rather an experience, a technique, a process, and a perspective in which to view this world.

The collaborations, themes, ideas, techniques, skill sets, and multiple disciplinary practices are all integral in the conceptualization of a musical-gestural composition. They require such incredibly varying specificities obliging the process and methods used to also be collaboration/material/piece-specific. The search and curiosity for how every theme, gesture, sound can have meaning and provoke meaning, and how that can be imagined as a composition or for an audience is questioned from a creator, performer, and audience perspective. It is deeply part of what constitutes a composition. As Lydia Goehr states, "There is nothing about the concept of a work, the relations between works and performances, or works and scores, or works and experiences of them, that is going to tell us where the locus of musical meaning 'really' resides."[17]

Composition as a New Composer

In recognizing how all-encompassing a composition is from the human interactions, collaborations, thematic materials, resources, notation possibilities, and performance, entering my own compositional experiment did not feel so alien. After a resistance to identify as a composer, rooted in a lack of confidence and legitimation, my own musical-gestural compositional path embraced the broad embodied practice, accepting Coessen's "web" of artistic practice, and psychologist Keith Sawyer's approach. He identifies the necessity to analyze artistic creativity from a multitude of disciplines including psychology, biology, sociology, art history, and anthropology. In approaching the artist's work and creativity from these diverse angles, he argues against the assumption that creativity somehow magically blossoms from some spontaneous spirit, but rather it

16 Nicholas Cook, *Beyond the Score: Music as Performance* (New York: Oxford University Press, 2014), 68.

17 Lydia Goehr, *The Imaginary Museum of Musical Works: An Essay in the Philosophy of Music* (Oxford: Oxford University Press, 2007), 278.

is based on formal training and deliberation, skillful, hard, and conscious work, developed through traceable mental processes.[18]

I am fortunate because as an artist, I am granted the position to provoke, to try different things, and I am allowed, almost expected, to be outlandish—to tell diverse stories that are not the same as the one I told before or to be inconsistent with what I share. My compositional pathway was created because so much of the experience of defining oneself as a composer had been experienced for me already as a musical-gestural performer. In being permitted and required to question so much so intricately, taking on the title of composer was only one extra step in the path I was taking. Because I am a work in progress as a composing performer, there is no fundamental purity of form in my work. Even my notational systems have been a mutation of my own multidisciplinary experiments.[19]

As a musical-gestural artist, I identify as a sonic, moving body, a performative truth searching storyteller, who continually adapts and modifies behavior for each work performed, through the figure of the performer. "The artistic process is an amalgamation of creative and social aspects, between planned and spontaneous musical activities, and the relationships that occur between students, teachers, audiences, peers and other communities around the artist."[20] My compositions, both the process and the performance, are experiences; these experiences and experiments offer new opportunities, inputs, and challenges.

Works and Case Study

While having the opportunities to learn about my sounding and performing body through other new and existing compositions, the desire to make original work of my own was ignited. My experience grew over many years, in working on pieces such as the soloist role in *INORI* (1973–74) by Karlheinz Stockhausen (1928–2007), *How to Make a Monster* (2017) by Sivan Cohen Elias, *tend* (2019) by Charlie Sdraulig for one audience member and works by Jennifer Walshe, Steven

18 As presented in Keith Sawyer's writings; Keith Sawyer, *Explaining Creativity: The Science of Human Innovation* (New York: Oxford University Press, 2006).

19 Investigations in animated scores, sonic scores, Beauchamp–Feuillet Notation, Labanotation, Benesh Movement Notation, Eshkol-Wachman Movement Notation just to name a few.

20 John Rink, Helena Gaunt, and Aaron Williamon, *Studies in Musical Performance as Creative Practice—Musicians in the Making Pathways to Creative Performance* (New York City: Oxford University Press, 2017).

Takasugi, and Richard Barrett, but it was particularly my very special collaboration with Jessie Marino and her works that instigated the real insistence to compose.

Figure 2: Savoiardi Dance *by Jessie Marino, performed by Winnie Huang; link to video https://youtu.be/9yMJQIO-6zY. © Winnie Huang*

Through working with her on existing works, and through collaborating with her on a new piece, *Savoiardi Dance* (2019), I watched, learned, and was encouraged by her to start composing for us, first as a duo and then to expand out to other formats. I will always be so grateful for this collaboration and how it provided me with the support and generosity to feel legitimized in calling myself a composer and calling the works I produce my compositions.

During the pandemic, my ensemble soundinitiative allowed me the intriguing opportunity to try to work with many sounding bodies as a medium for compositional creation. The idea was to curate a performance piece of self-created musical sounds and specialized physical choreography specific to many physical bodies. Using interdisciplinary skills, pushing different boundaries for myself and other performers, trying various types of notations, exploring changing roles and expectations, and examining performance dynamics, I wanted to use my creativity to take on a new and exciting challenge.

Figure 3: tick tock iiiiii *composed by Winnie Huang, dedicated to and performed by soundinitiative; link to video https://youtu.be/nx6RARFQtWo. © Winnie Huang*

tick tock iiiiii is a composed and scored interdisciplinary piece exploring the concept of "masking." Masking is a habit where an individual changes or "masks" their usual personality to either conform to or disassociate from social and environmental pressures, expectations, abuse, or harassment. In today's world, we both choose to create our behavioral and material masks, but we are also taught, through daily encounters, to expect to be "masked," sometimes even to the safety that masking gives. We all "mask"—but why, why not, when, where, how, with what kind of mask, and how does it feel to "mask"? Inspired by many thoughts and concepts that had been present in my mind, I tried to create a work not based on a narrative but on abstract references—the physical masks worn during the pandemic, the "neutral mask" of Lecoq's work, the masks women are asked to wear when they are told to "smile," the stiff masks of bravery when living through trauma, the withdrawn masks of fear when confronted with racism, etc. This piece is also exploring all these factors reflected in the power of social media (referencing the application tiktok in the name) and the ongoing cycle of absurd repetition that is life as the piece ends in the same way as it begins, ready to recommence the same actions again.

Composed over the course of two sessions of workshops and rehearsals one month apart, for six hours in February 2021, I developed ideas, gestures, and abstract narrative elements mixed with known musical structures (such as canons, fugues, sonata form, dance structures etc.) and workshopped with five other members of soundinitiative to develop three rough large segments

of the piece that would become *tick tock iiiiii*. One month later, over the course of three rehearsals, we practiced the cleaner versions of these segments I had developed in our time apart. What did become apparent is seeing how certain performers of soundinitiative were more at ease with certain types of direction or overall rehearsal structure. Very much aligned to contemporary performer and researcher Ine Vanoeveren's theory of "Knitters versus Sculptors," I also worked to balance the needs of how these performers learned. Whereby the Sculptors desired to "first practice the main aspects of the entire piece, to get an understanding of the general structure," and the Knitters preferred to "practice a piece in detail from the beginning, bar by bar, and only advancing to the next bar when the previous one is completely learned."[21] Making sure everyone felt attended to and respected in their needs was, for me, imperative towards a positive rehearsal process.

After each rehearsal day, a run-through of the whole work was video recorded, and time was made for us all to watch it together. This method of sharing the watching experience allowed for self-critique and appreciation of how one or another performs the same gesture. I learned to use this method from my experiences with *Inori*, as a means of teaching or guiding others, without having to verbally explain how someone could handle their body more precisely, myself included. More often than not, the person quickly watches how others are doing a certain action, and with a bit of extra support, whether that is actual verbal teaching or just watching and doing it a few extra times, individuals can achieve a better result whilst maintaining a positive moral for the whole group. As positive, open, eager, and communicative participants are necessary in group scenarios for effective productivity, a consciously constructive way in which we transmit information and guide a rehearsal experience is also imperative.

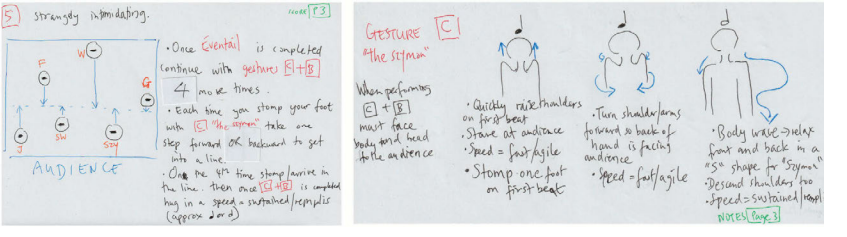
The whole process of *tick tock iiiiii* felt incredibly satisfying—a piece in which the performers enacted gestural, dramatic and musical elements with coherence, followed more or less the intended changes of energies, and touched upon the themes as I envisioned. It was musically together in the pitch and rhythm when indicated and was enjoyable to perform and watch, as I composed movements in appreciation of each individual performer's instinctive ticks, styles, and manners of performance. I wanted to use this piece as a framework to capture the beauty in how we all translate certain actions slightly differently, with varied intent, effort, and energy levels. Just like in Laban Movement Analysis, a simple kick has so many variants of speed,

21 Ine Vanoeveren, *Tomorrow's Music in Practice Today—a Practical Guide Towards Deciphering Contemporary Music* (Antwerp: University Press Antwerp, 2018), 171.

direction, effort, time and space, and I wanted to celebrate that instead of creating uniform synchronicity. In creating this framework, the notation was made more like a bird's eye-view dance placement notation, with descriptions of what happens in each stage movement, and people-specific notation such as "the Szymon," a gesture inspired by one of the performers of soundinitiative. In performing "the Szymon" every performer learned how to enact the gesture in terms of which muscles to move, but ultimately were free to decide in what quality of intensity they wanted to perform it. Some moved very slightly while others used large shoulder movement, some turned their palms to face the audience while others to face the back. Though these tiny discrepancies seem odd in a moment of group synchronization, in reality, by synchronizing only the speed/freeze and level of presentness of the performers, the difference of slight physical variances brought about more charm and beauty than if they were robotically the same. During the workshops I created a range in notation and learning experience which emphasized all experiences in our lifetime as knowledge; therefore all movement, no matter how easy or mundane is an appreciated technique, a technique that has been mastered by each individual.

> Psychology, physical culture (both athletics and somatics), religious ritual, and even the technique of everyday life are now understood as part of what an actor brings to performance. They can, therefore, be considered as part of the training and preparatory work of actors.[22]

Through encouraging all movement as artistic movement, there was no resistance in doing any gesture I suggested and therefore so many more suggestions were provided for material from the performers as they saw what they wanted to individually contribute to be valuable.



Figures 4a and b: tick tock iiiiii *notation, composed by Winnie Huang. © Winnie Huang*

22 Spatz, *What a Body*, 131.

This desire to showcase the diversity in each person's individuality, through displaying the unique ways in which each person chooses to do certain actions, also brought about an immediate instinctive quality in the performances of each movement and therefore the whole work. In acting comfortably, within their natural instincts and being encouraged to express more of themselves, not trying to emulate some mold I had for them, they performed each gesture with a presence and honesty as if it was their own gesture.

> Presence does not make something extraordinary appear. Instead, it marks the emergence of something very ordinary and develops it into an event: the nature of man as embodied mind. To experience the other and oneself as present means to experience them as embodied minds; thus, ordinary existence is experienced as extraordinary—as transformed and even transfigured.[23]

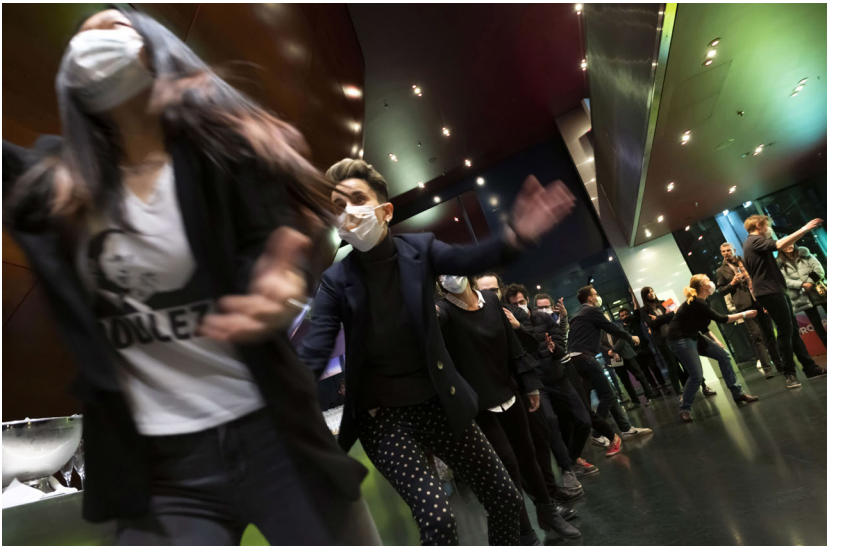


Figure 5: tick tock iiiiii *for twelve performers in flash-mob style in the foyer of the KKL Lucerne at Lucerne Festival Forward 2021. © Priska Ketterer/Lucerne Festival*

As a composer of the piece and director of the workshops and rehearsals, my experience with transmission of information, the manner in which one con-

23 Erika Fischer-Lichte, *The Transformative Power of Performance: A New Aesthetics* (London: Routledge, 2008), 99.

ducts a rehearsal and how to support or decline suggestions or questions, was so important. This refers back to the open attitude in Rodenburg's second circle: "you might know that deep, active, and thorough learning only takes place when teacher and student are both in Second Circle,"[24] and I'm incredibly grateful to soundinitiative's belief in me and patience with me during those sessions. *tick tock iiiiii* has now been premiered for six performers at the CDA Enghein-les-bains (FR) in July 2021.

Due to various artistic reasons, I also was granted the opportunity to reconsider the piece in multiple formats, with fewer or more performers, in teaching in my own workshops/lectures or for people to perform who are not professional musicians or performers.

In reflecting on the site-, people-, piece-specific needs for every work I have touched upon in this research, and realizing how to communicate to people in a more adaptable manner in order to transmit the information more clearly, the knowledge gained in appreciating exactly that allowed me to create a more open score. Through breaking it down into themes and ideas based around these structured musical ideas, it has been performed for five performers at Berlin (DE) in October, for twelve performers at Lucerne Festival Forward in November and for three performers at Bologna (IT) in November 2021.

Conclusion

I have been so fortunate to be allowed to take alternate paths, from the privilege of having a body that is non-disabled, to being permitted a comprehensive education in classical instrumental performance, to collaborating with others using my body as my instrument, and finally to be creating my own works for my own body and the bodies of others—to have been given these opportunities, to have been allowed to collaborate, to mutually give and receive so much support and to have been championed, and to champion others. It is in these exchanges that I have experienced communication, connection, and most importantly the sharing of empathy, of sincerity and of love.

I explored how my body afforded me a chance to transform, and how, in better understanding my embodied practices and even more importantly, seeing and listening to others' embodied experiences, I am evolving. A site of trouble that allowed me in some ways to transcend to new territory. In working with others, negotiating the pathways, I try to celebrate my own versions of my current truths in all melodic movements which I create.

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24 Rodenburg, *The Second Circle*, 202.

Over the course of this artistic research, I have so deeply felt how musical-gestural works encapsulate the elements of human interests. As a participant of this life, I find or develop meaning in what I make, and that becomes the truth I currently choose. So many unknowns can propel a paralyzing identity crisis. My aim in this research is to attempt to engage with these questions and contribute to the current research on contemporary interdisciplinary art from the musical perspective, to encourage more multi-sensorial understanding of these boundary-blurring works, to demonstrate the need for a profound understanding of multiple disciplines in order to be compelling across disciplines, and to showcase the deeply intimate and personal experience that is performing, composing, and creating musical-gestural works.

> Characteristic of artistic research is that art practice (the works of art, the artistic actions, the creative processes) is not just the motivating factor and the subject matter of research, but that this artistic practice—the practice of creating and performing in the atelier or studio—is central to the research process itself. Methodologically speaking, the creative process forms the pathway (or part of it) through which new insights, understandings, and products come into being.[25]

25 Henk Borgdorff, *The Conflict of the Faculties: Perspectives on Artistic Research and Academia* (Leiden: Leiden University Press, 2012), 146.

Embodying Expression in Classical Instrumental Performance Practice

Barbara Lüneburg

Abstract: *In the artistic research project "Embodying Expression, Gender, Charisma – Breaking Boundaries of Classical Instrumental Practices," funded by the Austrian Science Fund (AR 749-G), Barbara Lüneburg investigates bodily artistic expressions in instrumental playing as an essential part of performers' musical and cultural expression and values they share with their audiences. Through their corporeality instrumentalists allow audiences insight into their individual but also staged and culturally shaped personalities. Audience members–influenced by personal and cultural values they bring to the concert situation–perceive the performers' intentions and feelings from their posture, movements, facial expressions, and gestures, and reflects these in their own physical and emotional reactions. This paper introduces the project's interdisciplinary methodological approach from artistic research, discourse analysis and gender studies, and discusses findings of a pilot project conducted in 2021/22.*

Introduction

In this article, I introduce the reader to the artistic research project "Embodying Expression, Gender, Charisma–Breaking Boundaries of Classical Instrumental Performance Practices," funded by the Austrian Science Fund in the program PEEK (project no AR 749), and explore first case studies from the pilot project that preceded it. As described in the research proposal and on the project website,[1] in this project my team–consisting of the sociologist Dr.

1 Barbara Lüneburg, *description of the project: Embodying Expression, Gender, Charisma – Breaking Boundaries of Classical Instrumental Practices*", accessed 14 March 2023, http://embodying-expression.net/

Kai Ginkel (postdoc), flutist and artistic researcher Renata Kambarova (praedoc), and myself in the role of principal investigator, performer, and artistic researcher—explore the role of a performer's body in classical music as a determining factor in musical expression, gender and charisma, and investigate how it manifests in and through the body.

Our basic premise is that the body is the medium through which instrumentalists realize sound, musical ideas, and emotion. We claim that their body, simultaneously, *is* the emotion, and the conveyer of sound and musical idea. Performers use—consciously or unconsciously—gestures and facial expression as well as the staging of the body as a means of expression, communication, and interaction with the audience. Through their corporeality they allow the audience insight into their individual but also staged and culturally shaped personalities.[2] The audience in turn perceives the performers through their body language as well as through the sound, i.e. the acoustic musical expression. Psychologist Jane Davidson reports that "the body movements of the performers inform the audience about their musical intention," and further suggests that "in live or video performance viewing, audiences can enhance their understanding of a musical performance by observing the performer's movements."[3]

We understand a performer's "embodiment" as technique and habit inscribed in their body through training, years of practice, cultural association, lived routines, conventions and values of their discipline and individual personality. Embodiment plays directly into or even constructs the value system that is shared with the audience because bodily and artistic expression are intertwined with social messages and meanings. Emotions and thought processes are produced and presented through gestures. They will become part of the charisma that is constructed together with the audience. We tie together body and mind, music and situatedness, the fluidity of genderedness, and charisma. We investigate how liberating a performer from pre-conceived values and learned habits "directly influences the performers' creative strategies and goals, musical objectives, and capacity to share their artistic experiences with the audience."[4]

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2 Barbara Lüneburg, "Knowledge Production in Artistic Research–Opportunities and Challenges," in *Music & Practice*, Volume 10 (2023): https://www.doi.org/10.32063/1009, accessed 14 March 2024, https://www.musicandpractice.org/knowledge-production-in-artistic-research-opportunities-and-challenges/

3 Jane D. Davidson, "The Social in Music Performance," in *The Social Psychology of Music*, ed. David Hargreaves and Adrian North (Oxford: Oxford University Press, 1997), 222f.

4 Marko Ciciliani, Barbara Lüneburg, and Andreas Pirchner, *LUDIFIED* (Berlin: The Green Box, 2021), 98.

The research examines Western classical instrumental concert practice, incorporating performances from classical to contemporary music into its investigation, and translates the research findings into artworks for a multimodal exhibition and performance for violin and multimedia.[5] In the preceding pilot project (from 2021 to summer 2022) I tested my main method "Re-Enacting Embodiment" and its implication on myself and a workshop for master's violin students at Anton Bruckner University and with the start of the project, a one-week workshop at the isa–International Summer Academy[6] with four different instrumental groups. I have also developed initial artworks to explore and demonstrate the embodiment of expression in an artist's work and probed the question of how to capture or 'narrate' gender in the classical performance world.

Three main research objectives guide our investigation. We ask:

a) What constitutes expression, gender, and charisma in a performer's bodily work? How *is* the body of a performer an essential part of it?
b) How do a performer's bodily routines on stage establish norms, values, and social relations? What are the audience's expectations of values and charisma within a particular discourse? Who articulates these expectations and through which channels? How does gender play a role in the performer's embodiment and how does the audience perceive the interpretation of a musical work and the performer?
c) How can performers control, shape, and change cultural routines and the canon of norms and values that surround their practice through embodied techniques? How can this be expressed and deconstructed in newly created artworks? How does this affect the charismatic relation to the audience?[7]

Interdisciplinarity

We study our topics from different theoretical and methodological perspectives. Methods of artistic research, including performance, creation,

5 Barbara Lüneburg, description of the project: *Embodying Expression, Gender, Charisma – Breaking Boundaries of Classical Instrumental Practices*", accessed 14 March 2023, http://embodying-expression.net/

6 University of Music and Performing Arts Vienna, 2022, isa–International Summer Academy, accessed 2 September 2022, https://www.isa-music.org/en/.

7 Barbara Lüneburg, description of the project: *Embodying Expression, Gender, Charisma – Breaking Boundaries of Classical Instrumental Practices*", accessed 14 March 2023, http://embodying-expression.net/

and narration, are brought together with methods and theories of sociology of practices and gender studies. Our focus will lie as much on the institutional regulations of propositional practices and their performative, reality-constituting power, as on the individual performance, experience, and agency of the creative actors in the field, and how their practice is linked to societal, institutional, and implicit and explicit gender expectations. We will work towards breaking boundaries in classical instrumental music through performative embodiment, multimedia composition, the development of new narratives and staging formats. In the subchapter "Case Studies," I will look at examples from the pilot project to discuss our first steps forward.

The idea of embedding "research in an interdisciplinary approach" is to "provide a point of reference and accountability," different from a single discipline. "[T]he typical first-person perspective of artistic research" will "be supported by second and third-person research. It [will] help to counterbalance subjectivity and reduce the defensiveness that might result from research 'at home'."[8] This inclusive approach is treated as a pivotal dynamic through which understanding and change will be brought forward.

Artistic Research

The process of doing art and art production is the focal point of the investigation. This is how we produce the material and data and follow the artistic processes that we will subsequently explore. We identify three steps:

1) Artistic research based on practice: Based on the Re-enacting Embodiment method developed by the author, we explore the meaning the body holds for classical instrumentalists and strive to recognize how musical expression manifests in and through the body.
2) Artistic research through creation: Incorporating findings from step 1, we will create several multimedia artworks that (de-)construct the topics of embodying expression, gender, and charisma.
3) Artistic research and sociology of practice: Here we reflect on what kind of gender expectations an audience assigns to a concert setting, how performers answer to it via nonverbal, bodily expression, and how this relates

8 Barbara Lüneburg, *TransCoding—From 'Highbrow Art' to Participatory Culture* (Bielefeld: transcript, 2018), 167, accessed 25 September 2022, https://doi.org/10.14361/9783839441084.

to the construction of charisma between audience and performer.[9] We will employ historical and multimodal critical discourse studies combined with action-oriented analyses of the practices of individual classical music performers. "Gender as discourse," based on John Scott's concept for analyzing gender relations and gender orders,[10] will be compared with "gender as experience" and "narrating gender" as a method we will use in artistic research.

Biannual work labs with artists and scholars from thematically related disciplines complement the team's ongoing work and support the building of a network around the topics in question.

Sociological Research

For our epistemological sociological approach, we apply the principle of "second-order observation,"[11] a constructivist view understood as "observation of the observer." That is, we observe how categorization is done by the social actors in the field, including ourselves. Instead of asking questions like "What makes performer X appear charismatic or uncharismatic?"; "What marks the performing body as male or female?"; or "What is a legitimate way to move on stage?", we ask with Luhmann "Who (i.e., which system) uses the distinction [charismatic vs. uncharismatic; male–female–queer; the author] as a framework (or schema) of observations; or: Who is the observer? What does he [she/they; the author] invest in making this distinction, and what does he [she/they] lose by maintaining it?"[12]

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9 We examine charisma as a social process, following theories from sociology such as those put forward by C. Marlene Fiol, Harris Drew, and Robert House in "Charismatic Leadership Strategies for Effecting Social Change," in *Leadership Quaterly* 10 (1999): 449–82, or by Jürgen Raab in "Präsenz und Präsentation," in *Intermediale Inszenierungen im Zeitalter der Digitalisierung. Medientheoretische Analysen und ästhetische Konzepte*, ed. Andy Blättler, Doris Gassert, Susanna Parikka-Hug, and Miriam V. Ronsdorf (Bielefeld: transcript, 2010), accessed 5 January 2023, https://doi.org/10.14361/9783839411919-009.

10 Joan W. Scott, "Gender: A Useful Category of Historical Analysis," in *The American Historical Review* 91/5 (1986): 1053–75, accessed 25 September 2022, https://doi.org/10.2307/1864376.

11 Niklas Luhmann, "Deconstruction as Second-Order Observing," in *New Literary History* 24/4 (1993): 763–82, accessed 25 September 2022, https://doi.org/10.2307/469391.

12 Ibid., 764.

We are interested in how the various actors (or systems) that make an appearance—audiences, music promoters, colleagues, critics, social media followers, etc.—establish categories to evaluate the embodied work of an instrumental performer. What questions and problems are raised by the social actors in this field themselves in their practical activities? "Observing the observer" helps us maintain a critical distance to our fieldwork, to avoid stereotypes and instead to look at systems, historical circumstances, fashions, and related perspectives in a differentiated way. We are aware that this does not make us objective "meta-observers," and some blind spots will remain. We are always involved in some way but will reflect this through our transdisciplinary teamwork.

Case Studies

(1) *Artistic Research Based on Practice: Re-Enacting Embodiment*

For my first case study—conducted as part of the pilot project—I applied the practice-based method "Re-enacting Embodiment" that I developed as our fundamental method to explore the meaning of the body of classical instrumentalists as a determining factor in musical expression and to recognize how musical expression manifests in and through the body[13].

"Re-enacting Embodiment" is about slipping into the experience of another corporeality and consciously compare it with one's own corporeality to then reflect on it systematically. As I explain in my article "Knowledge Production in Artistic Research–Opportunities and Challenges"[14] it is about attempting to precisely recreate the musical and physical interpretation (i.e., the "embodied techniques") of another person. With a focus on the subjective experience, the re-enactment evokes skills that can be learned, and insights that can be drawn from it. Its purpose, however, is not to recreate historical situations as done in historical interpretation research,[15] nor is it an acting exercise in which a

13 Barbara Lüneburg, *Re-enacting Embodiment: The Method*, accessed 14 March 2023, http://embodying-expression.net/english/re-enacting_embodiment.html

14 Barbara Lüneburg, "Knowledge Production in Artistic Research–Opportunities and Challenges," in *Music & Practice*, https://www.doi.org/10.32063/1009, accessed 14 March 2024, https://www.musicandpractice.org/knowledge-production-in-artistic-research-opportunities-and-challenges/

15 Cf. Kai Köpp, Johannes Gebauer, and Sebastian Bausch, "Chasing Dr Joachim—Die Jagd nach Dr. Joachim: Joseph Joachim, Romanze in C-Dur. Re-

performer would try to "become" the soloist they re-enact. The concept of "embodied techniques" "differs from related concepts like performativity and habitus in that it emphasizes the epistemic dimension of practice"[16] –in our case instrumental performance practice. As the method is central to the project, I describe it in detail before reporting on the first case study.

The following figure depicts the steps to be taken in the "Re-enacting Embodiment" method.

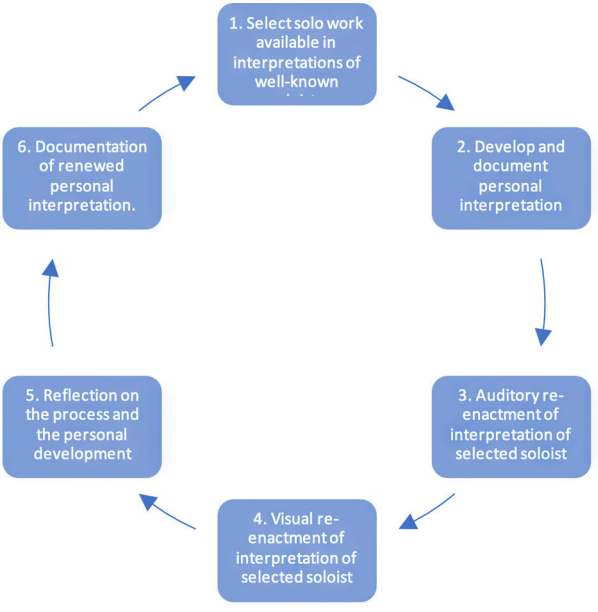

Figure 1: *The "Re-enacting Embodiment" method developed by the author. © Barbara Lüneburg*

enactment der Aufnahme des Komponisten, 1903," in *Arts in Context Kunst, Forschung, Gesellschaft*, ed. Thomas Gartmann and Christian Pauli (Bielefeld: transcript, 2020), 86–99, accessed 25 September 2022, https://arbor.bfh.ch/13197/7/AiC_09_Koep-Gebauer-Bausch.pdf, https://www.doi.org/10.14361/9783839453223-009.

16 Ben Spatz, *What a Body Can Do: Technique as Knowledge, Practice as Research* (London and New York: Routledge, 2015), 16.

Starting the circle from the top, "Re-enacting Embodiment" includes the following steps[17]:

1) Select a solo work with audiovisually documented interpretations by two established soloists (female and male).
2) Develop and document your personal interpretation of this work in a video prior to re-enacting the interpretation of either of the chosen soloists.
3) Re-enact the interpretation and performance by each soloist by only listening to their interpretation and using your own bodily repertoire.
4) Visually re-enact the soloists' performances by emulating their body language as exactly as possible.
5) While pursuing the re-enactment, ask yourself: How does the conscious appropriation of another person's movement repertoire affect my own interpretation and self-perception? How does the embodiment of movement patterns foreign to me enrich my musical expressive and performative agency? How can we reflect embodied techniques theoretically and practically in phenomenological observations, academic text, and artworks?
6) After experiencing and reflecting on the re-enactment follows a renewed interpretation and audio-visual documentation of the selected work. This version is not a documentation of any of the re-enactment steps, but a new personal interpretation based on the work with the method. This is to establish how the embodiment of movement patterns foreign to me has changed my musical expressive and performative agency.

The results of this work feed back into the artist's corporal and musical means of expression and have the potential to expand personal artistic boundaries. It has further implications for one's own under¬standing of music and the audience's perception of it. Psycho¬biologist Vittorio Gallese states, "embodied simulation [...] mediates our capacity to share the meaning of actions, intentions, feelings, and emotions with others, thus grounding our identification with and connectedness to others."

To test the method, I pursued a pilot case study based on Ysaÿe's Violin Sonata no. 3 *Ballade* (step 1). I developed my personal interpretation of the *Ballade* and documented it as an audiovisual recording (step 2). Next, I picked

17 Barbara Lüneburg, *Re-enacting Embodiment – The Method* as described in the research proposal for the Austrian Science Fund (FWF) and on http://www.barbara-lueneburg.com/Embodying_Expression_Gender_and_Charisma_ Breaking_Boundaries/ , accessed 14 March 2023.

two interpretations of the same work by a male and a female soloist (Maxim Vengerov and Hilary Hahn) which are both available as YouTube videos.[18] I analyzed the musical and physical interpretations in detail, and in a first step I re-enacted the interpretation purely from listening to it (step 3), in the second more extreme step, I re-enacted the visual interpretation embodied in arm movements, gestures, facial expressions and postures of the individual soloists as seen in the YouTube videos (step 4)

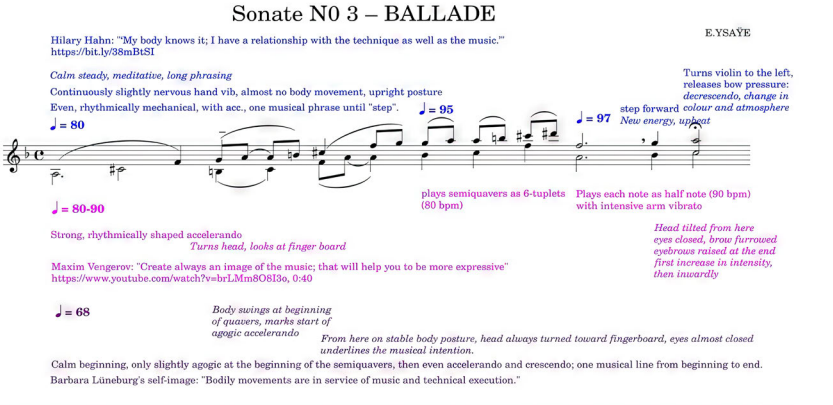

Figure 2: *Transcription, comparison, and interpretation of the movements and musical expressions of three performers, including some relevant comments by the interpreters themselves: Hilary Hahn (blue), Maxim Vengerov (pink), and Barbara Lüneburg (purple) when performing Ysaÿe's Ballade. © Barbara Lüneburg*

Later in the project, I developed a template for the re-enactment journal that enabled systematic and detailed data collection which would later serve as the basis for the team members' individual coding sessions. In the first part of the template, I ask for analytical records on metronome indications and specific tempo profiles or characteristics of a passage, its rhythmic features and musical shaping, which includes accents, vibrato, bowing, fingerings, timbre, phrasing, melodic and rhythmic form, and character, followed by a detailed description

18 Maxim Vengerov performing Eugène Ysaÿe's Sonata no. 3 in D minor, *Ballade* op. 27, accessed 2 September 2022, https://www.youtube.com/watch?v=Bg1NUBLK1tk; Hilary Hahn performing Eugène Ysaÿe's Sonata no. 3 in D minor, *Ballade* op. 27, accessed 2 September 2022, https://www.youtube.com/watch?v=biEUK9Winqo.

of the embodiment of musical expression and affect. The latter involves detailed observation of the various parts of the body that carry the performance, including breathing and the body as a whole.

The second part of the observation is dedicated to the interpretation of the collected data and includes the perceived musical expression, especially in connection with the physical expression. The assessment is based partly on the previously collected facts and partly on the performer's own bodily experience while re-enacting.

This initial process is followed by two further categories: The first deals with the observations the artist-researcher makes about their own practice during re-enacting. Here, challenges, accomplishments and steps taken are noted and reflected upon. Finally, the field notes are concluded with general comments on the process of embodiment. The aim here is to observe or develop successful practice strategies that may extend the personal boundaries of the re-enacting subjects and to note ideas for artworks that could emerge from the reenacting process.

While re-enacting visual body language as accurately as possible, I found that there could be no re-enactment without a profound understanding of the meaning of a body movement for musical expression. This observation was repeated in workshops with students of different instrumental groups. Without an understanding of the "why" of a body movement, it is almost impossible to recreate it physically or musically. Conversely, when body movement is understood and is re-enacted, it most often has a direct influence on musical expression.

To give an example: Maxim Vengerov tends to hold his head at an extreme angle, with his cheek resting entirely on the chin rest. At first, trying to imitate the extreme tilt of his head made my neck hurt; it felt uncomfortable and unhealthy, and it disturbed me in performing.

I wondered why Vengerov was doing something that clearly went against healthy anatomy, when everything we are taught in violin lessons is not to work against the body to avoid long-term damage. It was only when I linked the body movement with a performative-musical meaning that it began to make sense to me, and I could integrate it meaningfully in my playing. I interpreted the tilting of the head as a form of deep listening to the sound of the violin and the music, with Vengerov literally putting his ear as close as possible to the instrument. When I re-enacted this posture with this mindset—without my conscious intention to do so—it automatically increased the tonal and musical intensity of my playing. An interesting side effect was that my neck immediately stopped hurting. Looking at Vengerov's face and posture when leaning into the

music and listening intensely, this intensity becomes visually tangible to the audience.

Our investigation differs from previously conducted research in gestures in the fields of cognitive neuroscience of music and psychology,[19] empirical musicology,[20] participant observation in performance and theater studies,[21] or in the field of semiotics.[22] "Re-enacting Embodiment" is a practice-based method that allows us to examine gesture and embodiment from an intrinsic perspective in a bottom-up approach through our own doing. To evidence our investigation, we employ the knowledge mode of "Know-how"[23] that "comprises tacit and embodied knowledge exclusively known and gained from the perspective of the practitioner, and which can be identified as experiential, haptic, performative instances of knowing and may be articulated in specific skills and techniques."[24] Through the "Re-enacting Embodiment" method we have a tool to understand

19 Alexander P. Demos, "The Perception of Movement through Musical Sound: Towards a Dynamical Systems Theory of Music Performance," University of Connecticut, 7 October 2013; Federico Visi, *Methods and Technologies for the Analysis and Interactive Use of Body Movements in Instrumental Music Performance* (PhD dissertation, Plymouth University, 2017).

20 Eric F. Clarke, "Creativity in Performance," in *Musical Imaginations: Multidisciplinary Perspectives on Creativity*, ed. Dorothy Miell, Raymond MacDonald, and David Hargreaves (Oxford: Oxford University Press, 2012), accessed 25 September 2022, https://www.doi.org/10.1093/acprof:oso/9780199568086.003.0002; Bradley W. Vines, Marcelo M. Wanderley, Carol L. Krumhansl, Regina L. Nuzzo, and Daniel J. Levitin, "Performance Gestures of Musicians: What Structural and Emotional Information Do They Convey?," in *Lecture Notes in Computer Science* (2004): 468–78, accessed 25 September 2022, https://doi.org/10.1007/978-3-540-24598-8_43; Micheline Lesaffre, Pieter-Jan Maes, and Marc Leman, *The Routledge Companion to Embodied Music Interaction* (London: Routledge, 2019), accessed 25 September 2022, https://doi.org/10.4324/9781315621364.

21 Christoph Wulf and Erika Fischer-Lichte, *Gesten: Inszenierung, Aufführung, Praxis* (München: Wilhelm Fink Verlag, 2010); Spatz, *What a Body Can Do*.

22 Lina Navickaité-Martinelli, *Piano Performance in a Semiotic Key* (Helsinki: Semiotic Society of Finland, 2014), accessed 25 September 2022, https://helda.helsinki.fi/bitstream/handle/10138/136475/pianoper.pdf.

23 Robin Nelson, *Practice-as-Research in the Arts. Principles, Protocols, Pedagogies, Resistances* (London: Palgrave Macmillan, 2013), 37, accessed 25 September 2022, https://doi.org/10.1057/9781137282910.

24 Sara Hubrich, *The Creative Embodiment of Music—Practice-Based Investigations into Staged and Embodied Interpretations of Instrumental Music* (PhD dissertation, The Birmingham Conservatoire—Faculty of Media, Arts and Design, 2014), 19, accessed 25 September 2022, http://www.open-access.bcu.ac.uk/4917/.

why which gestures are made and how they become part of the musical and artistic expression of an instrumentalist.

Figure 3: *Barbara Lüneburg re-enacts Maxim Vengerov's extreme chin position. © Reinhard Winkler*

I also applied the method in a workshop with master's students at Anton Bruckner University (violin and viola, group instruction). Here the focus was on freeing the performing body from habitual restraints by slipping into the experience of a corporality other than their own. I met with the students for an introductory session where I went through the different steps of the method. In the next sessions the idea of working with an "air instrument" was born. Playing with an "air violin" meant putting away the instrument and pretending to play an imaginary violin while imitating the posture, footwork, gestures, and facial expressions of the impersonated soloist. It allowed us to focus on the movements and musical expressions of the soloist we re-enacted without being constrained by technical and mental difficulties of playing a real instrument.

In the feedback sessions, the master's students compared their normal teacher-student situation with the "Re-enacting Embodiment" experience. They emphasized that re-enacting the physical performative patterns of another person encourages breaking out of one's own bodily habits and unconscious self-limitations, and even boundaries imposed by violin traditions and schools to which they felt they belonged. They additionally stressed the liberating effect of the bodywork, which they found to be playful, curiosity-

promoting, and self-educating. A similar observation was provided by doctoral candidate Joanna Wicherek (piano) who reported that re-enacting the pianist Lang-Lang's corporal language—which is in her own account "very foreign" to her—liberated her own playing when interpreting Debussy's *Jardins sous la pluie*. She describes re-enacting as an act of relinquishing responsibility for the interpretation:

> I felt that impersonating another person gave my performance confidence and freed me from the responsibility for the musical decisions and their results in my playing. While focusing only on the physical accuracy of the re-enactment, I discovered that my performance developed new elements of expression.[25]

One of the findings was that trying out counter-models and relinquishing responsibility for one's own musical choices by imitating great soloists and trying to understand their performative and bodily work in detail encourages the development of greater physical and musical competence in one's own playing.

A third opportunity to test and adapt the method arose at the isa – International Summer Academy 2022, where I taught embodiment and charisma to young performers from various instrumental groups such as string players (violin, viola, violoncello), woodwinds (oboe, flute, clarinet, bassoon), brass players (horn), and keyboard (piano). Here, the main goal was for them to recognize ingrained kinesthetic habits in their playing and understand how kinesthetic experiences are on the one hand instrumental for playing, but at the same time have a communicative potential that conveys meaning. As Carrie Noland suggests,

> The body we observe in the act of writing [performing; the author] may indeed be communicating a message or completing a task [mastering a musical score and instrument], but it is simultaneously measuring space, monitoring pressure and friction, accommodating shifts of weight. These kinesthetic experiences that exceed communicative or instrumental projects affect the gestures that are made and the meanings they convey.[26]

I intended to offer them the knowledge and skills to change or expand their physical range of expression according to their artistic visions and musical intentions.

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25 Joanna Wicherek, "Overcoming Performative and Expressive Boundaries in Intermedial Theatrical Piano Music," examination paper at Anton Bruckner University, 2022.

26 Carrie Noland, *Agency and Embodiment: Performing Gestures / Producing Culture* (Cambridge, MA: Harvard University Press, 2009), 2.

A variant of the "Re-enacting Embodiment" method served as a starting point. The instrumentalists chose one video of a soloist whose musical and physical language they admired, and one of a performer they found physically strange, uninspiring or simply "terrible." By explaining their choice to me, they took a first step towards an awareness of their performing body. Next, I asked them to recognize and reflect on their personal movement patterns. The way they move their body while playing turned out to be an unconscious act for many, and was difficult to pinpoint. Therefore, we first had to establish how the whole body from feet to the crown of the head, posture, facial expression, vertical and horizontal reach, and movements around different axes all belong to our repertoire of bodily expression. Subsequently, the students worked with the aforementioned principle of the "air instrument." They played along with the video of their favorite performer, to compare their movement patterns with the physical expression of another person and to break personal, unreflective habits through new kinesthetic experiences. Again, simply imitating another person's physical actions sometimes felt unsatisfying, alien, and meaningless. It proved essential that the students find musical and emotional reasons for moving in a certain way. The students were only able to develop a different basic emotional feeling and alternative musical statements when they engaged with another person's body movement in an act of social and musical identification. As Vittorio Gallese states, "Social [in our case "artistic"; the author] identification incorporates the domains of action, sensations, affect, and emotions and is underpinned by the activation of shared neural circuits."[27]

Working with the "Re-enacting Embodiment" method guides performers' attention towards different value systems of their audiences which have personal and socio-cultural roots. We discussed how the body is a means of conveying emotion in human conversations and how it relates to the values our audiences bring to the concert situation. We considered how they could use this phenomenon to use their bodies as a means of expression that complements and extends musical expression and through which emotions are experienced by the audience in an act of empathy and embodied simulation. We started from the idea that "When observing other acting individuals, and facing their full range of expressive power (the way they act, the emotions and feelings they display), a meaningful embodied interpersonal link is automatically established."[28] We were therefore looking for ways to explore and use the full

27 Gallese, "Mirror Neurons, Embodied Simulation, and the Neural Basis of Social Identification," 519.

28 Ibid., 520.

range of the physical expressiveness of one's performative body to strengthen this interpersonal connection between performer and audience.

I observed that different instrument groups bring different body awareness to the table. Wind players are trained to use breath and body as a consciously reflected unity; string players are usually good at sensing and establishing connections between all parts of the body when playing standing up. Whereas, due to their seated playing posture, pianists and cellists often seem to need to take a greater mental and physical step to feel their physicality as a continuous unit. Disadvantaged by the fact that their upper and lower body are at right angles to each other, it seems to be more difficult for them to feel the body as a total complex in which the individual parts work together and in which the center of the body acts as the center of focus and strength.

(2) *Artistic Research through Creation*

Another challenge in this project is to make the implicit explicit. This concerns all three areas of enquiry: expression, gender, and charisma. The research method I use for this is in turn derived from artistic research using the process of arts creation for investigation and the actual artwork for the display and dissemination of research findings. It builds on the experience with the "Re-enacting Embodiment" method, which I use to create audiovisual installations and remixes that feature the performing body in the classical instrumental practice. I will elaborate on a first example:

I am in the process of setting up a website on the international database for artistic research, the Research Catalogue,[29] where over time I will create profiles of female and male soloists from different generations and countries: *The Body that Performs*.[30] First profiles planned are about the violinists Jascha Heifetz (1901–1987), Erica Morini (1904–1995), Zoria Shikhmurzaeva (1933–2010), Salvatore Accardo (*1941), Leonidas Kavakos (*1967), Isabelle Faust (*1972), Maxim Vengerov (*1974), Patricia Kopatchinskaja (*1977), Sergey Khatchatryan (*1985), Ziyu He (*1999), and Maria Dueñas (*2003).

The profiles will each expose—as central artwork and focus of attention—a remix that features the individual movement patterns that are central to the expressive language of the individual soloist. For that I examine YouTube

29 Society for Artistic Research, *Research Catalogue. An International Database for Artistic Research*, n.d., accessed 10 August 2022, https://www.researchcatalogue.net/.

30 I expect the platform to be available to the public at the completion of the project. It will be accessible via my personal profile: https://www.researchcatalogue.net/profile/?person=156033.

recordings of each performer for the expressive potential of their body movements. What characterizes their body language? How is musical decision making and execution expressed in their posture, facial expression, head tilt, upper body mobility, footwork, etc.? And how can I present this in such a way that the body is perceived as a powerful tool that shapes the musical execution as much as the perception?

Watching and analyzing videos of different instrumentalists it became apparent that the performers' face and body movements contribute to the musical expression. Gestures and music are closely, almost intimately fused. It is important to my research to emphasize the body's expressiveness so that others can see and perceive it in a focused way. For that I realized that I need to detach the gestures from the overall experience of the performance and from the soloist that we as an audience admire, in a way that the focus of the viewer's attention is no longer on the music but shifts to the body movements. The challenge is to separate body language and music in such a way that they are perceived as belonging together, but still seen independently of each other.

To achieve this, I separate the original music from the performing body via various steps: by subjecting the original composition to a remix in order to break the familiarity of the work and thus create a distance from the audience's normal listening habits; by superimposing body movements of the soloists on the remix, which are taken from the piece but almost always from a different location in the work; by zooming in twice: once literally on the video footage bringing details of the video closer to the viewer, and secondly by slowing down the movements, some of them extremely, to focus on details in the facial expression or movement pattern.

The website *The Body that Performs* | *The Shared Space* will feature a landing page with a general introduction, a second page introducing the reader to remixing as a method of research, and a third page that explains the choice of soloists and the different modes of alignments: a) a chronological timeline: since physical expression is not only a personal characteristic, but also subject to fashions of the time and possibly gender assignments, I pair male and female soloists of one generation[31]; b) an alignment that features similarities between

31 The reduction to the binary approach is due to the concert context of Western classical music. The gender representations of international soloists who perform in traditional concert halls are culturally marked mainly as male or female, based on gender characteristics such as clothing, name or physical appearance. More diverse gender representations are rarely addressed or lived on stage. The fluidity of gender representations shown on stage by the soloists studied is done more indirectly through physicality and embodiment or slight variations in clothing, haircut etc. and is part of our study. In the team's coding

performers in their physical embodiment: here I group the soloists according to their physical movement patterns and the way they embody their musical interpretations in order to investigate and point out historically influenced fashions in the way they move; c) a third mode of alignment that is concerned with gender observations will be added later.

The two main pages will be followed by profile pages of the chosen soloists. Here the audiovisual remixes I will create are central. A profile page contains basic information about the featured soloist, the audiovisual remix showing the physical characteristics of the player accompanied by my observations on how musical and gestural expression are related and what I felt was important to show. This is followed by comments from critics writing for professional journals and from the community (for instance on YouTube channels) who remark on the soloists' physicality and expressiveness.

The following picture (fig. 4) shows a section of one of the first profiles I have created, featuring the violinist Sascha Heifetz.

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of the re-enacting research protocols, we use anonymized gender-neutral descriptions with the pronouns "they/them/their" and omit references to for instance clothing or hairstyle. Instead, we look for the affect that embodiment and physicality of the performer convey or evoke. We compare this with the comments of the viewers that we find on YouTube, which give us an indication of how the movement, physical expression and musical interpretation were perceived and felt by them.

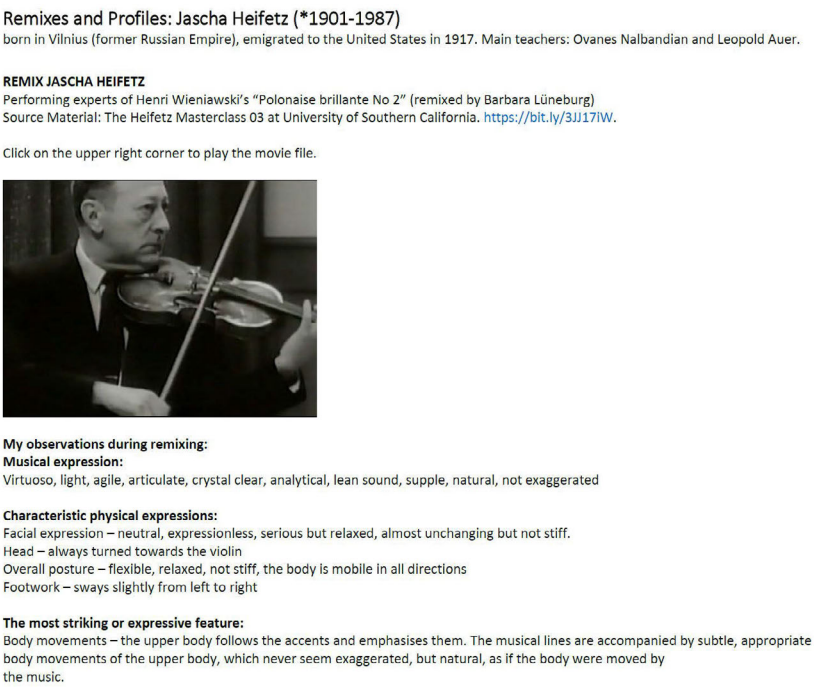

Figure 4: *Example of the appearance of a musician's profile page in the Research Catalogue. © Barbara Lüneburg*

The remixes and profiles that will be collected here provide a condensed summary and interpretation of the movement patterns of the individual soloists and offer immediate opportunities for comparison, taking into account the artistic and historical context of the performers and the social and emotional space they share with their audience via YouTube or reviews.

(3) *On the Tracks of Gender*

In the project we are interested in how performers answer to and challenge gender allocations through their body that are produced and upheld by both them and their audience and how this is negotiated in the field. Furthermore, we investigate how it is possible to break through personal and socio-cultural boundaries and open up new forms of bodily expression and artistic being. In thinking about gender we follow gender scholar Monika Mommertz who claims that "[i]nstead of using the term 'gender' to postulate a more or less constant differentiation of the forms of existence of 'men' and 'women' across times

and spaces, 'gender' should *first* be understood as a culturally constructed and coded 'marking'."[32] In our research, gender marking can take different forms, for example, in the way a performer's physicality is perceived and signified by the audience, or in the way a performer's body lives in her/his embodied practice on stage and how she/he signifies it in their personal self-perception or professional branding, or how gender is narrated through art.

We assume that performers consciously and unconsciously respond to what is expected of them, what is considered legitimate or what is fashionable; therefore we also need to ask ourselves what we allow ourselves to do as performers, where we set personal boundaries within a framework of gender given to us in a particular historical period and fashion of the time, the educational system or the demands placed on us by an organizer, a venue, a stage. Sociologist Anna Bull notes in *The Musical Body* that

> Practice assumes an actor who knows what to do within her field; for Bourdieu this 'feel for the game' (1991) is conceptualized as the 'habitus', the semi-conscious sense of what is possible or not possible for someone in a particular social position.[33]

To systematically investigate this, we will work with methods of discourse analysis and Luhmann's aforementioned "second-order observation" while considering the "four interrelated elements" proposed by gender scholar Scott for analyzing gender relations and gender orders:

> As a constitutive element of social relationships based on perceived differences between the sexes, gender involves four interrelated elements: first, culturally available symbols that evoke multiple (and often contradictory) representations [...] Second, normative concepts that set forth interpretations of the meanings of the symbols, that attempt to limit and contain their metaphoric possibilities. [...] a notion of politics as well as reference

32 Mommertz (2004), cited by Claudia Opitz-Belakhal, *Geschlechtergeschichte* (Frankfurt am Main: Campus Verlag, 2010), 22 (trans. Barbara Lüneburg): "Statt mit dem Begriff 'Geschlecht' eine über Zeiten und Räume hinweg mehr oder weniger gleichbleibende Differenz der Existenzformen von 'Männern' und 'Frauen' zu postulieren, sollte 'Geschlecht' *zunächst* als eine kulturell konstruierte und codierte 'Markierung' verstanden werden."

33 Anna Bull, *The Musical Body: How Gender and Class Are Reproduced among Young People Playing Classical Music in England* (PhD dissertation, London, Goldsmiths, University of London, December 2014), accessed 25 September 2022, https://research.gold.ac.uk/id/eprint/12299/1/SOC_thesis_BullA_2015.pdf, 37.

> to social institutions and organizations––the third aspect of gender relationships. […] The fourth aspect of gender is subjective identity.[34]

Through artistic research we will further explore how and if we can trace gender attributions and expectations in physical performance through the re-enactment of male and female soloists. In doing so, we consider the individual re-enactment experience of this fourth aspect of gender–"subjective identity"–as shaped "by gender norms and discourses," and we are aware that it is "historically mutable and varies from individual to individual."[35] As an example, I provide a case study that is not yet investigated to the end, but which already points to gender issues worth exploring further.

Maxim Vengerov's interpretation of the *Ballade* by Eugène Ysaÿe for violin solo, which was the first interpretation I tried my "Re-enacting Embodiment" method on, is one of the shortest documented on the internet.[36] Vengerov plays the *Ballade* exceedingly fast, precise, and crisp. By committing myself to Vengerov's extraordinary virtuosity as a researcher–not as a musician striving for her own interpretation who may have a different musical focus–the question of whether I am able to play a passage as fast as he does, becomes secondary to my task of re-enacting it. Virtuosity becomes a bodily matter that I have to investigate: I strive to learn how it physically feels to go into Vengerov's extremes of speed and perfection. I analyze the obstacles along the way, I breathe, lower my diaphragm, relax my forehead, loosen my shoulders, listen to where I stumble, analyze the bodily and mental reasons for it and force myself *not* to fluctuate in speed and precision but to keep playing through the fastest passages, just as Vengerov does. Approaching the kind of extreme virtuosity Vengerov displays requires both physical and intellectual skills from the re-enactor, and I've realized for myself that I need mental courage to break through my own conditioning and self-image to "dare" attempt this kind of virtuosity. But what does this have to do with gender? In the following section, I will explain how I began to question my attitude and approach to extreme virtuosic skills, taking into account a historical perspective.

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34 Scott, "Gender: A Useful Category of Historical Analysis," 1068f.

35 Opitz-Belakhal, *Geschlechtergeschichte*, 15 (trans. Barbara Lüneburg): "Die Geschlechtsidentität wird durch Geschlechternormen und -diskurse geprägt, ist aber, wie die Subjektivität auch, historisch wandelbar und individuell unterschiedlich ausgeprägt."

36 Maxim Vengerov performing Eugène Ysaÿe's Sonata no. 3 in D minor, *Ballade* op. 27, accessed 2 September 2022, https://www.youtube.com/watch?v=Bg1NUBLK1tk.

Gender scholar Cordelia Miller explains in *Musikdiskurs als Geschlechterdiskurs im deutschen Musikschrifttum des 19. Jahrhunderts* that in the nineteenth century, which showed the rise of virtuoso female pianists, women were ascribed an "inauthentic virtuosity" while men were ascribed "true virtuosity." She explains that when virtuoso female pianists emerged in the nineteenth century "'[f]eminine' attributes were used here to describe the 'inauthentic' virtuoso who was merely skilled in playing technique and concerned with outward effect, while 'masculine' attributes were used to characterize the 'true' virtuoso who served the musical work."[37]

Without being able to prove it through research so far, I believe I have observed that even today, "extreme" virtuosity tends to be displayed by and attributed more often to men. I wonder if, in a twist of collective memory, the label of "inauthentic virtuosity"—as assigned to female soloists in the nineteenth century—today means that women do not view sheer virtuosity per se as desirable and rather view it as "inauthentic," a label they do not want to expose themselves to. Further, I wonder if they might thereby be denying themselves not only a form of expression—the enjoyment of virtuosity for virtuosity's sake—but also a particular skillset in the service of musical expression.[38]

In this context, the next question to explore further is whether the nineteenth century designation of "female" for "inauthentic virtuosity" and "male" for "true virtuosity" might still have an impact on how male and female performers deal with virtuosity today and how it is perceived and appreciated by audiences. If that is the case, can we determine in what ways, in what contexts, and by which actors? And are there other factors at play in this issue? Is there a difference in how male or female players define and perform virtuosity in their performances? For now, however, I am conquering "extreme" virtuosity as another way to express myself and my musical ideas by re-enacting Vengerov's interpretation. I intend to explore whether this potential in developing extraor-

37 Cordelia Miller, *Musikdiskurs als Geschlechterdiskurs im deutschen Musikschrifttum des 19. Jahrhunderts* (Oldenburg: BIS-Verlag, 2019), accessed 25 September 2022, http://oops.uni-oldenburg.de/4679/1/2383-4__Miller__Musikdiskurs%20als%20Geschlechterdiskurs.pdf, 19 (trans. Barbara Lüneburg): "'Weibliche' Eigenschaften wurden hierbei benutzt, um den 'unechten', lediglich spieltechnisch versierten und auf äußeren Effekt bedachten Virtuosen zu beschreiben, während 'männliche' Attribute bei der Charakterisierung des 'echten', dem Musikwerk dienenden Virtuosen Verwendung fanden."

38 Please note that this consideration does not imply that there are not extremely virtuosic female instrumentalists. However, I wonder, if we see as many that display their virtuosity for virtuosity's sake.

dinary technical skills is accessible to others through my method of re-enacting embodiment.

To round off this overview on the artistic research project "Embodying Expression, Gender, Charisma–Breaking Boundaries of Classical Instrumental Performance Practices," I will touch briefly on another strand of artistic research that we will pursue with regard to gender: the creative act of "narrating gender" through art. We use "the very act of narrating," that is, creating artworks such as composing and performing multimedia works, as "a gendered activity that constructs, represents and narrates gender as a culturally mediated primary category of human existence, and these fundamentally gendered ways of narrating then construct, define and reify gendered ways of being in the world."[39]

In doing so, we ask: How can performers control, shape, and change the canon of norms and values that surround their practice through embodied techniques? How can this be expressed and deconstructed in newly created artworks for an exhibition and a multimedia performance and through specific dissemination formats? How does this affect the charismatic relation to the audience?

Conclusion

Bodily and artistic expression are intertwined with how artists–as senders of an artistic, as much as social message–are perceived by their recipients, the audience, within a shared value system and thus within a jointly constructed concept of charisma.

"Re-enacting Embodiment" is a method for understanding bodily movements and their meaning for musical expression from an inner perspective. The method has potential for both research and personal musical development of the user. However, it also has some limitations. First, it is a slow method. It takes time to analyze, understand, and consistently re-enact the bodywork of other artists and to allow for real changes in one's own performance. Second, its application requires extensive technical mastery of the instrument, body awareness, and the ability to maintain an intellectual, observational distance while playing in order to perceive what is happening to one's own body and how it is connected to musical expression. Nevertheless, it allows deep insights into

39 Robyn Fivush and Azriel Grysman, "Narrative and Gender as Mutually Constituted Meaning-Making Systems," in *Memory, Mind & Media*, vol. 1 (2022), e2: 1–14, 1f., accessed 25 September 2022, https://doi.org/10.1017/mem.2021.4.

the intertwined interplay of body and artistic expression. Moreover, applied over the long term, working with the method can expand a performer's own technical, musical, and artistic expressive boundaries.

Awareness of the discourse we live, and knowledge of embodied techniques enables us to challenge the conditions in which we perform and to break the boundaries of classical instrumental concert practice by developing new approaches in performance, developing an innovative discourse between all actors involved.

Music/Sound and Dance/Motion: Relations between Theory and Practice

Choreomusical Research as an Artistic Translation Process
Interferences Between Music and Movement

Stephanie Schroedter

Abstract: *The following reflections on relations between music/sounds and dance/movements emphasize a sensorimotor and above all kinesthetic mode of listening as essential for those choreographers who start from music in order to "translate" audible phenomena into visible ones. To give this procedure concrete conturs, Elisabeth Schilling's choreography* Hear Eyes Move *(2020) based on György Ligeti's* 18 Études pour piano *will be analyzed.*
In regards to such multisensory translation processes, the primary aim cannot be creating 'literal' analogies between the musical and dance parameters. It is also important to emphasize the differences between the various materialities and medialities of the arts, which interfere (e.g. through de-/synchronization processes) as well as they emerge (in our perception). Both artistic research and theories in the field of the so-called "choreomusicology" or a yet-to-be-established research into sound and performative movement can benefit from such aesthetic reflections.

Preconditions

"All music is danceable if you understand what it is about," emphasizes Lukas Ligeti, whose witty individuality and humorous originality immediately remind one of his father.[1] In order to be able to agree with this statement, we need to

1 It is worthwhile to cite the context of this quotation, with which Markus Deisenberger begins his "Portrait" of Lukas Ligeti in an article for the Austrian Music Information Center (mica): "'Jede Musik ist tanzbar, wenn man versteht, worum es in ihr geht', sagt der in Wien geborene und in New York lebende Komponist und Percussionist Lukas Ligeti. Wirklich jede Musik? Auch eine Klaviersonate von Boulez? 'Ja!' Die Überzeugung, mit der er einem dieses 'Ja' entgegen schmettert, verwundert, ist letztlich aber nur einer von vielen Gründen, weshalb es

understand the concept of music that underlies it. Although this concept lies at the basis of our Western musical cultures, it has been fatally pushed into the background, if not largely forgotten.

If we remember that it was primarily through the development of a repertoire of forms drawn from dance music that the instrumental music that we now call "classical" managed to emancipate itself from and become an independent, equal genre in regard to the vocal polyphony that had dominated the Renaissance, the apparent paradox that Ligeti Junior addresses already becomes more understandable. Clear evidence of this is provided by the numerous suites composed since the early sixteenth century in which popular, usually contrasting dances were linked together. Through sophisticated stylizations, these ultimately became the core of chamber and concert music. The irresistible pull of music that is emotionally and/or imaginatively "moving" through well-dosed momentum from dance can also be traced to the obligatory minuet movements of the sonatas and symphonies of the eighteenth century. These resonated in lively scherzi well into the nineteenth century. Finally, up until the twentieth century, extremely successful arrangements of ballet music for the concert hall continued the tradition of dance music intended exclusively for listening. This music inspires our movement imagination even in the absence of any visible physical movement, let alone any movement by the audience.

Also in the theater of the seventeenth and eighteenth centuries, music and dance were closely linked. This had a long-lasting effect in (especially French) opera as well as in "lighter" or more entertainment-oriented musical theater (such as operettas and musicals) and was never questioned. Likewise, pop concerts (understood in the broadest sense as "popular" concerts aimed at a wide audience) are hardly imaginable without movement/dance on stage as well as in the auditorium. "High" bourgeois music culture, which has become increasingly influential since the eighteenth century and has now developed into an elite culture typified by excellent musicians, encourages us to sit still and listen to

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sich lohnt, den Spezialisten in Sachen afrikanische Musik und rhythmische Polyphonie zu treffen. Wer mit ihm plaudert, taucht unweigerlich tief ein in einen Kontinent voller Geheimnisse und voller Magie." https://www.musicaustria.at/spurensuche-lukas-ligeti-im-portraet/ (28 December 2010, accessed 8 February 2024). "'All music is danceable if you understand what it is about' says percussionist and composer Lukas Ligeti who was born in Vienna and lives in New York. Really all music? Even a piano sonata by Boulez? 'Yes!' The conviction, with which he shouts this 'Yes' is astounding, but only one of many reasons why it is worthwhile to meet this expert in the fields of African music and rhythmic polyphony. If you speak with him, you automatically enter deep into a continent full of secrets and magic." Translated by Michael Schnack.

the music as motionlessly as possible in order to be able to follow the proceedings carefully, preferably analytically. According to this tradition, only through a metaphysically spiritualized abstraction, ultimately a disembodied perception, can enjoyment of the musical arts fully develop. This seems to be the underlying message of this listening culture, in which a (regrettably misunderstood) romantic musical aesthetic continues to have an impact.

For a composer like Lukas Ligeti, who is intimately familiar with African musical practices, such an understanding of music, in which he is undoubtedly rooted, must seem strangely alien. In fact, at this point the question arises as to why our Western-style concert system has moved so far away from a physically moving understanding of music.[2] Why it is sometimes assumed that movement is a hindrance to a deeper understanding of music? This situation is all the more strange since our linguistic approaches to music repeatedly resort to movement metaphors, making it clear that we spontaneously and intuitively perceive and understand music "as" a movement. For example, we speak of ascending or descending melodic progressions, although melodies cannot ascend or descend, let alone run. We speak of interval jumps, although intervals do not jump. Performance markings suggest that music can move smoothly (andante), glide up or down (glissando), or accelerate (accelerando). Above all they prove that we (are able to) perceive sound events as, if not visible, at least audible movements in time and space, that differ from each other through diversely nuanced expressive qualities. This perception of musical phenomena as structured movements in space and time goes back to our everyday experiences.[3] In

2 A change can be observed in New Music and its discursivation as well as generally in musicology and music pedagogy. See Jörn Peter Hiekel, ed., *Body Sounds. Aspekte des Körperlichen in der Musik der Gegenwart* (Mainz: Schott, 2017); Lars Oberhaus and Christoph Stange, eds., *Musik und Körper. Interdisziplinäre Dialoge zum körperlichen Erleben und Verstehen von Musik* (Bielefeld: transcript, 2017); Karolin Schmitt-Weidmann, *Der Körper als Vermittler zwischen Musik und (all)täglicher Lebenswelt. Distanzauslotungen am Beispiel ausgewählter Werke der Neuen Musik* (Bielefeld: transcript, 2021); Christine Hoppe and Sarah Avischag Müller, eds., *Music in the Body—The Body in Music. Körper an der Schnittstelle von musikalischer Praxis und Diskurs* (Hildesheim: Olms, 2021); Nadine Scharfetter and Thomas Wozonig, eds., *Körper(lichkeit) in der Musik des 20. und 21. Jahrhunderts* (Bielefeld: transcript, 2023).

3 Inspired by metaphor theories developed in the field of linguistics, which examine language in order to deeply explain how we think. These theories were substantially developed by Mark Johnson and George Lakoff in *Metaphors We Live By* (Chicago: University of Chicago Press, 1980; for more recent scholarship: Ezequiel A. Di Paolo, Elena Clare Cuffari, and Hanne De Jaegher, *Linguistic Bodies. The Continuity between Life and Language*, Cambridge, MA:

this way, music is deeply anchored in our lives and vice versa: experiences of our everyday lives are anchored in our music cultures. Through music that moves us (visibly or invisibly), we can penetrate into a multifaceted emotional, affective and/or imaginary experience that, although it underlies our everyday life, mostly does not penetrate our consciousness. The key to this are movements that—to refer to Daniel Stern—can also be described as dynamic expressions of vitality.[4] In this context—that is, from a perspective of perception—music as an audible motion (beyond functionality) comes close to dance, whereas this dance concept is by no means limited exclusively to human bodies and does not necessarily refer to culturally specific forms and styles. In this respect, music and sounds develop into an art of motion that exceeds the limits of our verbalizable imagination, because it continually generates new, dynamic forms of vitality.

Especially in regard to György Ligeti's compositions and in particular his *Études pour piano*, which Elisabeth Schilling has "translated" into choreography (a process that will be explained in more detail below), it therefore seems worthwhile to first ask questions about our (possible) perception of music from a perspective that attaches central importance to our body and its movements.

Music, Motion, and Cognition[5]

> I lay my ten fingers on the keyboard and imagine music. My fingers trace this mental image by pressing keys, but the tracing is quite imprecise: a feedback loop occurs between my imagination and my tactile-motor

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The MIT Press, 2018). The last decades have seen a cognitive science oriented music theory arise that focuses on analytical approaches to our perception of music and our "musical thinking." See Lawrence Zbikowski, *Conceptualizing Music. Cognitive Structure, Theory, and Analysis* (Oxford and New York: Oxford University Press, 2002); *Foundations of Musical Grammar* (Oxford and New York: Oxford University Press, 2017); Arnie Cox, *Music & Embodied Cognition. Listening, Moving, Feeling, and Thinking* (Bloomington and Indianapolis: Indiana University Press, 2016). See also my introduction to this volume, especially notes 9–12.

4 See Daniel Stern, *Forms of Vitality. Exploring Dynamic Experience in Psychology, the Arts, Psychotherapy, and Development* (Oxford and New York: Oxford University Press, 2010). See also note 45 below.

5 In order to clarify this very broad and often misunderstood term, I cite Arnie Cox's definition of "cognition": "I am taking cognition to be the sum of the process of coming-to-know and coming-to-understand and to thus subsume all forms of perception, comprehension, and conceptualization." Cox, *Music & Embodied Cognition* (see note 3), 15.

> execution. I move through this feedback loop, enriched by provisional sketches, very often. A mill wheel keeps turning between my inner hearing, my fingers and the characters on the paper. The result sounds completely different than my first ideas: the anatomical features of my hands and the configuration of the piano keyboard have reshaped my imagination. Also, all the details of the resulting music have to fit together coherently, like gears meshing together. The criteria for this are only partly in my imagination. Partly they are also in the keyboard. I have to feel them with my hands. György Ligeti (1996)[6]

From the perspective of cognitive science, György Ligeti's descriptions of his process of creating the piano etudes are extremely informative. Following his descriptions, he first "felt" the keyboard and then, through tactility, developed "mental" (movement) "images" through which he was able to imagine sounds. This resulted in sonic "fantasy images" that were transformed by concrete sound realization and sketch-like notations that attempted to approach what he heard through abstraction and to capture the listening impression. This process, repeated in a loop, can also be described as a "translation process" (in a broader sense), since it is only through this that the "original"—after Walter Benjamin[7]—comes to light: an "original" which, in the present case, is expressed sonically and oscillates between imagination (in the sense of artistic-creative

6 Translated by Michael Schnack after György Ligeti, *Gesammelte Schriften*, ed. Monika Lichtenfeld, vol. 2 (Mainz and Berlin: Schott, 2007), 288: "Ich lege meine zehn Finger auf die Tastatur und stelle mir Musik vor. Meine Finger zeichnen dieses mentale Bild nach, indem ich Tasten niederdrücke, doch die Nachzeichnung ist sehr ungenau: Es entsteht eine Rückkoppelung zwischen Vorstellung und taktil-motorischer Ausführung. So eine Rückkoppelungsschleife wird, angereichert durch provisorische Skizzen, sehr oft durchlaufen. Ein Mühlrad dreht sich zwischen meinem inneren Gehör, meinen Fingern und den Zeichen auf dem Papier. Das Ergebnis klingt ganz anders als meine ersten Vorstellungen: Die anatomischen Gegebenheiten meiner Hände und die Konfiguration der Klaviertastatur haben meine Phantasiegebilde umgeformt. Auch müssen alle Details der entstehenden Musik kohärent zusammenpassen, wie Zahnräder ineinandergreifen. Die Kriterien dafür befinden sich nur zum Teil in meiner Vorstellung, zum Teil stecken sie auch in der Klaviatur—ich muß sie mit der Hand erfühlen."

7 See Walter Benjamin, "Die Aufgabe des Übersetzers" (1923), in *Gesammelte Schriften*, vol. IV.1, ed. Tillman Rexroth (Frankfurt a.M.: Suhrkamp, 1971), 9–21; also Antoine Berman, Isabelle Berman, and Valentina Sommella, eds., *The Age of Translation: A Commentary on Walter Benjamin's "The Task of the Translator,"* translated and with an introduction by Chantal Wright (Abingdon and New York: Routledge, 2018).

fantasy) and notation (in the sense of fixing it in writing).[8] The resulting musical structures are then spun out to form a larger web, which, as a whole, expands in space rather than in time—a kind of standstill in motion.[9]

For Ligeti, composing seems to have been a highly sensorimotor experience: starting from (visual and tactile) ideas of movement, he imagined sounds which were then compared with his auditory perception in order to create a notated composition. The fingers, hands, and ultimately the body of the composer represent a kind of "membrane"[10] between the inner and outer world of his music—that is, between his sonic imagination and its audible realization.

> Since tactile concepts are almost as important as acoustic ones in decent piano music, I refer to four great composers who thought pianistically: Scarlatti, Chopin, Schumann, and Debussy. We feel a Chopinesque melodic turn or accompanying figure not only with our ears, but also as a tactile form: as a succession of muscle tensions. Well-formed piano writing creates physical pleasure.
> One source of such acoustic-motor pleasures is the music of many African cultures south of the Sahara. The polyphonic interaction of several musicians on the xylophone—in Uganda, in the Central African Republic, in Malawi and in other places—as well as the playing of a single performer on the lamellophone (Mbira, Likombe or Sanza) in Zimbabwe, in Cameroon and in many other places have prompted me to search for similar technical possibilities on the piano keys. (I owe much to recordings and theoretical writings of Simha Arom, Gerhard Kubik, Hugo Zemp, Vincent Dehoux and several other ethnomusicologists.)
> Two insights were essential for me: on the one hand, the way of thinking in movement patterns (independent of European ways of thinking about rhythm), and, on the other hand, the possibility of obtaining illusionary melodic-rhythmic configurations from the combination of two or more

8 See also, from inter- and transdisciplinary perspectives: Susana Zapke, ed., *Notation, Imagination und Übersetzung* (Wien: Hollitzer, 2020); Fabian Czolbe and David Magnus, eds., *Notationen in kreativen Prozessen* (Würzburg: Königshausen & Neumann, 2015).

9 See Ivanka Stoïanova, "Über Klang-Verästelungen und über die Form-Bewegung," in *György Ligeti. Personalstil—Avantgardismus—Popularität*, ed. Otto Kolleritsch (Wien and Graz: Universal Edition, 1987), 222–32. In regard to this topic see also note 68.

10 The term "interface" could also be used here. But the metaphorical description of the composing body as a "membrane" seems to me more appropriate, especially in this particular case. This term is organic, not media technical, and thus is not only closer to Ligeti's imagined world but also refers to the neurobiological foundations of cognitive science.

> real voices (that are heard but not played). These are analogous to Maurits Escher's "impossible" perspective images. György Ligeti (1996)[11]

As striking as the intellectual leap from Scarlatti, Chopin, Schumann, and Debussy to sub-Saharan musical cultures may initially seem, the phenomenon that Ligeti believes he recognizes both here and there is identical: music is not "absolutely" heard,[12] but "physically" "felt." This is not accomplished only by "listening"[13]—read and be astonished!—but also as a "tactile form" based on a sequence of "muscle tensions." Ultimately, this refers to a sense of movement for which our sensorimotor system or proprioreceptors and, as a consequence, our kinesthesia is responsible.[14] As Ligeti emphasizes, this creates an "acoustic-

11 Translated by Michael Schnack after Ligeti, *Gesammelte Schriften* (see note 6), 288f.: "Da in adäquater Klaviermusik taktile Konzepte fast so wichtig sind wie akustische, berufe ich mich auf die vier großen Komponisten, die pianistisch dachten: Scarlatti, Chopin, Schumann, Debussy. Eine Chopinsche Melodiewendung oder Begleitfigur fühlen wir nicht nur mit unserem Gehör, sondern auch als taktile Form, als eine Sukzession von Muskelanspannungen. Der wohlgeformte Klaviersatz erzeugt körperlichen Genuß. Eine Quelle solcher akustisch-motorischen Genüsse ist die Musik vieler afrikanischer Kulturen südlich der Sahara. Das polyphone Zusammenspiel mehrerer Musiker am Xylophon—in Uganda, in der Zentralafrikanischen Republik, in Malawi und an anderen Orten—sowie das Spiel eines einzigen Ausführenden am Lamellophon (Mbira, Likombe oder Sanza) in Simbabwe, in Kamerun und in vielen anderen Gegenden haben mich veranlaßt, ähnliche technische Möglichkeiten auf den Klaviertasten zu suchen. (Viel verdanke ich dabei den Aufnahmen und theoretischen Schriften von Simha Arom, Gerhard Kubik, Hugo Zemp, Vincent Dehoux und mehreren anderen Ethnomusikologen.) Zwei Einsichten waren für mich wesentlich: zum einen die Denkweise in Bewegungsmustern (unabhängig vom europäischen Taktdenken), zum anderen die Möglichkeit, aus der Kombination von zwei oder mehreren realen Stimmen illusionäre melodisch-rhythmische Konfigurationen zu gewinnen (die gehört, doch nicht gespielt werden), analog etwa zu Maurits Eschers 'unmöglichen' perspektivischen Gestalten."

12 Here not only designating "absolute listening" but also "absolute music." See Carl Dahlhaus, *Die Idee der absoluten Musik* (Kassel: Bärenreiter, 1978).

13 Ligeti's statement that we can "feel" with our sense of hearing is not as strange as it might seem. Our vestibular organ is located in the inner ear. Responsible for our sense of balance, and equipped with receptor cells for the perception of movement, especially the position of the body in space, it is closely linked to our hearing nerve (Nervus vestibulocochlearis). Thus the connection between hearing and moving as well as perception of movement—or, hearing and a "feel" for movement—has a physiological basis.

14 For a current discussion of the term "kinesthesia," see Maxine Sheets-Johnstone, "Kinesthesia: An Extended Critical Overview and a Beginning

motor enjoyment" that comes from two sources: on the one hand, from thinking in "movement patterns" and, on the other hand, from (melodic-rhythmic) perceptual illusions through the superposition of "two or more real voices." From the perspective of Gestalt psychology, one could also speak of acoustic tilting figures that, when heard, oscillate between different possibilities of musical pattern formation as acoustic shapes.[15] In this context, it becomes clear once again that our (hearing) perception does not passively absorb stimuli. Instead, we actively select from different perception possibilities and model what is perceived (heard) in order to create meaning—not in semantically charged sense, but as meaningfulness in relation to our perception.[16]

A sub-area of cognitive science known as enactivism focuses precisely upon this aspect: an active accessing of our senses of the diverse stimuli of our environment for the purpose of adapting what is selected or to its integration into one's own sense-making. Thus the term: our perception is "enacted". Just as in embodiment theories of cognitive science, research in the field of enactivism also assumes that perception takes place throughout our bodies and with all of our senses ("embodiment"). Enactivism emphasizes very emphatically that our (physical) body[17] is embedded within a physical, social and cultural environment that has an impact on it ("embeddedness"). Accordingly, our body is not only limited to its biological constitution, but can

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Phenomenology of Learning," in *Continental Philosophy Review* 52/2 (2019), 143–69, here 144, https://doi.org/10.1007/s11007-018-09460-7. In this essay, Sheets-Johnstone, an established expert in this field, forcefully underlines the difference between proprioception and kinesthesia. This difference is often overlooked and leads to confusion. The receptor cells for proprioception are located in outer, visible organs in order to pass on information about our body and its position in space. Kinesthesia, on the other hand, collects information about the body's own feeling "through internally-mediated neuro-muscular systems, hence systems that are not dependent on external stimuli but that are anchored in and register a continuous sensitivity to movement." Ibid., 144f., especially 145. Cf. for this topic also my introduction to this volume, especially notes 5 and 31.

15 See also Dylan van der Schyff, Andrea Schiavio, and David J. Elliot, *Musical Bodies, Musical Minds. Enactive Cognitive Science and the Meaning of Human Musicality* (Cambridge, Mass. and London: The MIT Press, 2022), here especially 76ff.

16 See also note 51.

17 This term denotes here the physical body which also includes a phenomenological body: that is, our body as an organ of perception. Concerning the terminology of the phenomenological body, see Emmanuel Alloa, Thomas Bedorf, Christian Grüny, and Tobias Nikolaus Klass, eds., *Leiblichkeit. Geschichte und Aktualität eines Konzepts* (Tübingen: Mohr Siebeck, 2012).

also expand through its integration into this environment ("extension"). In the context of music, the body can be supported by instruments which ideally become a part of ourselves. In this respect, it only makes limited sense to distinguish between an inner and an outer world: all living beings are closely intertwined with their surroundings through permanent exchange processes and are therefore essentially constituted by their environment/world.[18]

It is tempting to connect such theories, which seek to explain our perception of ourselves in our world, with Ligeti's compositional process. He also describes a physically anchored (embedded/situated) listening, involving all the senses. Visuality, haptics/tactility[19] and kinesthesia are undoubtedly of particular importance here. In this state, one's own sound ideas or imaginary sound structures (comparable to events in a musical "inner world") are compared with "real" sound events (the audible "outside world") through permanent "feedback loops" (comparable to metabolic exchange processes) in order to generate meaningful sound structures. As Ligeti explains in his own, visually descriptive language, "All details of the resulting music [must] fit together coherently, like gears meshing together." He seems to casually—en passant—refer to deeper meanings here.

Reinhard Meyer-Kalkus attributes this understanding of composition, which is based on ideas of movement that are as fine and subtle as they are complex and structured, to a "motor intelligence" (see below). He refers to the neurobiologist Gerhard Neuweiler, who coined this term. György Ligeti, who is known to have always had a great interest in scientific connections, which he transformed artistically, met Neuweiler during a joint stay at the Science College in Berlin in 2000/01. It is hardly surprising that the neuroscientist with an expertise in intelligent motor skills and the sound acrobat with an affinity for movement immediately discovered how their interests intersected. They entered into an intensive transdisciplinary exchange with one other

18 Drawn from these four terms used in enactivism ("embodied," "embedded," "extended" and "enacted"), we speak of "4E Cognition," which designates a more specific form of "embodied cognition" that contradicts mechanistic, ultimately symbolic as well as linguistically determined, so-called "representational" models for explaining our understanding. Cf. with regard to musical phenomena: van der Schyff, Schiavio, and Elliot, *Musical Bodies, Musical Minds* (see note 15), especially 48f.

19 In the research literature, haptics (as active grasping and touching) is mentioned as a generic term to which tactility (as a more subtle touching and feeling) is subordinate. Cf. for example Sebastian Sprenger, *Haptik am User Interface. Interfacedesign in der zeitgenössischen Medienkunst zwischen Sinnlichkeit und Schmerz* (Bielefeld: transcript, 2020), 31 (chapter "Ist es noch Taktilität oder schon Haptik?").

beyond the boundaries of science and music.[20] This was at the same time when Ligeti was working on his eighteenth piano etude entitled "Canon," which he dedicated to Fabienne Wyler—a Swiss painter who initially trained as a pianist and composer (with Ligeti, among others) and, like Ligeti, "synthesizes" or "synchronizes" auditory and visual impressions; that is, she does not perceive these as categorically separate phenomena.[21]

Movements between Listening and Watching—Interdependencies with the Special Case of Interferences

Although Neuweiler's theses on "humans becoming human through motor intelligence"[22] may be controversial in neuroscientific circles, they are undoubtedly stimulating when it comes to explaining the imaginary and (real) tactile and visual movement components ultimately taking acoustic form that are so essential to Ligeti's compositional process. It is important to Meyer-Kalkus to emphasize that the "enjoyment of physical movements"[23] mentioned by Ligeti (also in regard to the interpreters of his music) far exceeds basic human needs. It includes an additional imaginative play instinct (based on perceptual phenomena and curious exploration of the same).

> Music is perfected in the inner ear, in the auditory imagination of acoustic fantasy structures. What matters is what sounds, and this can be quite different from what is played and how. […] It is precisely the discrepancy between the patterns of muscle tension and the auditory form that can become a source of enjoyment for the performer. This difference between auditory image and movement image applies particularly to illusionary rhythms, inherent melodies, differential tones and other forms of *trompe l'oreille* in which Ligeti's musical œuvre is so rich. It applies even more to the supersignals of formal structure that adhere together from the individual sound events.[24]

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20 For documentation of this stimulating exchange, see Reinhard Meyer-Kalkus, ed., *György Ligeti, Gerhard Neuweiler. Motorische Intelligenz. Zwischen Musik und Naturwissenschaft* (Berlin: Wagenbach, 2007).

21 See Manfred Stahnke, *György Ligeti—eine Hybridwelt. Umkreisungen* (Norderstedt: Books on Demand, 2022), 69ff.

22 Cf. the postface by Reinhard Meyer-Kalkus in the volume *Motorische Intelligenz. Zwischen Musik und Naturwissenschaft* (see note 20), 79.

23 Ibid., 81.

24 Translated by Michael Schnack after ibid.: "Musik vollendet sich im inneren Ohr, in der Hörvorstellung akustischer Phantasiegebilde. Entscheidend ist, was erklingt, und dies kann durchaus unterschieden sein von dem, was und wie gespielt wird. […] Gerade die Diskrepanz zwischen den Mustern der

The "discrepancy" mentioned by Meyer-Kalkus between physical movement for the purpose of sound production and the sonic result,[25] as well as the "difference" mentioned between sound imagination, sound production (via "muscle tension") and notation, can also (and in my opinion even more precisely) be described as "interference phenomena."[26] This is because they are not limited to (mostly irritating) desynchronizations, but alternate with (overlapping) synchronizations[27] of the audiovisual kinesthetic sensory stimuli in a way that is comparable to synesthetic overlays. Such interference phenomena, which fluctuate between irritation and integration, are reinforced by those perceptual illusions ("illusory rhythms, inherent melodies, differential tones and other forms of *trompe l'oreille*"—see above), which gave Ligeti a special "enjoyment of physical movements." Citing the example of "Vertige," his ninth piano etude, he describes concrete features of this process. In this context, he also speaks explicitly about interference, which, however, he "only"

Muskelanspannung und der auditiven Gestalt kann für den Ausführenden zur Quelle des Genusses werden. Diese Differenz zwischen Hörbild und Bewegungsbild gilt besonders für illusionäre Rhythmen, inhärente Melodien, Differenztöne und andere Formen des Trompe-l'oreille, an denen Ligetis musikalisches Œuvre so reich ist, und sie gilt erst recht für die Supersignale der Formstruktur, die aus den klingenden Einzelereignissen zusammenschießen."

25 As a reminder: Ligeti spoke in this regard of "illusory melodic-rhythmic configurations […] that are heard, not played" (see quotation at note 11).

26 In the field of physics, the term "interference" describes the change of the amplitude of a wave due to the overlaying of two or more sound, light or material waves. A comparable phenomenon—the synchronization of differing bio-rhythms—is described in the field of chronobiology as entrainment. In recent dance research, these and similar terminologies (such as that of entunement) are transferred to choreographic design. They are well suited for the analysis of music-choreographic and sound performative phenomena. Cf. Gabriele Brandstetter, "'Wirbel der Zeit.' Synchronisierungen in *Work/Travail/Arbeid* from Anne Teresa de Keersmaeker," in *De/Synchronisieren? Leben im Plural*, ed. Gabriele Brandstetter, Kai van Eikels, and Anne Schuh (Hannover: Wehrhahn, 2017), 153–69; Elizabeth Waterhouse, "Entrainment und das zeitgenössische Ballett von William Forsythe," in ibid., 197–219; Dominik Mohs, *Kinästhetische Interferenzen. Körpertechnik und Tanznotation im Entwurfsprozess architektonischer Räume* (Bielefeld: transcript, 2021).

27 In addition to the anthology mentioned in note 26, Brandstetter, Eikels, and Schuh, eds., *De/Synchronisieren*, see—for comparable phenomena in the field of art—also the publication by Robin Curtis, Gertrud Koch, and Marc Siegel, *Synchronisierung der Künste* (München: Fink, 2013); and for everyday and therapeutic fields: Thiemo Breyer, Michael B. Buchholz, Andreas Hamburger, Stefan Pfänder, and Elke Schumann, eds., *Resonanz—Rhythmus—Synchronisierung. Interaktionen in Alltag, Therapie und Kunst* (Bielefeld: transcript, 2017).

(this limitation is understandable from his perspective) relates to the tonal level:

> One of my compositional intentions is to create an illusionary musical space in which what was originally time and movement presents itself as something timeless and immobile.
> The basic idea of the ninth etude is a constant slipping and collapsing, whereby the temporal process is frozen and the collapsing becomes a state. Technically, descending chromatic scales form the basis of the piece. But before one such run is finished, the next one begins, so that an interference of wave movements occurs—the individual waves roll over one another. Although the chromatic runs are regular in themselves, their combination results in a chaotic pattern due to the constantly changing intervals. As with a picture puzzle, our perception oscillates between the runs as movement and their interference as a static image.[28]

A constant changing between synchronization and desynchronization of different, audio-visual kinesthetic stimuli also characterizes the relationship between Ligeti's piano etudes and their choreographic translation by Elisabeth Schilling. The interferences between (imaginary) listening, touching/feeling, watching and moving in the course of sound creation[29] and concrete (sound) realization from which Ligeti's etudes arise are now magnified audiovisual-kinetic through the choreographic translation or transfer of the composition to a stage. The visible movements not only behave synchronously with the sound events.[30] There are also (inevitably) differences between the two arts, whether

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28 Translated by Michael Schnack after Ligeti, *Gesammelte Schriften* (see note 6), 294 ("Vertige" [Nr. 9]): "Eine meiner kompositorischen Intentionen ist die Erzeugung eines illusionären musikalischen Raumes, in dem sich das, was ursprünglich Zeit und Bewegung war, als etwas Zeitloses und Unbewegliches darstellt. Die Grundidee der neunten Etüde ist ein ständiges Abgleiten und Einstürzen, wobei der zeitliche Vorgang eingefroren, das Einstürzen zu einem Zustand wird. Technisch bilden abwärts laufende chromatische Skalen die Basis des Stückes. Doch bevor noch ein solcher Lauf beendet ist, beginnt schon der nächste, so daß eine Interferenz von Wellenbewegungen entsteht—die einzelnen Wellen überschlagen sich. Die chromatischen Läufe sind zwar in sich regelmäßig, doch ergibt ihre Kombination, aufgrund der ständig wechselnden Einsatzabstände, ein chaotisches Muster. Unsere Wahrnehmung pendelt, wie bei einem Vexierbild, zwischen den Läufen als Bewegung und ihrer Interferenz als statischem Bild."

29 See Denys Bouliane's contribution, which provides a detailed analysis of this phenomenon: "Imaginäre Bewegung. György Ligetis *Études pour piano*," in *MusikTexte* 28/29 (März 1989), 73–84.

30 Originating in film music, the term "Mickey Mousing" has also become established in choreomusical research to designate music and dance which

they arise through selective, targeted alienation or temporally/spatially more extensive and perceptually deeper estrangements. This oscillation between synchronization and desynchronization of the audiovisual-kinetic events or the changing between emergent and difference experiences on the level of perception creates aisthetic[31] interferences—even if these are "only" perceptual illusions due to cross-modal or multimodal interweavings of different sensory stimuli.[32] From the latter perspective, the choreography is neither dependent on the sound event nor completely independent. Instead, the auditory and visual "sensations" are situated in a relationship of interdependence. The

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are meticulously coordinated with one other—primarily rhythmically, but also melodically and/or tonally/harmonically—and thus appear "synchronized," even though in films the music is usually added later, whereas in dance the choreography is largely created against an existing musical template (as in our current example, Elisabeth Schilling's choreography to Ligeti's piano etudes). See Barbara White, "'As if they didn't hear the music,' Or: How I Learned to Stop Worrying and Love Mickey Mouse," in *The Opera Quarterly*, vol. 22, no. 1 (2006), 65–89, https://www.doi.org/10.1093/oq/kbi108, as well as the contribution by Philipp Feeney in this volume.

31 For the term "aisthesis" compare the contribution of Birgit Abels to this volume.

32 Cross-modal or multimodal perception is first and foremost a very general term for the interaction of different sensory systems. The interaction of intermodal features that are present in several modalities quickly leads to the integration of different sensory stimuli. Interference, on the other hand, arises from the interaction of different sensory stimuli, which, due to their overlap, create a new or different sensory impression in which the two initial stimuli can no longer be separated (the so-called McGurk-effect, see for an introduction: Ulrich Ansorge and Helmut Leder, *Wahrnehmung und Aufmerksamkeit* [Wiesbaden: Springer, 2011], 135ff.; one could also speak here of emergence effects: see note 35 below). With regard to the interaction between listening and watching, it is worth noting that, depending on the disposition of the perceiver, either the auditory or the visual stimulus is perceived more strongly and influences the overall impression accordingly: listening changes watching and vice versa, whereby both what is heard (that is, music) as well as what is seen (that is, dance) change and no longer correspond to the perception of the composition without the choreography or the choreography without the composition. For discussion of this perception phenomenon known as "auditory capture" as opposed to "visual capture" in the context of music-choreographic analysis, see Allen Fogelsanger and Kathleya Afanador, "A Mirror in Which to Dance: Actions and the Audiovisual Correspondences of Music and Movement," in *Bewegungen zwischen Hören und Sehen. Denkbewegungen über Bewegungskünste*, ed. Stephanie Schroedter (Würzburg: Königshausen & Neumann, 2012), 129–49.

composition can be perceived as a sound event that is just as "present" as the movement event—and vice versa.[33]

Formulated in Gestalt psychology terms, this structure is characterized by supersummativity. That is, the sum of the structure's individual elements is more than their "simple" summation—to the extent that such a thing is even possible in artistic creation processes in which different sensory impressions are "intertwined" with one another. Through the interplay of composition and choreography—which refers directly to Ligeti's compositional process on a conceptual macro level, but for this reason does not attempt to visualize or even illustrate the music on a micro-sound level[34]—emergence effects come into action. Since the 1950s, these emergence effects have been at the center of systems theory thinking. They are now also being taken up in complexity theory in order to research the interaction of dynamic factors in an interdisciplinary and transdisciplinary manner in the natural sciences, humanities/social sciences, and computer sciences. Basically, it is assumed that a structure that emerges from this background (for example, an organism or a system) is more than or even something new and ultimately completely other than the sum of the components from which it emerges. It is hardly surprising that, at the same time, such emergence phenomena have also been being experimented with in the arts—especially in such event-oriented or performative aesthetic approaches that place the effects and ultimately the possibilities of perception of artistic creations at the center of their interest.[35] Correspondingly, a paradigm shift

33 From a perspective of production aesthetics, this is a choreography made to pre-existing music—a composition created previously and not originally intended to be implemented in dance. Therefore it cannot enter into a "relationship" with the stage event. This point of departure is of fundamental importance for a choreomusical (staging) analysis, but not for performance analysis focusing on the interweaving of movement and sound, which concentrates on perceptual-aesthetic phenomena.

34 On the difference between choreographic music visualizations and music illustrations see Stephanie Schroedter, "Musik als Bewegung. Transformationen musikalischer Energetik im Tanz," in *Energie! Kräftespiele in den Künsten*, ed. Katrin Eggers and Arne Stollberg (Würzburg: Königshausen & Neumann, 2021), 369–81.

35 A paradigmatic example of this—drawn from the field of the interaction of music/sound and dance/movement—are the *Variations* V, based on a composition by John Cage (1965: with the participation of David Tudor, Gordon Mumma, Billy Klüver, Stan VanDerBeek, and Nam June Paik, among others); the Merce Cunningham Dance Company participated in its performative implementation. See Leta E. Miller, "Cage, Cunningham, and Collaborators: The Odyssey of *Variations* V," in *Musical Quarterly*, vol. 85, no. 3 (Fall 2001), 545–67, or with regard to overarching contexts: Julia H. Schröder, *Cage & Cunningham*

must also be carried out from a choreomusical staging analysis, which primarily examines the development and production of a creation, to research into the interweaving of sound and performative movement, which focuses in particular on the possibly intended effects and modes of perceiving artistic events.

Listening to Music with our Sense of Movement—Understanding Music Kinesthetically

Ligeti's statement that we "feel a Chopinesque melodic turn or accompaniment figure [...] not only with our listening, but also as a tactile form, as a succession of muscle tensions" is much more than the subjective expression of a creative artist. It is, rather—as will be explained in more detail below—a prerequisite for understanding choreomusical or sound performance creation processes. Ligeti describes a connection between listening and the sensation of movement (via tactility and muscular tension) in relation to sound production. This interweaving of different sensory impressions is by no means tied to a specific musical practice (such as composing, improvising or interpreting), as it characterizes our perception of music in general. As already mentioned, music can be perceived "as" motion that takes place (virtually) in space and time.[36] In doing so, we draw on the experiences of our everyday life through our moving body in time and space, ultimately depending primarily on our sensorimotor skills and our sense of movement alias kinesthesia.

Arnie Cox emphasizes in his studies on music cognition, that our learning (not only of music) is fundamentally mimetic ("mimetic comprehensions"). He distinguishes between an "overt mimetic behavior," which he calls "mimetic motor action" (MMA), and a "covert mimetic behavior," which he describes as "mimetic motor imagery" (MMI):

Collaboration. In- und Interdependenz von Musik und Tanz (Hofheim: Wolke Verlag, 2011). For a more recent, comparable experimental arrangement in this context in which a complex interface was developed with the generation of digital notation processes in order to create an interdependent connection between instant choreography and instant composition, see Penelope Wehrli and Vera Pechel, eds., *Eadweards' Ear—Muybridge Extended. Environment für Tänzer, Musiker und Interface. Gespräche, Überlegungen, Notizen* (Basel and Berlin: Edition Achsensprung, 2022); Stephanie Schroedter, "Interactions and Correspondences between Music/Sound and Dance/Movement as Permanent Negotiations of Translation Processes," in *Music, Dance, and Translation*, ed. Helen Julia Minors (London and New York: Bloomsbury Academic, 2023), 49–62.

36 See note 3 above.

> By imitation I mean not only the overt behavior of "monkey see, monkey do" but also covert imitation that occurs only in imagination. These forms of imitation occur whenever we attend to the behavior of others, whether in the performing arts or athletics, or in learning a particular skill from someone else's demonstration, or in merely taking an interest in what others are doing. When we imitate overtly or covertly, in effect we are responding to two implicit questions: *What's it like to do that*? And its twin question, *What's it like to be that*? We answer these questions in part by overtly and covertly imitating the behaviors of others.[37]

Without going into detail at this point about Cox's very differentiated arguments, which are always clearly comprehensible despite (or perhaps because of) their considerable abstraction, the shortest possible summary of his statements is that our musical life and understanding of music is fundamentally motivated by motor skills, therefore always motion-based—and that ultimately means: kinesthetically grounded.

At the beginning of the twentieth century, Theodor Lipps had already referred to sensorimotor imitation as a fundamental human "drive," which in turn was an essential prerequisite for (aesthetic) empathy.[38] Applied to musical phenomena, this would mean that we are able to "empathize" with sound events (cf. Cox' question: "What's it like to be that"?) through a (quasi-instinctive) sensorimotor rapport in order to understand them as meaningful, i.e. to create meaning in the sense of "cognition".[39] In relation to the topic at hand, the question arises to what extent such explanatory models can also be transferred to our perception of visible movements/dance and, even more, to the interplay of music and dance—choreomusical or sound-performative events such as those created by Elisabeth Schilling to Ligeti's piano etudes.

More recently, Jin Hyun Kim has built upon Theodor Lipp's comments on aesthetic empathy in order to establish a specifically kinesthetic understanding of music.[40] This approach is very forward-looking in that not only our hearing, but (much more comprehensively) the majority of our sensory perceptions are sensorimotoric—that is, based on sensations of movement. Kim starts from "mental imagery"—mental visual images—and on this basis defines a "kinaesthetic modality of mental imagery" as a central cognitive ability in which sound

37 See Cox, *Music & Embodied Cognition* (see note 3), 11f.

38 See Theodor Lipps, "[Der Begriff der Einfühlung]," in *Schriften zur Einfühlung*, ed. Faustino Fabbianelli (Baden-Baden: Nomos Verlag, 2018), 678.

39 Cf. notes 5.

40 Jin Hyun Kim, "Kinaesthetic Musical Imagery Underlaying Music Cognition," in *Music and Mental Imagery*, ed. Mats B. Küssner, Liila Taruffi, and Georgia A. Floridou (Abingdon/Oxon: Routledge, 2023), 54–63, https://www.doi.org/10.4324/9780429330070-6.

events are perceived as (one's own) dynamic movements without necessarily to becoming (externally) visible.

> Kinaesthetic imagery which could underlie the imagination of motion, however, is neither necessarily the imagination of previously performed motor action nor the imagination of imitated motor action that could be executed during perception. [...] kinaesthetic imagery that is not any imagination of (imitated) motor action is about awareness of self-movement that can be overt or covert. [...] kinaesthetic imagery [...] can be considered to involve understanding processes, since it can imitatively single out relevant musical properties, such as rhythm and dynamics, in a way that takes a specific perspective and shows a structural correspondence between imagery and perceived musical properties.[41]

In this context, Kim points out that at the beginning of the twentieth century, Edward Bradford Titchener, in his attempt to translate Theodor Lipp's epoch-making concept of empathy as "aesthetic rapport"[42] into English, made a distinction between a "kinaesthetic image" and a "kinaesthetic sensation," whereby (according to him) the kinesthetically influenced visual image refers back to an (imaginary) movement experience, while the kinesthetic "sensation" primarily reflects physiological processes.[43] Therefore, Kim emphasizes that kinesthetically influenced perceptions can best be described by phenomenologically influenced theories about processes in our consciousness, as they focus primarily on qualitative aspects of our sensory experience:

> For instance, when we hear musical sound events, we hear them in such a specifically inward way that we can trace what it is like to hear each event, the transitions between those events, and what it is like to feel those dynamics. Phenomenal consciousness is directed towards those experiential properties, not towards a series of musical events—although there could be a correspondence between musical properties and experiential properties.[44]

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41 Ibid, 58f.

42 Theodor Lipps, "Aesthetische Einfühlung," in *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*, 22 (1900), 415–50; as well as, "Einfühlung, innere Nachahmung, und Organempfindungen," in *Archiv für die gesamte Psychologie*, I (1903), 185–204.

43 Edward Bradford Titchener, *Lectures on the Experimental Psychology of Thought-Processes* (New York: The Macmillan Company, 1909); cited here from Kim, "Kinaesthetic Musical Imagery Underlaying Music Cognition" (see note 40), 56.

44 Kim, "Kinaesthetic Musical Imagery Underlaying Music Cognition" (see note 40), 56.

Based on this definition of a kinesthetic understanding of music, Kim develops a far-reaching concept of musical practices, drawing on research by the developmental psychologist Daniel Stern.[45]

Stern's forms of vitality address the behavior of living beings as well as artistic phenomena that are constituted by both movements in time and space as well as force and directionality, whereby these parameters relate to one another relationally. They are of particular interest in regard to interactions that involve all sensory modalities to promote the "inter-affectiveness" of interpersonal understanding. These forms of vitality manifest themselves in externally visible movements as well as in mental processes—in invisible dimensions of our aesthetic experience. Above all, they show *how* life develops relationally in its dynamics, not as a basis to explain *what* shows up—for example, to describe emotional content or mental concepts as comparatively static states.[46] Since Stern initially carried out his investigations into forms of vitality in the area of (child) developmental psychology and only later transferred them to time/space-based arts (performing arts in a broader sense),[47] it stands to reason that there is still considerable potential for differentiation.

This is where Kim begins with her concept of musical practices, which focus on coordinated, non-representational forms of vitality (according to Stern). She understands these forms of vitality as structures that are designed through creative processes on the basis of musical material such as timbre, pitch, volume, rhythm, melody, and harmony—whether as composition, improvisation, interpretation, or ritual. These specifically musical expressions of vitality are not to be understood as a sequence of individual elements, but primarily in their Gestalt contours (in the sense of Gestalt psychology). The "holistic" and at the same time "figurative" properties of these figures can be described as their "inner dynamics," which are not syntactically (not statically) structured, but energetically charged.[48]

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45 Jin Hyun Kim, "Musicality of Coordinated Non-Representational Forms of Vitality," in *Journal of Comparative Literature and Aesthetics*, vol. 46, no. 1 (spring 2023), 175–85; relating, among others, to: Stern, *Forms of Vitality* (see note 4).

46 Ibid., especially 178.

47 See especially the fifth chapter of Stern's *Forms of Vitality* (see note 4): "Vitality Forms in Music, Dance, Theater, and Cinema," 75.

48 This energetic property of music was already described by Ernst Kurth as dynamic movement (in *Grundlagen des linearen Kontrapunkts* [Bern: Max Drechsel, 1917]) and by Hans Mersmann as organic strength (in "Zur Phänomenologie der Musik," in *Zeitschrift für Ästhetik und allgemeine Kunstwissenschaft*, vol. 19 [1925], no. 1–4, 372–88), as mentioned by Kim, who thus refers to early psychological and aesthetic approaches within German-speaking musicology:

These forms of vitality are coordinated because movements in time and space as well as force or dynamics and directionality work together. They also rely on certain musical processes such as repetition, imitation, variation, sequencing, fragmentation, polyrhythmics, polymetrics, polyphony, heterophony, etc. The musical meaning of these forms of vitality can be understood through an re-enactment of the perceived experience ("experiental re-enactment")—be it through invisible, kinesthetic re-creation ("covert kinaesthetic imagery"), externally recognizable gestural-vocal activity ("overt gestural-vocal activity"), or through "interactive participation" such as dancing. A direct reference to the world is created—not as a bridge to a supposed "outside world" (separate from the musical "inner world"), but as a perception that goes beyond the self and develops primarily in interaction with musical forms of vitality.

> Hence, what musical forms refer to are not the things given in our reality (realitas) separately from the things that do within a world of musical understanding, but rather the world (actualitas) co-constituted while (co)shaping musical forms of vitality.[49]

This approach can also be transferred to analysis of sound performance events, which is less about describing individual situations and more about examining dynamic developmental processes such as the difference, interference and emergence phenomena described above. In addition, it is more suitable for a sound-performative analysis (research into sound and performative movement) because forms of vitality not only refer to mental images of what is immediately present (so-called "representations" in the sense of neurophilosophy), but also to purely dynamic, content-free forms of expression (without semantic attributions). Kim describes the latter as non-representational forms of vitality.[50]

It is tempting to speculate about the extent to which choreographies or (dance) improvisations to music/sounds (be they compositions or improvisations) that focus primarily on movement qualities—beyond semantically charged narratives—can be considered audiovisual and in particular sensorimotor-kinesthetically grounded forms of vitality. Based on Kim's theories, it is necessary to determine the energies and dynamics inherent in these non-representational, coordinated choreomusical forms of vitality with an eye to their specifically sound-performative meaning.[51]

Kim, "Musicality of Coordinated Non-Representational Forms of Vitality" (see note 45), 180. See also for the immediately following ibid., 181.

49 Ibid., 182.

50 Ibid.

51 Not understood in the sense of linguistic semantics (as an assignment of meaning), but as a specifically musical sense or logic—for example, comparable

From Music "as" Motion to Motion "as" Music

When Lukas Ligeti seemingly somewhat jokingly states that "all music is danceable if you understand what it is about," he not only continues the multisensory approach of his father, but also his father's scientifically ambitious, analytically permeated understanding of music, though with new means and in his own way. He seems intuitively to allude to a latent, kinesthetically grounded understanding of music in which visible or invisible movements are of essential importance, whether as mimetic imitations (Cox) or as dynamically coordinated, non-representational, kinesthetically grounded forms of vitality (Kim). This latter understanding contains mimetic imitations, but does not primarily focus on them. In this respect, the understanding of music outlined by Kim is much more far-reaching: both through the inclusion of kinesthesia as a source (or essential starting point) for diverse possibilities of expression of musical vitality as well as through the corresponding reconceptualization of musical practices. Starting from the premise that music is heard either directly with the sense of movement, that is, "as" a dynamic movement in space and time (empathically) or understood visibly or invisibly ("openly" or "covertly"), it is, ultimately understood kinesthetically. Finally, the gates are opened to a (very wide) dance-based understanding of music as well as a music-based understanding of dance, which also sees dance practices as coordinated, non-representational expressions of vitality that can be used in choreographies, improvisations, interpretations, or rituals. As a starting point for discussions Jaques-Dalcroze's components of a "plastique animée" or "moving sculpture" must be recalled, which were formed analogously to musical parameters.[52]

An understanding of musical elements in dance and vice versa: of dance elements in music—or, more general: music "as" motion and motion "as" music—is at the center of performance analyses, that concentrate on the interweaving of sound and movement. These in no way replace choreomusical (structural) analyses, but seek to expand them, enriched through recent developments in cognitive science and drawing on latest developments in

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to the interlocking of "gears" in a composition as described metaphorically by Ligeti.

52 For more information, see Stephanie Jordan, *Moving Music. Dialogues with Music in Twentieth-Century Ballet* (London: Dance Books, 2000), 15; available in German in Émile Jaques-Dalcroze, *Rhythmus, Musik und Erziehung*. trans. Julius Schwabe (Basel: Verlag Benno Schwabe & Co, 1921), 169. Cf. for this topic also Juliet McMains and Ben Thomas, "Translating from Pitch to Plié: Music Theory for Dance Scholars and Close Movement Analysis for Music Scholars", in: *Dance Chronicle*, 36:2, 196–217, https://www.doi.org/10.1080/01472526.2013.792714.

performance art that experiment specifically with the sound and movement.[53] An indispensable prerequisite for this seems to be a kinesthetic listening–i.e. a listening that is connected to our sense of movement, which is able to perceive music as a dynamic, if not visible, but at least audible movement in space and time and to relate it to dance (in the broadest sense) as a visible movement.[54]

Translating Music into Movement— Traces for a Sound Performative Analysis[55]

In his linguistic-philosophical essay "The Task of the Translator"–a groundbreaking essay for cultural and media translation research–Walter Benjamin[56] postulated that an original text and its translations are never congruent and never stand in a relationship of primary and secondary to one another. Instead, there is a constant interrelationship between the two types of text–one could also speak of two or more forms of artistic expression[57]–in which it is quite

53 Stephanie Jordan has pursued this approach in her third monograph, dedicated to choreomusical analysis methods, in which she examined the artistic œuvre of the exceptionally musical choreographer Mark Morris: *Mark Morris: Musician–Choreographer* (Binsted: Dance Books, 2015), especially chapter 4: "A Framework for Analysis," 91–123 (see note 61).

54 For this purpose, music and movement pedagogy–known as "rhythmics," founded by Émile Jaques-Dalcroze (see notes 52 and 58)–offers professional training enabling artistic-creative, resilience-strengthening practical use in all "agogic" fields and contexts: pedagogical, andragogical, geragogic, and cross-generational. Elisabeth Schilling worked with students of the Department of Music and Movement Education/Rhythmics (mbp) at the University of Music and Performing Arts Vienna (mdw) to create a choreography to the opening of the first Ligeti etude ("Désordre"), which was presented as part of my inaugural lecture on 25 Oktober 2022.

55 On the term "trace" as a methodical approach see: Sabine Karoß and Stephanie Schroedter, eds., *Klänge in Bewegung. Spurensuchen in Choreografie und Performance* (Bielefeld: transcript, 2017), especially my contribution "Audio-visuellen Bewegungen auf der Spur. Zum Konzept eines klangperformativen Spurenlegens und Spurenlesens," 25–44 as well as the introduction 9–22. Although this article is also "searching for traces," this approach–explained in detail elsewhere–will not be discussed here in depth.

56 See note 7 above.

57 On further choreomusical or dance-related approaches within translation studies, see Helen Julia Minors, *Music, Dance and Translation* (London and New York: Bloomsbury Academic, 2023) as well as her contribution: "Translations between Music and Dance: Analysing the Choreomusical Gestural Interplay in Twentieth- and Twenty-First-Century Dance Works," in *Translation and*

possible that something implied but not expressed explicitly, in the original comes into play only through translation. According to Benjamin, it is less about a "literal" translation of the original into another language (or into another artistic form of expression) and more about a (semantic) transparency that strives to translate what is meant into another language (or form of expression). But who decides what is or was "meant," especially if the author (or composer etc.) can no longer comment on the issue? Can this intention even be determined and defined? Is it not subject to constant change? What's more, doesn't it have to change constantly in order to be able to communicate itself in an understandable way (according to our changing times)? And finally—approached in the context of artistic forms of expression, which will be discussed below—is it actually about a (verbalizable) "intention" or rather about artistic designs of dynamics in the sense of forms of vitality that address (multimodal) overarching perception-aesthetic phenomena? The embedding of sound phenomena into synesthetic perception contexts sought by Ligeti Senior and the possibility of tracing music/sound back to dance phenomena/movement mentioned by Ligeti Junior offer insightful clues to answer this question. Elisabeth Schilling's choreography *Hear Eyes Move*—an artistic-creative translation of Ligeti's *Études pour piano*—offers further insight on this question through its visible, plastic[58]

Multimodality: Beyond Words, ed. Monica Boria, Ángeles Carreres, María Noriega-Sánchez, and Marcus Tomalin (London and New York: Routledge, 2019), 158–78; additionally, relating to artistic research at the Tanztheater Wuppertal and its "afterlife": Gabriele Klein, *Pina Bausch und das Tanztheater: Die Kunst des Übersetzens* (Bielefeld: transcript, 2019), in English translation: *Pina Bausch's Dance Theater: Company, Artistic Practice and Reception* (Bielefeld: transcript, 2020) as well as the anthology she edited, cross-culturally conceptualized around the example of tango: *Tango in Translation. Tanz zwischen Medien, Kulturen, Kunst und Politik* (Bielefeld: transcript, 2009), and her contribution with Marc Wagenbach, which deals especially with socio-political aspects in the context of dance and performance, "And so You See … On the Situatedness of Translating Audience Perceptions," in *Situated in Translation. Cultural Communities and Media Practices*, ed. Michaela Ott and Thomas Weber (Bielefeld: transcript, 2019), 191–213.

58 Émile Jaques-Dalcroze, with his pedagogically and didactically oriented concept of "plastiques animés" (three-dimensional "plastic" or "sculptural" music visualizations using various exercises) sought primarily to promote musicality. Although the subject he founded (and the field which has been built upon it) are called "rhythmics," he was by no means only concerned with "rhythmic" parameters, but equally with melodic, harmonic and dynamic ones. In addition, he was by no means concerned with dance training as such, even if his exercises proved also to be very helpful for those dancers seeking to engage intensively with music in their choreographic work. This approach—more or less referring

and directly kinesthetic dimensions.[59] This is the first choreography in which all eighteen etudes of the composition, that Ligeti worked on between 1985 and 2001, are implemented in dance for the first time. Overall, this cycle (divided into three etude collections) is considered Ligeti's most outstanding late work and a central element of his artistic legacy.[60]

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to Jaques-Dalcroze's "plastiques animés"—continues to be important in the field of music and movement pedagogy/rhythmics. See Jaques-Dalcroze, *Rhythmus, Musik und Erziehung* (see note 52), especially chapter 19 "Rhythmik und bewegte Plastik" (1919), 166–85.

59 While Ligeti's music, starting with the resounding success of Stanley Kubrick's *A Space Odyssey* (1968/2001), was often used in "soundtracks" for film productions (see the extensive filmography at: http://www.gyoergy-ligeti.de/filmographie/index.html, accessed 25 March 2024), it is less well-known that his music is also often used for choreographies—as musical "pre-scripts," so to speak. Though no list of such choreographies exists, a few prominent examples must be mentioned: Karole Armitage's *Ligetis Essays* on *Sippal, dobbal, nádihegedüvel* (*With Whistles, Drums and Reed Violins*) for mezzosopran and percussion, *Harom Weöres-dal* (three songs based on texts by Sándor Weöres) for singing voice and piano, as well as *Négy lakodalmi tánc* (four Wedding Dances) for three singing voices and piano (New York 2007), also the choreographies by Martin Schläpfer *Musica ricercata* (Mainz 2003), *Ramification* (Mainz 2005) and *Lontano* (Amsterdam 2009) (each to Ligeti's composition of the same name). Compositions by György Ligeti (*Volumina* for organ from 1962 as well as *Coulée*, the second etude for organ from 1969) were also used in Boris Charmatz's "choreographic Happening" *Wundertal/Sonnborner Straße* (Wuppertal 2023). Also noteworthy is the cross-disciplinary "Education-Projekt" to Ligeti's Piano Etudes, premiered in 2014 as part of the Ruhr Piano Festival: https://www.klavierfestival.de/education/projektdokumentationen/2014-ligeti-etudes/, accessed 25 March 2024.

60 At this point it is not possible to go into further detail about the reception of this composition in the extensive literature on Ligeti. It should be mentioned, however, that Elisabeth Schilling sought contact with the relevant Ligeti expert Jean-François Boukobza in order to obtain detailed information about the analytical and aesthetic aspects of this composition. See Jean-François Boukobza, *György Ligeti. Études pour piano* (Genf: Éditions Contrechamps, 2019).

Figures 1a–e: *Translation process from imagination to a fragmentary documentation: Drawings by Elisabeth Schilling as preparation for the creative process (a–d) and table of the overall structure of the choreography (e). © Photo by Stephanie Schroedter with kind permission from Elisabeth Schilling*

Figures 2a–h: *Exhibition of material from the research process for the choreography in the context of a first performance of parts of the choreography on August 7, 2020 within the frame of the Mosel Music Festival in the former Church of St. Maximin/Trier. © Photos by Stephanie Schroedter with kind permission of Elisabeth Schilling*

Elisabeth Schilling's engagement with Ligeti's music began with intensive choreomusical research: not, however, in the sense of a scholarly analysis focused on the relationship between music and choreography[61], but as an artistic practice dealing in detail with the score and also with overarching theoretical-aesthetic connections to the composition in order to creatively 'translate' it—to be able to transfer it into another artistic form of expression.[62] Schilling emphasizes that she first translates the music—one could also say: the musical forms of vitality (according to Kim)—into graphic drawings that reflect textures:

> In order to process the music with all senses, I begin to make drawings. These drawings are very intuitive and perhaps one can say that they express the textures that I experience physically two-dimensionally while listening to the music. These drawings may then serve me as an inspiration for both movement and spatial composition during the creative process.[63]

The fact that music and dance each have their own materiality and mediality makes a "literal" translation impossible: the movements that can be on the one hand heard and on the other hand seen can never be congruent. At most there can be analogies[64] between the two arts that "move" in space and time. How-

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61 Stephanie Jordan has provided essential foundations for specific music choreographic research—referred to as choreomusicology—that is currently establishing itself in Anglo-American musicology (see notes 52 and 53). She is currently working on the choreomusical œuvre of Richard Alston (see her contribution in this volume).

62 The following statements are based on my week-long observation of rehearsal work and the visit to a final public performance (significantly limited due to Corona-related restrictions) of parts of the choreography on August 7, 2020 within the frame of the *Mosel Music Festival* in the former Church of St. Maximin/Trier. Elisabeth Schilling presented her choreography in great detail at a symposium I organized entitled *Musik als Experimentierfeld für Bewegung*, which took place from September 14th to 16th, 2020. In addition to this, from January 5th to 8th, 2023 there was an intensive meeting exclusively to discuss the choreography. I would like to thank Elisabeth for her patience and generosity in giving me this comprehensive insight into her artistic work.

63 Citation from an interview which Elisabeth Schilling gave with me at the Symposium *Musik als Experimentierfeld für Bewegung* (see note 62) on September 15th, 2020.

64 On this theoretical approach see Lawrence Zbikowski, "Music and Movement: A View from Cognitive Musicology," in *Bewegungen zwischen Hören und Sehen* (see note 32), 151–62, as well as his "Points of Contact: Bases for Translations between Music and Dance," in *Music, Dance, and Translation* (see note 35), 29–48; as well as, bedded in a comprehensive music theory concept, his *Foundations of Musical Grammar* (see note 3).

ever, these analogies not only relate directly to concrete musical and dance parameters, but they can (and should) also extend to common, overarching aesthetic concepts of composition and choreography, whereby the dance can become independent of the score and still remain connected to the musical "ideas." Moreover, from the perspective of audiovisual-kinesthetic perception, it is not the process of creating the production or the choreomusical staging (its "being made") which is crucial, but rather the actual sound-performative event, with its interweaving of music and dance as audible and visible movements.[65]

For a choreographic translation work based on such premises, Ligeti's musical "universe" offers an inexhaustible reservoir. It arises from a multisensory, synesthetically grounded imagination but at the same time requires clear structures—preferably with reference to scientifically researched phenomena that (at least metaphorically) refer to Karl Popper's thought figures "Clocks and Clouds."[66] They are also echoed in Elisabeth Schilling's choreography, whereby, as an independent organism, each choreographic etude exhibits its own finely crafted structures interwoven with an inexhaustible movement fantasy.

Schilling speaks of islands on which there are stones, grasses, flowers, fountains, and lumps of ash and which are abstracted through dance—or of villagers who are connected to one another, even if they are far apart.[67] Networks develop between plants, living beings, and inanimate things. These trigger chain reactions or fractal-like configurations that give rise to non-linear figurations borrowed from chaos theory. They illustrate socio-political and ecological conflict, but without visualizing them blatantly. There is a characteristic fluctuation between predictable and therefore seemingly calculable elements ("clocks") and unexpected, quasi-unpredictable, supposedly unstructured elements ("clouds"), constantly lending the event new twists and nuances (like shades of color). This choreographic approach is thus less favoring dance movements that especially trace lines, but more about movement textures which relate to the entire ensemble, merging into an overarching movement corpus that subsumes the individual bodies. This

65 This fact, which is by no means insignificant for the analysis, has already been mentioned above (in note 33) and will be further elaborated in the following, so that it has to be emphasized again here.

66 See Karl Popper, "Of Clocks and Clouds. An Approach to the Problem of Rationality and the Freedom of Man," in Popper, *Objective Knowledge. An Evolutionary Approach* (Oxford: Clarendon, 1972), 206–55; as well as Ligeti's composition *Clocks and Clouds* for twelve-voice women's choir and orchestra (world premiere: Graz 1973).

67 Allusions to the Corona pandemic, which was virulent at the time of the production, cannot be ruled out.

corpus constantly evolves in a kaleidoscopic manner, changing and reacting to the musical textures in order to allow sound-performative dynamics to emerge from them.

Even if rhythmic parameters of the etudes often come to the fore, it is primarily the sounds that open up musical spaces for (wide-ranging) qualities of dance movement. This is because the piano etudes consist of sound fields that overlap one another and constantly change (thanks to their "internal" movements)—insofar as it makes sense to distinguish between rhythm and sound in relation to these compositions and not to speak of sound rhythms in general.[68] The choreography develops from a superimposition of movement and sound textures that can (and should) not only be heard and seen, but also kinesthetically understood. They emerge from, interfere with and/or clearly differentiate themselves from one another, as will be shown in the following. This approximately one-hour choreography will be, on the one hand, cursorily summarized in its form and, on the other hand, analyzed more in depth using individual "samples."

At the outset, three female and two male dancers enter as shadowy figures—almost imperceptibly and barely audibly—into a large, dark stage space with flooring (a dance carpet) extending to the top edge of the back wall (and beyond it, so to speak). The room is thus filled with a generous, gentle curve extending backwards and upwards, ultimately making it appear unlimited. The pianist is at the side, positioned close to the left corner of the back of the stage and sitting in front of her large black concert grand piano, which extends into the stage space. One end of a white runner is rolled up beneath the piano; this extends in an elegant curve, rising slightly diagonally upwards to the far right corner of the stage ceiling. Because of the lighting used at the beginning of the choreography, this element crosses the dark stage space like a bright beam of light.

The piece begins in absolute silence. The first sound is caused by the falling movement of a male dancer positioned centrally at the back of the stage. This is followed by a sound of breathing from a female dancer on the right, which accompanies a downward swinging movement and short sideways movements

68 This has already been suggested in a quote by Ligeti above (see note 28). For a detailed presentation of Ligeti's musical spatial concepts in relation to their temporal structuring, see Christian Utz, "'Plastisch greifbare Präsenz': Raum-zeitliches Klang-Denken bei György Ligeti und seine musikhistorischen Konsequenzen," in *Jahrbuch des Staatlichen Instituts für Musikforschung 2023*, edited by Simone Hohmaier, Berlin 2025, 6–30, https://doi.org/10.71046/simjb.2023.12.

by a female dancer positioned on the left. This is followed by the stomping of a male dancer standing in the middle of the front of the stage and finally a rolling movement of the male dancer in the background who first broke the silence and triggered this first chain reaction of the movement signals. The entire stage becomes slowly lit and the dancers, initially scattered across the room, come together and form a group. These first gestures and movements already establish the concept that nothing happens here at random and arbitrarily: everything is precisely coordinated, even if this plan is not immediately apparent and the logic of the structures only gradually unfolds.

This mood changes suddenly with the sudden onset of music, the percussively uplifting first etude "Désordre," which spins a tonal texture of fast runs with penetrating, almost hammering chordal strikes. The initial calm of the scene is broken by angular movements, performed by individual, constantly alternating, dancers and giving the impression of a hectic, pulsating swarm.[69] Much use is made of rotations, alternating with upward and downward movements (such as bending/falling and standing up with stretches and backward hyperextensions). This formation works its way diagonally across the stage from the upstage right to downstage left, basically maintaining this movement texture, and then—while the pianist climbs the highest registers of the keyboard—switching to slower and smoother movements. Gliding over the floor, interspersed with swings and spiral movements and loosened by light, gentle touches of movement "color," the swarm moves across the stage diagonally back to the starting point. Once there, the music stops as suddenly as it started. The chaos ("Désordre") seen and heard in the choreography is only superficial: in fact, complex structured figurations can be perceived on the levels of movement and sound. Initially they are differentiated significantly one from the other, but increasingly interfere with one another and finally merge into an audiovisual-kinesthetic overall structure. Or have the composer and choreographer deceived us—or has our own perception also done so?

In Ligeti's second etude, "Cordes à vide," a female dancer separates herself from the group and develops a web that extends into space with delicate, finely contoured and comparatively linear movements. These gradually develop and condense into polytextures thanks to varied movement qualities, dynamics and orientations. Initially beginning in silence, these movements carefully weave

69 On swarm movements in choreography and performance as well as movement research including (socio-)political and ecological contexts see Gabriele Brandstetter, Bettina Brandl-Risi, and Kai van Eikels, eds., *Schwarm(E)Motion. Bewegung zwischen Affekt und Masse* (Baden-Baden: Rombach Wissenschaft, 2007).

themselves into the sound events by underlining the different musical parameters and setting new accents—that is, interfering, with striking motifs. In this context, the choreographic textures in their microstructure form their own level in relation to the sound event. Through their macrostructure, they create a homogeneous conglomerate of movements and sounds. In this way, sound movements emerge.

This solo also demonstrates Schilling's body and movement concept of a "manifold body," which is both constantly in motion (even invisibly) and constantly changing between new and different spatial (alignments), movement qualities and their temporal design—comparable to a marionette whose individual parts can (apparently) move completely independently of each other. It is therefore a constantly changing body of movement in its dynamic forms of vitality (as a soloist or in relation to the entire ensemble), which Schilling developed on the basis of Ligeti's piano etudes—a dance counterpart to this music.

> The "manifold body" is an improvisation methodology that I developed over the last years and which is strongly inspired by Ligeti's music, but also by artists like William Forsythe, Deborah Hay and the Gaga technique. […]
> The notion of a "manifold body" originally springs from an attempt to understand the body as a complex whole. Generally speaking, it introduces a set of six interrelated, variable layers: the architectural body, or the body in and as space, the rhythmical body, the timing of the body, its temporality, but also its musicality; the imaginative body, the entire complex of our images, imaginations and associations; the resonating body, all the echoes and reverberations of the world passing through the body through the eyes of the audience; the textural body, the body as a multiplicity of individuating intensities, finally the transitional body, at the threshold between states, a catalyst of creativity at the moment of decision, both closing down and opening up possibilities.
> The method posits the body as a manifold of coexisting perspectives, providing inspiration for new forms of movement in a process of continuous becoming. Practising the "manifold body", the dancer is never still, neither in mind nor in the body. The dancer always is on the move, in creation, in flux. Centres of thought ceaselessly shift, inspirations ceaselessly change, there is no safety, no stability. Visual, sensual, rational and other impulses and stimuli are intertwined and entangled.
> In this sense, one could maybe see a relation to the state that the pianist of Ligeti's *Etudes* finds himself in: playing Ligeti's *Etudes* demand a great amount of technical skill of the pianist. Most of the *Etudes* keep the pianist on the edge of what is humanly playable on the piano. According to the pianist who works with me on *Hear Eyes Move*, playing Ligeti's *Etudes* never makes you feel safe, but leaves you in a constant state of flux, instability and ceaseless movement in the mind as well as the fingers.
> Moreover, similar to Ligeti's late compositional influences, the "manifold body" encapsulates a manifold of inspirations, often expressed or creatively

> used in tiny subtle layers which could be of an either technical, performative or compositional nature within a work. The technique of the "manifold body", its philosophy and consequence in movement and presence forms the basis of all of my work.[70]

At the choreographic center of the third etude "Touches bloquées" (based on the pianistic technique of silent key blocking) there is initially a duo in which the two participants repeatedly try to reach one another, ultimately in vain. This is perhaps comparable to a courtship dance which is fatefully unsuccessful while latently desynchronized. The irregular rhythm of the wild and unpredictable jumping tonal sequences, permanently interrupted by the key blocking, corresponds to abruptly breaking off, stubbornly contrary and self-shifting movements. In the middle part of the etude, in which the key blocking ceases, these are contrasted by clearly synchronized movements that follow the harsh chord sequences strictly (through dissonant intervals of seconds). This creates short-term homogeneity on the movement and sound level before, in the final section, the entire ensemble weave themselves into the stage action with their initial, highly desynchronized differentiated movements.

The fourth etude, "Fanfares," is characterized by an ensemble structure that appears to be disjointed across the stage, but whose members are connected to one another by an invisible, yet clearly audible (since strictly rhythmic) network—comparable to a mycelia-like tissue. The initially angular, choppy movements are contrasted in the middle part by decidedly slow, expansive gestures that evoke associations with a ballet adagio. They stand in stark contrast to the fast, consistently sustained ostinato runs of the etude, so that an unmistakable contrast opens between the levels of movement and sound. Finally the net stretched between the dancers—originating in the movement style developed at the beginning—merge with the shrill, fanfare-like melodic phrases.

In contrast, the fifth etude "Arc-en-ciel" elicits a transition to a completely new mood. As at the beginning of the choreography (i.e. the first etude), the entire stage is in deep darkness except for a single beam of light on which the isolated, introspective dancers carefully moving, some on tiptoe. The piece begins and ends with a striking "lamenting gesture" by a male dancer standing at the left downstage of the stage. Looking up towards the stage ceiling, he raises his right arm upwards—perhaps seeking help?—while his left leg is stretched slightly backwards to visually continue the stretch of his extended arm throughout his entire body. The delicate sound figurations of the etude begin in the

70 Excerpt from the interview mentioned in note 63.

higher registers and, as the composition progresses, gradually open up the entire tonal range. In contrast, the dancers' space of movement remains tightly limited–except for the "lament gesture" that points beyond the stage space. This creates a striking audio-visually-kinesthetically perceptible discrepancy between the conception of the sound space and that of the movement space. And while the strictly abstract drama of the stage events in the fifth etude is accompanied by a more atmospheric sound, it is musically developed in much more detail in the sixth etude "Automne à Varsovie," a "lamento piece,"[71] designed as a fugue.

Figure 3: *Moment of implosion from "Automne à Varsovie" © Bohumil Kostohryz*

Again like the choreography of the first etude, "Désordre," "Automne à Varsovie" begins in a silence that is only broken by the noises of the dancers. In this way, an arc stretches from the beginning to the end of this collection of etudes (in its choreography), dramaturgically rounding off the first book. In "Automne à Varsovie" music and dance initially confront each other in an affirmative way. Musical accents are given emphasis through dance movements, at first primarily through repeated gestures which vary but tend

71 This description comes from Ligeti himself. See *Hamburger Jahrbuch für Musikwissenschaft* 11 (1991), 362.

to be sculptural and related to (mute) choral lament of the whole ensemble. In addition, the fugue structure of the etude is echoed by the canonical movements of the dancers. These are characterized by a minimal time shift, comparable to an echo that is, if not audible, at least visible. Analogous to "Désordre," the dancers move across the stage in swarm formations that constantly change their contours. They are clearly driven by inner unrest, reeling in fear, desperate and panicked at the same time. A brief moment of respite with heads bowed is deceptive, and nothing more than a brief calm before the next storm. As if struck by lightning and controlled by someone else, the swarm starts moving again, whirling through the room with twisting and swinging movements and forming a circle, the inner tension of which leads to an implosion.

The movement and sound events are driven equally by vibrating, one could say irrepressibly seething forces. These rear up again and again after more subdued moments and finally culminate in a final climax. Then everything abruptly stops and is plunged back into the initial darkness. No matter how abstract this drama may be, it is clearly highly dynamic and energetically charged, and conveyed by musically and dance-nuanced forms of vitality, which (in the case of the sixth etude) differ and interfere only minimally in terms of perception aesthetics. Instead, there mainly emerges a tonally moving conglomerate, pouring lava-like into the auditorium as if after a huge volcanic eruption at the end of this etude—this impression is at least apparent from the perspective of perception, which can hardly escape the "powerful" energy of the dance event.

The choreography of the seventh etude "Galamb Borong," which opens the second book, refers to colors of Indonesian-African music, which seems to bring Ligeti's imaginary and fantastic island "Kondortombol"[72] to life. The same stage lighting is used as at the beginning of the first book (as well as at the beginning of the fifth etude "Arc-en-ciel"). The grand piano shines on a white runner while the rest of the stage sinks into darkness. All attention is focused on the pianist. The dancers are clumped together on the floor like a coarse-grained sedimentary rock, the contours of which can only be seen vaguely. They only start to move and rise vertically towards the end of the etude.

72 See Constantin Floros, *György Ligeti. Jenseits von Avantgarde und Postmoderne* (Wien: Lafite Verlag, 1996), 185.

Figure 4: *Cathy Krier, the pianist of* Hear Eyes Move. Dances with Ligeti © *Bohumil Kostohryz*

In the eighth etude "Fém," the stage shines again in bright light and reveals a strictly rhythmic movement game characterized by spiral movements and rotations and underpinned on the sound level by a polyrhythmic texture. It is a game of interference both within the choreography itself and between music and movement. Towards the end, it unmistakably prepares the next etude "Vertige," in which varied interfering pendulum movements are used. These gradually turn into a feeling of vertigo ("Vertige") characterized by a far-reaching, expansive oscillation. In the tenth etude, the "Der Zauberlehrling" ("Magician's Apprentice"), this quality of movement is transformed into a veritable "perpetuum mobile," the structure of which becomes increasingly dense and finally

discharges itself—primarily on the sonic level—in a final concentration of energy. The machine-like musicality is contrasted by a highly virtuosic solo, which presents—from a dance perspective—"diabolical" challenges. Rapid changes between extremely contrasting movement qualities in different rhythms and with permanent changes of direction (within the body as well as in space) require the male performer to possess a level of control that limits consciousness. Ultimately, there unfolds a sound-performative, immersive "magic" on the edge of human possibilities.

On a musical level, the eleventh etude, "En Suspense" ("In Suspense"), plays with complementary opposites that unfold on a polyrhythmically designed web between the two hands, ultimately evoking a floating lightness. The choreography of this etude begins in silence, initially broken only by the movement sounds of a female dancer who gradually separates herself from the ensemble. Her wide arm swings seem to extend the floating sounds into the room, almost giving them wings. This flapping of wings is augmented by the dancers who gradually join in and form, in the twelfth etude "Entrelac" ("Network"), an imaginary bird that continually creates new flight formations and allows itself to be driven by the sounds—that is, the movements and sound events are synchronized.

The thirteenth etude, "L'escalier du diable," is one of the most dramatic pieces of Ligeti's etude cycle. According to his descriptions, it deals with his experiences with a wildly raging storm on the California coast. The storm surprised Ligeti on a bicycle tour and he had to fight against it, virtually defenseless, in order to get back home. Ligeti compared this experience to "an endless climbing, a wild apocalyptic vortex, a staircase [...] almost impossible to ascend."[73] The composition begins pianissimo in the lower registers and increases to a fortissimo in the high registers, repeatedly peaking at the limits of strength and falling again and again. The choreographic design of this etude unmistakably references "Automne à Varsovie." In both pieces, the stage is only illuminated by a diagonal beam of light on which a large part of the movement occurs. At the same time, movement motifs from "Désordre" are used (partly in inversion or choreographic retrograde) and now dramatically brought to a head. Regardless of the dark mood on both the movement and sound levels, the choreography engages the musical feats of strength with a gradual reduction of the movement material, ending with a seeming powerless exhaustion of the dancers' movements, and culminates in a final collapse, making the greatest possible contrast to the sound event—a true anticlimax.

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73 Cited in Richard Steinitz, *György Ligeti. Music of the Imagination* (London: Faber and Faber, ^{2}2013), 308.

Figure 5: *Ensemble with Cree Barnett-Williams (front), Elisabeth Christine Holth and Brian Caillet (behind), Piera Jovic (left) and Valentin Goniot (right) in "L'escalier du diable" © Bohumil Kostohryz*

The fourteenth etude "Columna infinita" is also initially characterized by minimal use of movement, even including to a (seemingly) lifeless stay on the stage floor. Then the music intensifies monumentally (an acoustic counterpart to the sculpture of the same name by the Romanian sculptor Constantin Brâncuși), reaching threatening masses of sound. Here, too, the greatest possible difference between the movement and sound increases the intensity of the audiovisual-kinesthetic scenery. It is in no way leveled out.

With "White on White," the fifteenth etude, in which only white keys are used, a calmer, peaceful mood sets in. This marks the beginning of the third book and prepares the three following pieces that conclude this cycle of etudes, all of which retain this basic affect. Aggressively rising sound cascades that oscillate between presto and prestissimo are now replaced by more conciliatory, subtly dissonant, grounded melodic lines that interweave with one another, mostly canonically. The choreography of these last etudes often draws on movement motifs and formations from the previous pieces. Seen from a perceptual-aesthetic perspective, these are, however, changed in quality and given new nuances through the new acoustic contextualization. The familiar is thereby alienated and the known acquires new facets that alienate it from its origin and transform it into the unknown—comparable to a memory that opens

up new spaces of experience and, as it were, allows us to look both backwards and forwards.

Figure 6: *Ensemble with the pianist Cathy Krier in "Columna infinita" © Bohumil Kostohryz*

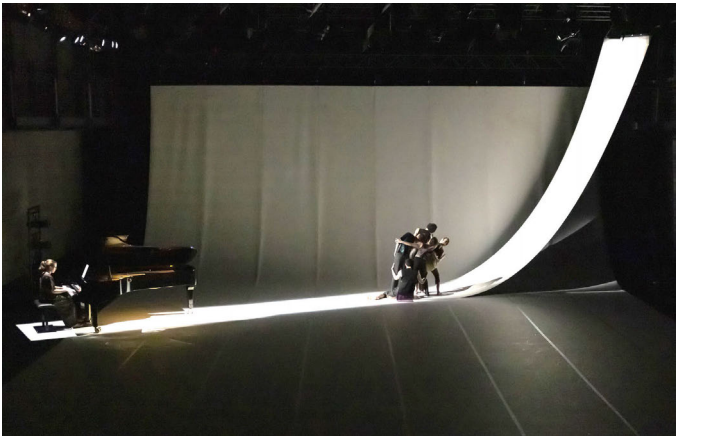

Figure 7: *Finale of the last etude "Canon" with the same lighting as at the beginning of the first etude "Désordre", but now with the dance ensemble on the white runner, which is illuminated like a bright beam of light © Bohumil Kostohryz*

Hearing the Dance and Watching the Music
Echoes and Anticipations

Stephanie Jordan

Abstract: *The term "music visualisation" is familiar to dance theorists, historians and those engaged in what are now called choreomusical studies. It is an aspect of choreomusical tradition that deserves more attention, where relations might be less obvious and less persistent. Here there is an analytical approach demonstrating both disjunction, linkage and more in between. It is important that informing my work are theories of embodied cognition: we understand music and dance physically through mimesis. I illustrate these theories as they apply to the work of modern dance choreographer Doris Humphrey and of British ballet choreographer Frederick Ashton. My main examples are three contrasting sections from Richard Alston's work* Brisk Singing *(1997) to music from Rameau's* Les Boréades. *We see that music and dance map on to each other in unexpected ways and engage with new meanings. The research suggests new ambiguities and subtle distinctions, structural sophistication alongside emotional pressure.*

"How I Learned to Stop Worrying and Love Mickey Mouse" must be one of the most unforgettable sub-titles in dance scholarship. It appears in 2006 in *The Opera Quarterly* dance issue, heading an article by American composer Barbara White.[1] Meanwhile, the term music visualization rings familiar to dance theorists and historians (those, at least, involved in dance analysis) as well as those engaged in what are now called choreomusical studies, crossing both disciplines. There was an outstanding moment in dance history (c. 1919) when two Americans, Ruth St. Denis and Ted Shawn (Denishawn), came up with the title "music visualization" to announce their shift from making ethnologically-

1 Barbara White, "'As if they didn't hear the music,' or: How I Learned to Stop Worrying and Love Mickey Mouse," in *The Opera Quarterly* 22, no. 1 (Winter 2006): 65–89.

inspired dances to those prompted by musical detail, mostly within western music.

The detail in the case of such music visualizations was considerable; consequently the technique was sometimes belittled as "Mickey-Mousing," borrowing the well-known musical action feature from Disney and other cartoons. But soon, dance began to enjoy a less rigid, less mannered approach, in a tradition of music dances continuing into our own times and that features celebrated choreographers such as George Balanchine in ballet and Mark Morris in recent modern dance. Now, as White goes on to suggest, the field is much wider open for choreomusical practices. Perhaps it needed a composer to say that in so many words.

In this article, I draw attention to an aspect of this tradition that deserves more attention—and where relations might be less obvious and less persistent. Yet here is an approach to choreomusical practices that demonstrates both disjunction and linkage. The dualism that I stress treats music and dance no longer as inert phenomena, rather as bearing forces of attraction and loss.

Informing my work are theories of embodied cognition, in that we understand music and dance physically through mimesis. To borrow the mimetic hypothesis of Arnie Cox from his book *Music and Embodied Cognition*,[2] a significant part of how we comprehend music as an audience member is by imitation, covertly (through the imagination), and by activating particular areas of the brain dealing with motor behavior. So Cox writes of "feeling" rhythm through our imagined bodies, the shared experience of physical exertions. (He refers just a little to dance with music, but does not discuss the rhythm of dance exertions or choreomusical relations.) On the other hand, elsewhere in music psychology research, there is evidence of our capacity to "hear" visual rhythms, evidence that we tend to hear rhythms in the mind's ear that are synchronized with visual changes.[3] Furthermore, useful to this paper, just as we talk casually about likeness and harmony (or not) between the two media, recent studies in science have emphasized the up and down of audio-visual, Cross-Modal Correspondences (CMC—the term that is used by music theorist Zohar Eitan[4]).

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2 Arnie Cox, *Music and Embodied Cognition* (Bloomington, IN: Indiana University Press, 2017), 12, 34–5.

3 Sharon Guttman, Lee Gilroy, and Randolph Blake, "Hearing What the Eyes See: Auditory Encoding of Visual Temporal Sequences," in *Psychological Science* 16, no. 3 (March 2005): 228-35, accessed 10 January 2023, https://doi.org/10.1111/j.0956-7976.2005.00808.x.

4 Zohar Eitan, "Musical Connections: Crossmodal Correspondences," in *The Routledge Companion to Music Cognition*, ed. Richard Ashley and Renee Timmers (New York, NY: Taylor & Francis, 2017), 213–24; "Cross-modal experience of

In this article I focus on subtle choreomusical relations that are not simply simultaneous, in other words, that are neither regularly synchronous, nor bound to duplicating structures of rhythm and pitch across the two media. These relations either involve overlap in time or an actual gap in time, and they pull upon our memory. First, I introduce three relatively simple and brief examples encountered in my previous work within choreomusical studies. Then, I discuss various examples demonstrating further range and sophistication within the work of the British contemporary dance choreographer Richard Alston, all to be discovered within his dance *Brisk Singing* (1997) to music from the tragédie-lyrique (opera) *Les Boréades* (1764), by Jean-Philippe Rameau. All my examples are from non-narrative dances without plots or named characters. Each is fundamentally a series or suite of dances.

My first example of more subtle forms of visualization stems from research in the 1980s into the 1938 setting of J.S. Bach's organ *Passacaglia and Fugue in C minor* by the American contemporary dance choreographer Doris Humphrey.[5] I identified a dance rhythmic motif in the *Passacaglia*, which used as its starting point Bach's one-measure, short-long, crotchet-minim ground bass rhythm (crossing the measure-lines and starting on the upbeat). This rhythm continues without a break through the entire bass line of Bach's *Passacaglia* (in total, twenty variations). Humphrey borrows this rhythm for much of her choreography, but shifts it to happen one beat later, thus fitting between the measure-lines, starting with the short move leading on the downbeat. The result introduces syncopation, with a stressed accent on beat 2 of the measure. Her motif also introduces many different movement ideas to what is fundamentally the same dance rhythm motif.

In a number of variations, Humphrey turns her motif into a body and arm shift that she referred to as her own "ground bass" because it resembles the musical device. This is relevant here to my argument that there is here a close, even if tweaked, relationship between dance and musical structure. The choreography is especially striking when the chorus halt and, on the spot, perform the rhythmic motif in sharp tilts forwards and backwards in profile to the audience.

There is an element of disjunction here, a sense of being out of "sync"—you both hear and see a similar rhythm embedded within the musical meter, but you are also aware of a jarring factor that draws from the past, leaving a severe

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musical pitch as space and motion: current research and future challenges," in *Body, Sound and Space in Music and Beyond*, ed. Clemens Wöllner (New York: Routledge, 2017), 49–68.

5 Stephanie Jordan, *Music as Structural Basis in the Choreography of Doris Humphrey* (PhD dissertation, London University, Goldsmiths' College, 1986), 246–50.

shadow. Humphrey sought variety through her choreography, and the effect here is of resistance, an awkwardness, the dancers tugged along behind their music before ultimate resolution with musical structure.

Distant relations, however, can be much less constrained than this and are often less about motifs, and more about moments of attack. If, for instance, we turn to Balanchine's *Agon* collaboration with Stravinsky (1957) and its canons, we not only experience actual canons within the choreography but also a semblance of canons that involve the music.[6] The coda of the *pas de trois* provides an example of this and we see/hear it twice, with the repeat of the music. We first watch left to right across the three dancers in their racing canon of *entrechat* jumps and high kicks. These, in turn, would seem to prompt a series of high notes at the top of their register, on piercing flutes: the peak notes in this coda. After this, the opposite: the dancers' high kicks continue as the flute line descends. Through likeness, the dancers seem to carry with them the sound of the peak notes, as if these still ring out to us in a series of reverberations.

Other examples of visualization involving cross-reference are not about overlap between what you see and hear; they tend instead to involve a gap in time, a dance motif separately identified and seen before it is "heard," or vice versa, starting with the music. An example of this occurs in a ballet by the British choreographer Frederick Ashton, his *Enigma Variations* (1968), which is a piece about the friends of the composer Edward Elgar. Here, we see the choreographer playing with the motif given in "Variation 6" to the dancer representing the young woman in love Isabel Fitton. Her motif anticipates the music: across the measure-line, two little stutter jumps with feet together and a third jump spreading into second position. In other words, Fitton dances the motif across a legato moment in the music, but as if thinking ahead. Her rhythm only coincides with the music the second and third time round, at which point she becomes more settled, the tension resolved. Here you can read the anticipation as an indication of character, a display of eagerness in love or impatience as Fitton takes her opportunity to display her feelings. And this choreomusical moment really stands out, all on its own, but not without a charming eccentricity.

I turn now to my main example *Brisk Singing* by Alston, who created the piece in 1997 for the Richard Alston Dance Company.[7] For eight dancers, this is a setting of various numbers extracted from Rameau's opera *Les Boréades*. Alston

6 Stephanie Jordan, *Music Dances: Balanchine Choreographs Stravinsky* [DVD] (New York: The George Balanchine Foundation, 2010).

7 The section of this article on Richard Alston's work will be used and developed during Jordan's current research on Alston. It will be incorporated within her forthcoming book focusing on work for his recent dance company, the Richard Alston Dance Company.

has not set many of the opera's original dance numbers, preferring choruses, arias, recitatives, and orchestral pieces. His emphasis is on community, covering groups of all sizes, but no solos. Alston used the 1990 John Eliot Gardiner recording of this music. He did not use the arcane libretto about ancient dance and music-loving inhabitants of an imaginary kingdom at the back of the North Wind. Relevant to the points I make here, Alston's program note explains his love of the music:

> Known in his own time as "le dieu de la danse," Rameau's flow of lyricism, made edgy with wonderfully odd phrasing and urgent rhythm, speaks to dancers in a similar way to Stravinsky in our own century; both composers seemed able to breathe movement into all their music.

I discuss here three contrasting sections from *Brisk Singing*. Straight away this is challenging because of the sheer amount of information—in the music, for instance, shifting counterpoint between orchestral groups every few measures—and we might be forgiven for not spotting the exact ABA structure of both music and dance at early viewings. In section A, with exuberance, six dancers sweep across our vision—remember the allusion to the wind—forever assembling and re-assembling in triangular trio formations, single and double lines, often in the air and on the re-bound. Meanwhile, long skeins of movement develop without internal repetitions.

There is the challenge to mix our hearing with our seeing. At the start of the music, as the curtain rises, the dancers are arranged in two diagonal lines across the floor, their backs turned from us, knees bent upwards. They hold this position for several measures. The music begins with a key motif: minim-minim-semibreve, quick-quick-slow in unison across the full orchestra (mm. 1–2). Mm. 3–4 introduce smaller note values: repeating crotchets and stepwise falling quavers from horn and viola. But now, an echo on the woodwind breaks the phrase symmetry, m. 5 echoing m. 4, an elongation that disturbs the forward drive. The dancers seem suddenly to awaken, three times lightly tapping their heels to the quick crotchet beat, but before we fully register these tiny motions, they scramble to their feet ready to dance.

Such heel tapping is an odd introduction to a dance, indeed to the whole piece—so quick, you might blink and miss it—but it primes us for everything that follows, and the stress on two different speeds of regular beat, crotchet and minim, quick and slow, is highlighted by strong percussive attack or the light touch of pricking the ground. The silent beating of our own toes or tongues may well simulate these patterns, punctuated by brave flourishes of the arms and joyous leaps that sing from the bigger body. But let's go back to the feet again, for we may find ourselves "hearing" the quick and slow patterns of footfall as a

visualization of the past. We remember patterns that were articulated musically now finding their way into physical statements. Especially strong is the effect of a dancer stepping straight out towards us, commanding our attention.

The central dance section B begins playfully, the quick beat suddenly super-clear in four little pizzicato jumps, from right foot to left four times, music visualization in the old, strict sense, echoed in the legato rippling of the arms that follows. How surprising then to see these jumps and ripples both starting and finishing the slow duet that follows, carried over into a totally different context! This may be what Alston likes to call "tying the choreography together," a technique that modernists in both dance and music have long favored as a useful unifying principle. But here it also suggests rhythmic whispers from a distance, hearing the past in the present.

A *rigaudon* in the second half of *Brisk Singing* finds the group at their most earthy, like a folk ensemble, shedding any mythical bearing that might be left. The raw beats of the tambour are for stamping, and sharp, almost mocking, up-and-down leg and arm gestures are both heard and seen, all smack on the up-and-down notes of the melody line. This is the most "mickey-mouse" dance in the whole work, and with music and dance strictly in harness.

Brisk Singing ends with the entrée from Act IV of Rameau's opera, originally introduced to mark the arrival of Polimnie (the Greek muse of song and dance). Alston's program note prepares us by quoting conductor Gardiner describing the entrée as "perhaps the most melting and gravely sensual writing for orchestra to emerge from the entire Baroque era." It seems immediately to pull us more deeply into our private physicality. It is also a song without words: the movement set to it "sings." Finally the focus is on a man and woman whom we will grow to know particularly well, this time attending to the articulation of their torsos and arms rather than their feet. This is the longest dance of all in *Brisk Singing* and, despite its intimacy, it becomes the emotional climax of the whole work. Alston's duets are, after all, widely considered especially moving—some of his finest choreography.

A dominant motif led by a long, two-measure high note (D two octaves above middle C) is visualized by a breathtaking "big-lift" stage center. The woman is raised high to arch back over the man's head, her toes to toes pulled up beneath her to form a V, her arms, knees and body opened wide, an exhilarating image—but with darker connotations. There is something mysterious, even disturbing, about that lift as both dancers' faces are hidden from the audience's view. Next, the high D falls away into a descending octave scale. Alston borrows Gardiner's image of "melting" into the music as she slides gently floorwards, a slide that seems to last forever, with a long ripple through her spine bringing her to rest. Along the way she borrows an additional long

note and descending scale from the bassoon, drawing our hearing downwards. It is as if she is taken over by the music in overwhelming lament. She also seems to be obsessively needy with another personal motif, another arching back, fists and elbows multiple times raised as if in supplication.

The lifts and gestures, however, develop into a story despite the musical structure, a story that weaves its way through the full five minutes, with, in the second half, more frequent use of the floor and alternatives to the opening lifts. Even though the music is in a plain four-part repetition structure of AABB (binary form), with A and B balancing each other in length, the choreography relinquishes this constraint. New harmonies surprise us in the B sections as the dancers reconfigure in stretched diagonal formations, while, at two other points, they stand apart and hold still, listening to the big-lift music. Are we urged to listen differently back beyond what is actually seen and heard? Are we still visualizing something that is no longer actually there and that might seem even stronger in its absence? Are we still haunted by that big-lift? We, too, listen differently when the dancing stops. I count at least eight occasions where a long note is stressed in this way, and six of these during the B sections in a process of continuous development. Alston's large structure is much more about a series of choreomusical meetings where music and dance map on to each other in unexpected ways, and engage with new meanings.

The end of this duet is a surprise. There is one more big-lift, but it is not set to big-lift music: it is grounded by a modest cadential figure that matches the one at the end of Rameau's section A—no long high note followed by a downward scale, no longer any sense of a lament. For the first time in this context, the woman throws herself into the big lift and descent, now turning from upstage, then deftly rolling over on to on her back and drawing her knees upwards to assume the opening position of the whole work. It's a quick, quiet finish. The man observes from close by. The lights dim. Questions are raised about what this ending might mean: is there unfinished business here? Is this a temporary calm? Where do we go from here? Just as this ending might suggest a second beginning, it is also a point of relative closure—a point about musical form—the final perfect cadence and tonic chord now creating the end of a dance form. Such choreomusical interactions across time are unsettling—they were, too, in my earlier Humphrey, Balanchine and Ashton examples—and here they suggest new ambiguities and subtle distinctions; they certainly have little to do with Mickey Mouse—here, more likely, pathways to expression that are well worth exploration. The duet is a brilliant example of structural sophistication alongside emotional pressure.

Dances with Tables
Materialities of Dance Practices in Metal during COVID-19

Daniel Suer and Florian Heesch

Abstract: *Our chapter focuses on dance practices in metal in times of COVID-19 by way of a case study. Of particular interest are tables, which serve diverse functions and contribute to the materiality of dance practices as well as their modification. The case study concert featured table pits as modification of common circle pits. The chapter asks: How can we analyze what people were doing at this concert? How did fans, sounds, things, and more interact? What might this teach us about the relation of materiality and immateriality in (popular) cultural practices? Our analyses focus on how the table pits start, how they relate to circle pits, and how table pits relate to musical form and other body movements, highlighting the heterogeneous elements that factor into dance practices. We argue that table pits illustrate a tactical logic of action. Finally, we propose a co-constitutive relation between the tables' materiality, their discursive constructions, and their use by fans.*

Introduction

Among the numerous practices that constitute popular music cultures, dancing seems to belong to those that are generally less dependent on material things. In contrast to practices such as DJing and other instrumental activities, mediatized listening, or production practices, the materiality of dance, not unlike singing, mainly relies on moving bodies—although clothing, hair styles, jewelry, and footwear (or their absence) are also relevant. In cases in which people actually dance *around* a certain thing, this thing is usually inscribed with significant cultural or even ritual meaning such as a maypole, a Christmas tree, or the Old Testament's golden calf. Keeping this in mind, we would consider an observation we made during the COVID-19 pandemic in the summer of 2020

to be an oddity: At one of the few live events of the time—in this case a one-day metal festival—the audience danced around ordinary tables that are commonly found in beer tents. Originally, these tables were intended to ensure a safe distance between audience members due to the ongoing pandemic but, beyond that, they became part of the audience's dance practices. Within our current research project on the relation of music and dance in heavy metal,[1] this phenomenon caught our attention as it represented a fascinating constellation and entailed—as far as dance is concerned—a previously irrelevant actor in the form of the tables that turned out to be highly significant for the dance. We chose this event as a case study because we believe it provides us with insights into the flexible use of material things within music cultures and, despite it being a rather exceptional phenomenon, we can learn something about metal's "regular" dance culture. In order to better understand what we observed, our article is guided by the following questions: How can we meaningfully describe and analyze what people were doing at this concert? What role did material elements such as tables play? Or to put it differently: How did music fans, sounds, things, and other elements interact? What might this teach us about metal culture? And what can we learn about the relation of materiality and immateriality in (popular) cultural practices?

In what follows, we will provide a more detailed, yet broadly focused, ethnographic account of the event in question, before zooming in on the specific dance practices we observed and their relation to the music and the tables. Building on these analyses, we engage in a discussion of our guiding questions in the conclusion. First, though, we will turn to our theories and methods to clarify our basic approach to research, how we conceive of music and dance as phenomena at the center of our investigations, which perspectives guided our view during field work, and how we went about analyzing our empirical material. All of these aspects are based on the notion that the phenomena we study and indeed our knowledge (not just concerning these phenomena) are characterized by their ineluctable situatedness.[2]

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1 "Das Verhältnis von Musik und Tanz im Heavy Metal. Entwicklung eines Analysemodells zur situierenden Beschreibung ästhetisch-performativer Praktiken auf der Grundlage qualitativ-empirischer Erhebungen aus historischer und gegenwartsorientierter Perspektive—The Relation of Music and Dance in Heavy Metal. Developing a Method of Analysis for the Situating Description of Aesthetic-Performative Practices on the Basis of Qualitative-Empirical Investigations from Historical and Contemporary Perspectives," University of Siegen, funded by the DFG (454261397) 2021–2023.

2 Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," in *Feminist Studies* 14, no. 3 (1988): 575–99.

Theories and Methods

We conceive of dance as a practice that is performed in specific situations and which demands an accordingly situating and situated analysis. To do so, we use Situational Analysis (SitA), a methodological approach which was developed by Adele Clarke as a modification of Grounded Theory Methodology by incorporating postmodern lines of thought.[3] SitA is a methodology which aims at capturing the complexity, heterogeneity, and situatedness of a phenomenon.[4] In pursuit of this aim, Clarke proposes to focus on the situation as unit of analysis. Her specific conception of "situation"—building on theorizations from social sciences, pragmatist philosophy, and feminism[5]—goes beyond an everyday notion of the term by way of a partial dissolution so as to include an array of different elements and their relations spanning different times and places:

> To clarify, in SA, a situation is not merely a moment in time, a narrow spatial or temporal unit or a brief encounter or event (or at least rarely so). Rather it usually involves a somewhat enduring arrangement of relations among many different kinds and categories of elements that has its own ecology. It usually includes a number of events over at least a short period of time, and can endure considerably longer.[6]

While Clarke states that the situation is not limited exclusively to individual points in time, her concept is also characterized by a high degree of elasticity which allows for different foci.[7] Accordingly, researchers can zoom in on narrowly delineated moments (such as a single song at a concert or a single movement) or they can zoom out (to focus on different movements across different concerts, for example). As we investigate an aesthetic-performative case study in this article—as opposed to Clarke and colleagues who engage with aspects of the US-American health system—we make use of the former. This

3 Adele E. Clarke, *Situational Analysis. Grounded Theory After the Postmodern Turn* (Thousand Oaks: Sage, 2005); Adele E. Clarke, Carrie Friese, and Rachel S. Washburn, *Situational Analysis. Grounded Theory After the Interpretive Turn*, 2nd ed. (Los Angeles: Sage, 2018).

4 Adele E. Clarke and Reiner Keller, "Engaging Complexities: Working Against Simplification as an Agenda for Qualitative Research Today. Adele Clarke in Conversation with Reiner Keller," in *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research* 15, no. 2 (2014): Art. 1.

5 Clarke, Friese, and Washburn, *Situational Analysis*, 68–71.

6 Ibid., 17.

7 Ibid.

choice considers and is in line with established performance aesthetics that emphasize the transient and unique quality of each performance.[8]

The last aspect of the situation we want to point out in the limited space of this article is the co-constitution of the situation's elements. Since our article (and this volume) is dedicated to investigating relations of music and dance, it seems important to us to clarify co-constitution as a heuristic device for the conceptualization of relationality. The elements that make up a situation are not completely isolated phenomena that simply accumulate in a situation, but they are entities that mutually constitute each other in the first place. As a result, this relational understanding dismisses the differentiation between a phenomenon or text and its context since all of the elements are part of the situation. This is how Clarke and her co-authors put it:

> *In* SA *the conditions* **of** *the situation are* **in** *the situation.* There is no such thing as 'context.' The conditional elements of the situation need to be specified in the analysis of the situation itself as *they are constitutive of it*, not merely surrounding it or framing it or contextualizing it, or contributing to it. *They are it.*[9]

Applied to our research this means that a single element, e.g. the dance or the music, is not considered by itself with other elements simply surrounding it. Instead, these elements are viewed as constituting each other in situated interactive relations. When applied to dance, this means that dance is not just given movement but it comes into being through the relationality of bodies, movement, space, time, sound, media, light, and more. Accordingly, such a relational and situating notion does not construe music as isolated and given text. By considering its situatedness, heavy metal music becomes dance music, for example when people dance to it at a concert.

As researchers in the fields of science and technology studies, and sociology of health, Clarke and her colleagues are not primarily interested in aesthetic aspects.[10] Our focus on music and dance, on the other hand, explicitly engages with our situation's aesthetics, and to account for this difference we want to

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8 For a theater studies perspective cf. Erika Fischer-Lichte, *The Transformative Power of Performance: A New Aesthetics* (New York: Routledge, 2008). A musicologically oriented overview is given in Nicholas Cook, "Music as Performance," in *The Cultural Study of Music. A Critical Introduction*, ed. Martin Clayton, Trevor Herbert, and Richard Middleton, 2nd ed. (New York: Routledge, 2012), 184–94.

9 Clarke, Friese, and Washburn, *Situational Analysis*, 46.

10 Cf. ibid., 269–312 for SitA's engagement with visual materials which might be said to include aesthetic considerations. Yet, sonic aesthetics are absent.

briefly point out our theoretical extensions of SitA. As stated above, we consider performance aesthetics to account for the fleeting character of the case study and the specificities of its bodily co-presence. Additionally, especially Fischer-Lichte's deliberations of performances' materiality offer us further sensitizing concepts for what kinds of elements participate in the situation and constitute it. These concepts include corporeality, spatiality, tonality,[11] and temporality.[12] In order to analyze music as an element of the situation, we make use of tools for the analysis of metal music developed by Dietmar Elflein[13] as well as Allan Moore's[14] approach to rock music analysis, depending on which is rather suited for the musical material. With respect to dance movements we rely on a descriptive approach as found in literature from popular dance studies.[15] While the former approaches rather tend to focus on the sounding music exclusively, we aim to observe it in relation to dance practices and other relevant elements, keeping co-constitution and a situation's relentless relationality in mind. In order to heuristically conceptualize this relation, our last theoretical addition to SitA consists of Tia DeNora's notion of affordance.[16] Put briefly, musical affordances are music's actionable qualities that are realized by people engaging with the music. According to this view, material objects lend themselves to certain actions more readily than to others based on their material properties.[17] A ball, for example, lends itself to the action of rolling more readily than a cube. This concept was first developed in the realm of visual perception by psychologist

11 Tonality is not meant in a music theoretical sense but more generally comprises a performance's aural components (cf. Fischer-Lichte, *The Transformative Power of Performance*, 120–30). In the German edition, it is not *Tonalität* but *Lautlichkeit* (Erika Fischer-Lichte, *Ästhetik des Performativen*, 10th ed. [Frankfurt am Main: Suhrkamp, 2017], 209–27).

12 It might be argued that these concepts are partially redundant because Clarke et al. also explicitly mention bodies, spatial and temporal elements (cf. Clarke, Friese, and Washburn, *Situational Analysis*, 45) but Fischer-Lichte approaches them from an aesthetic perspective.

13 Dietmar Elflein, *Schwermetallanalysen. Die musikalische Sprache des Heavy Metal*, Texte zur populären Musik 6 (Bielefeld: transcript, 2010).

14 Allan F. Moore, *Rock: The Primary Text. Developing a Musicology of Rock*, 2nd ed., Ashgate Popular and Folk Music Series (London: Routledge, 2016).

15 Sherril Dodds, *Dancing on the Canon. Embodiments of Value in Popular Dance* (Basingstoke: Palgrave Macmillan, 2011), 141–3.

16 Tia DeNora, *After Adorno. Rethinking Music Sociology* (Cambridge: Cambridge University Press, 2003).

17 Tia DeNora, *Music in Everyday Life* (Cambridge: Cambridge University Press, 2000), 39.

James Gibson,[18] and was appropriated by DeNora in a sociological fashion which posits the use of the object as paramount to what it affords. Applied to music, this means that music's affordances do not reside in a musical text but are instead dependent on "the ways that those who hear it respond to it; how they incorporate it into their action; and how they may adapt their action […] to its parameters and qualities."[19] One example of what music might afford is that it can structure modes of embodiment. As a quite vivid example, DeNora describes what rhythm might afford:

> Different types of rhythm may afford particular types of bodily movement. […] Rhythm may be said to 'afford' movement to the extent that it is perceived as profiling specific types of movement (e.g., tempos, energy levels, styles of movement) and these are acted upon to the extent that actors entrain their bodily movements to its properties.[20]

So, listening to a metal riff which consists of more than just rhythm, fans might headbang, body bang, mosh, or something similar according to what the music's properties afford them. Importantly, music *may* afford all these actions, but it does not necessarily do so—music does not *cause* specific actions. This aspect is crucial in order to account for the variability of an audience's movement behavior because it enables us to understand that the music might afford some audience members to move in a certain way while it does not to others. Since DeNora's approach considers music's materiality as well as its use by people, it shares common ground with Clarke's notion of a materialist social constructivism. According to this view, Clarke argues, our analyses need to account for the material world while also considering how this material world is interpreted and ascribed meanings to by people.[21] In that sense Clarke's approach suggests the co-constitution of the material world as well as the discursive, ideological, or symbolic. In our view this compatibility facilitates the extension of SitA to include DeNora's notion of affordances.

As we stated at the outset of this subchapter, we conceive of dance as a practice that is performed in specific situations and which demands an accordingly situating and situated analysis. In order to provide said analysis we opted for ethnographic participant observations of several events, one of which we want to focus on in this article. Daniel attended two out of three days of the Dong Moshbox and observed dance practices and their relations to the music

18 James J. Gibson, "The Ecological Approach to the Visual Perception of Pictures," in *Leonardo* 11 (1978): 227–35.

19 DeNora, *After Adorno*, 48.

20 Ibid., 47.

21 Clarke, Friese, and Washburn, *Situational Analysis*, 26f.

and other elements. Since some of our earlier field studies have shown that the relations between music and dance in particular are too complex to rely only on committing them to memory and writing everything down after the event, we decided to film parts of the concert with a camera phone. In our experience it has become a common practice among audiences at metal concerts to record the event with a smartphone, so this did not seem as invasive to the field as a conspicuous camera set-up even if this would have yielded higher quality results. The recordings have proven to be immensely useful because, firstly, details in music and movement can be revisited; secondly, different dancers located at various positions within the concert space can be analyzed as they move differently to the same music (which was simply impossible in real time perception); and finally, the situated live performance of the songs can be analyzed regarding potential differences to the studio version and their possible relevance for the dance. Yet, the recordings also have their limits in terms of what frames and sections of the entire concert they grant us repeated access to. Therefore, we did not rely only on those recordings but also on field notes which were written down immediately after the event and contained, among other things, descriptions of portions of the event that were not captured on camera as well as the subjective experience of participating in the concert. Besides participation, field notes, and recordings, our analytic material also included the organizers' communication with the audience before and after the event which mainly took place via their website and social media channels.[22] This communication had noticeable consequences for the dance practices and is therefore part of the situation in question. In analyzing our empirical material, we made use of SitA's so-called mapping strategies—especially situational and relational maps—which, put briefly, prompt researchers to map all of the elements pertinent to a situation and systematically investigate the relations among them.[23] Now that we have laid out how we generated and analyzed our data, we will next take a closer look at the event on which these data are based.

The Dong Moshbox

The Dong Open Air is an annual metal festival founded in 2001 that takes place near Neukirchen-Vluyn, a rural area located in the west of Germany. In August 2020, the COVID-19 pandemic necessitated the reduction of the three-

22 This pool of various forms of data is enabled by SitA's openness and its ability to integrate heterogeneous empirical materials (cf. ibid.).

23 Ibid., 127–46.

day festival to three consecutive but separate events with two bands each which was called the Dong Moshbox.[24] Due to the uncertain development of the pandemic and resulting regulations, the event could only be announced a mere eleven days in advance via several online channels.[25] Yet, while the pandemic was still ongoing and continuing to cause various restrictions in public life, the Dong Moshbox was permitted under the conditions of safety regulations because August 2020, in hindsight, was situated between the first and second "waves" of COVID and saw low infection rates. The safety measures, as legally prescribed by the state of North Rhine-Westphalia,[26] and the ensuing adaptation of the Dong Open Air had several consequences for the situation we wanted to investigate. Located upon pithead stocks which were turned into a natural reserve and now function as recreational area, the Dong Moshbox took place outdoors which made the event possible in the first place since indoor events were prohibited at the time.[27] The open air setting renders the weather a relevant factor, also for the dance. This could be observed at the Dong Moshbox by comparing the two days Daniel attended. The first day (which is our main focus in this article) saw mostly nice weather with sunshine and warm temperatures during the day and was accompanied by people strolling about, moving freely within the confines of the COVID regulations, and dancing. The weather on the second day, on the other hand, included repeated bursts of rain which immediately prompted many audience members to put on rain jackets and ponchos or, if available, gather under umbrellas. This in turn limited

24 "Rage und Long Distance Calling in der Moshbox!," Dong Open Air, accessed 16 December 2021, https://www.dongopenair.de/de/news/post/rage-und-long-distance-calling-in-der-moshbox.

25 The concert Daniel attended took place August 1, 2020 and was publicly announced July 21, 2020 via the Dong Open Air's website (ibid.), facebook page ("Rage und Long Distance Calling in der Moshbox!," @DongOpenAir, accessed 16 December 2021, https://de-de.facebook.com/DongOpenAir/), twitter account ("Rage und Long Distance Calling in der Moshbox!," @DongOpenAir, accessed 16 December 2021, https://twitter.com/dongopenair?lang=de), and instagram account (dong_open_air, accessed 20 October 2021, https://www.instagram.com/dong_open_air/?hl=de).

26 "Verordnung zum Schutz vor Neuinfizierungen mit dem Coronavirus SARS-CoV-2 (Coronaschutzverordnung – CoronaSchVO). Vom 1 Juli 2020," Ministerium für Arbeit, Gesundheit und Soziales des Landes Nordrhein-Westfalen, accessed 16 December 2021, https://recht.nrw.de/lmi/owa/br_show_historie?p_id=24319.

27 For further information about the location as well as visual impressions without the Dong Moshbox setup cf. "Die Halde Norddeutschland in Neukirchen-Vluyn," Halden Ruhr, accessed 26 August 2021, https://www.halden.ruhr/halde-norddeutschland.html.

mobility as audience members seemed to be mainly concerned with not getting wet and less with dancing in the rain. While the first day's weather certainly cannot be said to have "caused" movement and dance, we would state that at least it did not inhibit dancing as the weather did on the second day.

The organizers of the Dong Moshbox converted the federal and hence rather general COVID-regulations into an instruction manual that was tailored to the event's specificities and which was mainly concerned with the spatial arrangement of human and non-human actors.[28] This was picked up on again a week after the event when the organizers published a statement on their website, thanking all of those involved—not least the audience—for contributing to the success of the event under COVID-conditions.[29] This claim to success strategically laid a foundation for potential future instances of the format should COVID still be an issue. Taking a step back again, what did the spatial set-up look like in 2020? The stage at the Dong Moshbox was positioned within a quasi-amphitheater that consisted of a circular flat space in front of the stage and which was surrounded by a rising crest. According to the organizers' instructions, attendance was limited to 250 people, a distance of four meters was to be kept from the stage, single groups were not allowed to consist of more than ten people, and a safety distance of one and a half meters among audience members had to be kept at all times possible, except for the members within a single group.[30] Besides written instructions in advance, the organizers made use of material means during the event, such as distance markers on the floor and tables and seating opportunities, to facilitate the spatial arrangement: "We want to make following the rules as easy as possible, so we'll be setting up a number of tables around which you can gather."[31] Tables are by no means unheard of at metal concerts—usually they are placed in lounge sections or similar areas that are rather removed from the space immediately in front of the stage where the audience stands and dances. Significantly, this was different at the Dong Moshbox as almost the entire circular space in front of the stage was crowded with oblong tables and benches that would fit up to ten people.[32] Instead of a rather free audience area, the spatial arrangement was dominated

28 "The Rules of the Moshbox," Dong Open Air, accessed 16 December 2021, https://www.dongopenair.de/en/news/post/the-rules-of-the-moshbox.

29 "Ein großes Dankeschön aus der Moshbox!," Dong Open Air, accessed 23 December 2021, https://www.dongopenair.de/de/news/post/ein-grosses-dankeschoen-aus-der-moshbox.

30 "Rules of the Moshbox."

31 Ibid.

32 For visual impressions of the Dong Moshbox setup as well as for some glances at the dance forms we refer to in this article, cf. "DONG OPEN AIR MOSHBOX

by the tables and mobility was limited to the alleys between them. These measures that aimed at regulating the actors' spacing to minimize potential COVID infection risks—and which thereby turned something so seemingly profane as tables into hygienic agents—suggested consequences for the dance in advance which made it such an interesting case study.

We want to focus on the first of the two days Daniel attended the Dong Moshbox, when the two bands Crossplane and Rage performed. Despite the fans' tangible enthusiasm and excitement to finally be able to listen to live music again, the audience adhered to the COVID regulations and mostly kept their distance from one another, aided by the tables. As soon as the first band, Crossplane, began, large portions of the audience stood up. During the first couple of songs, most people stood listening to the performance and the only movements were ones that did not require bodily proximity to other people and which could be performed by individuals on their own. These included conventionalized metal movements such as pumping fists or horns[33] into the air in a rhythmically synchronous fashion, nodding one's head or clapping, for example, and were performed with varying intensity throughout the entire evening. Addressing the audience in an announcement, the vocalist of Crossplane, Marcel Mönnig, stressed the importance of everyone complying with the COVID regulations, as did both bands several times during their performances. They argued that everyone present bore responsibility for possible future iterations of the Dong Moshbox and the wider metal scene, thereby echoing a widely dispersed discourse at the time surrounding large-scale societal responsibility in light of COVID. This included modifications to metal concerts and while the above-mentioned forms of movement remained untouched, adaptations included the impossibility of mosh pits and circle pits. Mosh pits are circular performative spaces that usually emerge in the audience in close proximity to the stage and in which moshing takes place. Moshing comprises several different movement interactions of audience members such as running seemingly chaotically across the space of the pit, running and jumping into each other, pushing each other, and more. Circle pits are similar performative spaces but instead of the mosh

2020," HMHTVchannel, video, 09:41, accessed 16 December 2021, https://www.youtube.com/watch?v=PFBneB8_e8c.

33 There are different terms for this hand gesture which is formed by extending the index and little finger while the thumb, middle and ring finger are bent into the palm of the hand. For an overview of its meanings within heavy metal cf. Adam E. Nowakowski, "'Horns Up!' The Horned Hand as the Emblematic Gesture of the Metal Subculture," in *Półrocznik Językoznawczy Tertium. Tertium Linguistic Journal* 5, no. 2 (2020): 62–82.

pit's rather individualized interactions, the participants of a circle pit collectively run in a circle, most commonly counterclockwise. While there remain individual differences such as the running speed or single people who run in the opposite direction (i.e. clockwise), the majority of the members in a pit move rather similarly. Bearing the COVID regulations in mind, mosh and circle pits were not an option at Dong Moshbox if the audience was to comply with the rules. In that sense, all of the involved core actors—musicians, audience members, and organizers—had to constantly negotiate conventionalized practices that are part of metal concerts with what was acceptable regarding the COVID regulations. A creative outcome of this negotiation was a modified version of circle pits that was possible within the confines of the regulations and which was first encouraged by Mönnig: he asked the audience to do small circle pits around the tables. After the next song started with a four-bar guitar intro, most groups put that idea into action as soon as drums, bass, and vocals entered, and people started running around their tables. These table pits—a term coined later that evening by the vocalist of the second band, Rage—bore a striking resemblance to circle pits in that they also consisted of a circular, mainly counterclockwise collective motion, yet they also had a different quality. They seemed rather unwieldy, maybe even slightly clumsy, and lacked some of the flowing quality of circle pits which was probably partly due to the limited range of movement and the obstruction presented by the tables. Additionally, they also had a somewhat comical character as many jeans- and leather-clad, long-haired, and beer-drinking metal fans orbited around tables. The image also seemed to speak to the audience's sense of humor as Mönnig's initial demand for table pits was met with laughter and cheers by the audience. Additionally, the table pits made the impression of "domesticated" circle pits since there was no pushing or collisions of dancers within the rather orderly alternative, thereby lacking some of a circle pit's transgressive character. Articulating that impression, Crossplane's guitar player remarked that the table pits looked like the audience was engaging in musical chairs. The humorous quality was further exaggerated by a small group of people who ran around the entire amphitheater, inverting the distorted dimensions of the small table pits by turning the entire concert venue into one giant circle pit. Yet, from our perspective this comical character did not ridicule what the audience was doing. Instead, there seemed to remain a simultaneous sense of genuine bodily pleasure and appreciation since the table pits maintained corporeal similarities to circle pits such as plain exhaustion and the collective quality of the movement. Most of the table pits ran counterclockwise and most of the circular area in front of the stage was transformed into table pit areas. While the area covered by table pits exceeded that of circle pits we observed at pre-COVID concerts, there was a similarity in

the location of the action. Mosh and circle pits tend to form close to the stage; similarly, the few tables at Dong Moshbox that did not perform table pits were located in the back of the circular space and hence in greater distance to the stage. Some of the table pits lasted remarkably long, ranging from about one minute to some that were maintained throughout an entire song. While that may not seem particularly long, it should be taken into account that it is quite exhausting to continuously run around in circles (as a counterpart to such continuous movement, regenerative phases such as announcements in between songs or intermissions in between bands are probably important). Considering the pandemic situation, it is noteworthy that hygienic masks were almost completely absent. Only a few crew members wore masks when moving through the audience. This probably supported the long duration of the table pits as masks make it more difficult to breathe and hence would have further increased the dancers' exhaustion. Although the table pits were performed with enthusiasm by those participating in them, they occurred rather rarely throughout the performances, accompanying only two songs by each band: "I Will Be King"[34] and "Dance with the Devil"[35] by Crossplane, and "Black in Mind"[36] and "Wings of Rage"[37] by Rage. Other songs were met with less or even no movement at all.

Audience members used the tables in different ways besides table pits. Some audience members, for example, climbed upon tables in the course of the event, partly apparently to get a better view, partly to use them as stage of their own on which they played air guitar and performed other movements such as the already mentioned pumping fists. Finally, they were also used, as is usual in everyday life, as convenient seating opportunities and to place items upon such as beer bottles or phones. This in turn was commented on by Rage's singer, Peter 'Peavy' Wagner, as reminding him of a beer tent and the popular Austrian/German music TV show *Musikantenstadl*,[38] thereby once again emphasizing the comical aspect.

As we tried to illustrate with this short description of the Dong Moshbox, the table pits and the dance practices in general were situated within an arrangement of numerous elements that interacted with each other. There were certainly more elements that made up the Dong Moshbox (e.g. further actors such as fire fighters, food vendors, etc.), but we wanted to limit our focus to

34 Crossplane, *Class of Hellhound High*, CD (7Hard, 2013).
35 Crossplane, *Backyard Frenzy* (7Hard, 2017).
36 Rage, *Black in Mind* (BMG/GUN, 1995).
37 Rage, *Wings of Rage* (Steamhammer, 2020).
38 Long-standing TV show on Schlager music (cf. Susanne Binder and Gebhard Fartacek, eds., *Der Musikantenstadl: Alpine Populärkultur im fremden Blick*, Kulturwissenschaft 13 [Wien: Lit, 2006]).

those that made a difference to the dance which is itself an element of the situation. The relevance of other elements to the dance is not always immediately obvious (although at times it is) but when attended to, we can grasp the contribution of factors such as whether the concert takes place within an outdoor or indoor setting, the weather, the addition of federal, regional, and event-specific COVID regulations, bodies, music, human and non-human actors and their spatial arrangement, musicians' announcements, discourses that extend beyond the Dong Moshbox as an event, pleasure, appreciation, exhaustion, (the absence of) masks, or tables. The tables in particular illustrate that single elements in themselves can be surprisingly complex and need to be situated with respect to how they are used. Apart from serving as a piece of furniture around which people gather, the tables at Dong Moshbox were used as hygienic agents that were supposed to ensure safety distances, as objects that signify practices beyond metal such as a children's game or Schlager music, as performance stages for audience members, and—most important to us—as an integral part of dance practices. Metal dance and its adaptation during COVID was possible at the Dong Moshbox through the incorporation of the tables into the dance and the resulting transformation of circle pits into table pits.

Music and Movement

Until now, we have described the situation at the concert with regard to some of the most important elements that interact in initiating the dance with the tables. What still remains open in our analysis is a closer look at the movements and the music and how these two relate to each other: How do people actually move in that somehow experimental practice that is labeled "table pit"? And how are these movements related to the music? As these questions lead to the core of our research interest, we are going to spend particular attention to them. We do not aim to privilege the aesthetic aspects of dance and music over the other elements of the situation. Rather, and in synch with the concept of SitA, we understand them as being closely intertwined in the interaction of all elements. At the same time, we read SitA as a challenge to take all relevant relations within a situation into consideration, hence even the as yet hardly investigated relation of heavy metal music and dance.

As described above, table pits did not happen during the whole event, but only during the performances of two songs by the bands Crossplane and Rage. To analyze the relation of movements and these songs, we rely on a mixture of empirical data including (1) Daniel's field notes, (2) his video recordings from a certain point close to the back of the amphitheater, (3) additional footage of the

same event published on YouTube by an audience member from a perspective close in front of the stage, and (4) studio recordings of the relevant songs. Although in general, no live performance can be memorized or documented in its entirety for a later analysis,[39] combining the diverse mentioned empirical materials proved to be helpful for an approximate performance analysis, because they allow a view of the event from multiple angles, each of them providing certain details.

How the Table Pits Start

During the performances of both bands of relevance here (Crossplane and Rage), the initial impulse for starting table pits came from their respective singers. As Crossplane opened the second day of the festival, the band's singer Marcel Mönnig played a crucial role as individual actor at the event since—a few songs into their set—he introduced the idea of table pits to the audience as an unusual but legitimate type of collective movement under the pandemic circumstances at the time. At some point of Rage's later performance, their singer Peavy Wagner referred to the same practice introduced earlier as something worth trying out again with one of their own songs. Although the audience showed a positive response to these verbal announcements by cheering, the actual table pit movement did not start until the music afforded it. Hence, the start of the table pits resulted from the interaction of the singers' announcements, the driving rhythm of the music, and the people in the audience who decided to get into action (i.e., move their bodies in a way that can in short be described as a table pit).

Moving in a table pit basically means to run around the table together with the other persons at that table, hence keeping—more or less—the prescribed distance from each other which results in—again more or less—coordinated group movement without (ideally) any bodily contact. Regarding the direction of the running and thus where people turn their faces and bodies, we observed most pits moving counterclockwise while two or three ran clockwise. Tempo matters, too, being a basic element of body movement; before commenting on this however, we would like to elaborate a bit more on the beginning of the pits. While the actual movement may look simple to perform, it is remarkable how quickly a relatively large number of audience members started moving together. Particularly in the case of the first table-pit song, "I Will Be King" by Crossplane, we could hardly observe any gradual build-up process but rather

39 Fischer-Lichte, *The Transformative Power of Performance*.

an almost immediate collective start of the table pit in sync with the entrance of drums, bass, and vocals after four bars of guitar-only introduction. Since the involved people did not show any insecurity about when to start with which movement in spite of the new, unusual nature of the table pit, we conclude that (1) the affordance of the music included a sufficient impulse for getting into action and (2) the verbal reference to the culturally established term "circle pit" in the singer's announcement evoked a certain cultural knowledge in the dancers that worked as basic instructions for their movements even though they had to adapt their knowledge to the new situation. In both respects the audience performed its belonging to the metal culture, because otherwise it would not have worked like this. With regard to the co-constitutional character of this situated practice, it is also important to mention the style of dress (many band t-shirts or vests with patches, black or denim pants, a few black or leather dresses, heavy boots or dark sport shoes) and hair (many long-haired men and women, bald heads on some men, and beards). While these stylistic features certainly influenced the movements—and as it seems mostly in a non-obstructing way—they also visually marked the people as members of the metal culture who can be relied on having some knowledge about circle pits and being motivated to move along to metal music.

Table Pits in Relation to Circle Pits: Aspects of Body Contact, Shape, Spatiality, and Tempo

At first glance, it seems plausible to describe table pits just like singer Marcel Mönnig did in his call to the audience, namely as "circle pits around the table." Although that verbal announcement functioned as an important impulse and instruction, and although the basic principle of a group of people running in circles (either counter-clockwise or clockwise) along to fast metal music is common to both forms of dance, table pits deviate from circle pits at least in the aspects of body contact, shape of the circle, their relation to the audience space and their tempo. As stated above, the avoidance of bodily contact was a direct result of COVID regulations. Audience members were obliged to stay at "their" tables, and were thus not allowed to mingle like in usual circle pits. And while the very nature of the latter involves intense and often violent bodily contact, table pits had to avoid any kind of contact. We like to describe them as a metallic experiment of balancing cultural participation and the pandemic situation; their non-contact aspect resulted from hygienic regulations, and was also in sync with the daily experience and pandemic-induced habitus of avoiding any contact with other bodies outside the most intimate relationships. As a side-

effect of that, it is of note that the absence of violence in table pits may have contributed to their attractiveness or inclusivity for certain groups of people.[40]

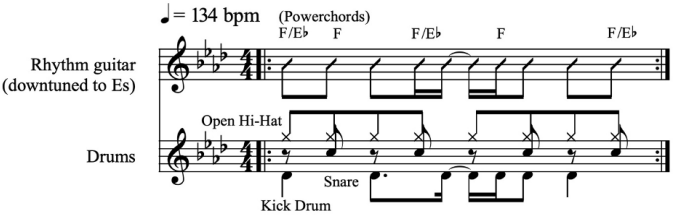
Regarding the shape of the pits it goes without saying that table pits were table-shaped, while circle pits can—even within a single event—increase or decrease in size and oscillate between actual circles or rather oval shapes, not least in relation to the relatively flexible amount of involved dancers. Their flexibility also includes the placement within the audience space. Although the level of energy, commitment, and endurance of the table pits was generally higher the closer the tables were placed to the stage and thus similar to the tendency of circle or mosh pits to evolve in the front part of the audience, table pits could not move around. Circle pits, on the other hand, usually have this flexibility which even includes the potential of combining two pits into a larger one or splitting-up into smaller ones. However, there was even an interesting exception among the table-pit dancers, namely one group of four to five men (they could originally have been the "line-up" of a single table, but we cannot tell exactly on the basis of our observations and videographic documents) who at a certain point within the first table-pit song left their table in order to run around (almost) the whole audience circle. In doing so, they used a crest that formed a semi-circle around the center part of the audience space, thus being reminiscent of an amphitheater's structure. Gradually ascending from the bottom line of the audience space on the left and right, that crest offered an easily accessible way to circle around the rest of the audience. Because of how that spatial structure was used by these dancers, we chose to call their variant of the table pit the amphitheater pit. In a certain way, the amphitheater pit implies the flexibility that is inherent to any pit dancing. Seeming like a spontaneous variant, it shows that even table pits can be adapted to larger shapes as well—as long as these variants do not result in prohibited bodily contact.

The question of how table pits and circle pits deviate from each other with regard to tempo is a relatively complex one. While the aspects of bodily contact or its avoidance, as well as shape and spatiality of the circles can be grasped in a rather straightforward manner, the aspect of speed needs a more complex discussion, not least because it is closely related to diverse affordances of the music. What holds for any metal circle, be it a circle pit or a table pit (or even an amphitheater pit), is that all participants move quickly, by either running

40 We cannot discuss aspects of inclusivity further within the confines of this article. For an investigation of female participation in mosh pits that are marked as male homosocial space cf. Gabrielle Riches, Brett Lashua, and Karl Spracklen, "Female, Mosher, Transgressor: A 'Moshography' of Transgressive Practices within the Leeds Extreme Metal Scene," in *IASPM Journal* 4, no. 1 (2014): 87–100.

or bouncing, with nobody just walking. However, while the movement tempo in circle or mosh pits is often in a relatively loose relation to the rhythm of the music, table pits showed a remarkable tendency to synchronize with the music. It is important to note here that the first part of that observation has to be stated with care because it is less based on comprehensive data than being a preliminary observation with implications for further research. Hitherto existing scholarly and popular literature also suggests that pits do generally get faster and more frantic in sync with the music's broad character, but not necessarily with steps being synchronized with the music's rhythm. In his rather uncritical study of the mosh pit, Joe Ambrose gives this rough, but indeed generally suitable description: "The circle turns faster and faster as the music picks up speed."[41] Although the possibility for comparison with circle or mosh pits in this regard is somewhat limited due to the hitherto limited state of research, our focus on table pits in this study does include clear observations of a tendency to synchronize the pace with the music.

For instance, in the case of Crossplane's "I Will Be King" most people generally moved roughly in sync with the meter of 134 bpm that is established by the combination of the guitar riff and the drum pattern (live version and album version are in the same meter). This is also true for the amphitheater-pit dancers.



Music example 1: *Basic riff and drum pattern in Crossplane, "I Will Be King." © The Authors*

When the audience moved again in a table pit to the song "Dance with the Devil" by the same band, they tended to synchronize to the now clearly faster

41 Joe Ambrose, *Moshpit. The Violent World of Mosh Pit Culture* (London: Omnibus Press, 2001), 3. A similar assessment with a focus on hardcore is given in Katharina Inhetveen, "Gesellige Gewalt. Ritual, Spiel und Vergemeinschaftung bei Hardcorekonzerten," in *Soziologie der Gewalt*, ed. Trutz von Trotha (Opladen: Westdeutscher Verlag, 1997), 235–60.

tempo of 202 bpm. Once again, not everybody seemed to move exactly in sync with the music's meter. Hence, we prefer not to speak of a proper synchronization of movements and music, but of a tendency towards synchronization. The table pits during performances of the band Rage confirmed that observation. In that case, the tempo relation between movements and music tended to be even looser than before, but the tendency towards synchronization was still clearly noticeable.

Relating table pits to circle pits proves to be a productive method for understanding them. While the singer's verbal announcement suggested a similarity that functioned as an instructive impulse for the audience, the actual practice of table-pit dancing deviated clearly from that of circle pits in terms of bodily contact among participants as well as in terms of shape and spatiality of the pits; according to our limited research thus far, even the tendency towards synchronizing leg movements to the musical rhythm seems to mark a difference from usual circle-pit dancing. Hence, the status of the circle pit as element in the analyzed situation is twofold: On the one hand, its presence in the verbal call was clear, working mostly as a reference to cultural knowledge among metal fans; on the other hand, the actual practice of circle-pit dancing was rather an absent element that proved to be useful for a comparative approach to describing what table pits are.

Table Pits in Relation to Musical Form and Other Body Movements

As we have described with regard to aspects of tempo and of starting the movements, table pits related to the music in a specific way. While it may seem self-evident that the music had to be some kind of energetic metal, as it is best-liked by audience members to afford pit dancing, a closer look reveals that it was even significant which song was played and how its form was structured. Regarding the choice of songs, we assume that several aspects are of importance including, among others, the dancers' affective relations to the songs. Generally, people are inclined to dance to music they already know and like. In our case study, that general observation was confirmed from its negative side, namely an absence of dancing activity during the performance of a song by Rage that had, like other songs before, been announced with a clear call for table pits. Certainly, the rhythmic affordances of "Wings of Rage" might have been experienced as less "affording" than those of the previous song "Black in Mind" and physical exhaustion might also have weakened the motivation for dancing at that relatively late moment in the event. However, the fact that the

song is relatively new in contrast to the "classic" status of "Black in Mind" within Rage's repertoire should not be underestimated here.

While the affective relation of (potential) dancers to a certain song is of general importance with regard to dancing and presumably also with regard to the energy dancers put into their movement, the musical form of the song is important, too. Table pits did not just start and stop with the beginning and ending of the song; rather, they often interacted with the change of the song's different parts. This observation is particularly clear in the case of Crossplane's song "I Will Be King" which is comprised somewhat expectably of two verses, a chorus, third verse, and two more choruses with an instrumental part (guitar solo) in between and an outro in the end. Strikingly, after four bars of guitar-only introduction, all dancers started immediately with the entry of the drums, bass, and vocals and continued running around the tables exactly until the end of the second verse. Now, with the start of the chorus, most table pits came to a stop; the people at those tables stopped running and stretched or threw one or both arms up. During the third verse, most of the audience moved relatively little except for one table on the left side in front of the stage which kept circling. Then, exactly when the next chorus entered, a small group dissolved from that relatively active part of the audience and started the amphitheater pit as described above. It is important to remark that the singer, who seems to have played an important role in instigating the beginning of the table pits, did not give any further signal or cue regarding the movements during the course of the song. Hence, the audience synchronized their change of movements only by ear. We can state that the dancing was in clear sync with the audible form of the song.

That said, it is worth taking a closer look into how the form actually manifests musically in order to get a better picture of which movements related to which sounds. For a general approach to Crossplane's music, we consider it helpful to describe its style as close to a pastiche of the internationally famous British band Motörhead. While having achieved an outstanding status in the globalized metal scene, Motörhead have successfully shaped a "rock 'n' roll" image that, in addition to lifestyle aspects, includes a musical style that blends elements of hard rock with rock 'n' roll-based forms and riffs.[42] The band would make sure that nobody who attended their concerts had any doubts about that image by regularly shouting out their "trademark" line: "We are Motörhead

42 Elflein, *Schwermetallanalysen*, 173–204; Daniel Suer, "Kilmister, Ian," in *MGG Online* (Kassel, Stuttgart, New York: Bärenreiter, Metzler, RILM, 2018), accessed 10 January 2023, https://www.mgg-online.com/mgg/stable/394455.

and we play rock 'n' roll."[43] Crossplane explicitly subscribes to their ideal by adapting the line and even incorporating it into merchandise such as t-shirts: "We're Crossplane and we play rock 'n' roll."[44] While not covering original Motörhead-songs, Crossplane produces music that often—and obviously not unintentionally—resembles that of Motörhead, sometimes even in a soundalike manner. In the case of "I Will Be King," "Ace of Spades"—one of Motörhead's most famous songs from their eponymous album *Ace of Spades*[45]—can be regarded as a model with its fast backbeat-oriented rhythmic pattern in a similar tempo (146 bpm) and a similar riff on a semitone detuned guitar, also circling around tonic and minor seventh. Although riffs are important in the rock 'n' roll-based music of Motörhead and Crossplane, they do not regularly function as main elements of the musical form as Elflein has established being a characteristic of metal music's style.[46] Rather, the actual form in the named bands' music is regularly based either on typical elements of rock songs (various combinations of verses and choruses, often with a pre-chorus and/or bridge as additional parts) or on variations of blues schemes. In "I Will Be King," the change between verse and chorus is basically marked by two elements: a harmonic change, namely a sudden shift from F minor to G major, whereby the major third of the new key is played by the lead guitar, performing the second element of change here. Otherwise, the reduced and plain instrumentation with the fast backbeats continuing on the snare drum during all parts of the song do not allow much more contrast between different song parts. It is indeed remarkable then, that the dancing audience clearly interacted not only with the rhythm of the music but also with its harmonic structure.

While the dancing to "I Will Be King" can be described as a highly energetic collective relation of music and table-pit movements, the slightly different example of Rage's "Black in Mind" helps to draw a more detailed picture of the complex co-constitution of movements and sounds during the event. In terms of genre and style, Rage differs from Crossplane in that the former band's thrash metal style includes the genre-typical aspect of song forms being based on a sequence of different riffs that don't necessarily parallel conventional song parts like verses or choruses. In the performance of "Black in Mind," we once

43 E.g. Motörhead, *We Are Motörhead* (Steamhammer, 2000); Motörhead, *The Wörld Is Ours—Vol 1. Everywhere Further Than Everyplace Else* (UDR, Motörhead Music, EMI, 2011).

44 "About Us," Crossplane, accessed 28 December 2021, https://crossplane.de/bio/; "Merch," Crossplane, accessed 28 December 2021, https://shop.art-worx.de/bands/crossplane.

45 Motörhead, *Ace of Spades* (Bronze, 1980).

46 Elflein, *Schwermetallanalysen*, 300.

again observed the table pits starting almost immediately with the entrance of the first riff that follows after a brief opening unison introduction in that case. At this point, we consider it revealing to zoom our observation in on an individual dancer. A male participant of one table pit in the center of the venue slowed his running down in sync with the other persons at the table after about one minute during the first part of the chorus. As soon as the song entered the second part of the chorus (Riff E, 01:07–01:15), characterized by sixteenth notes that include syncopated accents and a double-time backbeat, the man started headbanging, partly along to the backbeat, partly along to the downbeat quarter notes, and partly somewhere in between (start of headbanging at 01:08, so immediately after the onset of Riff E). By engaging in a brief air drum fill immediately before the break he anticipated the change of form parts. He continued headbanging with short interruptions. Next, he joined a person beside him and several other audience members in performing a kind of arm pumping with impulses that synchronized with the sung words "black" and "mind." Furthermore, he engaged in air guitar playing. About two and a half minutes into the song, he stopped moving along to the music for a while and stood by the table drinking beer instead. Towards the end of the song he started headbanging again, and it is remarkable that he synchronized a short break in his movements precisely with the final rendition of the first riff just to continue to headbang until the song was over (see figure 1a–c).

Regarding the dancer's interaction with the table, it is remarkable how he combined the two functions of the table during the course of the song. While participating in the table pit for about one minute, he held his half-full glass of beer in his hand, probably to avoid losing it or confusing it with another person's glass. As soon as he arrived back at his original position, he put the glass on the table which allowed him to engage in air guitar and air drum playing with both hands as well as in energetic headbanging. Furthermore, dancing close to the table enabled him to interrupt his dancing movements to grab his glass and drink beer. While usual concerts without tables afford a change of place between dancing (in front of the stage) and drinking (at the bar) the tables at that special event during the pandemic offered a rather new combination of both practices without changing places. In a sense, this unusual concentration of different actions in a relatively small space is similar to behavior many people have gotten used to during the pandemic. In order to avoid infections, movements have become regulated in a way that many of them are allowed only as long as they can be conducted within a limited space. While the tables at the concert have been construed discursively as contributing to the enforcement of such a regulation, they obviously kept functioning as common tables, hence affording the possibility of putting beer glasses on them.

Timecode	00:00–00:02	00:03–00:17	00:17–00:32	00:32–00:46	00:46–00:53	00:53–01:07	01:07–01:15	01:15–01:18	01:18–01:26
Movement	static	table pit					headbaning (hb) air drum	static	hb
Riff	Opening Unison Element (OE) (1 m.)	2A (1A = 4 m.)	2B (1B = 4 m.)	2A‘	C (4 m.)	4D (1D = 2 m.)	E (4 m.)	2 m.	B‘
Function	Intro/Opening section			Verse I	Pre-Chorus I	Chorus I		Break	Interlude

01:26–01:40	01:40–01:47	01:47–02:01	02:02–02:09	02:09–02:13	02:13–02:20	02:20–02:27	02:27–02:40	02:40–02:52	02:52–02:59
hb	static	hb / static	arm pumping	static	hb	air guitar	(dancer not covered by ethnographic footage) ?		
2A’	C	4D	E		B’	B	F (7 m.)	F’	C
Verse II	Pre-Chorus II	Chorus II		Break	Interlude		Git.-Solo		Pre-Chorus III

02:59–03:13	03:14–03:21	03:21–03:24	03:24–03:31	03:32–03:39	03:39–03:51	03:51–04:05
break, drinking beer					hb	static / hb
4D	E		4OE*	B	F	2A
Chorus III		Break	Interlude		Chorus’/Playout	Playout

Figure 1a-c: *A single dancer’s movements in interaction with riffs/form parts of the song “Black in Mind.” Schematic visualization. The riff analysis is a modified version of Elflein’s model. © The Authors*

Conclusion

As we draw towards our conclusion, we want to return to our initial concerns. With respect to the question of how to approach this phenomenon and investigate it in an academically sound way that enables us to consider its complexity, we think that our modified version of SitA was a suitable avenue. We would also claim that it is not limited to this rather unusual performance but can be

extended to further instances of (metal) dance. SitA seemed especially beneficial to us as it enabled us to grasp the complex constellation in which various elements assemble in order to make it possible for audience members to dance during the COVID pandemic. It made the various human and non-human actors and the diverse routes and loops of communication among them visible which were required to negotiate between metal's dance conventions and the confines of the pandemic: The federal government decreed general regulations which were converted into specific instructions tailored to the setting of the Dong Moshbox by the event's organizers. They in turn communicated these instructions to their (potential) audience via online channels several days prior to the event. Immediately before the concert, musicians clarified with the organizers on site whether table pits would be an admissible modification of mosh and circle pits and were assured that this would be within the bounds of the safety measures. During the event, band members on stage not only repeatedly asked the audience to abide by the instructions, but they also encouraged the audience to perform table pits while explicitly noting that these were permitted by the organizers. After these various communicative efforts, audience members decided to put the demanded table pits into action. In doing so, they oriented their movements towards the music's tempo and formal structure and incorporated the tables into their dance practice. SitA's open notion of situation was useful to us in understanding the Dong Moshbox in two ways: Firstly, its concern for a diverse range of elements sensitized us to the importance of aspects beyond bodies and music and highlighted that many elements actually make a difference. Secondly, the temporal extension of "situation" beyond the immediate event moved the manifold actions into view that lead up to it as well as the discursive prolongation of the event through the organizers' comments afterwards. It thereby allowed us to situate the table pits and similar practices more precisely while a sole focus on the moments of dancing would have rendered these aspects invisible.

The modification of SitA—through the inclusion of DeNora's concept of affordance on the one hand, and modes of aesthetic analysis on the other—facilitated a more detailed analysis of the elements and their relations. Assuming an automated or simply mechanic influence the music has over the dancers' movements would have been incompatible with our empirical observations of diverse movements among the audience. Instead, the perspective of affordance enabled us to account for the similarities as well as the differences in how audience members danced to the same music, thereby conceptualizing a more varied and fluid relation between music and dance. While, for example, some dancers mainly engaged in a table pit with varying intensities throughout an entire song, others, as the selected dancer from our example illustrates,

exhibited a more varied movement repertoire. Hence, the music afforded them different movements. Nevertheless, our analyses suggest that the respective dance styles can be tied back to the music in that it is the music's materiality that affords the dancers their actions. At this point our other modification of SitA, the incorporation of aesthetic analyses, was necessary and helpful as it entailed a more detailed study of the materiality of the music and the movements. Although, as we pointed out, music and movement are not the only relevant elements, they are crucial ones and music and movement analyses provided us with a better grasp on them. This allowed us to connect the music's materiality to the dance practices and better understand, for example, that and how dancers orient their bodily actions towards those qualities of songs that constitute their tempo and formal structure (e.g. rhythm, instrumentation, and harmony during Crossplane's "I Will Be King").

If we further focus on elements and their relations, the Dong Moshbox illustrates the active and flexible use of and interaction with non-human actors such as tables in metal. Considering the event's range of elements and comparing it to similar events pre-COVID, we can grasp which new elements enter the situation (e.g., the corona virus, resulting regulations, tables) and which consequences they have for the dance (e.g., the ban of mosh and circle pits). This may conflict with the actors' interests—keeping bodily distance vs. the bodily intimacy of metal's dance conventions—in which case they are required to develop creative means of dealing with the elements and their consequences. At the Dong Moshbox one solution to the conflict consisted of adapting the established dance practice of circle pits so as to incorporate tables and generate table pits as a new dance form. This creative maneuver resembles what Michel de Certeau called a tactic, a calculus which "is always on the watch for opportunities that must be seized 'on the wing.' [...] It must constantly manipulate events in order to turn them into 'opportunities'."[47] Crucially, these opportunities are specific to the situations (in a narrower sense than Clarke's) in which they emerge.[48] In our interpretation, the comparison to de Certeau's tactic clarifies two things, the first being that audience members are active and not passive actors. While the above description of the loops of communication might make the impression that the audience simply did what it was told after other actors had decided that it was okay for them to do so, that is not the case. This holds for the audience's adherence to the regulations and for the performance of modified dance practices. Concerning the compliance with the regulations, audience members

47 Michel de Certeau, *The Practice of Everyday Life* (Berkeley: University of California Press, 1984), xix.

48 Ibid., xx.

actively decided to do so, not only because of the musicians' and organizers' remarks but also because they were assumedly aware of large-scale societal pandemic discourses that stressed the responsibility of each individual and society as a whole in lowering infection risks and rates. Similarly, the audience actively decided to seize the situation's opportunity and perform table pits. This aspect of the audience's agency was further highlighted by a contrasting case later that evening in which the audience decided not to engage in table pits even though the singer of Rage encouraged the audience to do so and claimed that the song was well suited for it (ascribing certain affordances to the music the audience apparently did not perceive). Another example of the audience's active contribution that places the instigating musicians even further in the background is the spontaneous, audience-induced modification of table pits that were turned into an amphitheater pit. These instances show that the dancers at the Dong Moshbox were far from passive, and instead that the creation of these opportunities were a joint effort of the various actors present.

The second aspect the comparison to de Certeau's tactic clarifies is that from a different perspective, the table pits are not necessarily the rare oddity they might seem to be at first glance. While tables are very uncommon right in front of the stage and the table pits were the first ones either of us had ever observed, the ability to maneuver emergent situations is a requisite with which most if not all people, including metal fans, have abundant experience.[49] So, the table pits surely are an oddity but as a result of a tactical logic of action they also illustrate an aspect that is quite common to musical cultures and everyday life. Furthermore, this tactical competence is not the only kind of preexisting cultural knowledge the actors make use of, as the comparison of circle pits and table pits made clear, for example.

While our conclusion so far has rather focused on human actors and their interaction with various elements, we finally want to shift our perspective so as to center on the most prominent non-human actors of the event: the tables. They were actively involved in the negotiations between metal's dance conventions and COVID-regulations described above and they supported the

49 For an influential though not uncontroversial application of de Certeau's theories to different instances of popular culture cf. John Fiske, *Reading the Popular* (London: Unwin Hyman, 1989) and John Fiske, *Understanding Popular Culture* (London: Unwin Hyman, 1989). Coggins, in his study of mysticism, ritual, and religion in drone metal, focuses on the interlocked rather than dichotomous relation between production and consumption which is inherent to de Certeau's thoughts on tactics (Owen Coggins, *Mysticism, Ritual and Religion in Drone Metal*, Bloomsbury Studies in Religion and Popular Music [London: Bloomsbury Academic, 2018]).

adaptation of the dance practices to the pandemic situation—therefore, audience members did not dance around or on top of tables but with them. Since the tables posed material obstacles that impeded practices such as moshing (although they did not render them impossible), the tables' materiality emphasized their agency as hygienic agents. Yet, a deterministic impression would be misleading here because, after all, the tables did not force a specific form of conduct on audience members. The audience could have just cleared the area in order to have more room for mosh pits, for example. With reference to DeNora we would rather argue that audience members made use of and adapted their actions to the tables' material qualities.[50] Keeping Clarke's material social constructivism in mind, we would add that the communication prior to the concert and the entailed meanings ascribed to the tables also contributed to the audience's specific use of them. Hence, materiality and immateriality can be conceived of as co-constitutive: Discursive constructions of the tables by the organizers of the Dong Moshbox (i.e., as comfortable distancing assistance) were based on the materiality and on preceding cultural constructions and uses of the tables. Due to their size, stability, solidity, etc., they were suited to aid people in keeping their distance from one another. As a kind of "beer furniture" (the German term for the specific tables and benches at the event is *Biergarnitur* and they can be found in the huge beer tents at Oktoberfest and similar festivities) they were at least partially compatible with metal culture and its affinity for alcohol.[51] Yet, musicians' remarks such as the comparison with the *Musikantenstadl* indicate that at least in this specific set up there seemed to be a certain friction. The discursive constructions lead to different forms of material-practical uses of the tables that performatively confirmed and extended the discursive constructions (i.e., as distancing assistance, as an opportunity to sit down or place objects such as bottles or phones, and as a stage). This represents a co-constitutive and continuously processual interweaving of materiality and immateriality that destabilizes a rigid, dichotomous juxtaposition of the two: material tables afforded immaterial-discursive constructions which in turn informed the material-practical interaction with tables, which in turn (re-)spawned immaterial-discursive constructions.

Concerning the future developments of the COVID-19 pandemic, we cannot say for sure whether our observations can be transferred to similar events

50 DeNora, *After Adorno*, 48.

51 Sarah Chaker, *Schwarzmetall und Todesblei. Über den Umgang mit Musik in den Black- und Death-Metal-Szenen Deutschlands*, Wissenschaftliche Reihe 10 (Berlin: Archiv der Jugendkulturen Verlag, 2014), 167f., 304f.

or if there will even be concerts that necessitate these kinds of adaptations.[52] Nonetheless, we think that the study of music and dance greatly benefits from a focus on their situatedness. Besides its documentary value for the COVID-related oddity of table pits, such a perspective enables research a more thorough understanding by tracing the numerous and complexly related elements that factor into the constitution of a specific dance practice. At the same time, as we hope to have shown in this article, this does not exclude the possibility to make analytical observations that reach beyond this immediate phenomenon and grant us further insights into the wider culture of which music and dance are a part.

52 Yet, that possibility seems feasible since at the point of writing, Germany is witnessing its fourth "wave" of COVID and public restrictions have begun to tighten again.

Listening through Seeing
Perceptual Aspects from the Field of Eurhythmics

Dorothea Weise

"Beauty is not a thing but an act."
Friedrich Theodor Vischer, (1922)[1]

Abstract: *This paper will venture to describe modes of perception that emerge through the interaction and counterplay of listening and seeing by means of a partial analysis of the compositional access.*
Choreomusical work opens a world of images and signs beyond language. The expressiveness of what is heard and seen merges with the tacit-knowing-view *of the viewer and the listener. Meaningful resonances and processes of understanding develop along the structure of the work and within the individual construct of implicit and explicit knowledge of the audience. In this process, perception plays a major role. Aside from the obvious processing of acoustic and visual stimuli, this paper will look at the role of proprioception, especially the kinesthetic sense, with regard to its role as intermediary and creator in the process of perception.*
A closer look at a short section of Susanne Jaresand's choreography Beauty/Schönheit/Skönhet *and the way it was created shows how a differentiated texture in the interweaving of music and movement turns listening into an acoustic, a visual and kinaesthetic act.*

1 Friedrich Theodor Vischer, "Kritische Gänge," in *Kritik meiner Ästhetik*, ed. Robert Vischer, 383, quoted in Robin Curtis and Gertrud Koch, eds., *Einfühlung. Zur Geschichte und Gegenwart eines ästhetischen Konzepts* (München: Fink Verlag, 2008), 8 (trans. Josefine Bingemer): "Das Schöne ist nicht ein Ding, sondern ein Akt."

To Stumble Is to Perceive

The ability to arrange and connect sensory impressions in such a way that the brain can generate meaningful perceptions, emotional reactions, thoughts, and motor actions appropriate to a situation is continuously formed during the first seven years of a child's life.[2] Accordingly, it is a learned skill to use this interplay of all levels of perception, called *sensory integration*, as a source of understanding and meaningful response, which expands and differentiates with new experiences. However, contemporary music/dance performances—which shift, decouple, or even negate what is being seen and heard—put precisely this hard-won skill to the test.

The concept of refusing the mutual confirmation of hearing and seeing began radically with John Cage and Merce Cunningham and was subsequently explored in the most diverse forms. At the same time, the synchronicity of music and dance, and with it the certainty of the meaning it conveys, lived and lives on seemingly unbroken. Cage and Cunningham did not seem very interested in how their performances affected perception: The unravelling of visual and auditory impressions caused by their aleatorically conceived works makes sensory integration impossible. And yet a strong desire to bring seeing and hearing together remains. A strange moment of satisfaction or brief inner relaxation occurs when a musical gesture and a dance gesture coincide in time and energy—even if it is "just" by coincidence. This is how reactions can be interpreted when viewing Cunningham's choreographies, in which only the duration of the pieces or individual phrases was agreed upon with the composer beforehand.

Merce Cunningham impressively describes the freedom of perception found at that time through its systematic overtaxing. In 1952, a forty-five-minute event took place at the Black Mountain Summer School, with David Tudor at the piano, accompanied by poetry recitations, white monochromatic paintings by Robert Rauschenberg on the walls (who in turn played records himself), John Cage presenting texts, and Cunningham dancing. The audience sat diagonally across from each other in the middle of the room, making it impossible to see everything that was happening. "Nothing was intended to be other than it was, a complexity of events that the spectators could deal with as each chose."[3] They were, after all, interested in the effect of their

2 A. Jean Ayres, *Bausteine der kindlichen Entwicklung* (Berlin: Springer, 1984), 37.

3 Peter Gena and Jonathan Brent, *A John Cage Reader* (New York: C.F. Peters, 1982), 111.

works on perception, perhaps even more than those dance creators who favor representing music in movement, so-called "mickey-mousing."

Sixty years later in his texts on theater, the composer and director Heiner Goebbels calls for the spectator's expectation space not to be "blocked with images of unambiguity"[4] and quotes the French art historian Georges Didi-Huberman: "to give something to be seen always means to disturb seeing in its act, in its subject" and adds that this also applies "to listening—and even more, to the sum of both."[5] In this case disturbance is not to be understood as a sensation of threat, but rather as a disquieting element, as a motor for paying attention and activating action-oriented thought resources.

In the pedagogy of the musician Heinrich Jacoby, efforts are made in the spirit of reform pedagogy to promote the development of the senses and "the forming of an alert relationship [...] on the basis of a conscious perception of the current condition."[6] Jacoby called such awareness *stumbling* and urged his students to break habits and "be ready to stumble."[7] The call for refined perception and a readiness to stumble runs through the fields of aesthetic education more or less until today. The dancer and psychologist Detlef Kappert describes the search for meaningful confrontation as essential for personal growth and artistic maturation in the context of his reflections on a teaching style that equally enables performance, sensitivity, and artistic development. Kappert introduces the concept of *productive uncertainty* for this purpose,[8] which refers to a kind of shock that releases productive energy into the dialogue between taught content and oneself. Ursula Brandstätter names the ability to differentiate—to tolerate difference, irritation, and the questioning of the familiar—as

4 Heiner Goebbels, *Ästhetik der Abwesenheit. Texte zum Theater* (Berlin: Theater der Zeit, 2012), 85 (trans. Josefine Bingemer): "mit Bildern der Eindeutigkeit zu verbauen."

5 Ibid., 84 (trans. Josefine Bingemer): "Zu sehen geben heißt stets, das Sehen in seinem Akt, in seinem Subjekt zu beunruhigen [...] [Dies] gilt auch für das Hören—und mehr noch für die Summe beider."

6 Heinrich Jacoby, *Jenseits von "Begabt" und "Unbegabt."* Zweckmäßige *Fragestellungen und zweckmäßiges Verhalten—Schlüssel für die Entfaltung des Menschen* (Hamburg: Christians Verlag, 1994), 19 (trans. Josefine Bingemer): "Sich-Erarbeiten einer wachen Beziehung [...] aufgrund bewussten Zustandsempfindens."

7 Walter Biedermann, *Entfaltung statt Erziehung. Die Pädagogik Heinrich Jacobys* (Freiburg: Arbor Verlag, 2003), 18 (trans. Josefine Bingemer): "für das Stolpern bereithalten."

8 Detlef Kappert, *Tanz zwischen Kunst und Therapie* (Frankfurt am Main: Brandes und Apsel Verlag, 1993), 11ff.

an opportunity in aesthetic education.[9] And Heiner Goebbels writes in his publication *Aesthetics of Absence* (*Ästhetik der Abwesenheit*), which culminates in reflections on education for the performing arts:

> Our perception reacts where intensity is *evoked and produced*—this can also be a blank space. An observation at the edge, something that lacks conclusiveness because it does not fit together or denies visibility and completion. As spectators we want to bridge distances and instinctively wish to close gaps.[10]

Every child has the ability to tolerate gaps in order to use them as a springboard for their own fantasies, conclusions, and interpretations. As an adult, this ability often has to be regained. Aesthetic experiences can provide numerous starting points to explore the spectrum of perception in which the self and the other fall into each other,[11] including the consciously experienced pleasure of not understanding.[12]

Excursus on Empathy

The concept of empathy, as researched at the beginning of the twentieth century by Theodor Lipps especially in the field of psychology and aesthetic perception, is fundamental for our ability to connect with what we perceive.[13] According to Lipps, empathy occurs in a bodily way, in that what is perceived is involuntarily followed as a micro-movement and subsequently experienced as a projection into the other. He did not distinguish between inanimate objects and living beings. For him, aesthetic experiences of things, be they landscapes,

9 Ursula Brandstätter, "Differenzen als ästhetisches und pädagogisches Potenzial," in *Positionen. Beiträge zur Neuen Musik*, Heft 61 (November 2004): 2–7.

10 Goebbels, *Ästhetik der Abwesenheit*, 85 (trans. Josefine Bingemer): "Unsere Wahrnehmung reagiert dort, wo Intensität *hervorgerufen* oder *produziert* wird—das kann auch eine Leerstelle sein. Eine Beobachtung am Rande, etwas, das Schlüssigkeit vermissen lässt, weil es nicht zusammenpasst oder Sichtbarkeit und Komplettierung verweigert. Gerade Distanzen wollen wir als Zuschauer überbrücken, Lücken wollen wir instinktiv schließen."

11 Siri Hustvedt, *Embodied Visions: What Does It Mean to Look at a Work of Art?* (München: Deutscher Kunst Verlag, 2010), 7.

12 Wicki Bernhardt, "Warum machen die das?," in *Rhythmik—Musik und Bewegung. Transdisziplinäre Perspektiven*, ed. Marianne Steffen-Wittek, Dorothea Weise, and Dierk Zaiser (Bielefeld: transcript, 2019), 420.

13 Dargelegt in Theodor Lipps, *Ästhetik, Psychologie des Schönen und der Kunst I: Grundlagen der Ästhetik* (Hamburg: Voss, 1903).

objects, or architecture, as well as living events were objects of empathy, because "generally every sensual object imposes on me to be active."[14]

Automatic empathy often occurs unconsciously or below the threshold of perception and is today supported by the theory of mirror neurons as the basis of empathy. With regards to the reception of music (and dance), physical empathy shows itself, for example, as swinging or rocking along, provided that the formative elements such as rhythm, phrasing, and dynamics can be sufficiently anticipated. Lipps developed the model of empathy broadly. It also includes the active, intentional process, which is based on the recognition of fundamental, bodily experienced dynamic processes, which are described by him as

> free-flowing or inhibited; easy or forced; unanimous or opposed; tense and loosening; concentrated in one point or diverging in manifold life-activities and 'losing oneself' in them.[15]

In a reassessment of this concept, Karsten R. Stueber differentiates between immediate bodily experience as a "basic" form of empathy—described by Lipps as mimicry—which he links to the activity of mirror neurons, and the process of "reactive" empathy.[16] This second, reactive form involves cognitive processes such as comparisons, considerations, and imagination, which make it possible to understand the causes of behaviors or events. Vittorio Gallese also sees the mirror neurons as part of a multi-layered process that enables empathy and imitation. In his view, several mechanisms of synchronization intertwine.[17] He emphasizes that experienced analogies include all aspects of what can be perceived and are to be understood as a multi- or intermodal system.

> The distinction between *basic* and *reactive* empathy can possibly be transferred to the distinction between kinetic listening as an involuntary physical reaction to beats and catchy rhythms, and kinesthetic listening,

14 Curtis and Koch, *Einfühlung*, 16 (trans. Josefine Bingemer): "jedes sinnliche Objekt überhaupt stellt an mich die Zumutung zu einer Thätigkeit."

15 Ibid., 17 (trans. Josefine Bingemer): "frei dahinfließende oder gehemmte; leichte oder bemühte; in sich einstimmige oder in sich gegensätzliche; sich spannende und sich lösende; in einem Punkt konzentrierte oder in mannigfachen Lebensbethätigungen auseinandergehende und in ihnen 'sich verlierende'."

16 Karsten R. Stueber, *Rediscovering Empathy. Agency, Folk Psychology, and the Human Sciences* (Cambridge: MIT Press, 2006).

17 Vittorio Gallese, "The Roots of Empathy. The Shared Manifold Hypothesis and the Neural Basis of Intersubjectivity," in *Psychopathology* 36 (2003): 171–80, 175, accessed 6 December 2021, https://www.karger.com/Article/Abstract/72786.

> which is able to reflect impulsive bodily reactions and differentiate them into different levels of perception.[18]

The following example illustrates how movement perception and hearing can also develop in cultural contexts. Dancer and movement analyst Cary Rick describes the effect of his solo dance "Sodom" from the cycle *Totem* based on descriptions from the Old Testament. The theme is sensual pleasure. He performed soft undulating movements with his arms and spine, while his legs moved quickly and rhythmically. This was accompanied by drum music (unfortunately not described in detail). While the European audience watched the performances in silence, the audience at a dance festival in Tabarka, Tunisia "enthusiastically began clapping along to the rhythm of the percussion accompaniment"[19] and demanded a repetition of the piece. Apparently, the kinetic effect of the music and the dancer's movements, intensifying into trembling, had literally swept the audience off their feet. In contrast, the European audience, not used to visible physical participation in concerts or dance performances, sat completely paralyzed, presumably triggered by the sublimity of the religious theme.

Daniel Stern addresses the phenomenon of displacing affects in his infant research.[20] Rather than using emotion labels, he works with dynamic, kinetic terms such as "'surging', 'subsiding', 'fleeting', 'explosive', 'swelling', 'bursting', 'dragging on'"[21] to describe so-called "vitality affects," which are recognized at an early age due to the simultaneous (amodal) perception of time, form, and intensity. The physicality of these energetic states (or Gestalten) can later become a connecting link in the perception of aesthetic products and turn it into a bodily experience. The extent to which consciousness and reflection can deepen the process of perception and thus empathy depends—especially in the case of the so-called (contemporary) time-based arts of music and dance—on how they are made. If the audible is not clearly oriented towards the visual, if music and dance don't happen at the same time or are separated through

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18 Stephanie Schroedter, "Musik erleben und verstehen durch Bewegung. Zur Körperlichkeit des Klanglichen in Choreographie und Performance," in *Musik und Körper. Interdisziplinäre Dialoge zum körperlichen Erleben und Verstehen von Musik*, ed. Lars Oberhaus and Christoph Stange (Bielefeld: transcript, 2017), 223

19 Cary Rick, "Das Auge des Betrachters," in *Tanz Affiche*, Nr. 31 (1991), 67 (trans. Josefine Bingemer): "enthusiastisch den Rhythmus der Schlagzeugbegleitung mitzuklatschen."

20 Daniel Stern, *Die Lebenserfahrung des Säuglings* (Stuttgart: Klett-Cotta, 2003).

21 Ibid., 83 (trans. Josefine Bingemer): "'aufwallend', 'abklingend', 'flüchtig', 'explosionsartig', 'anschwellend', 'abklingend', 'berstend', 'sich hinziehend'."

other non-congruent means, it becomes more complicated—and arguably more interesting. It is pointless to try to determine how perception is experienced in detail, since it will never be identical between two people, fed by individual experiences of hearing, moving, and seeing, as well as current sensitivities. It may rather be of interest which clues awaken and guide the processes of listening and seeing by vitality affects or "stumbling blocks." This could lead to a new richness of expressiveness in the connection between music and dance, thus how listening is deepened through seeing.

Beauty

In her music-choreographic work *Beauty/Schönheit/Skönhet*,[22] which was created within the framework of an artistic research, the Swedish eurhythmics practitioner and choreographer Susanne Jaresand explores the similarities and differences between what can be heard in music and what can be physically heard in dance:

> The concept of reflective listening is, for all participators of this project, an important parameter as a methodology for analyzing how music and dance inter-operate, and how choreography creates a kind of listening, which can transform music into a physical experience.[23]

Jaresand aims to create a physical experience while listening to music for everyone present at a performance: the audience, musicians, dancers, and the artistic collaborators for costumes, set, and lighting.[24] She developed a concept that combines a choreography with different casts, the composition for string quartet *Fragmente—Stille, An Diotima* by Luigi Nono and a composition for chamber ensemble by Sven-David Sandström. The latter was created on the basis of

22 Video on YouTube, accessed 31 March 2022, https://www.youtube.com/watch?v=xDlRiNSJT58.

23 Susanne Jaresand and Maria Calissendorff, "Beauty/Schönheit/Skönhet. An Artistic Research Project in Music and Dance," in *Le Rythme. Scientific Perspectives, Artistic Research and Theory* (2019): 161–74, 164, accessed 20 July 2022, https://fier.com/wp-content/uploads/2022/07/le-rythme-2019.pdf.

24 "[…] a physical experience to all in the space that are exposed; musicians, dancers, audience and hopefully the artistic people of more material matter as scenography, costume and of course the light." (Jaresand in an e-mail to the author dated 16.08.2020.)

dance sequences that had themselves been developed through improvisation and without music. Dance relates to music and music relates to dance.[25]

The working process was complex. After a long listening phase, Jaresand divided Nono's string quartet into four parts based on different musical elements, which she then visualized in relation to possible dance events. She gave improvisation guidelines to the dancers, who then produced movements that later functioned as a counter or accompanying voice to the music. Once the finished movement sequences were created, the dancers heard the respective part of the string quartet for the first time whilst performing their sequences and at the same time their own musical embodiment, which was indirectly fed by the composition.

Originally, the string quartet was to be heard first, followed by Sandström's composition. Jaresand discarded this concept and interwove the musical levels in such a way that some parts of the compositions can be heard separately and some simultaneously. In this way, she was able to juxtapose the conventional style of Sandström's work with Nono's uncompromising composition through long phases of silence. The different constellations of bodies moving on stage, only occasionally in direct correspondence with the music, further influence and deepen the listening experience. The following graphic by Jaresand shows the time structure of the different levels of action of music and dance:

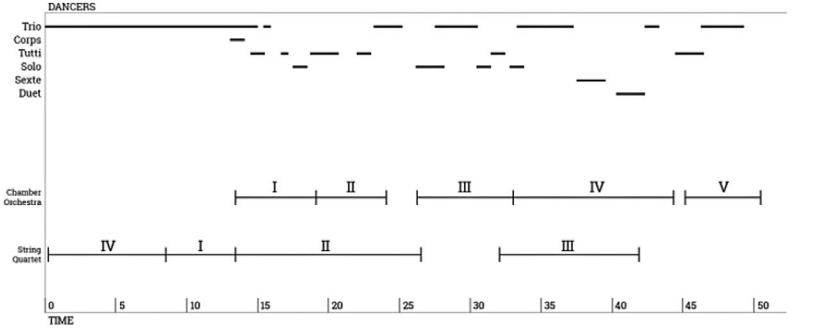

Figure 1: *Graphic by Susanne Jaresand on the time structure of Beauty/Schönheit/Skönhet. © S. Jaresand*

25 Jaresand and Calissendorff, "Beauty/Skönhet/Schönheit." A taping of *Beauty/Schönheit/Skönhet* can be seen here, accessed 23 August 2020, https://www.youtube.com/watch?v=xDlRiNSJT58&feature=youtu.be.

Sandström's composition is heard in the notated sequence with two interruptions. The string quartet begins with the fourth part (defined as such by Jaresand, see figure 1), which is followed by parts 1 and 2 and, after a longer pause, part 3. A longer opening of the choreography is performed by a dance trio, followed by more frequent changes in the cast, repeatedly accompanied or replaced by the dance trio, which also performs the end of the choreography.

Jaresand combined the thirteen-minute trio made up of two men and a woman at the beginning of the choreography with the final part of the string quartet. The ninety seconds,[26] which will be examined in more detail here, are initially characterized by multiple fragments of sound that rapidly swell and subside and sometimes emerge like flashes. Quarter tones and an extremely wide tonal space develop into a disparate auditory image that suddenly changes into a long, thin, sustained tone. This leads with a rapid crescendo to a sequence of briefly oscillating chords. Ghostly flashing tonal schemes from *piano* to quadruple *pianissimo* then ebb into a fermata whose duration Nono notes as 8–11 seconds.[27] The last passage, again in delicate dynamics with short recumbent notes and bouncing *balzare* jumping back and forth between the instruments, leads again into a seemingly endless sustained sound.

Which components of the music Jaresand transformed into movement and suggested as improvisation guidelines for the development of movement phrases and gestures can be tentatively derived from the movement terms used in the music description. Roughly described, the motif-generating physical actions are short, rapid, and selectively separated movements that combine to form a kaleidoscopically changing picture of jumping geometric forms, body lines cutting through space, tense holding figures, horizontal and vertical pendular movements as well as isolation and whole-body modeling. The elements of this short introductory phase form a complex material that is taken up again in the further course of the piece, spun on, transposed and supplemented.

Calling for Attention

Hearing, since it cannot be turned off and remains active even in sleep, forces attention. Nevertheless, hearing does not automatically mean paying attention

26 This section corresponds to the score numbers 44–47.

27 At the request of the La Salle Quartet, to whom Luigi Nono dedicated the work, he added seconds to some of the fermatas.

or listening. Something must awaken attention in order to generate precise listening. Attention is directly connected with experiencing something and the sensations that accompany perception.[28] Waldenfels regards the experience of the moment in which subjective attention is awakened as a double event.[29] He refers to the moment an event hits or touches one as an experience to which a reaction of the subject is attached only in the second step: "*What comes towards me* is separated by a gap from what *goes out from me*."[30] This gap presents itself as a liminal moment of transition between attentiveness and noticing. It is only as a result of this attention that behavior occurs which interprets the impulse into structures, follows it, or rejects it. Waldenfels depicts individual attention as a selection in which "some things *stand out*, others *recede*, like in a relief."[31] In the image of a relief with stronger and weaker characteristics, perception is thus constituted as a multi-layered process that is fed by the organization of the respective individual fields of experience.

In the opening passage of *Beauty/Skönhet/Schönheit*, hearing and seeing are constantly immersed anew in "experiences" through extremely changeable events. Not only is there no stable relationship established between music and dance, but the compositional material changes almost constantly within each medium. This complexity and the associated moments of surprise offer an abundance of connection experiments with already existing experiences in movement and listening, and—in keeping with the choreographer's intention—with events that have already taken place in the work. The dance material combines, for example, gestures of pointing and determining with pendular and swinging movements that may be linked to physical experiences of bobbing and slinging. These are reflected—though not in temporal correspondence—in tonal gestures, as can be seen in the description of the musical events of this section (cf. section "Aleatoric Counterpoint"). The perceived density of events decreases when the passage is viewed several times. Moments of silence allow the audience to process the information and to connect what has been seen and heard. For example, the author only noticed after a while that a rhythmic

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28 David Espinet, *Phänomenologie des Hörens*, 2nd edition (Tübingen: Mohr Siebeck, 2016), 109.

29 Bernhard Waldenfels, "Geweckte und gelenkte Aufmerksamkeit," in *Aufmerksamkeit. Neue humanwissenschaftliche Perspektiven*, ed. Jörn Anders Müller, Andreas Nießeler, and Andreas Rauh (Bielefeld: transcript, 2016), 29.

30 Ibid., 30 (trans. Josefine Bingemer): "*Was auf mich zukommt* ist durch eine Kluft getrennt von dem was *von mir ausgeht*."

31 Bernhard Waldenfels, *Phänomenologie der Aufmerksamkeit* (Frankfurt am Main: Suhrkamp, 2004), 101 (trans. Josefine Bingemer): "einiges *hervortritt*, anderes *zurücktritt*, wie bei einem Relief."

swinging motif is repeated five times. Since this rhythmic structure is not confirmed on the musical level, the seeing was, so to speak, "out of step." Instead, in the search for accordance, short moments of temporally close or almost synchronous overlaps in articulation, direction of movement, and dynamics were recognized, whereby hearing and seeing were connected.

Timing as a Physical Experience

With thirteen different basic tempi, numerous fermatas and breaks, as well as the instructions *accelerando* and *ritardando*, which are to be interpreted subjectively, *Fragmente–Stille, An Diotima* presents itself as extremely discontinuous in the course of time. However, with a few exceptions, identical tempi are provided in all four parts and similar compositional textures are marked with the same tempo indications.[32] This results in a homogeneous structure in each of the individual sound fragments. Inspired by Stern's vitality effects described above, these figures can be identified as kinetic elements: tumbling, dragging, searching, oscillating, fleeting, jerking.[33] Like the shapes of a mobile, they emerge and disappear again from the field of vision or listening sphere.

If one wants to consider the quartet under the aspect of rhythm, an extended approach must be applied. Although the score is marked with bar and scale lines as well as with horizontal and vertical arrows that divide the time stream and clarify what sounds together, the listening is oriented towards the texture of the individual fragments, their duration, and the energetic quality of their transitions. In accordance with the core principle of Gestalt theory, the sums of the most differentiated figurations become audible as a whole, which is more than the addition of its individual elements, so that "the succession of discrete individual elements [...] is elevated to a description of dense cumulative figures."[34] These acoustic perceptual forms manifest themselves physically and are questioned and contrasted in various ways throughout the dance events. Depending on the individual disposition, the process takes place primarily on the visual level and the listening is contextualized accordingly. However, the

32 Joachim Junker, "*Die zarten Töne des innersten Lebens*." *Zur Analyse von Luigi Nonos Streichquartett Fragmente–Stille, An Diotima* (Büdingen: Pfau, 2015), 60.

33 These terms were derived from the author's movement reactions to the music section discussed here.

34 Viktor von Weizsäcker, *Gestalt und Zeit* (Göttingen: Vandenhoeck & Ruprecht, 1960), 3, cited in Junker, "*Die zarten Töne des innersten Lebens*," 269 (trans. Josefine Bingemer): "die Sukzession von diskreten Einzelelementen [...] für eine Beschreibung von dichten Summengestalten erhoben wird."

stumbling blocks could possibly be bypassed and a perceptual level disregarded, which would regrettably diminish the process of getting into motion.[35]

Aleatoric Counterpoint

The complex interlocking of music and dance is introduced in *Beauty/Schönheit/Skönhet* right at the beginning and arises from the choreographer's way of working. She derived movement qualities and spatial figurations from her intensive listening that were explored improvisatorially in dance and composed into movement phrases. In the subsequent performance with music, random points of connection occur in which accents, slips, or pauses in the movement coincide with the music. However, the piece is dominated by non-simultaneity.

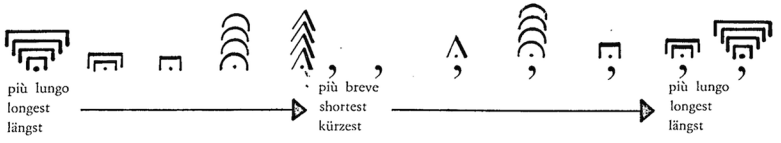

Figure 2: *Notations of fermatas from the playing instructions of Luigi Nono's Fragmente–Stille, An Diotima.*[36] *© 1980 Casa Ricordi Srl, a division of Universal Music Publishing Group. International Copyright Secured. All Rights Reserved. Reprinted by permission of Hal Leonard Europe BV (Italy)*

Nevertheless, music and dance enter into a dialogue that contains a special analogy to language through its syntax, in this case as the formation of groups of events that are separated from each other by longer pauses. The alternation of sound chains of varied articulation, colour, and dynamics characterize Nono's

35 "Gestalt is that which has become solid, but precisely this then proves to be fluid again. Gestalt is in figures and forms; but these are seemingly not the beginning nor the end, but themselves what has become and is becoming." von Weizsäcker, *Gestalt und Zeit*, 3, cited in Junker, "*Die zarten Töne des innersten Lebens*," 269 (trans. Josefine Bingemer): "Gestalt ist das Festgewordene, aber gerade dieses erweist sich dann wieder als das Flüssige. Gestalt ist in Figuren und Formen, aber diese sind offenbar nicht Anfang, nicht Ende, sondern selbst Gewordene und Werdende."

36 Luigi Nono, *Fragmente–Stille, An Diotima per quartetto d'archi* (Milano: Ricordi, 1985).

string quartet. They create phases of silence through the expansion of sounds as well as pauses, and open up spaces for musical associations.[37] These stretches are notated in the score as fermatas (figure 2) and were differentiated by Nono in twelve different forms.

In developing the choreography, Jaresand also sought to form movement fragments that create a kind of arhythmic expression[38] and are also separated from each other by moments of pause. It was a particular concern for her not to let the end of movements necessarily coincide with the arrival in a final body position, but to set moments of pause also where movement actually wants to be continued and the audience may already feel them coming on.

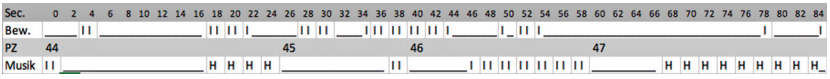

Figure 3: *Overview of the relationship between pausing (H = held notes, vertical lines = pause) and action (continuous horizontal lines) in music and movement. Bew. = movement, PZ = score numbers. © D. Weise*

The characteristic of interrupting and pausing is equally present in the music as well as in the choreography of this section danced in unison. However, there are hardly any temporal correspondences in the transitional moments from action to pause and vice versa, which is not surprising given the choreographic method. As can be seen in the sketch (figure 3), there are only two such events: in second 17 and at the end of score number 47. Correspondences in the energy and dynamic of the movements lead to those musical-sound elements in the dialogical interweaving of music and dance. Ears and eyes are stimulated by the polyphony of both voices, which use different languages, to perceive the events as independent but also related to each other. Nevertheless, there are moments of energetic correspondence, for example when an arrow-like realignment of movement in space coincides with a sharp, high, torn string sound, or when a physical softening is combined with the fading of an oscillating interval. Somewhat reminiscent of the well-known memory game, sound and movement motifs are mixed and the pairs are only revealed partially and delayed in time. The movement phrases composed in advance by the dancers from the music, but without having heard it, meet Nono's complex construction

37 Junker, "*Die zarten Töne des innersten Lebens*," 48.

38 "[…] a kind of arhythmic expression." (Jaresand in an e-mail to the author dated 12.08.2020.)

of sound, pauses and silence. In this way, the choreographic procedure devised by Jaresand creates a texture of aleatoric counterpoint.

Heinrich Jacoby described *trying* as a further development step after stumbling. This was exemplified in the creation of *Beauty/Schönheit/Skönhet* through the various approaches to movement, listening, and finally composing in dance and music. This piece thus explicitly focuses on perception as the motor and generator of artistic creation and demands of its audience: s/he who will hear must feel.[39]

39 Referring to the German proverb "Wer nicht hören will, muss fühlen." In English: S/he who will not hear must feel.

Rhythm and Meter in Dance as Bergsonian *durée*[1]

Amy Ming Wai Tai

Abstract: *Although many musicians consider meter to be a hierarchy of discrete and isochronous time points or spans, dancers emphasize the continuity of motion and time. This emphasis on continuity challenges the use of conventional music-theoretical models of rhythm and meter for dance analysis by many choreomusicologists, scholars of dance and music. I propose that the way dancers think of movement and time echoes that of philosopher Henri Bergson, who highlights the indivisibility of time and movement, as they carry memories from the past into the present and future, creating what he calls* durée*—a heterogeneous and continuous flow where one state melts into the next without clear boundaries. As such, a Bergsonian view of rhythm and meter in dance can reveal subtleties in the interaction between dance and music that might otherwise escape notice. I apply these concepts in a choreomusical analysis of the beginning of a duet in* A Sweet Spell of Oblivion *(2007) by David Dawson, choreographed to the E-flat minor prelude in* Das wohltemperierte Klavier *I by J.S. Bach.*

Many musicians consider meter to be a hierarchy of pulses, which are conceived sometimes as discrete, isochronous, and durationless time points, and other times as time spans demarcated by these time points.[2] In this model, when we hear expressive variation, we quantize the continuum of time into discrete patterns representable by notation.[3] Most choreomusicologists, scholars of dance and music, adopt this view of rhythm and meter in analyzing dance.

1 An earlier version of this paper was presented at the annual meeting of the Society for Music Theory in 2020. I thank my professors and colleagues who gave me thoughtful advice for this project, most notably Richard Cohn, Christopher Hasty, Zachary Stewart, Jacob Reed, Henry Balme, Liam Hynes-Tawa, and many others.

2 For instance, see Graeme M. Boone, "Marking Mensural Time," in *Music Theory Spectrum* 22, no. 1 (Spring 2000): 1–43, 2–3.

3 Peter Desain and Henkjan Honing, "The Formation of Rhythmic Categories and Metric Priming," in *Perception* 32, no. 3 (2003): 341–65, 341–2.

However, dance philosophers and practitioners, especially in ballet and modern dance, emphasize the continuity of motion and time. For instance, choreographer and philosopher Sondra Horton Fraleigh comments that there is no division from one movement to the next, because division cannot occur in something that cannot be frozen in time.[4] Maxine Sheets-Johnstone, in a similar vein, discusses how motion is indivisible because it is always in the process of becoming.[5] Their observations can be substantiated by physics in dance. According to Emily Coates and Sarah Demers:

> Dancers use momentum to fold one movement into another. [...] Some dancers think of this moment as the "bottom" of a jump or an action. This initial movement then generates a force that the dancer rides into the next action. Within the fulfillment of each movement lies the potential for the next movement that occurs.[6]

The continuity of movement is highlighted in dance pedagogy, too. Ballet pedagogues Barbara Walczak and Una Kai note that whatever the step is, "the dancers are not stopping," because "[t]here is constant flow between the notes or counts."[7] And as dance accompanist Elizabeth Sawyer points out, "most of the crucial preparatory and connecting movements are outside, or even contrary to (*contre-temps*) the tick-tock of the beat and meter."[8] Although dancers sometimes also refer to "counts" as discrete points or spans, in those cases, they are mostly using counts as mnemonics for learning and notating choreography, not a comprehensive representation of movement.[9]

Such views on continuity and qualitative expression of movement challenge the efficacy of conventional models of rhythm and meter in music theory for dance analysis. Whereas these views theoretically do not prevent one from perceiving qualitative expression in rhythm, the tendency to quantize, which is implied by the existence of theoretically durationless time points, leads many

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4 Sondra Horton Fraleigh, *Dance and the Lived Body: A Descriptive Aesthetics* (Pittsburgh: University of Pittsburgh Press, 1987), 191.

5 Maxine Sheets-Johnstone, *The Phenomenology of Dance*, 5th ed. (Philadelphia: Temple University Press, 2015), 27–28.

6 Emily Coates and Sarah Demers, *Physics and Dance* (New Haven: Yale University Press, 2019), 68.

7 Barbara Walczak and Una Kai, *Balanchine the Teacher: Fundamentals that Shaped the First Generation of New York City Ballet Dancers* (Gainesville: University Press of Florida, 2008), 16.

8 Elizabeth Sawyer, *Dance with the Music: The World of the Ballet Musician* (Cambridge: Cambridge University Press, 1985), 38.

9 Sheets-Johnstone, *The Phenomenology of Dance*, 87–90; Stephanie Jordan, e-mail communications, October 27, 2020.

choreomusicologists to pay attention to "what" happens on which beat instead of "how" it happens and the transitions between movements, while the "how" and the transitions matter much to dancers. Due to these habits—quantizing and focusing on the "what"—choreomusicology has yet to resolve questions such as the following:

1) Why do dance and musical accents seldom align perfectly?
2) How do we determine a durational unit, such as a phrase, in dance?
3) How can we take into account qualitative feeling in analyzing rhythm and meter in dance?

In this paper, I propose that the way dancers think of movement and time echoes that of philosopher Henri Bergson,[10] who highlights the indivisibility of time and movement as they carry memories from the past into the present and future, creating what he calls *durée*—a heterogeneous and continuous flow where one state melts into the next without clear boundaries.[11] As such, a Bergsonian view of rhythm and meter in dance can reveal subtleties in the interaction between dance and music that might otherwise escape notice, and provide novel insights into the aforementioned questions. I begin by examining Bergson's conception of *durée* and how movement as discussed by twentieth-century dance writers gives rise to *durée*. After that, I discuss Bergsonian views of rhythm and meter in music theory, such as those of Victor Zuckerkandl and Christopher Hasty. Similar to dancers, they treat rhythm and meter as motion and processual experience. One might think that the difference between them and the customary model is that they see beats as spans, whereas the latter considers them to be points. However, as Graeme Boone points out, points

10 Fraleigh cites Bergson in her discussion of movement and time (*Dance and the Lived Body: A Descriptive Aesthetics*, 191), and Sheets-Johnstone is influenced by Maurice Merleau-Ponty and Jean-Paul Sartre (*The Phenomenology of Dance*, 11), whose ideas on the continuity of time and movement were inspired by Bergson. For how Bergson influenced Merleau-Ponty and Sartre in their views on time and movement as they apply to dance phenomenology, see Fraleigh, *Dance and the Lived Body: A Descriptive Aesthetics*, 178–81. For the relationship between Bergson's and phenomenology's views of time in general, see Christian Dupont, *Phenomenology in French Philosophy: Early Encounters* (Dordrecht: Springer, 2014), 47–55.

11 Bergson discusses *durée* in many places. See, for example, *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer (London: George Allen & Unwin, 1911), especially chap. 4; *Time and Free Will*, trans. F.L. Pogson (London: George Allen & Unwin, 1910), especially chap. 1–2; *The Creative Mind*, trans. Mabelle L. Andison (New York: Philosophical Library, 1946), 192–3.

and spans are dual in nature—points necessarily generate spans between them.[12] The difference is, rather, that whereas the customary model represents the points or spans as discrete, the Bergsonian ones focus on the process between these points or spans. I then explore how Hasty's and Zuckerkandl's theories can be extended to dance, since they use metaphors of motion in describing rhythm and meter but do not discuss movement *per se*.[13] Finally, I apply these concepts in a choreomusical analysis of the beginning of the first duet in *A Sweet Spell of Oblivion* (2007) by David Dawson, choreographed to the E-flat minor prelude in *Das wohltemperierte Klavier* I by J.S. Bach, orchestrated by Leopold Stokowski.[14]

Dance and Bergson's *durée*

Bergson observes that, before the discovery of calculus, science mostly investigated homogeneous and discrete elements juxtaposed in space, and many transferred ways of modeling space to time, representing time as durationless points.[15] For him, however, spatial models cannot capture the experience of motion and time, where the present contains all the memories from the past which become potential for the future. As such, it is more fitting to conceptualize motion and time as continuous and indivisible, where successive states melt into one another with indeterminate boundaries. Since memory is constantly accumulating, we cannot live the same moment twice, making the flow of motion and time a heterogeneous and perpetual becoming.[16] The continuity and heterogeneity of time creates a qualitative flow which he calls *durée*, or "duration" in English: "pure duration might well be nothing but a succession of qualitative changes, which melt into and permeate one another, without precise outlines […] it would be pure heterogeneity."[17]

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12 Boone, "Marking Mensural Time," 2–3.

13 For the relationship between physical movement and the theories of Zuckerkandl and Hasty, see John Paul Ito, *Focal Impulse Theory: Music Expression, Meter, and the Body* (Bloomington: Indiana University Press, 2021), 267–8, 270–2.

14 David Dawson, duet from "A Sweet Spell of Oblivion," performed by Jurgita Dronina and Fabien Voranger at the Dance Open Festival in Saint Petersburg in 2013, with costumes by Yumiko Takeshima and original stage design by John Otto, accessed 16 March 2020, https://youtu.be/24EAi6FLhkQ. I would like to thank the choreographer and dancers for their kind permission to use this video.

15 Bergson, *Time and Free Will*, chap. 1–2.

16 Bergson, *The Creative Mind*, 192–3.

17 Bergson, *Time and Free Will*, 104.

Dance writers often describe movement as a flow that corresponds to Bergson's *durée*. Dancers do not think of steps as durationless "hits." Any step involves an impulse that starts the movement, a getting into the position, and a coming out of the position, and all these stages merge into a continuous flux.[18] On top of the physical necessity for movement to be continuous, dancers also deliberately make this flow heterogeneous by quickening certain parts of the movement and slowing down others to enhance its expressiveness, a technique dancers call "phrasing."[19] In the ballet style of George Balanchine, the pioneer of neoclassical ballet, this is usually achieved by starting a movement fast and then slowing it down at the end. According to Suki Schorer, a pedagogue of the Balanchine style, the *tendu* is phrased if it "starts out rapidly, then slows slightly to reveal the full point. It starts in sharply and then slows as the foot is placed in fifth."[20] Phrasing is even more perceptible in *adagio* movements, where "[t]he dancer must show the beginning with a quicker start, then slow as she continues smoothly down."[21] Even when the dancer seems to be "holding a pose," energy is continuously growing in that position. For instance, in a leg extension, "[o]nce the dancer reached the extended line, she 'grew' in the held position so it did not look static and lifeless. Each movement must maintain a vibrant energy throughout."[22] That is, after the dancer reaches the extended line, her leg continues to get higher, especially right before it comes down; dancers call this "breathing." As Jordan notices, although changes of speed and intensity within a movement are common in dance, it is relatively difficult to achieve within a single note in music.[23] A situation where it is possible to vary

18 Jonathan Still discusses this phenomenon in greater detail with regards to ballroom dancing. See "How Down is a Downbeat? Feeling Meter and Gravity in Music and Dance," in *Empirical Musicological Review* 10, no. 2 (2015): 121–34, 125.

19 John White, *Advanced Principles in Teaching Classical Ballet* (Gainesville: University Press of Florida, 2009), 109. On the surface, this seems to be a strange appropriation of the musical term, but if we consider how Hugo Riemann talks about "phrasing" as the increase and decrease in volume for purposes of articulation (see Lee Rothfarb, "Energetics," in *Cambridge History of Western Music Theory*, ed. Thomas Christensen (New York: Cambridge University Press, 2001), 927–55, 935), borrowing this term to mean the flow of energy within a movement in dance is not inappropriate at all.

20 Suki Schorer, *Suki Schorer on Balanchine Technique* (New York: Alfred A. Knopf, 1999), 67.

21 Ibid., 136.

22 Ibid., 124.

23 Stephanie Jordan, *Moving Music: Dialogues with Music in Twentieth-Century Ballet* (London: Dance Books, 2000), 79.

the speed and intensity within a single musical note is playing a long note with *vibrato*. However, conventional theories of rhythm and meter do not address this phenomenon in *vibrato*–for similar reasons that they do not address this phenomenon in dance–which is that they are in general not concerned with motion and process.[24]

The continuity and heterogeneity of time is also seen in the transitions between movements. As discussed, for Bergson, memory makes time continuous because the present engulfs the past, which in turns becomes potential for the future. Likewise, in dance, kinesthetic memory–conditions set forth by the previous step–become the preparation for the next step and render the succession of steps continuous.[25] For instance, if a dancer finishes a step at a certain location on stage in a particular body position, s/he must begin the next movement from that position. But this continuity is not merely a physical necessity; in order to enhance the impression of continuity, from one step to the next, dancers also deliberately let different body parts arrive at different times to eliminate sharp demarcation between steps. Often, although the footwork coincides with the count conceived as a time point or the onset of the count conceived as a time span, movements in the head, arms, and torso begin or end slightly before or after that.[26] As Walczak and Kai write, "the essence lies in the musicality of how each movement flows over into the next, meaning that a movement may not end or begin squarely on a given count but may overlap into the next count."[27] In the process of increasing the sense of continuity, dancers transform the theoretically isochronous and metronomic stream of dance counts into a heterogeneous flow, where the duration of the first movement imperceptibly bleeds into the second, and the second movement has always already begun by the time the dancer gets into position. This is why the boundaries between time spans in dance are often indeterminate, creating the phenomenon in Bergson's *durée* where one state melts into the next without clear boundaries.

Toward a Bergsonian View of Rhythm and Meter in Dance

What do these observations on movement, time, and memory mean for analyzing rhythm and meter in dance? As mentioned above, a count can refer

24 I thank Liam Hynes-Tawa for sharing this idea with me (private communications, August 2023).

25 Sheets-Johnstone, *The Phenomenology of Dance*, 84.

26 Stephanie Jordan, *Moving Music*, 80.

27 Walczak and Kai, *Balanchine the Teacher*, 8.

to a time point or span, and as I shall discuss in more detail, dancers use the word for both meanings. When a count is conceptualized as a point, how do we reconcile the seemingly punctilious aspect of counting in dance and the continuity of movement? When it is a span, how do we take into account the indefinite overlap between steps? How do these questions illuminate metric and rhythmic concepts in dance, such as accent and phrase, as outlined in the introduction? And what role does memory play in all this? To explore these questions, I will extend Zuckerkandl's and Hasty's Bergsonian views of rhythm and meter for analyzing dance.

When dancers discuss how to make movement expressive, they tend to conceptualize counts as spans. Walczak's comment above that a movement "may *overlap* into the next count [my emphasis]" implies a span-view of counting.[28] As a more explicit example, Jordan points out that, for choreographer Mark Morris, "a beat is a concept that is not about a point, but rather about a length, in time [...] it has a 'front,' a 'back' and the more familiar center, which he simply calls being 'on' it."[29] As mentioned above, dancers do sometimes refer to counts as time points, especially when they use it as a heuristic to learn choreography. In such cases, the movement can pass through the count, or the beginning, the apex, or the end of a movement can coincide with it.[30] But even when they refer to counts as time points, they emphasize the transition between them. As choreomusicologist Robert James Nicholas Coleridge points out, "The interest of the exercises and the true nature of their rhythmic life are to be found entirely in the way the dancers move between each downbeat[.]"[31] Coleridge here takes a "point" view of meter, but for him what is important is the transitions between these points. As such, dance counts can be thought of as hypothetical points that lie in the continuum of movement without stopping it.

In order to explain the phenomenon of counting in dance without compromising the continuity of movement, we can think of these counts as points on a continuous graph, whose properties can be modelled by calculus in mathematics.[32] The idea of "limit" in differential calculus approximates the gradient of a curve at a point without freezing or dissecting the curve, allowing us to make

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28 Walczak and Kai, *Balanchine the Teacher*, 8.

29 Stephanie Jordan, *Mark Morris: Musician-Choreographer* (Binsted: Dance Books, 2015), 119.

30 Robert James Nicholas Coleridge, "Music and Dance in the Twentieth Century: Issues and Analyses" (PhD diss., University of Southampton, 2005), 104–5.

31 Ibid., 103.

32 I am indebted to Dora Hanninen for pointing out to me during the Society for Music Theory Annual Meeting in 2020 how "inflection points" keep the idea

observations about a point while preserving the continuous nature of a curve.[33] For Bergson, calculus brings to the fore the notions of process and continuity in modern science and mathematics, which were sidelined before its invention.[34] He writes, with reference to calculus, that

> [m]odern mathematics is precisely an effort to substitute for the *ready-made* what is in process of *becoming*, to follow the growth of magnitudes, to seize movement no longer from outside and in its manifest result, but from within and in its tendency towards change, in short, to adopt the mobile continuity of the pattern of things [emphasis his].[35]

Bergson finds calculus a fitting analogy for *durée* and movement.[36] He comments that, just as calculus stimulated modern mathematicians to focus on the continuous instead of the discrete, *durée* motivates modern philosophers to forego their spatialized concepts of time and motion as disconnected and durationless instants.[37]

Zuckerkandl takes up Bergson's ideas on the continuity and heterogeneity of *durée* in his conception of rhythm and meter.[38] Just as Bergson conceptualizes *durée* as a curve modelled by calculus, Zuckerkandl represents meter as a continuous wave that cannot be segmented. Although Zuckerkandl does not discuss movement *per se*, he echoes Coleridge's comment above by arguing that it is more productive to represent meter as "not born in the beats at all, but in

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of "point" without compromising the qualities of change and continuity, which inspired me to examine Bergson's use of calculus in discussing movement.

33 Pete A.Y. Gunter, "Bergson, Mathematics, and Creativity," in *Process Studies* 28, nos. 3–4 (1999): 268–88, 274–9; "Temporal Hierarchy in Bergson and Whitehead," in *Interchange* 36, 1–2 (2005): 139–57, 146.

34 Gunter, "Bergson, Mathematics, and Creativity," 277; "Temporal Hierarchy in Bergson and Whitehead," 146. See also his "Gilles Deleuze, Deleuze's Bergson and Bergson Himself," in *Deleuze, Whitehead, Bergson: Rhizomatic Connections*, ed. Keith Robinson (Basingstoke: Palgrave Macmillan, 2009), 167–80, 170–1.

35 Bergson, *The Creative Mind*, 225. David M. Peña-Guzmán discusses this passage in relation to calculus in "Bergson's Philosophical Method: At the Edge of Phenomenology and Mathematics," in *Continental Philosophy Review* 53, no. 1 (2020): 85–101, 95, and Gunter in "Temporal Hierarchy in Bergson and Whitehead," 146 and "Gilles Deleuze, Deleuze's Bergson and Bergson Himself," 171.

36 Alan Robert Lacey discusses this interpretation of Bergson by Jean Milet in *Bergson* (London: Routledge, 1989), 121. See also Gunter, "Gilles Deleuze, Deleuze's Bergson and Bergson Himself," 170.

37 Gunter, "Gilles Deleuze, Deleuze's Bergson and Bergson Himself," 171. See also Bergson, *Matter and Memory*, 241–2.

38 Victor Zuckerkandl, *Sound and Symbol: Music and the External World*, trans. William R. Trask (Princeton: Princeton University Press, 1956), 243–5.

the empty intervals *between* the beats. [emphasis his]"[39] In his model, musical counts fall onto different points of a curve. As figure 1 shows, in a wave of duple meter, counts 1 fall on the peaks and counts 2 in the troughs. Every point in a cycle has a different metrical quality.[40] Although Zuckerkandl does not invoke calculus in his explanations, we can compare the situation to how different points on a curve in a cycle have different gradients or different changes of signs of the gradients around those points. For instance, although the maxima and minima both have a zero gradient, the gradient changes from positive before a maximum to negative after that, and vice versa for a minimum. This mathematical phenomenon explains how counts 1 and 2 have different metrical qualiti continuum of musical motion.

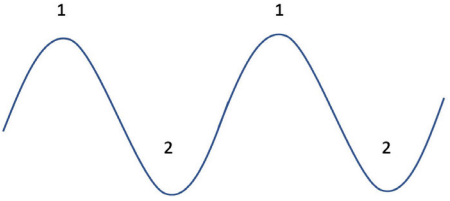

Figure 1: *Zuckerkandl's metrical wave for duple meter. Reproduced based on Victor Zuckerkandl*, The Sense of Music *(Princeton: Princeton University Press, 1959), 116. © Princeton University Press*

Zuckerkandl's metrical wave can be adapted to show the relationship between counts and the continuum of movement in dance. Imagine the *tendu* as Schorer describes it above, which "starts out rapidly, then slows slightly to reveal the full point. It starts in sharply and then slows as the foot is placed in fifth."[41] If we graph the distance of the foot away from the dancer's body (d)

39 Ibid., 181.

40 Victor Zuckerkandl, *The Sense of Music* (Princeton: Princeton University Press, 1959), 116.

41 Schorer, *Suki Schorer on Balanchine Technique*, 67. For a video demonstration of the *tendu* in Schorer's and Merrill Ashley's class, see "The Barre–Part 1" in *The Balanchine Essays*, directed by Merrill Brockway, produced by Catherine Tatge and Barbara Horgan (George Balanchine Foundation, 1998), accessed 26 August 2022, https://video.alexanderstreet.com/watch/the-balanchine-essays-the-barre-part-1, 15:00–15:30.

over time (t), if count 1 is out, count 2 is in, the metrical wave approximates the diagram in figure 2:

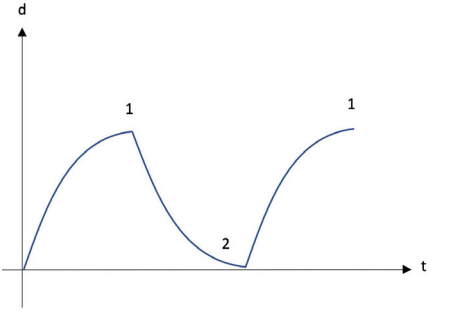

Figure 2: *The metrical wave of* tendus. *© Amy Ming Wai Tai*

Adapting Zuckerkandl's metrical wave to model counting can illuminate the nature of accents in dance, which is most controversial in *adagio* movements. For example, in leg extensions in *adagio*, as explained above, the leg is customarily said to get into position "on the beat" but actually rises incrementally throughout the step to enhance the feeling of extension, and "breathes" before it comes down.[42] If we graph distance of the foot from the floor (d) over time (t), count 3 should fall slightly before the apexes of the graph, as illustrated in figure 3:

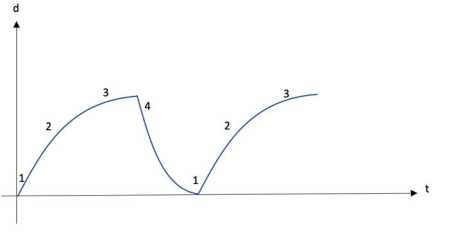

Figure 3: *The metrical wave of leg extensions. © Amy Ming Wai Tai*

42 Schorer, *Suki Schorer on Balanchine Technique*, 124.

This phenomenon helps explicate the nature of "accents" in dance. As in music, an accent in dance can broadly speaking be understood as a moment of perceived emphasis.[43] However, there are two kinds of emphasis in play here: one is the location of the "count," the other the furthest point of extension of the leg, and there is a slight lag between the two. As such, we get the impression that an accent in dance occupies duration. Moreover, like a state in Bergson's *durée*, this duration is perceived to have indeterminate boundaries, because the transition from count 2 to 3 and from 3 to 4 happens in a continuum.

In fact, although music theorists typically think of accents in music as theoretically durationless timepoints, Brent Yorgason points out that musicians often slightly spread apart elements in a single rhythmic event for expressiveness, as in the performance of arpeggios or grace notes, a phenomenon he calls "dispersal." Within a certain temporal threshold, we perceive these dispersed elements as belonging to the same rhythmic event.[44] Dispersal can create the impression of an elongated downbeat.[45] The idea that musical accents occupy duration is supported by cognitive science. Drawing on previous research by J. W. Gordon (1987) and M. J. Wright (2008), Anne Danielsen and others argue that rhythmic events are better modelled as a probability distribution rather than a time point.[46] The resulting curve is the "beat bin," defined as "the perceived temporal width of a beat according to the musical context. Multiple onsets falling within the boundaries of the perceived beat bin will be heard as merging into one beat."[47] What J. Morton, S. Marcus, and C. Frankish (1976) call the "perceptual center" (also called the "P-center") of a note, "the specific moment at which a sound is perceived to occur," occupies duration within the beat bin.[48] The duration of the P-center is affected by factors such as tempo and instrumentation, and it is found that slow, long, and low notes have the longest P-centers.[49] If we treat the P-center in music as analogous to the moment we perceive an accent in a dance step, the results of this experiment may suggest

43 Rachel Elizabeth Short, "Musical Feet: The Interaction of Choreography and Music in Leonard Bernstein and Jerome Robbins's *Fancy Free*" (PhD diss., University of California Santa Barbara, 2016), 67.

44 Brent Yorgason, "Expressive Asynchrony and Meter: A Study of Dispersal, Downbeat Space, and Metric Drift" (PhD diss., Indiana University, 2009), 46.

45 Ibid., 132.

46 Anne Danielsen et al., "Where is the Beat in That Note? Effects of Attack, Duration, and Frequency on the Perceived Timing of Musical and Quasi-Musical Sounds," *Journal of Experimental Psychology: Human Perception and Performance* 45, no. 3 (2019): 402–18, 403.

47 Ibid., 404.

48 Ibid., 403.

49 Ibid., 413.

explanations to why, in dance, the time lag between different kinds of emphasis is more perceptible in *adagio* movements than in quick movements.

Conceptualizing dance and musical accents as events that occupy duration helps us understand Edwin Denby's comment that "dance accents frequently do not reproduce the accents of a musical phrase, and [...] even when they correspond, their time length is rarely identical with musical time units," and this is what makes dance "alive."[50] In this connection, it is interesting to note that Denby was influenced by Bergson's ideas of movement.[51] Denby's comment has fascinated many dance and music scholars. Dance accompanist Elizabeth Sawyer and choreomusicologists Stephanie Jordan and Rachel Short interpret Denby's observation as the result of rubato and cross-accents,[52] but they have not discussed what the "time length" of a dance accent is, how that interacts with "musical time units," and why dance and musical accents are not identical even when they "correspond." Denby's comment is most applicable to slow dances that emphasize the continuity from one movement to the next. As discussed, in such dances, dance steps have relatively long P-centers. As such, there are more varied ways for the P-centers in the dance and music to synchronize. Thus, even when the choreographer intends the step and the musical tone to "correspond," we may still perceive the two events as slightly misaligned or only loosely synchronised. Conversely, in fast and percussive dances, where the P-centers of the movements are shorter, we are more likely to see the dance steps as being exactly "on" or "off the beat" of the music.

That accents in dance occupy duration suggests that we can represent movement more accurately by modelling counts in dance as spans rather than points, as dancers tend to do when they ruminate on the nature of movement or explain how to make movement expressive. Conceiving of counts as spans has the additional advantage of being able to portray the counts as overlapping by an indefinite duration, which represents the phenomenon of one movement overlapping with the next with fuzzy boundaries. Although musicians by and large do not consider successive musical events to overlap, this is accounted for in Hasty's model of rhythm and meter. For him, rhythmic events, like successive states in Bergson's *durée*, cannot be discretely separated. He writes,

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50 Edwin Denby, *Dance Writings* (New York: Alfred A. Knopf, 1986), 62.

51 Andrea Harris, *Making Ballet American: Modernism Before and Beyond Balanchine* (New York: Oxford University Press, 2017), 103–44, 113–114, 128.

52 Sawyer, *Dance with the Music: The World of the Ballet Musician*, 133–34; Jordan, *Moving Music*, 76–77; Short, "Musical Feet: The Interaction of Choreography and Music in Leonard Bernstein and Jerome Robbins's *Fancy Free*," 68–70.

> [T]he first event as past, ended, and completed does not precede the beginning of the second event; and although end and beginning happen at the same time, this time involves duration – the (indefinite) duration in which beginning, as I have argued, creates an overlap in the making past of the first event and the making present of the second.[53]

The indefinite overlap between successive rhythmic events arises because of the dual nature of the transition: the beginning of the second event defines the end of the first, and at the same time the memory of the first event becomes potential for perceiving the second. The situation is analogous to how, in dance, the end of a step is simultaneously the preparation for the next.

The overlap between steps in dance contributes to what Jordan has observed as difficulties in determining units of duration in dance in general.[54] "Phrase," for example, is an elusive concept in dance. As Jordan comments, "even when the phrase beginnings and endings in music and dance seem to correspond, there is often in reality overlap, a blurred synchronization, energies awakening and trailing to rest at different times."[55] Due to the fuzziness of phrase boundaries in dance, phrase overlap is much more common in dance than in music. This is most evident when there is a phrase break in the music but none in the choreography, which is often the result of the fact that, while music can articulate phrase boundaries by changing register, dancers cannot leap to a new position without transitional movements and without traversing the space in between. This phenomenon makes phrase boundaries in dance necessarily kinesthetically and spatially coincidental, just as memory and potential are inseparable in *durée*. Again, the difficulty of determining durational units in dance comes from the physical necessity of movement to be continuous and the aesthetic decision to emphasize that continuity. As such, the fuzziness in the boundaries of units of duration are to be taken as a positive aesthetic attribute rather than something to be normalized or explained away.

In fact, it is often variations in the ways these durational units overlap that makes dance expressive. Conventional models of rhythm and meter, treating events as discrete and successive, cannot model this. We need a model of rhythm and meter that does not arrest the flow of movement, where memory and expectation participate in a dynamic process. Hasty takes a similar view

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53 Christopher Hasty, *Meter as Rhythm* (New York: Oxford University Press, 1997), 92–3.

54 Jordan, *Moving Music*, 79; "Music/Choreographic Discourse: Method, Music Theory, and Meaning," in *Moving Words: Re-writing Dance*, ed. Gay Morris (London: Routledge, 1996), 15–28, 19.

55 Jordan, *Moving Music*, 78.

in music. For him, "music as experienced is never so arrested and is not, I will argue, an expression of numerical quantity. [...] it is open, indeterminate, and in the process of becoming a piece of music or a part of that piece."[56] In his projection model, inspired by Bergson's idea that memories serve as potential for the future, the duration of the first event projects the next. In figure 4, A and B are two rhythmic events of the same duration,[57] whose beginnings are represented by a and b, respectively. With the onset of B, the duration of A becomes determinate, and projective potential Q is realized. Since B is of the same duration as A, the potential Q' is realized, too. However, since there is no event C, the projective potential R is not realized, as indicated by the cross on the arrow.[58]

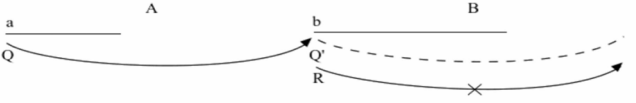

Figure 4: *Hasty's projection model. Reprinted from Hasty*, Meter as Rhythm, 85. *© Oxford University Press*

Hasty's model views rhythm and meter as an active and dynamic process. Adapted to analyze the interaction between dance and music, Hasty's model can bring to light the aesthetic effects created by variations in how a dancer moves from one time span to the next.

An Analysis: *A Sweet Spell of Oblivion* (2007) by David Dawson

To explore the last question outlined in the introduction—"how can we take into account qualitative feeling in analyzing rhythm and meter in dance"—I will adapt Bergsonian views of rhythm and meter to analyze the beginning of the first duet in *A Sweet Spell of Oblivion* by David Dawson, choreographed to the E-flat minor prelude in *Das wohltemperierte Klavier* I by J.S. Bach.

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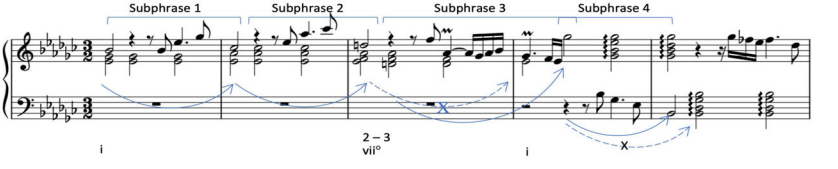
56 Hasty, *Meter as Rhythm*, 3.

57 In Hasty's explanation, these events are just "given" without explanation on how their duration is determined. Technically speaking, we cannot actually determine the duration of B without the onset of a following event. See *Meter as Rhythm*, 85.

58 Ibid., 84–85.

The music consists of four subphrases. As shown in music example 1, the tonic expansion in mm. 1–2 goes into vii° through a 2–3 suspension in the bass. However, the resolution, D-natural, arrives prematurely in the soprano during the suspension. Although in terms of melodic organization, subphrase 3 is clearly separated from subphrases 1 and 2, the anticipatory resolution of the suspension at the end of subphrase 2 creates a sense of continuity between subphrases 2 and 3. The harmony returns to i in m. 4. Adopting Hasty's projection model and his use of arrows to denote projective potential, the repetition of the rhythmic pattern from mm. 1–2 in mm. 2–3 leads us to expect a similar half-note downbeat at the beginning of m. 4. This half note, although present in the bass, fails to materialize in the soprano as it did previously, as shown by the dotted arrow that is crossed out; instead, it is delayed to the second beat of that measure. In retrospect, the progressive diminutions at the end of m. 3 into m. 4, from sixteenth notes to the trill, which are felt as acceleration at the moment, actually contribute to the delay of the half note G-flat. But afterwards the music tarries no more, for the bass kicks in with another anacrusis that overlaps with the end of subphrase 3, rushing the half note at the end of subphrase 4 to arrive "on time" on the downbeat of m. 5.

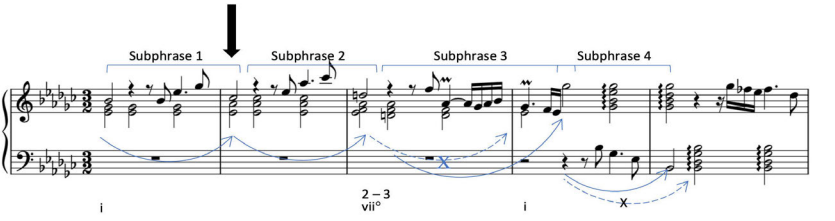


Music example 1: *J.S. Bach, E-flat minor prelude from* Das wohltemperierte Klavier I, *mm. 1-5 (Franz Kroll*, Bach-Gesellschaft Ausgabe, *Band 14, (Leipzig: Breitkopf und Härtel, 1866), 32, newly typeset and annotated by Amy Ming Wai Tai with MuseScore). © Amy Ming Wai Tai*

Before reading the following dance analysis, the reader is encouraged to watch 0:00-0:45 of the choreography,[59] paying attention to the onsets and apexes of the dancers' movements in relation to the accents and phrasing in

59 David Dawson, duet from "A Sweet Spell of Oblivion," performed by Jurgita Dronina and Fabien Voranger at the Dance Open Festival in Saint Petersburg in 2013, with costumes by Yumiko Takeshima and original stage design by John Otto. Accessed 16 March 2020, https://youtu.be/24EAi6FLhkQ.

the music. At the end of subphrase 1, as shown in the video in example 2,[60] the female dancer luxuriates in an off-balance spin that takes the full duration of the half note indicated by the large arrow.

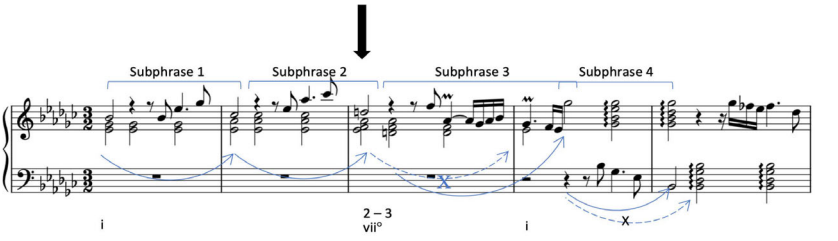


Music example 2: A Sweet Spell of Oblivion, *subphrase 1. (Franz Kroll*, Bach-Gesellschaft Ausgabe, *Band 14, (Leipzig: Breitkopf und Härtel, 1866), 32, newly typeset and annotated by Amy Ming Wai Tai with MuseScore). © Amy Ming Wai Tai*

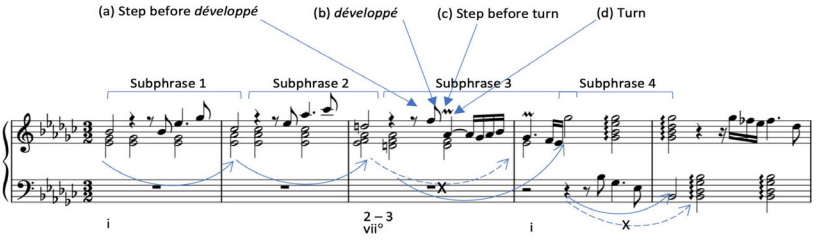
In contrast, at the end of subphrase 2, shown in the video in example 3, the dancers unfold their bodies relatively "on the beat." This is more perceptible in the female dancer: her feet and wrists arrive at the positions at the beginning of the note. I have discussed how the resolution of the suspension at the beginning of m. 3 comes too soon; her being "on the beat" here accentuates that feeling. Note though, that even here the step is not a durationless "hit." Her gaze slowly rises after she gets into the pose, as though the motion continues through and beyond subphrase 2.

When she runs over to the male dancer to prepare for the start of subphrase 3, we feel that the energy is directed, bringing to the fore how the premature resolution of the suspension glues the phrases together. And just as in the harmony vii° has the urge to resolve to i, at the beginning of subphrase 3, the female dancer turns the tardiness in subphrase 1 into active anticipation. In the video in example 4, at (a) and (c), she steps slightly before the note so as to do a *développé* or turn at the onset of the notes at (b) and (d).

60 Music examples 2–6 have associated video examples, available here: https://vimeo.com/showcase/8466217. The password is "duree." I would like to thank the choreographer and dancers for their kind permission to use the YouTube video.



Music example 3: A Sweet Spell of Oblivion, *subphrase 2* (*Franz Kroll*, Bach-Gesellschaft Ausgabe, *Band* 14, (*Leipzig: Breitkopf und Härtel*, 1866), 32, *newly typeset and annotated by Amy Ming Wai Tai with MuseScore*). © *Amy Ming Wai Tai*

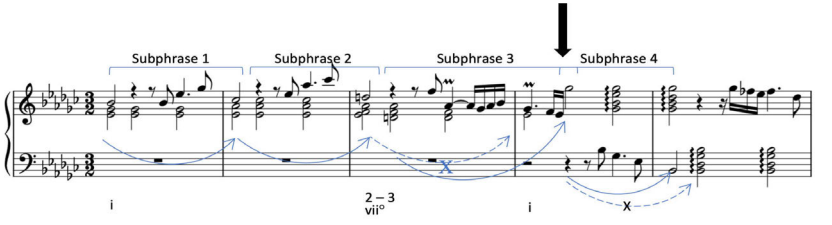


Music example 4: A Sweet Spell of Oblivion, *transition between subphrases 2 and 3* (*Franz Kroll*, Bach-Gesellschaft Ausgabe, *Band* 14, (*Leipzig: Breitkopf und Härtel*, 1866), 32, *newly typeset and annotated by Amy Ming Wai Tai with MuseScore*). © *Amy Ming Wai Tai*

However, as shown in the video in example 5, by the end of subphrase 3 on the high G-flat in m. 4, the dancers only complete the unfolding of their bodies toward the end of the note, in effect delaying the accent of the step until then. This accentuates the feeling of delay that we already experience in the music itself, since, as discussed, the G-flat appears on the second beat of m. 4 instead of the expected downbeat.

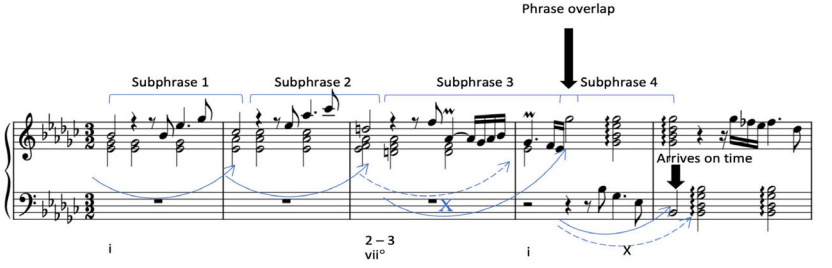
The feeling of delay is underscored by the fact that on the downbeat of m. 3, where the half-note D-natural fulfills the projective potential, the dancers' unfolding of their bodies is relatively "on the beat." In contrast, on the second half note of m. 4, when the fulfillment of our projective potential is delayed, the dancers' unfolding of their bodies is held off until the end of the note. In a dance that thematizes remembering and forgetting, we could imagine that at the end of subphrase 3, the female dancer recapitulates the feeling of moving through

the note at the end of subphrase 1. This choreographic echo calls to attention that at this point the music returns to the tonic, for at the end of subphrase 1, where a tonic pedal was held, the female dancer similarly used up the whole beat to complete her motion.



Music example 5: A Sweet Spell of Oblivion, *subphrase 3 (Franz Kroll*, Bach-Gesellschaft Ausgabe, *Band 14, (Leipzig: Breitkopf und Härtel*, 1866), 32, *newly typeset and annotated by Amy Ming Wai Tai with MuseScore). © Amy Ming Wai Tai*

The half note delayed until the second beat of m. 4 overlaps with the start of the next subphrase, as shown in the video in example 6. In the dance, once the dancers finish unfolding their fingers at the end of the second beat of m. 4, the male dancer immediately starts a *rond de jambe* which gets him into position for the next partnering move.



Music example 6: A Sweet Spell of Oblivion, *subphrase 4 (Franz Kroll*, Bach-Gesellschaft Ausgabe, *Band 14, (Leipzig: Breitkopf und Härtel*, 1866), 32, *newly typeset and annotated by Amy Ming Wai Tai with MuseScore). © Amy Ming Wai Tai*

As such, we get the impression that the delay of the accent in one step simultaneously serves as the impetus for the next, just as in *durée*, successive states are linked to and constantly impact one another. This impetus gives the impression that the music rushes towards the next event; why the half note at the end of subphrase 4 in the bass comes "on time" on a downbeat suddenly makes kinesthetic as well as musical sense.

Conclusion

In the formative years of choreomusicology in the 1990s, Jordan suggested adapting conventional methods from music analysis to analyze dance because music already had an existing methodological framework whereas dance did not.[61] This approach has seen fruitful results, helping choreomusicology establish its place in academia, especially within music studies. However, these methods do not capture the continuous and dynamic qualities in many styles of dance, especially ballet and certain styles of modern dance. As such, many concepts in dance-music analysis, such as what accents and phrases are in dance, remain obscure to dance and music scholars. A Bergsonian approach to rhythm and meter in dance addresses these aspects of dance-music analysis.

The discussion above has also shown that music is more like dance than conventional music theories might lead us to think. For instance, *vibrato*, like dance steps in neoclassical ballet, plays with the variations in speed and intensity within a single note, which conventional models of rhythm and meter do not account for. Accents in music, like those in dance, occupy duration, in contrast to what music theory customarily implies. As such, dance can be a tool through which to understand embodied approaches to music theory and analysis. For instance, Hasty's work, though highly regarded in music theory,[62] is not free from criticism. As Bryan Parkhurst writes in a forthcoming review of *Meter as Rhythm*, the book has not led to what Roger Grant calls a "complete revision of our core beliefs."[63] This is because, as Parkhurst explains, the book "is regularly

61 Jordan, "Music/Choreographic Discourse: Method, Music Theory, and Meaning," 15–8.

62 This is seen in the publication of *Music in Time: Phenomenology, Perception, Performance* edited by Alexander Rehding and Suzannah Clark (Cambridge, MA: Harvard University Press, 2016) which celebrates Hasty's retirement, and the recent 20th anniversary edition of *Meter as Rhythm* published in 2020.

63 Bryan Parkhurst, "Review of *Music in Time* and *Meter as Rhythm*" (unpublished manuscript, summer 2023), 11, https://www.academia.edu/105723331/Review

cited but rarely engaged with, and is far more mentioned than grasped."[64] One of Parkhurst's arguments against Hasty's *Meter as Rhythm* is that although Hasty claims that music-theoretical language does not fully capture the experience of time and motion, there is no better alternative.[65] My investigation above, however, suggests that dance can be this alternative to conventional music-theoretical language, as dance embodies and visualizes what a processual view of rhythm and meter looks and feels like. As such, dance can make Hasty's ideas not only mentionable but also intuitively graspable.

By using dance research to inform music theory, this paper participates in a larger trend in music studies which emphasizes the epistemological value of embodiment in analysis. Whereas music theorists traditionally situate analytical observations in the brain, recent scholars argue that the body plays an important part in our engagement with music.[66] Despite its growing popularity, embodied musicology still appears obscure and analytically irrelevant to some music theorists, as Parkhurst's critique above illustrates. My choreomusical research shows that dance studies can concretize concepts in embodied musicology and perhaps contribute to a "complete revision of our core beliefs" in music theory.

_of_Music_in_Time_2016_and_Meter_as_Rhythm_2020_, accessed Sep 2, 2023.

64 Parkhurst, "Review of *Music in Time* and *Meter as Rhythm*," 9.

65 Parkhurst, "Review of *Music in Time* and *Meter as Rhythm*," 18.

66 The recent burgeoning of literature on the topic testifies to this. See, for example, Arnie Cox, *Music and Embodied Cognition: Listening, Moving, Feeling, and Thinking* (Bloomington: Indiana University Press, 2016); Steve Larson, *Musical Forces: Motion, Metaphor, and Meaning in Music* (Bloomington: Indiana University Press, 2012); Marius Kozak, *Enacting Musical Time: The Bodily Experience of New Music* (New York: Oxford University Press, 2019), Ito, *Focal Impulse Theory: Music Expression, Meter, and the Body*.

Rhythm and Relation
The Choreographic Politics of Sound and Motion

Gerko Egert

Abstract: *Rhythm, as described by Deleuze and Guattari, is a transition, an in-between, a coupling and connection. From one condition to another, rhythm connects situations, movements, and bodies. Based on this concept of rhythm, the chapter will examine rhythm as a form of collectivity in movement. The essay will focus on the work of the group Nguyễn + Transitory, made up of the musicians and performance artists, Nguyễn Baly and Tara Transitory. Beyond uniformity and conformity, their performances* Bird, Bird, Touch, Touch, Sing, Sing *(2019) and* Symphony of Intimacies *(2022) are characterized by movements of touch, approach, and interference. What rhythms of closeness and care, as well as of difference and disorientation are produced by their musical and choreographic explorations? In what way do they turn their musical means into techniques of a choreographic politics that operates on the level of bodies and their rhythms?*

Singing at Night

A child walks through the night, gripped with fear. They try to fight their fear by territorializing the vastness of the dark night surrounding its body. And how do they do it? By singing. They use the sonic rhythm to modulate the darkness. And by repeating their tune, they territorialize the night, allowing the body to navigate home.

When Gilles Deleuze and Félix Guattari tell this story, they describe the child's singing as a way to create a refrain.[1] For them, the song is a sonic modu-

1 Deleuze and Guattari tell the story to open their chapter on the refrain: "A child in the dark, gripped with fear, comforts himself by singing under his breath. He walks and halts to his song. Lost, he takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, center in the heart of chaos. Perhaps the child skips as he sings, hastens or slows his pace. But the song itself is already a skip: it jumps from

lation of space. The sonic rhythm of singing modulates the darkness, turning it from an endless vastness into a walkable space. And by modulating the darkness, the child's voice also modulates movement. Their singing allows the body to walk calmly, to keep on walking, without being stuck looking over their shoulder. The calming effect of singing feeds into the movement of walking, territorializing it—step by step. The rhythm created by the singer walking at night is a transversal rhythm. It crosses the level of sound, movement, space, and experience. Without the perception of darkness, singing would be just another song. Without the vastness of the night, the movements just another walk. Only though the rhythm of singing-moving does the child avoid drowning in fear.

To think of singing as a way to territorialize darkness, to rhythmize and navigate the night, places rhythm at the very heart of our actions and perceptions. Rather than being an extra aspect to the way we walk, we see and we feel, rhythm makes our actions and perceptions happen. There is no walking without rhythm, no seeing and no feeling. Walking, seeing, and feeling are rhythms that make a situation. As Erin Manning writes: "To posit rhythm as extra to experience is to misunderstand how rhythms make up events. Rhythm gives affective tonality to experience, making experience this and not that."[2] When the child begins to sing, they do not only add a tune to their walk through the night, they change the night as well as the walk. The rhythm of the entire situation becomes different, making it a different situation. What Manning as well as Deleuze and Guattari propose is something the singer already knows: Singing is more than just a sonic act. It is an immanent modulation of the spatio-temporal rhythms of our surroundings.

Tracing the rhythmic changes of the entire situation on all its different levels proposes a thinking that perceives this situation as a "rhythmic event."[3] Composed itself as the interplay of multiple rhythms, bringing them into relation, the event is itself part of a wider rhythmic field. No event is entirely self-enclosed, and each of its rhythms links to past and future occasions, to situations far and near, creating the rhythm of time as much as that of space. The fear of darkness brims with stories, imaginations, anticipated futures, and past

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chaos to the beginnings of order in chaos and is in danger of breaking apart at any moment. There is always sonority in Ariadne's thread. Or the song of Orpheus." Gilles Deleuze and Félix Guattari, *A Thousand Plateaus: Capitalism and Schizophrenia*, trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987), 311.

2 Erin Manning, *Relationscapes: Movement, Art, Philosophy* (Cambridge, MA: MIT Press, 2009), 9.

3 Eleni Ikoniadou, *The Rhythmic Event: Art, Media, and the Sonic* (Cambridge, MA: MIT Press, 2014).

experiences. The rhythm of walking is inseparable from the desire for a place to arrive while singing connects sonically and rhythmically to the re-embrace of the past.[4] As Eleni Ikoniadou is keen to point out: Rhythm cannot be reduced to linear time; to think of rhythm as a space-timely dynamic is to follow its multiple nonlinear becomings, its interferences and reverberations, its distortion and amplifications.[5]

The notion of the transversal rhythms of the situation explored here is a twofold one: On the one hand each situation is made of multiple rhythms, and their interplay create the situation's rhythm. On the other hand, none of the situations accommodate a rhythm in its entirety. Rhythms always feed into another situation, creating a rhythm of multiple situations. In this way they create a rhythmic assemblage or a nonlinear chain of situations. Walking at night / being at home / not wanting to go home / remembering to sing /etc. It is this second dimension that for Deleuze and Guattari is at the very heart of their interpretation of rhythm: "There is rhythm whenever there is a transcoded passage from one milieu to another, a communication of milieus, coordination between heterogeneous space-times."[6] I will come back to this idea of rhythm as the betweenness of situation at the end of this chapter.

Rhythms of Touch

Another place, another night. This time: two bodies. Again, they use movement and sound to work the situation's rhythm. This time the place is a stage. Nguyễn Baly and Tara Transitory enter slowly. Droning sounds already establish the sonic space of *Bird Bird*, *Touch Touch*, *Sing Sing* (2019). Following each other's steps closely they circle the room until they arrive in its center. Preparations begin: First, they wind their right arms with silver wire and then moisten their hands, arms, feet, and faces with water from a bowl placed between their bodies.

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4 Deleuze and Guattari are well aware that home is not an aways already existing place: They continue their story: "Now we are at home. But home does not preexist: it was necessary to draw a circle around that uncertain and fragile center, to organize a limited space. Many very diverse components have a part in this, landmarks and marks of all kinds. This was already true of the previous case. But now the components are used for organizing a space, not for the momentary determination of a center. The forces of chaos are kept outside as much as possible, and the interior space protects the germinal forces of a task to fulfill or a deed to do." Deleuze and Guattari, A *Thousand Plateaus*, 313.

5 Ikoniadou, *The Rhythmic Event*, chap. 3.

6 Deleuze and Guattari, A *Thousand Plateaus*, 313.

What opens the performance in a ritualistic manner soon becomes technical, when they connect cables to the spiraling wires of their arms. Soft, tender, and exploratory touches of each other's skin create an intimate relation between the bodies of the two performers. As if trying out what each form of bodily contact does, Nguyễn and Transitory bring together their feet, shoulders, faces, arms, and hands. The droning and pulsating sounds of the beginning are now accompanied by high pitched tones, sometimes appearing suddenly, sometimes slowly fading in and out.

The changing sonic landscape not only introduces a new rhythm on the performance's musical track, it shifts the entire experience: wire and water are no longer accessories of a ritualistic action but technical components of the performance's sound-machine. While the electronic instruments haven been already present in the space from the very beginning, they then become an integral part of the sonic-kinetic situation. What you hear is the very sound of movement as much as the movement of sound. In the relational dance of touching each other's skin, of approaching each other's bodies and withdrawing in manifold ways, Nguyễn and Transitory co-compose the performance's rhythm.

The rhythm of *Bird Bird*, *Touch Touch*, *Sing Sing* is neither the danced rhythm of one individual body, nor of two. It is the transversal rhythm that precedes any attribution of the movement to one individual. It emerges in the relational movements, running through the bodies of the performers. When the performers touch, movement runs through their bodies. Movement circulates like the sound producing electronic waves through their arms and shoulders, runs from the leg to the feet, from there to the other performer's leg and into the torso. When Nguyễn pushes her arm against Transitory's shoulder, a movement moves through their collective body. In these relational movements, in the ways the performers touch, a rhythm is produced. Touch creates differences in movement. Relations come with distance. The act of approaching is inseparable from that of withdrawal. While closeness emerges between the performers' heads, their torsos stay at certain distance. This interplay of bodily touching, laden with closeness and distance, makes their movements rhythmic. It is the rhythm of relational movement made through the difference that touch creates, that is: it is play with distance. Rather than being locked in static proximity, the distance of touch can be described by Deleuze and Guattari as rhythm in the sense that it is the moving configuration of an interval:

> Critical distance is not a meter, it is a rhythm. But the rhythm, precisely, is caught up in a becoming that sweeps up the distances between characters,

> making them rhythmic characters that are themselves more or less distant, more or less combinable (intervals).[7]

In this quote, Deleuze and Guattari point towards another important aspect of rhythm, also key to the work of Nguyễn + Transitory. It is not only the relation between the two performers that creates a rhythmic movement; their characters and their bodies themselves become rhythmical. Each of their bodies is full of movement, full of tension, and full of touch. As much as they touch each other, they touch parts of their own bodies (leaving the question of what "own" means). An elbow touches the torso, one leg the other, the hand and arm and the arm the chest. As rhythmic characters, their bodies are assemblages of touch. They are relations of closeness and distance. Each body is full of rhythms. In the performance they compose with other rhythms and thereby compose other rhythms.[8]

Choreosonic Touch

In *Bird Bird, Touch Touch, Sing Sing* touch is not only visible, it is audible.

One of most influential and potent developments in western dance was the separation of sound from movement. While music already organized the realm of the sonic, dance was meant to stay limited to the visual. Only by clearing movement from its sound, could dance evolve as a form to visualize precomposed music without sonic interferences. The synchronization of dance to music is based on the ignorance of the sonic composition that comes along with each movement and each choreography. Against this logic, Ashon Crawley proposes his concept of the choreosonic: "the always attendant and interconnected concept of movement and sound."[9] While the separation of sound and movement for him is closely linked to whiteness, he studies the emergence of the choreosonic in the practices of Blackpentacostalism. In these practices, the choreosonic is grounded in the "*a*theology-*a*philosophy of blackness." It is "Blackpentecostalism [that] utilizes choreosonics as a politics of avoidance that exists previous to aversive theological, philosophical thought."[10]

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7 Ibid., 320.

8 For a detailed discussion on touch as rhythm and relation, see Gerko Egert, *Moving Relation: Touch in Contemporary Dance*, trans. Rett Rossi (New York: Routledge, 2020), especially chap. 4 "Body Tremors."

9 Ashon T. Crawley, *Blackpentecostal Breath: The Aesthetics of Possibility* (New York: Fordham University Press, 2016), 93.

10 Ibid.

In shouting and whooping, a different tradition of dance can be traced—one that does not separate sound and music. But Crawley is careful to not conflate one with the other. In relation to the tradition of shouting he writes:

> And this because the shout does not take place without making, taking, and breaking sound; the shout traditions are choreographic insofar as they are sonic, and are sonic insofar as they are choreographic. This portmanteau thinks the concept of choreography and sonicity together by breaking them apart.[11]

Following Crawley's proposition on the inseparability of sound and music, touch becomes choreosonic. Even though the sound of touch is most often (and especially in dance performances) kept in the background if not eliminated completely, this elimination is nothing more than an illusion. Against this illusionary separation of movement and sound, Nguyễn + Transitory use the very means of music's technological production to amplify the multiple sounds inherent in each relation and movement of touch. Yet their work with amplification comes with a difference. When the performers use wire and water to make touch audible, the sounds produced are not a louder version of the barely audible rhythms produced by skin touching skin. The flow of electric signals conducted through the moist surface of the body, into the body, though the flesh, across the wires and into the speaker creates again a difference in rhythm and a different rhythm. It co-composes with the droning rhythms that make up the sonic space of the performance from its beginning, as well as the vocal sounds articulated by both performers with increasing intensity until its very end.

In *Bird Bird, Touch Touch, Sing Sing* rhythm is no one-way street. While the flow of electric signals through the wires, bodies, and the moist skin of the performers compose the technical sound machine, the rhythm of the performance cannot be reduced to electricity. Sound feeds back into movement: it creates a driving rhythm, animating the performers' gestures. It slows movement down, makes it tarrying, explosive or floating. The sound created through touch affects the performers' bodies and their movement, creating a feed-back loop of sound and movement. Again: this is not the linearity of a closed circle. One does not know in advance the way the sonic affects the body.[12] Like

11 Ibid., 94.

12 Brian Massumi terms this impossibility to pre-define how affect will transmit the "autonomy of affect," or its "openness": "The autonomy of affect is its participation in the virtual. *Its autonomy is its openness*. Affect is autonomous to the degree to which it escapes confinement in the particular body whose vitality, or potential for interaction, it is. Formed, qualified, situated perceptions and

the movements of touch, affection is not caused by a linear transmission. The droning sound can create a turbulent movement or can have a calming effect. It can slow down the rhythms of movement or agitate them. In other words: the choreosonic rhythm of touch makes the performers' bodies part of the performance's sound machine, without pre-determining the way they move or sound. Their choreosonic rhythms link the movements of choreography and those of sonicity by breaking them apart, as Crawley reminds us. The differential rhythm of the choreosonic performance creates a field of relation. Touching the bodies of the performers as well as those of the audience in sonic and tactile ways, the performers compose (with) the sound of movement and the movement of sound: *Bird Bird*, *Touch Touch*, *Sing Sing*.

The Rhythm of Striation

Another place, another night. Darkness, again. Rhythm is already there. The space of a dark stage. On the ground, barely visible, run silver lines, creating an undefinable pattern. Their straight diagonal design looks like the wire pattern of a micro-chip. These lines striate the space visually. They give rhythm. They are rhythm. A spatial rhythm. This rhythm opens the performance *Symphony of Intimacies* (2022).

Three years after *Bird Bird*, *Touch Touch*, *Sing Sing*, *Symphony of Intimacies* continues Nguyễn + Transitory's choreosonic explorations into the field of haptic and acoustic forms of relation. Relation between bodies, between sound, between rhythms. Relations of space, of time and between situations. *Symphony of Intimacies* is performed by five people: a dispersed group of bodies that most of the time move scattered around the space—bodies meeting occasionally, creating moments of intense and intimate contact, while never vanishing in a homogeneous collectivity.

Each of the performers moves alone, measures the space with her steps, follows the lines on the floor, crosses them, ignores them. While moving, the floor pattern becomes a rigorous score, neatly followed with each step, or it is laconically ignored, barely touched, as if not seen. Yet all the steps play the lines like an instrument. And an instrument they are. Made of shimmering metal, each of the lines connect to the sound processor, extending the machine of music production across the entire stage. Touching the lines and connecting

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cognitions fulfilling functions of actual connection or blockage are the capture and closure of affect." Brian Massumi, *Parables for the Virtual: Movement, Affect, Sensation* (Durham: Duke University Press, 2002), 35.

them with one's body modulates the droning sound, which creates the sonic realm of *Symphony of Intimacies* from the beginning. It is a modulation of an acoustic rhythm through bodies which started with the wiring of the two performer's bodies in *Bird Bird*, *Touch Touch*, *Sing Sing* and extends into a spatial configuration, played by multiple bodies in *Symphony of Intimacies*.

Extending the sound machine across the stage produces not only the visual rhythm of a space striated by lines, perceptible from the very beginning. These lines also create a sonic rhythm, that cuts across the rhythm of the visual. Visually and sonically, the lines co-compose with the performer's movements, creating the rhythm of the performance: sonically, by modulating the sound through touch; visually, through shrouding the lines. When the focus of perception is shifted away from the dancers' individual bodies and their movements to the wideness of the space, the performance's background and foreground begin to blur and the space begins to blink. Cutting with their black clothes through the shimmering lines of the stage, the lines appear and disappear, allowing the space itself to create its own rhythm: a sparkling field of black and silver-gold. In this sparkling field, the repetitiveness of the pattern disappears. Rather than a static space, the stage becomes a rhythmic situation, inseparable from its durational dimension. Making the space sparkle and its sound shake does not mean that structure and striation disappear once and for all. The pattern and its striation of space appears and disappears and becomes part of the performance's rhythm. Deleuze and Guattari call this the transversion of space between smooth and striated, a space that only exists in the process of modulation: "smooth space is constantly being translated, transversed into a striated space; striated space is constantly being reversed, returned to a smooth space."[13] One can call it the rhythms of striation at work in the performance: a rhythm of space as much as a rhythm of sound and movement.

The performers in *Symphony of Intimacies* compose with the rhythms of the space. Rather than moving upon a striated structure on the ground, they move *with* the lines. By touching the lines that extend the music machine into space, the sonic rhythm of the performance is altered and new rhythms are created. This rhythm is a co-composition of the performers' movements with the circuits and loops running through the space. Space and its architecture become co-performers in what Luciana Parisi and Steve Goodman have dubbed

13 Deleuze and Guattari, *A Thousand Plateaus*, 474.

a "rhythmic anarchitecture."[14] Building on the fact that space does not consist of just one rhythm but of many, and that these rhythms constantly interfere and intersect with each other, they describe anarchitecture as "a method of composition which feeds off the vibratory tension between contrasting occasions. A rhythmic anarchitecture is amodal and atemporal. Rhythm proper cannot be perceived purely via the 5 senses but is crucially transsensory or even nonsensuous."[15] Transsensory also describes the multiple rhythms of *Symphony of Intimacies*: bodily, acoustic, and spatial. Together they create a situation whose very nature sits in the in-between: in-between occasions, in-between senses, in-between movements, and in-between bodies. It is the transition that makes the performance's rhythm, rather than any of the individual elements mentioned.

Improvisation as a way to alter these elements without following a preexisting score makes the performance's rhythmic anarchitecture. And these performers do so in a radical way, that is: sound and movement do not deviate from a preexisting score. In this radical way, there is no order to deviate and improvise on. Improvisation here comes out of improvisation. In regard to the jazz ensemble, Fred Moten describes this radical form of improvisation by distinguishing between an improvisation based on a pattern's upkeep (by what is often called the "rhythmic group") and an improvisation of "shared responsibility." In his words: "There is, rather, a shared responsibility that makes possible the shared possibilities of irresponsibility. More precisely, attuned and passionate response is given both in the capacity to walk and to walk away."[16]

It is this "shared responsibility of irresponsibility" that keeps the *Symphony of Intimacies* together (apart). Without an underlying structure, a fixed ground, without a pre-defined separation of sound and choreography, the rhythm is produced in improvisation. In the collective rhythm of sound and movement any existing structure becomes rhythmic itself. The pattern on the ground, which might be perceived as a limiting and structuring striation at the beginning, shimmers and sparkles as soon as the performers start to move. They do not provide an ordering choreography, only the visual pattern of an extensive sound machine, calling for a choreosonic production of rhythm—a rhythm, that "performs variations on a fixity that is always already in trouble."[17]

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14 Luciana Parisi and Steve Goodman, "Extensive Continuum Towards a Rhythmic Anarchitecture," in *Inflexions*, no. 2 (2009) (*Rhythmic Nexus: the Felt Togetherness of Movement and Thought*), accessed 29 September 2022, https://www.inflexions.org/n2_parisigoodmanhtml.html.

15 Ibid.

16 Fred Moten, *Black and Blur* (Durham: Duke University Press, 2017), 106.

17 Ibid., 108.

A Rhythmic Ensemble

Without following a score that provides a structuring rhythm, the performance creates a rhythmic milieu through collective improvisation. The concept of the rhythmic milieu draws on Gilbert Simondon's[18] as well as on Deleuze and Guattari's[19] thinking of the milieu as a relational situation from which new process emerges. Through the interplay of multiple rhythms—sonic, haptic, visual—the movements of the performance are created. Instead of placing the origin of a movement in an individual idea or a preexisting rhythm, movements emerge as the product of a co-composition. In this sense, rhythm is always relational: an effect of the milieu rather than a repetition of a structure. Multiple rhythms feed into each other and create new movements and new rhythms. In this relational field of rhythms, the performers are coming together, moving together, and relating with each other, producing a collective of rhythms, or as Fred Moten writes: an ensemble of rhythmic feel/ings.[20] A feeling of intimacy that never loses difference and keeps open the wiggle room for diverging rhythms to continue.

Thinking of the performance as a rhythmic milieu shifts its notion from that of a composition of individual acts to a relational field. Yet, to think of the milieu only as the breeding ground for a collective to emerge would only grasp one side of the process at work in *Symphony of Intimacies*. The performer's rhythms are not only the product of the performance's rhythmic milieu. They are also part of the milieu itself: each movement, each sound, each sensation of touch alters the rhythmic condition of the entire milieu. Moving with the others is therefore as much the creation of a milieu as their movements simultaneously create new milieus to move in and to move with. Gilbert Simondon is keen to point out that this form of feedback (or better, "feed forward" as we will see) does not collapse in simple adaptation (which eventually would lead to uniformity and the creation of one overarching rhythm). As every new rhythm alters the milieu it emerges from, it also becomes immediately changed by this altered milieu.[21] It is a process of constant alternation, in which neither the rhythmic milieu

18 Gilbert Simondon, "Culture and Technics (1965)," trans. Olivia Lucca Fraser and Giovanni Menegalle, in *Radical Philosophy* 189 (2015): 17–23; Gilbert Simondon, *On the Mode of Existence of Technical Objects*, trans. Cecile Malaspina and John Rogove (Minneapolis: Univocal, 2017).

19 Deleuze and Guattari, *A Thousand Plateaus*.

20 Fred Moten entitles his discussion of the ensemble in relation to Jazz music as "The New International of Rhythmic Feel/ings" (Moten, *Black and Blur*, chap. 6).

21 Simondon, "Culture and Technics (1965)," 21; see also: Gerko Egert, *Choreopower. On the Politics of Movement* (forthcoming).

nor the emerging rhythms attain enduring stability. It is a hardly predictable process, in which the improvising ensemble of performers moves.

Improvisation and the unpredictable rhythms of the choreosonic allow the dancers to relate in their shared milieu without being tied to a singular rhythmic structure.

But improvisation and unpredictability are characterized by their own form of power, as Parisi and Goodman stress in relation to their discussion of rhythmic anarchitecture. Often seen as a possibility to overcome the disciplinary powers of static structures, the relational rhythms of the milieu are no less a field of regulation and governing. To grasp the politics of the performance of *Symphony of Intimacy*, one cannot rely on its improvisational logic. Rather than attributing resistance to the relational and improvisational character of the performances rhythms as such, the question is: how do the relations and rhythms differ from those at work in dominant politics? One form of power Parisi and Goodman see very often at work in rhythmic milieus is topological power:

> It is precisely such calculation of infinitesimal variations that has increasingly become an expression of a topological power, where the production of novelty becomes a priority of control. This is not just an illusion of ideology, but produces real effects. For instance, one expression of this we call ergonomic control, whereby physical and cognitive activities are preemptively modulated via the engineering of random algorithms into the morphology of blobjects.[22]

How, then, should we think of ergonomic control and the forms of resistance to it in the creation of new rhythmic ensembles and milieus? Parisi and Goodman immediately state: topological control cannot be resisted "via the reintroduction of a Euclidean architectural order."[23] For them a reworking of rhythms needs to happen on the way it distributes events in time and space. A rhythmic anarchitecture as the very possibility to resist topological power, therefore relies on the "spatio-temporal anomalies" and the "evacuation of here and now."[24] *How*, then, do we move together to create a collective rhythm, in which collectivity exceeds the composition of movements in the rhythmic milieu of the already give now? How does one create a rhythmic milieu that produces "new singularities (which is to say new ensembles)," as Fred Moten would say?[25]

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22 Parisi and Goodman, "Extensive Continuum Towards a Rhythmic Anarchitecture."

23 Ibid.

24 Ibid.

25 Moten, *Black and Blur*, 117.

The Transsituational Politics of Rhythm

As much as every rhythm is of the milieu, it is not limited to the milieu. As argued above, rhythms are not created as an individual act or by a willful movement, they are the product of the convergence of multiple rhythms and how they interfere. In this sense, rhythms are closely related to their milieu. While the milieu is important in the way in which rhythms emerge, rhythm always exceeds the milieu. Coming back to the notion of rhythm as "a transcoded passage from one milieu to another, a communication of milieus, coordination between heterogeneous space-times"[26] as stated by Deleuze and Guattari, rhythms are always of multiple milieus. Rhythms relate milieus in a space-timely manner, making them part of the rhythms as much as rhythms are part of the milieu. It is this rhythm between milieus or what also could be called the "transsituational" logic of rhythm[27] which I want to propose as the politics at work in Nguyễn + Transitory's performances. It is a politics closely related to pedagogy and rehearsal (rather than a politics of staging or representation).

Bird Bird, *Touch Touch*, *Sing Sing* and *Symphony of Intimacies* are both part of a series of situations creating a process that opens up a way to learn and rehearse, as well as to explore forms of relation and collectivity through touch and intimacy. Instead of being a presentation of a directed rehearsal process, the performances are situations in an ongoing process of multiple events, some of them happening in the space of a rehearsal studio, some of them on stage, others in the everyday lives of the performers. Outside of the theater, before and after the public performances, the rhythms of the performance process feed into the life of the performers, modulating the rhythms of their everyday, to use the words of Henri Lefebvre.[28] At the same time everyday experiences continuously feed into the work and are reworked constantly. This remodulating of the rhythmic feelings of the everyday, the proposition to combine them with other rhythms and to let them co-compose, allows for "spatio-temporal anomalities" as mentioned by Parisi and Goodman. It is here, in the moment of the interfering rhythms of artistic and everyday performance that a rhythmic anarchitectures is created and the possibility to resist the dominant habits of everyday rhythms emerge. During the process of working together, one of the performers states:

> We are relaxed, but we have to be conscious of the fact that we are exercising an act of resistance as well [...]. In a collaboration, people having had

26 Deleuze and Guattari, A *Thousand Plateaus*, 313.

27 Egert, *Choreopower*.

28 Henri Lefebvre, *Critique of Everyday Life* (London: Verso, 2014).

> experiences, or life experiences, that deal with being excluded, because of, you know, sexual identity or sexual expression [...], or a particular race, you know being racialized of course or being in situations of being impoverished because of the social economic model in which we live.[29]

Here, the relaxed dynamics of the performance process is not the creation of a collective situation free from any dynamics of power. The question it poses is rather: how can the dominant and ordering rhythms of the everyday, the alignment to certain choreographies and the exclusion of other modes of living and moving be challenged and modulated to allow for other rhythms to emerge and continue to exist?[30] Instead of imagining a space outside of the powers that organize the rhythm of the everyday, the rehearsals become a reworking of and with the experiences of exclusion in the everyday. This work feeds on the experiences of the performers as much as it feeds into the experiences of everyday living and the rhythm it creates. In this sense, *Symphony of Intimacies* is a rehearsal space. Yet, it is not only rehearsing the show, but the very singularities and ensembles it produces for everyday life. And it does so on the level of rhythm: the rhythm of sound and movement, of the choreosonic, as well as the rhythm of touch and intimacy. It explores the power of rhythm to go beyond the given situation to alter movements and create new modes of collective movement. With its power to re-compose between and across situations, it creates new refrains and gives constituency to emerging processes. This makes rhythm one of the performance's powerful operations.

To work on the level of rhythm means that you never limit the way you move and the way you move with others to the actual and the current situation. By co-composing with the rhythms of a situation, the milieu as well as your own movements are altered. This makes the politics of *Bird Bird*, *Touch Touch*, *Sing Sing* and *Symphony of Intimacies* a transsituational politics. Their rhythms work across situations, never limiting the movement and sounds to the actual event. It is though this transsituational rhythm that relations and collective movements gain consistency. The rhythms of the performance feed into future situations, co-composed with them and linking back to the collective experiences of the performances. Through these transsituational movements, new ensembles, new relations and new intimacies are created.

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29 Quote from one of the performers of *Symphony of Intimacies*, stated in a documentary on the rehearsal process, accessed 29 September 2022, https://www.youtube.com/watch?v=y68V3gs3TmY&t=1s.

30 For a more extensive study of the politics of movement, see Egert, *Choreopower*.

Conducting Experiments
Theorizing Sound through Conductors' Movement in Experimental Music

Drake Andersen

Abstract: *Experimental musicians have long questioned traditional aesthetic attitudes towards sound. In this chapter, I examine how conductors' movements in American experimental art music both shaped and reflected these changing conceptions. Drawing on examples from the 1950s to the 1980s including John Cage, Butch Morris, Earle Brown, Walter Thompson, John Zorn, and Frank Zappa, I argue that conducting styles are aligned with experimental musicians' distinctive approaches to sound. For example, Cage envisioned the conductor as an expressionless utility for timekeeping, in keeping with his interest in non-intention, while Butch Morris's conduction technique makes use of bodily and spatial metaphors to encourage intuitive improvisation. Focusing on the conductor's movements—rather than composers' words—reveals hidden artistic priorities and assumptions, while also offering an opportunity to address the performing body's status as a mediator of both the aesthetic and the social.*

Despite John Cage's insistence that his compositions were devoted to letting the sounds "be themselves," it is this dictum, rather than any particular sound, that most reliably persists in listeners' minds.[1] In fact, in looking back at post-war experimental music as a whole, it seems that the aesthetic theories that accompanied this music have received considerably more attention than the sounds themselves. This state of affairs, while seemingly incongruous, is by no means an outlier among artistic movements in the twentieth century. As Georgina Born succinctly observes, "modernist art invests an unprecedented

1 Cage expressed this sentiment frequently from the 1950s onward. For an early example, see John Cage, "Experimental Music," in *Silence: Lectures and Writings by John Cage* (Middletown, CT: Wesleyan University Press, 1961), 7–12, 10.

power in exegetical texts."[2] While Cage and his coterie frequently sought to distinguish themselves from European arch-modernists such as Pierre Boulez, Born emphasizes how the United States experimentalists' music was nevertheless still "constructed in discursive texts," reflecting a modernist sensibility that was ultimately "theoreticist and determinist."[3] The reception of Cage as more of a philosopher than a composer—a view which even Cage seemed to encourage at times—exemplifies this tendency.

Nevertheless, as many have pointed out, the extensive theorizations of experimentalism were frequently frustrated by the sonic realities of performance. As Cornelius Cardew once pointedly observed,

> contrary to his own 'beautiful idea', Cage himself, in his performance of [*Variations I*] with David Tudor [...] never let the sounds be just sounds. Their performances were full of crashes, bangs, radio music and speech, etc. No opportunity for including emotive material was lost.[4]

Anecdotes like this, in which theory is found to be inconsistent with both the sounds themselves and how they are received, call into question the role of theory in experimental music more broadly. In this chapter, I want to experiment with a different approach: examining experimental aesthetics of sound as expressed not through words—or through sounds—but through movement. I will attend to the movements of the conductor—that is, the conductor of experimental music—and consider how these movements both shape and reflect how experimental musicians conceived of sound from the 1950s to the 1980s. I argue that these conceptions were frequently predicated on discursive negations that resulted in the conductor withholding conventionally musical or expressive bodily movements. This observation foregrounds the role of the body in experimental music, offering an opportunity to address its status as a mediator of both the aesthetic and the social.

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2 Georgina Born, *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Musical Avant Garde* (Berkeley: University of California Press, 1995), 42.

3 Ibid., 57.

4 Cornelius Cardew, "John Cage: Ghost or Monster," in *Stockhausen Serves Imperialism* (Ubu Editions, 2004), accessed 5 July 2022, http://www.ensemble21.com/cardew_stockhausen.pdf, 34–40, 37.

The Hands of the Clock

Despite the postwar experimentalists' special attention to the conceptual and theoretical implications of their work, experimental music was initially envisioned along the lines of what it wasn't, rather than what it was. As Born has emphasized, the post-Cagean experimental tradition was defined "through a series of negations," while Rebecca Y. Kim notes Cage's parallel rejections of conventional art music, popular musics, and jazz.[5] From Derek Bailey's aporic notion of "non-idiomatic" improvisation to Morton Feldman's "obliterating" repetitions, experimental music was enmeshed in a negative sonic aesthetics that trafficked in rejection and disavowal.[6]

Sound itself was not rejected—at least in most cases—but the properties of musical sound were called into question by embracing noise, spontaneity, electronic tones, and dynamic extremes. Rather than specifying the types of sounds to be produced, composers like Cage, Feldman, and Earle Brown explored intentionally ambiguous forms of notation intended to discourage conventional musical patterns such as scales, chords, and rhythmic synchronization. These same composers took pains to emphasize that this approach necessarily reflected not only a transformation of the sonic content of their works, but an entirely novel aesthetic theory. For example, in the 1950s, Cage criticized American composers of electronic music who "call themselves experimental because of their use of this new medium." In his view, these composers simply employed electronic means to "continue conventional musical practices."[7] For Cage and others, it was not enough to simply pursue new sounds. On the contrary, the core meaning of experimental music was to be found through the manner in which the sounds were produced and organized. In practice, this often entailed meticulously purging any recognizable content.

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5 Born, *Rationalizing Culture*, 63; Rebecca Y. Kim, "John Cage in Separate Togetherness with Jazz," in *Contemporary Music Review* 31, no. 1 (February 2012): 63–89, 65.

6 See Morton Feldman, "The Anxiety of Art," in *Give My Regards to Eighth Street: Collected Writings of Morton Feldman*, ed. B.H. Friedman (Cambridge, MA: Exact Change, 2000), 21–32, 25.

7 John Cage, "History of Experimental Music in the United States," in *Silence: Lectures and Writings by John Cage* (Middletown, CT: Wesleyan University Press, 1961), 67–75, 74.

A particularly illustrative example is John Cage's "clock" conducting technique, first called for in the 1958 composition *Concert for Piano and Orchestra*.[8] In this technique, the conductor's principal task is not to cue or indicate tempo, dynamics, or expressive qualities of the music, but rather to simply mark the passage of time without regard for the sounds produced by the musicians. In performance, the conductor imitates the hand of a clock by lifting and lowering their arm while fully outstretched to the side in a clockwise direction (from the performers' perspective). The conductor uses one arm at a time, exchanging arms at the twelve o'clock and six o'clock positions.[9]

Unlike conventional conducting techniques in which the conductor attempts to capture the expressive qualities of the music through movement, in this technique the conductor evokes the complete equanimity of an inanimate object. More strikingly, the conductor's arm movement negates any semblance of rhythm or pulse, moving smoothly at a uniform pace through its circuit without any subdivisions. Even where phrasing could theoretically be suggested–for example, the arm exchanges at the twelve o'clock and six o'clock positions–the conductor gives no acknowledgement, passing through these movements without the slightest change in demeanor, or even a cueing breath. Far from gesturing outwards towards an ensemble, the conductor seems deeply absorbed in executing the movements with almost scientific precision.

Clock Time	Effective Time	Omit
30″	45″	00″
2′00″	1′15″	00″
1′15″	1′15″	15″

Table 1: Excerpt from John Cage *Concert for Piano and Orchestra*, Conductor's Part

8 For a detailed description of the clock conducting technique, see chapter 5 of Martin Iddon and Philip Thomas, *John Cage's Concert for Piano and Orchestra* (New York: Oxford University Press, 2020).

9 For a demonstration of this technique, see the video featuring conductor Jack Sheen produced as part of a long-term research project on John Cage's *Concert for Piano and Orchestra* at the Universities of Huddlesfield and Leeds led by Thomas and Iddon, accessed 5 July 2022, https://cageconcert.org.

Table 1 is a transcription of a brief excerpt from the conductor's part in the *Concert for Piano and Orchestra*. The part is read from top to bottom, with each row representing a particular span of movement, and three columns specifying different aspects of that movement. The first column, labeled "Clock Time," indicates the absolute duration of a given span of movement. For example, the first movement in the excerpt will last thirty seconds, and the second will last two minutes. The second column, labeled "Effective Time," indicates the amount of movement that should take place within the amount of clock time specified in the first column, with one complete circle representing one minute of effective time. Consequently, in the first row, the conductor must move their arm three quarters of the way around the circle (45") in thirty seconds of clock time. Immediately following, the conductor must make one and a quarter circles (1'15") in two minutes of clock time. In other words, the conductor's arm first moves slightly faster than the second hand of a clock, then somewhat slower. The starting position for each row's change of speed depends on the ending position resulting from the movement in the previous row. The third column, which allows the conductor to omit certain durations of clock time, is only observed if the conductor wishes to achieve a performance of exactly twenty rotations (one of the performance options suggested by Cage).[10]

Yet for all of these intricate calculations and choreography, Cage did not view the conductor as a conscious actor or agent. On the contrary, Cage felt that not only should the conductor not serve as a leader, but that they, like all of the other musicians involved, should not have any intentional interpretive influence on the performance whatsoever. As he wrote in a statement reflecting on his music:

> Thinking of orchestra not just as musicians but as people I have made different translations of people to people in different pieces. […] In […] *Concert for Piano and Orchestra* the conductor is not a governing agent but a utility, providing the time.[11]

Cage saw experimental musical performance as an opportunity for individuals to reject expression and transcend their own subjectivity in order to achieve something that was, in his view, more meaningful. By framing the conductor as a "utility" rather than a "governing agent," Cage links a musical situation to a broader distinction between political and utilitarian aims that reappears

10 Hans G. Helms's film *Birdcage*: 73'20.958" *for a composer* depicts Cage conducting rehearsals of the *Concert for Piano and Orchestra*.

11 John Cage, "Autobiographical Statement (1990)," John Cage Trust, accessed 5 July 2022, https://johncage.org/autobiographical_statement.html.

throughout his theoretical writings.[12] While Cage viewed the control exerted by the conductor in a conventional performance situation to be overtly political—and consequently repressive—the conductor in *Concert* is merely providing a service which has a utility to the individuals of the orchestra. Cage's understanding of the orchestra as composed of individuals was consistent and explicit. Proceeding from the assumption that "each musician is a soloist," Cage's aims were, in his own words, "to bring to orchestral society the devotion to music that characterizes chamber music. To build a society one by one. To bring chamber music to the size of orchestra."[13]

It's worth contextualizing just how radical this point of view was. The year 1958, in addition to being the year in which the *Concert for Piano and Orchestra* was premiered, was also the year in which Leonard Bernstein assumed the role of music director of the New York Philharmonic. Bernstein became known and loved for his confident and expressive interpretations, and his outsize public persona. Whereas Bernstein aimed for an embodied interpretation of sound through his arms, posture, facial expressions, lip-syncing, and so forth, Cage studiously avoided any correlation between movement and music. It is hard to imagine two more contrasting approaches to the performance of music, and yet both are undeniably embodied. As if to underline this fact, it was not a musician who played the role of the conductor at the premiere of the *Concert for Piano*, but a dancer: Cage's partner, Merce Cunningham. Cage could have had the musicians use a stopwatch—he did in other works—but he clearly felt the need to create a part for the conductor who, through their body, resists all that is expressive and musical. This rejection literally embodied the tripartite aesthetic negation of experimental music: of the dance of popular music, the emotion of classical art music, and the dialectical content of the avant-garde. In place of the charismatic leader, the musical personality, here was a living mannequin—an inversion of the nineteenth-century automaton: human as machine. By withholding their expressivity—their human qualities—the conductor would come to embody an objective reference—a "utility"—against which abstract duration could be measured.

Liz Kotz writes that Cage understood musical activity to be "experimental" only if it emerged from a continuous, non-symbolic medium that was "unhinged not only from *sound* as a system of discrete notes but also from *time* as a graph-

12 For more on this distinction, see John Cage, "Reflections of a Progressive Composer on a Damaged Society," in *October* 82 (Autumn 1997): 77–92, 81–2.

13 Cage, "Autobiographical Statement (1990)."

ically-plotted system of rhythmic measure."[14] For Cage and others, this kind of work was facilitated by composing directly with magnetic tape in the electronic music studio. As Cage wrote in the late 1950s:

> Counting is no longer necessary for magnetic tape music [...]: magnetic tape music makes it clear that we are in time itself, not in measures of two, three, or four or any other number. [...] All this can be summed up by saying each aspect of sound is to be seen as a continuum, not as a series of discrete steps favored by conventions.[15]

By this logic, we can imagine Cage's famous composition 4'33", for example, as a length of magnetic tape of just under five minutes' duration. Extending this metaphor, it is as though the conductor in the *Concert for Piano* is not only letting the tape run, but changing the tape speed as it passes over the record head through the discrepancy between clock time and effective time. This additional level of abstraction completes the chain from the symbolic rhythm of musical notation to the chronometric duration of unmeasured sound to scientific notions of relativity and uncertainty, or as Cage put it, indeterminacy.

(Finger) Painting with Sound

Cage's conducting technique was one of two major practices that emerged in the early days of experimental music. The other is the composer Earle Brown's conducting technique for his open form compositions. Brown's open form works consisted of musical events scored for subsets of an ensemble that can be performed in any order. The conductor cues the beginning and ending of each event, designating each event number with one hand—usually the left—and using a placard with a moveable arrow to indicate the page from which the event is given. At the same time, the conductor uses conventional hand gestures to shape the expressive qualities of each event.[16]

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14 Liz Kotz, "Post-Cagean Aesthetics and the 'Event' Score," in *October* 95 (Winter 2001): 55–89, 70.

15 Cage, "History of Experimental Music," in *Silence*, 70–1.

16 For more on this technique, see Stephen Drury, "Then and Now: Changing Perspectives on Performing Earle Brown's Open Form Scores," in *Beyond Notation: The Music of Earle Brown*, ed. Rebecca Y. Kim (Ann Arbor: University of Michigan Press, 2017), 231–48 and Drake Andersen, "(Per)forming Open Form: A Case Study with Earle Brown's *Novara*," in *Music Theory Online* 26, no. 3 (September 2020), accessed 5 July 2022, https://mtosmt.org/issues/mto.20.26.3/mto.20.26.3.andersen.html.

While many of Brown's scores use traditional notation, over time Brown increasingly employed graphic and verbal instructions, introducing a great deal of unpredictability into each performance. The indeterminacy of the relationship between notation and sound is one of the central conceits in experimental music. However, the conductor's involvement introduces the possibility of the indeterminacy of a cue or gesture as well. For example, Brown's improvisatory score *One to Five*, composed around 1970, includes five distinct categories of sound, described only in the most general terms: (1) "long high notes"; (2) "quick angular melodic lines"; (3) "very legato lines"; (4) "highly fragmented lines"; and (5) "very small noisy sounds."[17] The open-ended nature of these categories illustrates Brown's interest in achieving variable responses to a single gesture. In performance, the conductor assigns one of these categories of sound to a given performer (or subset of the ensemble) using the fingers of one hand, and then uses more traditional conducting gestures to shape expressive qualities. Even though there is likely to be a stronger correlation between sound and movement in a composition by Brown as compared with Cage, indeterminacy is still thematized through the underdetermination of the musical material that corresponds to each gesture.

Brown's technique—which has precedent in big-band jazz and other improvised conducted forms—influenced a number of musicians of the younger generation, including Walter Thompson. Thompson is best known as the inventor of Soundpainting, a sign language for improvisation—or "live composing"—developed in 1974. It is unique among experimental conducting techniques in that it has made its way from avant-garde circles to the musical mainstream over the past few decades. In an interview, Thompson explained that Soundpainting was born out of two complementary needs: (1) to communicate more directly with an ensemble as a conductor, and (2) to produce sounds that he had difficulty notating.[18]

Like Brown, Thompson's work explores the creative potential at the confluence of multiple agencies, such as the conductor's gestures and the performer's interpretation. In fact, both Brown and Thompson organized performances with multiple conductors and Soundpainters, respectively. Much experimental music is concerned with similar investigations of what has more recently been characterized as distributed creativity, however this kind of practice is by no means unique to experimental music. Both

17 For more on *One to Five*, see David Ryan, "Energy Fields: Earle Brown, Open Form, and the Visual Arts," in *Beyond Notation: The Music of Earle Brown*, ed. Rebecca Y. Kim (Ann Arbor: University of Michigan Press, 2017), 80–112, 108.

18 Walter Thompson, interview with author, July 20, 2017.

Brown and Thompson also exhibited an interest in the intersections between different art forms, further complicating the translation between movement and sound. Brown consistently linked his open form works with midcentury action painting, in which a painted gesture on the canvas was taken as index of a physical movement.[19] Meanwhile, Thompson has expanded the Soundpainting lexicon to facilitate performances that include dancers, actors, and visual artists, in addition to musicians, developing these interdisciplinary dialects in collaboration with specialists. For instance, Thompson developed the movement language with the choreographers Margery Segal and Gus Solomon. As Thompson explains regarding his initial foray into dance with Segal: "Some gestures were easy to translate to movement while others were not. For example, it took us more than two weeks to codify what a Long Tone was for Dancers."[20] The result is a complex chain of mediation in which the Soundpainter's gesture, originally devised with explicitly musical connotations, is interpreted by a dancer through further movement linked to sound on a metaphorical—which is to say, theoretical—level.

Another example from this later generation of experimental musicians is John Zorn, who developed a series of compositions in the 1970s and 1980s known as the "game pieces." In these works, the structure of the composition is determined spontaneously through playful interactions between the performers. Some of the "games," like *Cobra*, employ the use of a conductor-like figure called the "prompter." The prompter is not exactly a conductor, but more like a conduit: the performers all actively gesture and signal throughout the performance, and the conductor mediates, keeping track of the progress of the game, different groupings, and designating when "guerilla operations" to overrule a prevailing musical texture have been successful. Zorn has written that he sees his game pieces as "tying together loose strings left dangling by composers such as Earle Brown, Cornelius Cardew, John Cage, and Stockhausen," though the complexity of the possible interactions in performance surpasses those in works by any of these predecessors.[21]

Zorn not only engages with the conductor's physicality, but also that of the musicians. Zorn's instructions stipulate that performers propose different categories of events or actions by making hand signals or pointing to different

19 See, for example Brown's directions for performance in *Novara* (Litolff/Peters, 2007).

20 Walter Thompson, "History of Soundpainting," accessed 5 July 2022, http://www.soundpainting.com/history/.

21 John Zorn, "The Game Pieces," in *Audio Culture: Readings in Modern Music*, ed. Christoph Cox and Daniel Warner (New York: Bloomsbury, 2013), 196–200, 196.

parts of their body, including the mouth, nose, eye, and ear. The prompter acknowledges performers' requests by holding up a card, and then lowering it to signal a downbeat. As David Brackett points out, the prompter's ability to decide which signals to acknowledge (or ignore)—as well as individual performers' inclinations and actions—leads not only to musical tensions, but also potentially personal and social tensions. Zorn himself has variously compared *Cobra* to a psychodrama, a model society, and "life itself" in its improvised staging of the circulations of power.[22] Despite a significant departure from Cage's practice on a musical level, Zorn recapitulates aspects of Cage's theorization of performance as a site for modeling wider social relations.

The theatricality of Zorn's performances is intensified in the work of another conductor of experimental music: rock musician Frank Zappa. Thompson suggested that Zappa may have been influenced by Brown's open form conducting technique, though the origins and extent of Zappa's technique ultimately remain unclear.[23] In a filmed interview, the percussionist Art Tripp, who played with Zappa in the late 1960s, noted a number of specific gestures, such as a raised middle finger jerked upward indicating a high-pitched "peep" sound, or a wave-like gesture across the body with one hand indicating a guttural, almost emetic groan.[24] Zappa's physicality was an enormous part of his artistry, as for most rock musicians, yet his approach was unique. In video clips of Zappa conducting, he can be seen turning towards the other musicians on stage to direct them, like the leader of a big band, eager to evoke the rarefied role of conductor, only to bring it back down to earth with scatological force. On television talk shows, he would cue the band and audience alike during his appearances to produce flatulence-like raspberry sounds, eliciting peals of laughter. His movements—which oscillated rapidly between the comically formal and winningly crude—alternately served to sustain the frame of conducted music and to puncture it: an echo of Cage's original negation, to be sure, but a much more targeted one.

Embodiment and Social Mediation

In the final section of this chapter, I want to linger on the social aspects of the conductor's role in the experimental music ensemble. As mentioned

22 David Brackett, "Some Notes on John Zorn's *Cobra*," in *American Music* 28, no. 1 (Spring 2010): 44–75, 55–6.

23 Thompson, interview with author, July 20, 2017.

24 *Frank Zappa and the Mothers of Invention: In the 1960s*, DVD (New Malden, Surrey UK: Sexy Intellectual, 2008).

above, many experimental musicians, most notably John Cage, were focused on eliminating aspects of individual subjectivity from musical performance. For Cage, the solution was to resist and purge subjectivity through individual discipline. The younger generation, however, saw that multiplying the subjects involved could have the same desired effect of preventing any single individual from dominating a performance. Negotiating multiple creative agents requires attending to the social dynamics of performance, and understanding the conductor as not only an interpretive force, but also a conduit of social mediation.

An experimental conducting practice that illustrates this dynamic is Lawrence "Butch" Morris's conducted improvisation system known as conduction. After beginning his career as a jazz musician, Morris began to develop the conduction technique in 1985. (At Morris's first performance at The Kitchen in New York that same year, Zorn was among the musicians in the ensemble.) Conduction is distinct from the other techniques discussed in that virtually all of the musical material is developed by the musicians independently, and the conductor's role is to shape and organize, rather than to create. As the journalist Ben Ratliff has written, Morris

> would often begin a performance by setting a tempo with his baton and having his musicians develop a theme spontaneously and then seize on the musical ideas he wanted to work with, directing the ensemble with a vocabulary of gestures and signals.[25]

The significance of improvisation in this context suggests a strong parallel with the music of Zorn and Thompson in particular, but Morris's reliance on a shared, intuitive understanding of the relationship between gesture and sound also suggests a link with a conventional conducting language, such as that employed by Bernstein.[26] Meanwhile, a link to Brown can also be ascertained through the fact that the conductor's role is primarily one of arrangement—though in Brown's case the material was usually notated to some degree, rather than completely improvised.

Morris's gestures are precise and confident—unlike other conductors of experimental music, he used a baton—and, like Bernstein, also engage seemingly

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25 Ben Ratliff, "Butch Morris Dies at 65; Creator of 'Conduction,'" January 30, 2013, accessed 5 July 2022, https://www.nytimes.com/2013/01/30/arts/music/butch-morris-dies-at-65-creator-of-conduction.html.

26 According to Ratliff, Morris cited Bernstein's *Four Improvisations* with the New York Philharmonic, released in 1965 on the Columbia Masterworks Music of Our Time series, as an inspiration for his work.

instinctual physical metaphors for sound and action. For example, an open palm moving up or down indicates volume, the vertical position of the hands along the length of the body indicates pitch or register, and a finger pointed to the forehead indicates that performers should remember a sound. Yet Morris's process was undeniably distinctive: not only were the musicians improvising, but the meaning in Morris's gestures ultimately remained fluid and contextual. As Ratliff points out, Morris frequently found himself asking musicians to "reorient themselves to his imagination," a process that required negotiation and improvisation of a different kind.[27] I argue that this is fundamentally different from responding to signals that are contextual or ambiguous but fixed, like Brown's graphic notations, Thompson's well-defined signs, or Zorn's instructions. Morris relies on a shared understanding that emerges through interaction with the ensemble, which ultimately suggests a more overtly social valence for Morris's gestures.

During a rehearsal featured in a 1992 documentary, one of the performers asks for clarification on Morris's cueing system and he replies: "Everybody that's worked with me before should know that I'm pretty good at making eye contact with you, so you'll know that it's you."[28] This response speaks not only to the physicality inherent in the microsocial interactions of performance, but also of a community assembled through an ongoing practice and shared musical understanding. In other words, it reveals multiple orders or planes of social mediation, as Georgina Born has theorized them.[29] In this case, the microsociality of performance is mobilized through the conductor's body, while community manifests through the musicians' continuing co-presence in rehearsal and performance. The simultaneous interactions on and through multiple planes suggest a hybrid approach that contrasts sharply with more rigid conducting techniques, such as Cage's clock conducting. In this way, conduction exhibits an affinity with other hybridized experimental practices, such as Anthony Braxton's language music, in which Braxton frequently shifts between conducting and playing an instrument—or more than one.[30]

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27 Ratliff, "Butch Morris."

28 This quote is taken from an undated and unattributed rehearsal clip featured in Derek Bailey's 1992 Channel 4 (UK) television miniseries on improvisation *On The Edge*.

29 Georgina Born, "For a Relational Musicology: Music and Interdisciplinarity, Beyond the Practice Turn," in *Journal of the Royal Musical Association* 135, no. 2 (2010): 205–43, 232.

30 Much of Braxton's music is distinguished by the importance of multi-instrumentalism. See Paul Steinbeck, "Improvisation and Collaboration in Anthony

While the hybrid polystylism of experimental music in general has often been celebrated, many writers have asserted the basis of Morris and Braxton's practices in jazz, apparently owing to their Black identities. This lineage is frequently restated in reviews and even scholarly literature, despite being contradicted by available stylistic evidence and, in many cases, the artists' own accounts of their work. George E. Lewis has noted that Black artists—and others from backgrounds underrepresented within experimental music communities—are frequently marginalized through reductive assumptions about genre and style. As he writes:

> Claims of genre transcendence often feature a complementary Othering of someone else as 'genre-bound,' with criteria for the identification of genre diversity that shift according to not only (or even primarily) musical direction, but also the race, ethnicity, class position and, quite often, the gender of the artist involved.[31]

This racialized dynamic illuminates the third of Born's orders of social mediation, in which music can be seen to embody "stratified and hierarchical social relations, of the structures of class, race, nation, gender and sexuality, and of the competitive accumulation of legitimacy, authority and social prestige."[32] It is through a recognition of music's potency along this plane of mediation that Lewis identifies an evocation of the "one-drop rule" in one reviewer's revocation of Braxton's genre mobility.[33] Similarly, Morris once reflected that, "as long as I'm a black man playing a cornet, I'll be a jazz musician in other people's eyes."[34] Yet both artists found ways to resist the binary implications of racialized musical discourse seemingly invited by the mere presence of their bodies on stage: for Braxton, the integration of improvised elements with notation and several volumes of aesthetic explication; for Morris, the evocation of the European conducting tradition through the use of the baton. In this way, both artists engage in a hybridizing practice analogous to what Lisa Barg describes as Billy Strayhorn's "queer" arrangements, which occupy a similarly liminal space

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Braxton's *Composition 76*," in *Journal of the Society of American Music* 62, no. 2 (October 2018): 249–78.

31 George E. Lewis, "Afterword to 'Improvised Music after 1950': The Changing Same," in *The Other Side of Nowhere*, ed. Daniel Fischlin and Ajay Heble (Middletown, CT: Wesleyan University Press, 2004), 163–72, 166.

32 Born, "For a Relational Musicology," 232.

33 Lewis, "Afterword," 166.

34 Quoted in Ratliff, "Butch Morris."

amongst nominally opposing musical practices.[35] In short, in this context the notion of the conductor's movement can be extended so as to encompass their very presence before an audience.

In contemporary scholarship on experimental music, there is a particular focus on the social and political aspects of performance, in which the conductor frequently figures prominently.[36] Yet the conductor is too often treated as a kind of symbol, and too little attention is paid to what the conductor actually does—and who they actually are. While it is undeniable that the conductor's technique, presence, and movements do shape and reflect how sound is understood in the experimental context, I conclude with the social—rather than the aesthetic—in order to emphasize the contingencies of this understanding. Many theorizations of experimental sound have historically proceeded from essentialist and rationalist tendencies that are as unsustainable as the frameworks they purported to negate. By reintroducing the social—alongside the embodied—I hope to have illustrated how theory is constructed through interactions between musicians: interactions that are heard, but also seen and felt.

35 As Barg writes, "arranging involves weaving together or 'composing' in time and space the formal dimensions of a song or musical material and specific bodies, voices, or sonic personalities, itself a process that fundamentally depends on collaboration and interaction," adding that "one could, of course, point to any number of compositional and improvisational practices that similarly blur the lines [...] such as graphic scores or structured improvisations/conductions, both of which function very similarly to arrangements." See Lisa Barg, "Billy Strayhorn's Queer Arrangements," in *Improvisation and Social Aesthetics*, ed. Georgina Born, Eric Lewis, and Will Straw (Durham, NC: Duke University Press, 2017), 183–212, 188–9.

36 See Nicholas Cook's critique of oversimplified political metaphors centered around the conductor in Cook, "Scripting Social Interaction: Improvisation, Performance, and Western 'Art' Music," in *Improvisation and Social Aesthetics*, ed. Georgina Born, Eric Lewis, and Will Straw (Durham, NC: Duke University Press, 2017), 59–77, 70–3.

Bundling Meaningfulness in a Felt-Bodily Manner
Structured Movement as Aisthetic Labor[1]

Birgit Abels

Abstract: *For neo-phenomenologist Hermann Schmitz, creative processes are dancing movements. Drawing on the felt body's sensing its motion-laden environment, a motional motive grows into a Gestalt. This Gestalt takes form as it transitions from abstract inspiration into a palpable medium. This is why a piece of fine art is, for him, "dance having taken shape," and dancing is a motional phenomenon located in primary proximity to aisthetic comprehension. It is felt-bodily communion with the temporo-spaciousness surrounding us. Here, I reflect critically on this notion of dance, inquiring into the relationship between felt-bodily sensing and cultural qualification. Exploring the interfaces of felt-bodily sensing with performance conventions and of diffuse meaningfulness with cultural qualification, I explore dance as a practice of dwelling on the threshold. Inspired by dance practices in Micronesia, my chapter is conceptual in nature—approaching phenomenology through dance rather than vice versa.*

Introduction

Neo-phenomenologist Hermann Schmitz (1928–2021) considers any and all creative processes as intrinsically dancing movements, owing to the nature of what he terms "suggestions of motion" (*Bewegungssuggestionen*):

> The felt body, not the artist's mind, receives the inspiration: in the felt body's perception, a mentally or emotionally conceived motif grows from suggestions of motion to the *Gestalt* in which it can then, as it transitions into a visible, audible, or tactile medium, literally or metaphorically see the

1 This project received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation program (grant agreement No. 862367—Sound Knowledge).

> light of the day. *Thus, an artwork is an objectified gesture inspired by felt-bodily sensing, a dance solidified into fixed form.*[2]

Where artistic creativity transforms from inspirational spark into manifestation, Schmitz argues, the felt body draws on its ability to sense its motion-laden environment. As the felt body—perhaps it is more instructive to refer to it as the feeling body[3] in this context—parses the complex stream of para-reflective sensory information, it finds itself incited by a motional motive which grows into a *Gestalt*. This *Gestalt* literally takes form as it transitions from abstract inspiration into a visible, audible, or palpable medium. The process by which a creative impetus becomes manifest—as a gesture, a music performance, or a piece of art—is, therefore, a motor practice at heart. As such, it is intimately tied to the felt body.[4] This is why, for Schmitz, a piece of art in essence consists of suggestions of motion which, sensed by the felt body, have manifested into an objectified *Gestalt*. This process, in which "human felt-bodilyness translates into the objective Gestalten of the fine arts," hinges on the unfolding of *Gestalten* (*Gestaltverlauf*[5]). Importantly, specific *Gestalten* tend to merge with specific types of suggestions of motion; otherwise a *Gestaltverlauf* would be arbitrary.

Bearing this in mind, Schmitz suggests that dancing is a motional phenomenon located in primary proximity to any aisthetic comprehension of the world in which we live. It is felt-bodily interaction with the temporo-spaciousness surrounding us and the holistic meaningfulness present in our felt-bodily surroundings. Schmitz's suggestions of motion are a type of kinetic atmospheric energy that feeds into the rhythm of a person's vital

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2 Hermann Schmitz, *System der Philosophie. II.2: Der Leib im Spiegel der Kunst* (Freiburg: Karl Alber, [1966] 2019), 77. In the original German: "Der Leib, nicht der Geist des Künstlers, empfängt die Inspiration: Ein gedanklich oder gefühlshaft konzipiertes Motiv wächst im eigenleiblichen Spüren von Bewegungssuggestionen zu der Gestalt hin, als die es dann, beim Übergang in ein sicht-, hör- oder tastbares Medium, buchstäblich oder gleichsam das Licht der Welt erblicken kann. Das Kunstwerk ist also eine objektivierte, vom leiblichen Befinden inspirierte Gebärde, ein in feste Form geronnener Tanz." All translations in this contribution are my own.

3 See Hermann Schmitz, Rudolf Owen Müllan, and Jan Slaby, "Emotions Outside the Box—The New Phenomenology of Feeling and Corporeality," in *Phenomenology and the Cognitive Sciences* 10 (2011): 241–59.

4 Schmitz, *System der Philosophie II.2*, 77.

5 Ibid. Riedel translates Schmitz's *Gestaltverlauf* as "gestalt-process;" Friedlind Riedel, "Atmospheric Relations. Theorising Music and Sound as Atmosphere," in *Music as Atmosphere. Collective Feelings and Affective Sounds*, ed. Friedlind Riedel and Juha Torvinen (London and New York: Routledge, 2020), 1–42, 22.

drive, thus impacting them in their entire being. Schmitz positions these suggestions of motion as the heartbeat of vitality in a general sense; therefore, his philosophy should be intuitive to choreomusicologists and others exploring dance as a felt-bodily practice,[6] as it already has been to dance therapists in particular.[7] It resonates well with key ideas in the philosophy of dance around the turn of the twentieth century, ranging from Nietzsche[8] to von Laban.[9] And yet, like felt-bodily holisms, Schmitz's suggestions of motion fail to address an analytical category that is fundamental to any structured movement activity: the cultural distinctiveness of performance conventions, without which, paradoxically, a specific dance movement's meaningfulness will forever remain out of reach. Contemporary global dance studies, by contrast, tend to wrestle with the opposite problem: with much of its theoretical and conceptual underpinnings derived from postmodern and poststructuralist approaches to the body, here the moving body tends to be "seen as a technical tool with intentionality that enumerates political agendas, or a text on which various politics are inscribed or negotiated."[10] Contemporary global dance studies tend to fail to address the specifically motional affordances the felt-bodily negotiation of Chakravorty's "various politics"—via structured movement practices—draws on. To me, this somewhat paradoxical situation urges inquiry into the relationship between felt-bodily sensing and cultural qualification. In this chapter, I follow this invitation by making a foray into dance as a threshold practice that strategically links felt-bodily sensing with specific structured movement conventions, diffuse meaningfulness with cultural qualification, and allows us to conceptualize atmospheres together with the cultural frameworks within which they unfold their efficacy. I am not so much interested here in a choreomusical analysis of structured movement activity that seeks to analyze

6 E.g., Robert Gugutzer, *Verkörperung des Sozialen. Neophänomenologische Grundlagen und soziologische Analysen* (Bielefeld: transcript, 2012), 99–116.

7 Renate Schwarz, "Applied Embodiment und das Konzept der Leiblichkeit in Beratung, Supervision und Coaching," in *Resonanzen. E-Journal für biopsychosoziale Dialoge in Psychotherapie, Supervision und Beratung* 3, no. 1 (2015): 52–64, accessed 26 February 2021, http://www.resonanzen-journal.org; Elke Willke, *Tanztherapie: Theoretische Kontexte und Grundlagen der Intervention* (Wiesbaden: Reichert, 2020).

8 Friedrich Nietzsche, *Also sprach Zarathustra*, vol. 1 (Chemnitz: Ernst Schmeitzner, 1883), 54.

9 Rudolf von Laban, *Die Welt des Tänzers*, third edition (Stuttgart: W. Seifert, 1920), 14.

10 Pallabi Chakravorty, "Moved to Dance: Remix, *Rasa*, and a New India," in *Visual Anthropology* 22 (2009): 211–28, 214.

choreographic structure alongside connotative semantic content.[11] Instead, following up on Schmitz's notion of the motor quality of all creative movement, I will inquire into structured movement systems as a distinctly kinesthetic type of aisthetic labor, in Schmitz's fellow neo-phenomenologist Gernot Böhme's sense.

To scholars studying Pacific Island performing arts, the insight that the movement dimension of activities or activity systems (often referred to as "dance" in a Northern Atlantic context) works systematically across several distinct layers—thus bringing each into conversation with one another on divergent levels of meaningfulness—is not new at all.[12] In her work on Hawaiian *hula*, Adrienne L. Kaeppler has emphasized the importance of the processuality behind the emergence of such complex meaningfulness in performance, underlining how "often, the process of performing is as important as the cultural form produced."[13] Scholars working in other areas of Oceania second this appraisal.[14] In keeping with Oceanic notions of deep meaning versus surface meaning—also relevant across the entire region[15]—she describes how movement motifs may depict specific animate beings (such as flowers or animals) or inanimate things (such as objects) but, at the same time, also refer to "veiled or hidden meanings, making reference to genealogical lines, chiefs, and their deeds, and thus enhancing the texts."[16] This leads her to distinguish between the "visible" (i.e., an actual performance), and the "invisible" (i.e., the "aesthetic system") by which specific movements are engendered with meaningfulness:

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11 Stephanie Jordan, "Structural Categories for Relating Music and Dance: Towards an Analytical Method," in *Die Beziehung von Musik und Choreographie im Ballett*, ed. Michael Malkiewicz and Jörg Rothkamm (Berlin: Vorwerk 8, 2007), 27–34, 29; see also Kendra Stepputat and Elina Seye, "Introduction: Choreo-musical Perspectives," in *The World of Music (new series)* 9, no. 1, special issue on *Choreomusicology* (2020): 7–24.

12 Adrienne Kaeppler, "Visible and Invisible in Hawaiian Dance," in *Human Action Signs in Cultural Context. The Visible and the Invisible in Movement and Dance*, ed. Branda Farnell (Metuchen and London: Scarecrow, 1995), 41.

13 Ibid., 32.

14 E.g., Karen L. Nero, "The Breadfruit Tree Story: Mythological Transformations in Palauan Politics," in *Pacific Studies* 15, no. 4 (1992): 235–60.

15 See e.g., Vicente M. Diaz, "Voyaging for Anti-colonial Recovery: Austronesian Seafaring, Archipelagic Rethinking, and the Re-mapping of Indigeneity," in *Pacific Asia Inquiry* 2, no. 1 (2011): 21–32.

16 Kaeppler, "Visible and Invisible," 33.

> Only if one knows the social and cultural background will the visible and the invisible emerge in all their dimensions to reveal the political acumen of the creator or [...] the reinterpreter. The resulting products were passed from generation to generation to become chronicles of history and social relationships objectified in verbal and visual forms.[17]

A key to understanding *hula* is *kaona*, a deeply Kanaka Maoli (native Hawaiian) concept embracing the idea of the "hidden meaning" and significatory stratification inherent in both language and cultural practices. Only with a deep understanding of *kaona*, Kaeppler argues, does a performance's meaningfulness "become [...] visible as a product of human action and interaction in the context of a socially constructed movement system. The system itself is invisible, existing in the minds of people as movement motifs, specific choreographies, and meaningful imagery."[18] Kaeppler's interpretation is reminiscent of Schmitz's distinction between suggestions of motion as an invisible kinetic impetus and motional sensory energy bursting with meaningfulness, on the one hand, and their manifestation as physical movement or a piece of art as "dance having taken shape," on the other. In several ways, however, Kaeppler and Schmitz are coming from opposite directions. Kaeppler's interest is in the culturally specific manifestations in the structured movement of the "invisible system"; Schmitz's is in the holistic experientiality through which felt-bodily sensing affects human being-in-the-world.

My own interest is piqued by what one could refer to as the missing link between the two perspectives. By taking a step back and looking at the upstream qualities of aisthetic labor,[19] I extend the well-established viewpoint that the human body is a "moving agent in a spatially organized world of meanings,"[20] suggesting that to engage in structured movement activity is to go beyond dimensionally anchored meaning. I argue that to partake in structured movement is to take a plunge into the chaotic and messy intensity of what Schmitz calls surfaceless space—to navigate surfaceless space's complexity in order to then dwell on the threshold between the surfaceless space from which creative energy emerges, the directional space in which felt bodies incorporate creative energy along culturally qualified conventions, and the

17 Ibid., 39.

18 Ibid., 42.

19 Patrick Eisenlohr, "Sonic Privilege. The Holism of Religious Publics," blog entry for *The Immanent Frame. Secularism, religion, and the Public Sphere*, 2019, accessed 25 February 2021, https://tif.ssrc.org/2019/05/21/sonic-privilege/.

20 Brenda Farnell, ed., *Human Action Signs in Cultural Context: The Visible and the Invisible in Movement and Dance* (Metuchen and London: Scarecrow Press, 1995), 7.

dimensional space in which the now-transduced energetic flow takes shape as kinetic movement. This is what I mean when I refer to structured movement activity as a threshold practice: a process that guides the felt body from surfaceless to directional to dimensional space, not in a linear fashion but as an energetic impetus fulfilling itself as body movement as it explores the fringes of the moving felt body's experiential spatialities. Framing structured movement activity as a threshold practice, I will explore it in the following as a specific type of aisthetic labor. The actual "labor" is for the felt body to manifest meaningfulness into visible structured movement. Regardless of its (in)visibility, however, the holistic meaningfulness energized by the flux of suggestions of motion intervenes into felt-bodily temporospatial economies and, as such, is engendered with cultural qualification. Cultural qualification enters the energetic flow of suggestions of motion in directional space, strategically oscillating in the directions of both surfaceless and dimensional space at all times. It is, thus, no less a phenomenon of dimensional space than of surfaceless space, but it also goes beyond both. I will briefly turn to the mythological framing of the *ruk*, the traditional men's dance in Palau, Western Micronesia, exploring the oral history of its origin to take a closer look at structured movement activity at the interfaces of surfaceless and dimensional space. In closing, I will reflect on the conceptual implications for this contribution's central question: what is the aisthetic labor of structured movement?

Structured Movement as Aisthetic Labor

Gernot Böhme, the second pivotal figure in neo-phenomenology next to Schmitz and one generation the latter's junior, contends that aisthetic labor is implicitly or explicitly central to any post-Benjaminian aesthetics. It is

> generally conceived of as the production of atmospheres and, as such, ranges from cosmetics to advertisement, from interior and stage design to art in a more specific sense. Autonomous art, in this context, is simply one specific form of aisthetic labor, and even where it is autonomous, it has a social function: to impart, in situations that relieve their participants of their agentivity (such as in museums and exhibitions), familiarity with and exposure to atmospheres.[21]

21 Gernot Böhme, *Atmosphäre. Essays zur neuen Ästhetik* (Berlin: Suhrkamp, 2013), 24. In the original German: "[Ästhetische Arbeit] wird allgemein bestimmt als Produktion von Atmosphären und reicht insofern von der Kosmetik über Werbung, Innenarchitektur, Bühnenbildnerei bis zur Kunst im engeren Sinne.

To labor aisthetically, then, is to invest skill, time, and energy in the emergence of atmosphere as collective feelings poured out in space. Böhme strategically distinguishes between the production and the reception side of aisthetic labor; he identifies aisthetic theory as, on the one hand, a general theory of the production of atmospheres, and on the other, as a theory of perception in an encompassing sense from the recipient's perspective. In the context of the latter, "perception is understood as the experience of the presence of people, things, and surroundings."[22] Böhme's categorical distinction between the dynamics governing the production and reception of atmospheres, respectively, has been useful in application-oriented contexts, such as architectural design; in connection with structured movement, however, it is of little analytical value because the "producing" movement artist is always already a "receiving" participant as well. Movement artists do not create an objectifiable atmosphere, they are enveloped by the atmosphere their aisthetic labor creates throughout the process. The atmospheres created by structured movement—through their performative processuality—are characterized by a heightened immediacy of Böhme's "presence of people, things, and surroundings." This is where I locate structured movement's ability to intensify—Kaeppler, in connection with *hula*, uses the word "enhance"[23]—the meaningfulness inherent in the complex and ongoing stream of suggestions of motion by transducing them into and manifesting them as culturally qualified bodily structured movement. This intensification occurs through a bundling of diverging spatial and temporal modalities of experience.[24] Any type of bodily movement can experientially bundle such divergent experientialities and, by doing so, produce atmospheric energy. Through structural self-referentiality (Kaeppler's "invisible system"), however, the culturally qualified nature of structured movement atmospheres

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Die autonome Kunst wird in diesem Rahmen nur als eine spezielle Form ästhetischer Arbeit verstanden, die auch als autonome ihre gesellschaftliche Funktion hat. Und zwar soll sie in handlungsentlastender Situation (Museum, Ausstellung etc.) die Bekanntschaft und den Umgang mit Atmosphären vermitteln."

22 Ibid., 24. In the original German: "Die neue Ästhetik ist also auf seiten der Produzenten eine allgemeine Theorie ästhetischer Arbeit. Diese wird verstanden als die Herstellung von Atmosphären. Auf seiten der Rezipienten ist sie eine Theorie der Wahrnehmung im unverkürzten Sinne. Dabei wird Wahrnehmung verstanden als die Erfahrung der Präsenz von Menschen, Gegenständen und Umgebungen."

23 Kaeppler, "Visible and Invisible," 39.

24 Birgit Abels, "Bodies in Motion. Music, Dance and Atmospheres in Palauan *ruk*," in *Music as Atmosphere. Collective Feelings and Affective Sounds*, ed. Friedlind Riedel and Juha Torvinen (London: Routledge, 2019), 165–83.

can open dance situations up to their own historicity, thus dynamically positioning a structured movement performance vis-à-vis the situation's temporospatial positionality. This positionality emerges atmospherically from the aisthetic stream of meaningfulness through the aisthetic labor of structured movement for the brief duration of the performance or just a moment thereof. Through this process, a performance movement becomes meaningful. It takes cultural conventions of structured movement for Kaeppler's "deep meaning" to manifest, and it takes deep meaning for cultural conventions of structured movement to self-referentially bundle divergent experiential frames into atmospheric intensity.[25]

Thinking of Böhme's aisthetic labor regarding Schmitz, a key moment of the transductive work that occurs as a *Gestalt* unfolds and manifests—as musical motif, structured object, or physical object—is the transition of a felt-bodily sensed suggestion of motion in surfaceless space to, in one way or another, physical motion in dimensional space. Space for Schmitz "is not originally encountered as the measurable, locational space assumed in physics and geography, but rather as a predimensional surfaceless realm manifest to each of us in undistorted corporeal experience, for example, in hearing voluminous sounds or sensing atmospheres."[26] Schmitz gives the example of the resounding of large church bells, the sonic immediacy of which envelop those within hearing range. Another example would be the weather, which

> presents surfaceless spaces that are felt immediately in our bodily responsiveness to the atmosphere surrounding us. Crucially, the felt body itself is a surfaceless space, or more precisely an assemblage of many such spaces: corporeal 'islands' such as the stomach region or the soles of feet are felt as diffuse but still separately identifiable spatial realms.[27]

Surfaceless space is primary in Schmitz's neo-phenomenology; dimensional space, to him, is an abstract construction and a secondary spatial experience. Structured movement activity impacts surfaceless space in a way that introduces directionality to surfacelessness:[28] in the now directional space of structured movement activity, suggestions of motion, for instance, as exuded by chants and music, can be incorporated in a felt-bodily manner, and in this

25 Something similar could be said about sonic atmospheres versus musical atmospheres, see Abels 2022.

26 Schmitz, Müllan, and Slaby, "Emotions Outside the Box," 245.

27 Ibid.

28 Hermann Schmitz, *System der Philosophie III.1: Der leibliche Raum* (Freiburg: Karl Alber, [1967] 2019), 179.

way feed into one's own movement practice.[29] Similar to structured movement activities, a suggestion of motion enters directional-spatial experience; its motional energy transduces from energetic flow into palpable structured movement. Such transduction intensifies the synesthetic quality of structured movement: that which we know in directional space and that which we sense in a felt-bodily manner in surfaceless space enter into correspondence. "Body-spaces of sound and sound-spaces of the body enter into conversation with one another to give rise to new body-sound-spaces," writes Stephanie Schroedter.[30] Such new body-sound spaces are always transitory and ephemeral, and I suggest we conceive of them as the threshold between surfaceless, directional, and dimensional space. To dance, then, is to experientially explore and savor a spatial threshold experience, and to actively engage with the spatial properties of one's environment. This accounts for the experiential intensity of structured movement.

Weaving Together Temporospatial Complexity beyond Time and Space: Palauan *ruk*

If all creative processes are essentially motional in nature, then it makes sense, against this backdrop, that Pacific Indigenous communities have not traditionally categorized motion in a way that compares to the notion of "dance." "Dance," in its academic usage, is a distinctly North Atlantic category and sets a specific type of kinesthetic repertoire apart (from daily life activities but also from other types of cultural practices), assigning a bounded category to it. In most of Oceania, kinesthesia is deeply entangled with daily practices and to think in terms of dance as a distinct category would conflict with lived experience. Kaeppler has suggested the term "structured movement systems" instead.[31] Structured movement systems, by definition, include some that are integrally related to

29 Ibid., 71.

30 Stephanie Schroedter, "Neues Hören für ein neues Sehen von Bewegungen. Von der Geburt eines zeitgenössischen Balletts aus dem Körper der Musik—Annäherungen an Martin Schläpfers musikchoreographische Arbeit," in *Bewegungen zwischen Sehen und Hören. Denkbewegungen über Bewegungskünsten*, ed. Stephanie Schroedter [Würzburg: Königshausen & Neumann, 2012], 43–104, 48. In the original German: "Körperräume des Klanges und Klangräume des Körpers treten miteinander in einen Austausch, um neue Körper-Klang-Räume entstehen zu lassen."

31 Adrienne Kaeppler, "Structured Movement Systems in Tonga," in *Society and the Dance*, ed. Paul Spencer (Cambridge: Cambridge University Press, 1985), 92–118; Adrienne Kaeppler, "Understanding Dance," in *Garland Encyclopedia of World*

music. They are "systems of knowledge, the products of action and interaction, and processes through which action and interaction occur."[32] Structured movement systems

> denote specially marked or elaborated systems of movement [...] that result from creative processes that manipulate human bodies in time and space in such a way that movement is formalized and intensified in much the same manner as poetry intensifies and formalizes language. [...] These specially marked movement systems may be considered art, work, ritual, ceremony, entertainment, or any combination of these [...] A person may perform the same or a similar sequence of movements (consisting of grammatically structured motifs) as a ritual supplicant, as a political act, as an entertainer, or as a marker of identity. Thus, the same movement sequence may be meant to be decoded differently if performed for gods, [...] for a human audience, or [...] as a participant for fun; and it may be decoded differently depending on an individual's background and understanding of a particular performance and the individual's mental and emotional state at the time.[33]

The Austronesian language spoken in Palau, a small island nation in the westernmost part of Micronesia, has the neologism *dangs*, adopted from the English word dance. Generally, however, Palauans will discuss specific dance forms by the name of their dance genre (e.g., *ngloik*, *ruk*) rather than a generic category. The actual movements and motion-based gestures are inherited from either the Gods or the ancestors. Similar to elsewhere in Oceania, therefore, they "may be perpetuated as cultural artifacts and aesthetic performances, even if their meanings have been changed or forgotten."[34] Importantly, such underlying systems of structured movement are invisible themselves, "existing in the minds of people as movement motifs, specific choreographies, and meaningful imagery;"[35] but, as the performers move their bodies through time-space, the dance takes shape as visible form. This is, in a tangible manner, reminiscent of Schmitz's archetypical creative process, which transduces motional energy into a visible medium and impacts the performers' spatial surroundings.

Schmitz's notion of space(s) radically complicates notions of space as established in the North Atlantic philosophical traditions. At the same time, however, it remains indebted to European conceptualizations of space, which make a basic distinction between the spatial and the temporal. Many Oceanic languages,

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Music, vol. 9, *Australia and the Pacific Islands*, ed. Adrienne L. Kaeppler and J.W. Love (New York and London: Garland Publishing, 1998), 311–8.

32 Kaeppler, "Understanding Dance," 311.

33 Ibid., 312.

34 Ibid.

35 Ibid.

by contrast, know the word "space-time" in one form or another,[36] which reflects a conceptualization based on the sense that time, place, and space cannot categorically be distinguished from one another: "The *vā* [i.e., space-time in Samoan and Tongan[37]] is necessarily relational, implying not a static point of observation but a movement, or possible movement between."[38] More specifically, *vā* perceives of space as points and their interrelationships rather than a bounded area.[39] Tevita O. Ka'ili conceives of the Tongan practice of *tauhi vā* as a nurturing cultural practice of establishing and strengthening beautiful sociospatial relationships. She emphasizes how it is impossible to think of *vā*, space, without *tā*, time, both in Tonga and Hawai'i. In Hawaiian culture, "the past is the time in front and the future is the time that comes behind."[40] Ka'ili's thinking is closely related to Tongan historical anthropologist 'Ōkusitino Māhina's *tā-vā* theory of art.[41] Māhina sees *tā* and *vā* as the common medium of all things natural, mental, and social that exist. Accordingly, all things unfold in time and space, with nothing whatsoever existing above or beyond this realm. All things in nature, mind, and society have four dimensions: three spatial dimensions (height/depth, width/breadth, length) and one temporal dimension, which is form.[42] Ka'ili explains how *tā-vā* is "collective and communal but [...] also arranged in a circular fashion"; and, "the purpose of ontologically organizing these concepts in a cyclical fashion is to bring multiple entities into

36 Damon Salesa, "The Pacific in Indigenous Time," in *Pacific Histories: Ocean, Land, People*, ed. David Armitage and Alison Bashford (New York: Palgrave MacMillan, 2014), 31–52, 41.

37 See Andrea Staley, *Identifying the Vā: Space in Contemporary Pasifika Creative Writing* (Master's Thesis, University of Hawai'i at Manoa, 2017), accessed 14 December 2020, https://scholarspace.manoa.hawaii.edu/bitstream/10125/62661/2017-05-ma-staley.pdf.

38 Salesa, "The Pacific in Indigenous Time," 43.

39 See Staley, *Identifying the Vā*, 52; Fepulea'i Micah Van der Ryn, *The Measina of Architecture in Samoa—An Examination of the VĀ in Samoan Architecture and Socio-Cultural Implications of Architectural Changes* (Apia, Samoa: The Institute of Samoan Studies, National University of Samoa, 2007), 3.

40 Tēvita O. Ka'ili, *Tauhi Vā: Creating Beauty Through the Art of Sociospatial Relations* (PhD dissertation, University of Washington, 2008), quoted in Staley, *Identifying the Vā*, 53. Also see Lilikala Kame'leihiwa, "Hawai'i-nui-akea Cousins: Ancestral Gods and Bodies of Knowledge are Treasures for the Descendants," in *Te Kaharoa. The eJournal on Indigenous Pacific Issues* 2, no. 1 (2009): 42–63.

41 See Adriana Lear, *A Study of Traditional Tongan Music Using the Tā-Vā (Time-Space) Theory of Art* (Bachelor's Thesis, University of Wollongong, 2018); Hūfanga 'Okusitino Māhina, "*Tā*, *Vā*, and *Moana*: Temporality, Spatiality, and Indigeneity," in *Pacific Studies* 33, no. 2/3 (2010): 168–202.

42 Staley, *Identifying the Vā*, 54.

harmonious relations with one another."[43] This is made visible in the practice of *tauhi vā*, especially among closely related people in a *'aiga* or kin group."[44] At the same time, *tauhi vā* underlines the social importance of *tā* and *vā*, which literally mean "beating space:" *Tauhi vā*, as a cultural practice, regulates and maintains social relationships between groups by performing reciprocity. The symmetry or asymmetry of such exchange-based relationships leads to either a harmonious relationship or a conflict.[45] This illustrates the deep entanglement of notions of time-space and sociality in Tonga.

Oceanic temporalities, thus, tend to place emphasis on the interlacing of the cultural, the relational, and the spatial with the temporal. While this differs significantly from Schmitz's understanding of space, it does resonate with his acknowledgment that music-making and structured movement are spatial practices of the felt body and, simultaneously, ingrained with a fundamental historicity: "[In sound], sound's history often lives on," contends Schmitz.[46] To engage with music through kinesthetic listening, then, can also be understood as a temporalizing act of the felt body as engaged with its temporo-spatial environment.[47]

This is certainly the case for *chelitakl rechuodel*, the traditional repertoire of the performing arts in Palau, Micronesia, and a closer look at the traditional conceptualization of structured movement activity in Palau will reveal the central role structured movement and kinesthetic listening hold vis-à-vis lived Palauan temporality (see Abels 2022[48]). In traditional Palauan thinking, motion is ingrained in the concept of space-time to begin with:

> [Traditional Palauan] culture unites [the two categories of space and time] through the notion of a journey (*omerael*, from the verb *merael*, "to walk, to travel," itself derived from the noun *rael*, "path, road, way" [PAN **dalan*]). The journey of a god, person, group, or mythological creature provides a basic space-time continuum for conceptualization and discourse.[49]

43 Ka'ili, "Tauhi Vā," 41.
44 Staley, *Identifying the Vā*, 55.
45 Ka'ili, "Tauhi Vā," 42.
46 Hermann Schmitz, Atmosphären, Freiburg: Verlag Karl Alber 2014, 88.
47 Mariusz Kozak, *Enacting Musical Time. The Bodily Experience of New Music* (Oxford: Oxford University Press, 2020), 3.
48 Birgit Abels, *Music Worlding. Chanting, Atmospheres and Meaningfulness in Palau* (Amsterdam: Amsterdam University Press, 2022).
49 Richard J. Parmentier, *The Sacred Remains. Myth, History, and Polity in Belau* (Chicago: University of Chicago Press, 1987), 134.

Chelitakl rechuodl are not the result of the specifics of Palauan temporospatiality; in fact, they are a set of cultural conventions in the practice of Indigenous time-space that render them experiential in their "deep" sense. "Deep," here, refers to what Kaeppler has referred to as the "invisible system," the complex entanglement of cultural, social, and aesthetic values interlacing with Oceanic spatio-temporality (note here that while surfaceless space is primary to Schmitz, he also refers to it as the "deeper layers" of spatiality[50]). Importantly, the spiritual world is a fundamental component of Palauan deep time, and Palauan structured movement activities were originally created by *chelids*, the Palauan Gods. During the Hamburg South Seas Expedition of 1908–1910, Augustin Krämer recorded the following oral history describing the invention of the Palauan *ruk*, a men's dance:

> [Uchelchelid] is considered the inventor of the *ruk*. It is said that once when he sat on the shore of a Ugél pelú, he saw a *gorovídĕl* [caranx] jumping after a *tebér* sardine. The jumps inspired him so much that he decided to adopt the caranx as a symbol of the dance. In *a* Irâ̂, especially, this is observed, because their god Medegê̂ is a descendent of Ugél'lëgalíd [= Uchelchelid]. In *a* Irâ̂, during the period of seclusion, the dancers have in the bai [men's house], in addition to their *tet* hand baskets, another little basket called *gomsangël*. This basket contains the betel quid for the god and is hung on the bai wall behind the back of its owner. In *a* Irâ̂, where several other unusual things occur, the *klemeâ̂* ['locked in', i.e. secluded for the purpose of the *ruk* preparation] people engage in something special. Everyone from [a specific house] makes thread (*ker'rël*) and weaves a net with a particular mesh size; even the *uriúl* members [i.e., the ones of lower rank in the social hierarchy] take part. All of the nets are then tied together, resulting in a long net, which is spread out over the water on the Megórei stone wharf [...], as a soul-catching net for the protective deities, the 7 Galid ['Gods'], the Tekíël maláp ['man-eating devils'] [...]. These special practices apply only to *a* Irâ̂ and Ngátpang, however, which are the villages of Medegê̂ pélau [= a specific *chelid*] [...]. after all of these activities, the day of coming out begins in earnest.
>
> In the morning, the village women go to the village bai and rub turmeric on the *klemeâ̂*. Each of them puts on a women's skirt. In this state, the men now advance in a festive procession towards the ocean, holding the wooden *gorovídĕl* in their raised right hands. At the edge of the path, at some distance, lies a tridacna clam shell filled with water. The leader dips the head of his dance rod figure into this, an act known as *omárĕg ra gorovídĕl* "the dipping of the caranx." After this, the group returns to the bai in silence, where the women perform their dances on the stage. Now has come the time for the dancers to show what they have learned while being sequestered. First, they do *klemeâ̂*, a little dance and then return to their bai. It is not until the

50 Hermann Schmitz, *Atmosphären* (Freiburg: Verlag Karl Alber, 2014), 83.

> afternoon that the great dance *gorovíděl* is performed; it is followed by the *kotebáděl*, the other clubs.[51]

The *ruk*'s choreography is predetermined by the ancestors.[52] The actual dance is of divine origin and the actual performance of a *ruk* calls upon the deities and ancestor spirits to an extent that determines the structure of the months-long seclusion period prior to the performance of a grand *ruk*. Ritual objects manifest and further consolidate this link into the spiritual realm, rendering the presence of spirits felt. To perform the *ruk* following the ritual observance of the traditional *klemeaî*, then, is not only to dwell on the threshold between surfaceless, directional, and dimensional space. It is also to commune with spiritual beings in the here and now, and to dissolve the boundary between the past and the present while performing—in the present—along linear time structures. The *ruk* makes this possible by creating a performance space in which the performers can listen kinesthetically,[53] and in Schmitzian terms, act upon suggestions of motion. Through its genre conventions, it also provides a set of cultural strategies for both the performers and the audience to navigate the wealth of suggestions of motion it creates space for. These strategies are based on structured movement's ability to guide the felt body in bundling suggestions of motion and transduce them into an encompassing sensation of meaningfulness.

Conclusion

The dancing felt body's aisthetic labor is based on its kinesthetic awareness.[54] Kinesthetic listening emerges as a participatory multimodal practice of attune-

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51 KETC (Krämer Ethnography Translation Committee), *Palau by Prof. Dr. Augustin Krämer*. Vol. 3, trans. of Krämer 1926 (Koror: Belau National Museum/Etpison Museum), 295; for the German original, see Augustin Krämer, *Ergebnisse der Südsee-Expedition 1908–1910* (Hamburg: Friederichsen, 1926), II/B/3, 315.

52 Palau Society of Historians, *Ongelaod: Klekool, Ngloik ma Chelitakl. Entertainment: Sports and Games, Dances and Songs* (Koror, 2008), 8.

53 Stephanie Schroedter, "Denkbewegungen über Bewegungskünste—Erste Gedankenimpulse," in *Bewegungen zwischen Sehen und Hören. Denkbewegungen über Bewegungskünsten*, ed. Stephanie Schroedter (Würzburg: Königshausen & Neumann, 2012), 9–27, 10; Gabriele Brandstetter, "'Listening'—Kinaesthetic Awareness im zeitgenössischen Tanz," in *Bewegungen zwischen Hören und Sehen. Denkbewegungen über Bewegungskünste*, ed. Stephanie Schroedter (Würzburg: Königshausen & Neumann, 2012), 113–27, 114 and 123.

54 Brandstetter, "'Listening.'"

ment to motional energy. Attuned in this way to motional energy, structured movement activity in Palau can be cast as a cultural strategy to intensify—via the felt-body's sensibilities—the sensation of human interconnectedness with everything and everyone around—not only in an ontological and epistemological, but also in a social, cultural, historical, and temporospatial sense. As the dancing felt body bundles and condenses atmospheric suggestions of motion via bodily movement, these suggestions of motion connect the *ruk* performers both with the aisthetic stream of sensory perception, and with those beings and things that share the same space.

Expanding on Schmitz, cultural techniques of the felt-body such as structured movement are strategies to interact with and intensify the holistic meaningfulness present in our felt-bodily surroundings. In doing so, they significantly alter surrounding spatial economies, giving rise to the emergence of new suggestions of motion and changing extant ones. It is of central importance to note here that structured movement activities do not change space as a dimension external to the felt body; the space of structured movement is, by nature, a space-as-felt-bodily-connection. Seen against this background, then, it is no coincidence that Schmitz's conception of dance figures almost literally in the reflections of one of the seminal figures of expressionist dance, Mary Wigman (1886–1973), who in 1922 described the ballet dancer's sensation as she does a *piqué tour* as one of becoming one with "all the oscillating celestial bodies" and of "communion with space;"[55] or, in Japanese *butoh* performer Min Tanaka's statement that "when I dance, I don't dance in the place, but I am the place."[56] Böhme, in recourse to Baumgarten, seeks to emphasize the ultimately epistemological nature of sensory perception and, as such, of aisthetic labor.[57] Following Schmitz, such knowing emerges as the unfolding of *Gestalten*, which manifest in one palpable form or another. Importantly, they also exude suggestions of

55 Mary Wigman [= Karoline Sofie Marie Wiegmann], "Tanz," in *Die Tat* 13, no. 2 (1922): 863–5, 864–5. In the original German: "[…] Teil der schwingenden Weltkörper alle" and "Kommunion mit dem Raum." "Alles schwankt schon, taumelt ineinander, löst sich in einzelnes. Sie fühlt ihren Körper wieder; Stillstand, Ruhe, Beherrschung, letzte Sehnsucht darin, vorüber die Kommunion mit dem Raum" (ibid., 864).

56 Cited in Stuart Grant, "Performing an Aesthetics of Atmospheres," in *Aesthetics* 23, no. 1 (2013): 12–32, 14.

57 Karoline Fahl, *Atmosphäre am Werk. Gernot Böhmes* Neue Ästhetik *als Architekturästhetik*. Study essay. Technical University Berlin, 2016, accessed 26 February 2021, https://www.bda-bund.de/wp-content/uploads/2017/09/Fahl-Atmosph%C3%A4re-am-Werk-DGB-2016.pdf, 14.

motion themselves, thus re-investing themselves in the feedback loop between suggestions of motions, their unfolding as *Gestalten* and the dimensional sonic event.

For Schmitz, Wigman's "communion with space" would be a natural effect of dance ecstasy: "Ecstatic dance completes itself as an intoxication in which the present and the self […] are surrendered to an unmeasurable expanse."[58] In her own words, Wigman describes quite vividly the unfolding of *Gestalten* in this process:

> A [sense of] knowing flashes up in her. The wide, invisible, transparent space extends in formless waves, a lifting of the arm will change it. Ornaments emerge, massive, big, disappear again; delicate arabesques dance past, subside; a jump, right in; forms burst, with an evil fizzle; a fast spin; the walls give way. She drops her arms, standing still again, looks into the empty room: the dancer's realm.[59]

Structured movement activity, then, is intense aisthetic labor. The multimodal dynamics of structured movement allow for the "sensation of dropping through space;"[60] space, in turn, is filled with suggestions of motion and shared feelings. To drop through space with structured movement, thus, is to surrender to the temporospaciousness surrounding oneself; and, to feel out for the otherwise ineffable holisms of lived experience is the aisthetic labor of kinesthesia.

The neo-phenomenological-inspired terminology and conceptual apparatus I have drawn on in this contribution offer to the study of dance both a language and an analytic for the experiential intensity described by dancers from very diverging backgrounds such as Wigman and Tanaka. Importantly, it is a conceptual framework that adds an analytical understanding—finely attuned to the felt body—to the metaphorical description of kinesthetic intensity.

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58 Schmitz, *System der Philosophie III*.1, 173. In the original German: "Auch der ekstatische Tanz vollendet sich in einem Rausch, bei dem die Gegenwart und das eigene Ich […] an maßlose Weite preisgegeben wird."

59 Wigman, "Tanz," 865. In the original German: "Erkennen blitzt in ihr auf. Der große unsichtbare, durchsichtige Raum breitet sich formlos wogend, ein Heben des Armes verändert, gestaltet ihn. Ornamente steigen auf, wuchtig, groß, tauchen unter; zierliche Arabesken tänzeln vorüber, versinken; ein Sprung mitten hinein: böse zischt es von zerplatzenden Formen; ein schnelles Drehen: die Wände weichen. Sie senkt die Arme, steht wieder still, schaut den leeren Raum, das Reich des Tänzers."

60 Albright/Gere quoted in Brandstetter, "'Listening,'" 118.

Musical Dimensions of Motion-Based Interindividual Behaviors
Situated in an Interactive Music Environment

Jin Hyun Kim and Marta Rizzonelli[1]

Abstract: *This chapter discusses the extent to which motion-based interindividual behaviors in an interactive music environment can be described as musical, focusing on an exploratory study using "Sentire," a system that transforms proximity and movement into real-time musical feedback. We propose that coordinated and cooperative musical interaction consists not only of sounds, but also of body movements considered meaningful in a given cultural context. Through structured observation, we analyzed improvisations with Sentire, developing functional codes categorizing interindividual behaviors—non-interactive, mirroring, and residual interactive. This study allowed us to distinguish phases of interaction—exploratory and systematic. While mirroring occurs throughout, its characteristics vary by phase. In the systematic phase, more complex mirroring behaviors—based on an anticipatory agreement between participants and characterized as musical—emerged through continuous mutual adaptation.*

Introduction

Motion-based interindividual behaviors are often observed in contexts of verbal interaction. Some of them are known as speech-accompanying nonverbal gestures that support or replace verbal expressions. Although processing such gestures does not always engage the neural language-processing regions, especially in the case that speech is absent,[2] co-speech gestures can support

1 These two authors contributed equally to this work.

2 See, for instance, Olessia Jouravlev, David Zheng, Zuzanna Balewski, Alvince Le Arnz Pongos, Zena Levan, Susan Goldin-Meadow, and Evelina Fedorenko, "Speech-Accompanying Gestures Are Not Processed by the Language-

language comprehension. Some motion-based interindividual behaviors do not serve to accompany or replace verbal expressions, but are considered meaningful in a given cultural context. Examples include behaviors that are exhibited in protoconversational communication taking place, for instance, in infant-caregiver interactions.[3] Protoconversational communication is characterized by interindividual coordination that involves sound- and motion-based behaviors in sync/tune with one another as well as qualitatively attuned behaviors. These behaviors, in turn, provide a shared rhythmic foundation for turn-taking and a shared intonational foundation for prosodic matching and bodily adjustment. The developmental psychologists Stefan Malloch and Colwyn Trevarthen term such behaviors "communicative musicality": the innate human abilities to move, remember and plan while interacting with others, which allow us to appreciate and produce an endless variety of events unfolding in time.[4] "Communicative musicality" presupposes the concept of music, but is not limited to phenomena described with emic concepts of what is called "music" in Western culture. In addition, the concept of music that can be found in the definition of communicative musicality is too broad and therefore deserves thorough discussion. The concept of communicative musicality suggests that language and other human communicative practices—including musical practices—are based on a common innate ability to interact with others using body movements rather than verbal articulations that may bear representational and propositional meanings. The first author proposes a

Processing Mechanisms," in *Neuropsychologia* 132 (2019), accessed 15 September 2022, https://www.doi.org/10.1016/j.neuropsychologia.2019.107132.

3 See, for instance, Stephen Malloch and Colwyn Trevarthen, "The Human Nature of Music," in *Frontiers in Psychology* 9:1680 (2018), accessed 15 September 2022, https://www.doi.org/10.3389/fpsyg.2018.01680; Colwyn Trevarthen, "Musicality and the Intrinsic Motive Pulse: Evidence from Human Psychobiology and Infant Communication," in *Musicae Scientiae* 3 (1999): 157–213, accessed 15 September 2022, https://www.doi.org/10.1177/10298649000030S109; Colwyn Trevarthen, "Learning about Ourselves, from Children: Why a Growing Human Brain Needs Interesting Companions?," in *Research and Clinical Centre for Child Development, Annual Report 2002–2003*, 26 (2004): 9–44.

4 Cf. Stephen Malloch and Colwyn Trevarthen, "Musicality: Communicating the Vitality and Interests of Life," in *Communicative Musicality: Exploring the Basis of Human Companionship*, ed. Stephen Malloch and Colwyn Trevarthen (Oxford: Oxford University Press, 2009), 1–11, 4.

minimal concept[5] of musical practices that does justice to an innate ability for protoconversational communication by considering it a basis for musical practices, among other communicative practices:

Musical practices are coordinated and cooperative practices consisting of sounds and body movements that structure shared experiences. They are considered meaningful in a given cultural context in that act of understanding occurring in terms of interactive participation and embodied re-enactment, although they do not bear any representational semantics.

Musical practices are *coordinated* due to the regularity and predictability of sounds and body movements unfolding in time, which provide the means to coordinate and sustain interactions. Processes of coordination such as rhythmic adjustment (entrainment),[6] alignment related to non-rhythmic properties (such as vertical body movement, intensity of body movement or sound, timbre and pitch of sound),[7] and affective adjustment (such as attunement, empathy, etc.) are characteristics of behaviors that structure shared experiences.

Moreover, musical practices are *cooperative* as they involve shared intentionality—at least we-intentions[8]—to shape musical units using sounds and body movements. The individuals' intentions to participate in a collective act are derived from the overall goal of the collective behavior in such a way that each individual believes that they are doing their individual act as part of a collective

5 It is discussed as a broader concept of music (cf. Jin Hyun Kim, "Musicality of Coordinated Non-representational Forms of Vitality", in *Journal of Comparative Literature and Aesthetics, Special Issue – Contemplating Music across Cultures and Contexts: Philosophical Perspectives*, 46/1 (2023): 59–69).

6 Cf. Martin Clayton, Kelly Jakubowski, and Tuomas Eerola, "Interpersonal Entrainment in Indian Instrumental Music Performance: Synchronization and Movement Coordination Relate to Tempo, Dynamics, Metrical and Cadential Structure," in *Musicae Scientiae* 23/3 (2019): 304–31, accessed 15 September 2022, https://www.doi.org/10.1177/1029864919844809 and Jin Hyun Kim, Andres Reifgerst, and Marta Rizzonelli, "Musical social entrainment," in *Music & Science* 2 (2019): 1–17, accessed 22 September 2022, https://www.doi.org/10.1177/2059204319848991.

7 Cf. Jin Hyun Kim, "Musik als nicht-repräsentationales Embodiment. Philosophische und kognitionswissenschaftliche Perspektiven einer Neukonzeptualisierung von Musik," in *Musik und Körper. Interdisziplinäre Dialoge zum körperlichen Erleben und Verstehen von Musik*, ed. Lars Oberhaus and Christoph Stange (Bielefeld: transcript, 2017), 145–64.

8 Cf. John Searle, *The Construction of Social Reality* (New York, NY: Free Press, 1995); Kim, Reifgerst, and Rizzonelli, "Musical Social Entrainment."

act.[9] Collective interindividual behavior involving we-intentions is oriented towards cooperation with a common goal, which makes it distinguishable from the summation of individual acts that do not involve cooperation.[10] This type of interindividual behavior emerges if each individual is aware of the effect that is reached through interindividual behavior.[11]

Understanding musical practices does not require meta-representational processes since a representational account of meanings of the sounds and body movement that musical practices consist of is unsatisfactory.[12] There are no meanings of musical expression that can be stated regardless of context or articulated by other expressions that have the same meaning. Terms like "true," "satisfying," "expressive," etc., that articulate specific semantic relations between the expressions and the world, are not applicable to music. Instead, musical meanings are generated within the course of musical understanding, which occurs as interactive participation and embodied re-enactment.[13] For instance, musical meanings are generated while producing sounds and body movements through interactive participation such as singing and dancing along, or through embodied re-enactment of sonorous-rhythmic structures such as dance movements imitating features of sonorous-rhythmic structures.[14] Such activities of interactive participation and embodied re-enactment single out those aspects of musical practices that are relevant in a given cultural context.

Based on this minimal concept of musical practices, this chapter presents one of our exploratory studies and discusses the extent to which motion-based

9 Cf. John Searle, "Collective Intentions and Actions," in *Intentions in Communication*, ed. Philip R. Cohen, Jerry Morgan, and Martha E. Pollack (Cambridge, MA: MIT Press, 1990), 401–15, 407.

10 Ibid., 406.

11 Cf. Searle, *The Construction of Social Reality*; Kim, Reifgerst, and Rizzonelli, "Musical Social Entrainment."

12 Cf. Kim, "Musik als nicht-repräsentationales Embodiment"; Jin Hyun Kim and Matthias Vogel, "Nichtsprachliches Musikverstehen: Einleitung," in *Nichtsprachliches Musikverstehen. Zur Neuperspektivierung der musikalischen Hermeneutik*, ed. Jin Hyun Kim and Matthias Vogel (Heidelberg and Wiesbaden: Metzler/Springer, forthcoming).

13 Cf. Kim and Vogel, "Nichtsprachliches Musikverstehen."

14 Cf. Arnie Cox, *Music and Embodied Cognition: Listening, Moving, Feeling, and Thinking* (Bloomington: Indiana University Press, 2016); Matthias Vogel, "Nachvollzug und die Erfahrung musikalischen Sinns," in *Musikalischer Sinn. Beiträge zu einer Philosophie der Musik*, ed. Alexander Becker and Matthias Vogel (Frankfurt am Main: Suhrkamp, 2007), 314–68.

interindividual behaviors that emerge while socially interacting in an interactive music environment could be described as musical.

Exploratory Study on Motion-Based Interindividual Behaviors Emerging in Free Musical Improvisation

In this section, we present our explorative study using structured observation, which was carried out on four participant couples who interacted using Sentire,[15] an interactive music system consisting of a body-machine interface which detects movements and proximity between two persons and provides real-time music feedback. Subjects freely improvised their behavior through body movements accompanied by sound feedback. According to participants' cultural background, this kind of improvisation could be associated with a specific genre of dance improvisation or musical improvisation, yet it was not necessary for participants to apply skills in musical improvisation or dance improvisation. Rather, they were invited to act with their bodies in relation to another interactant. Sentire allows subjects to explore a dyadic interaction, starting with the broad common goal ("we-intentions") of interacting with each other using body movements, without a set of rules or a specific role for each interactant. Our research question asks whether it is possible to identify a relevant sequential order of behaviors through which we might be able to infer how interindividual synchrony emerges as a result of musical interaction in a broader sense. Based on our previous observational studies,[16] our initial hypothesis holds that Sentire, which is designed to facilitate non-linguistic,[17] musical interaction using body movements in the contexts of everyday life and therapy, fosters basic social interactive behaviors[18] without necessarily involving a high-order capacity of mind-reading, as well as "a strong kind of

15 See https://vimeo.com/317080128 (accessed 15 September 2022) for a video example of how Sentire can be used.

16 Marta Rizzonelli, Jin Hyun Kim, Pascal Staudt, and Marcello Lussana, "Fostering Social Interaction through Sound Feedback: Sentire," in *Organised Sound* 28/1 (2023): 97–109, accessed 28 October 2023, https://www.doi.org/10.1017/S1355771822000024.

17 By "non-linguistic" we mean that it is about musical interaction that does not serve as any kind of language-related interaction, not merely a matter of non-verbal interaction which might involve bodily gestures that can serve to accompany or replace language.

18 Cf. Ibid.

collective intentionality with […] a shared semantic content and […] specifically defined roles" for each actant.[19]

Study Design

This study was part of a larger experiment in which the usage of Sentire was compared with two control conditions (recorded sound and no sound) to look for a baseline effect of the Sentire system on the facilitation of interaction. This study was approved by the Ethics Committee of the Faculty of Humanities and Social Sciences Ethics Committee at Humboldt University of Berlin (approval no. HU-KSBF-EK_2020_0014). All participants provided written informed consent regarding study design, audio and video recordings, processing of sensitive data, and compliance with Covid-19 protective measures.

Examining four sessions conducted with Sentire, we carried out an exploratory analysis based on informal and structured observation, to investigate whether it is possible to find motion-based interindividual behaviors that show how synchrony emerges as a result of musical interaction—that is, cooperative interaction beyond mere coordination. To this end, based on previous analyses, we selected sessions in which synchrony had been detected consistently throughout the interaction.

Participants were two men and six women (mean age 25,88 years, s.d. ± 4,39) in four same-gender couples, in an effort to (try to) control for the possible confounding variable of sexual attraction.[20] Participants did not know each other before the study and were asked to interact with each other for eight minutes using body movements. Without being assigned any particular task, the instruction was to move freely and interact with the partner, given the limitations of avoiding touch and wearing a face mask due to Covid-19 regulations. During the interaction, an ambient pad sound intended to promote physical proximity was generated in real-time in response to participants' movements and fluctuations in proximity. Audio and video were recorded for the duration of the interaction.

19 Kim, Reifgerst, and Rizzonelli, "Musical Social Entrainment."

20 The choice of creating same-gender couples was made assuming that most participants were heterosexual. To verify this assumption, this information was collected in a brief questionnaire together with demographic data.

The technical setup consisted primarily of Sentire hardware and software.[21] Each participant wore a bracelet that takes advantage of the human body's electric conductivity to generate a signal within the same electrical circuit (capacitive coupling). The signal's strength depends on the distance between the two participants ("proximity effect") and is used to produce a control signal which changes linearly with the distance of the two bodies. The control signal is mapped to specific parameters of an algorithmic sound synthesis environment (parameter mapping), which generate real-time, closed-loop auditory interaction between the two persons. Detection and sonification of the control signal are achieved by a custom software and a sound generator written in SuperCollider. In addition to the hardware and software components of the Sentire system, the technical setup included loudspeakers, three USB-cameras set in a triangular configuration (to guarantee an accurate capture of the full interaction space), and two computers (placed in a separate room) to control Sentire and the cameras.

A Behavioral Sequential Approach: Structured Observation

Structured observation is an established method in behavioral and social sciences. It consists in observing audio and/or video recordings and identifying specific behaviors by annotating them, i.e. assigning them a label (or code). Annotation can be carried out in different ways: simply counting the number of occurrences of a certain event, with the option of marking its length or not (timed or untimed event recording); or pre-segmenting the flow of behavior into brief, fixed time intervals and attributing a label either to each of them (interval recording) or only to some of them (selected-interval recording). Each approach has advantages and disadvantages, and the choice depends on research questions, available time and resources, and the complexity of the data.[22] These approaches share an aim towards systematic observation which can be treated as measurements, so long as codes fulfill certain logical conditions:

21 Pascal Staudt, Anton Kogge, Marcello Lussana, Marta Rizzonelli, Benjamin Stahl, and Jin Hyun Kim, "A New Sensor Technology for the Sonification of Proximity and Touch in Closed-Loop Auditory Interaction," in *Proceedings of the 19th Sound and Music Computing Conference (SMC-2022), Saint-Étienne, June 8–11, 2022*: 446–53, accessed 15 September 2022, https://www.doi.org/10.5281/zenodo.6798242.

22 For a detailed explanation, see Roger Bakeman and Vicenç Quera, *Sequential Analysis and Observational Methods for the Behavioral Sciences* (New York: Cambridge University Press, 2011).

1) having a strict one-to-one correlation with the unit of behavior they are assigned to, which makes codes comparable to nominal scales used in quantitative studies,[23] 2) being exhaustive, meaning that every type of behavior must be attributable to a code, and 3) being mutually exclusive, meaning that only one code can be applicable for each behavior.[24] It is clear, therefore, that the development of the codes and their definitions (summarized in the so-called coding scheme) is the core process of the method.

To identify effective codes, structured observation must be preceded by one or more phases of informal observation, during which various examples of the behavior of interest are analyzed to determine relevant events, their order of magnitude (in terms of duration) and whether there are behaviors that have to be ignored. Informal observation is carried out by first describing the observed behaviors in a simple and objective manner, and then organizing these descriptions into hierarchically-ordered categories (the future codes). It is often necessary to carry out several phases of informal observation, starting from more general aspects and/or larger timescales, and proceeding step by step towards finer behavioral aspects, which usually unfold on a smaller timescale. During this iterative incremental process, empirical and theoretical work develop in parallel and inform each other, since, at every step, the empirical observation of specific phenomena is the basis on which theoretical questions, generalizations, or interpretations are built. Although it is therefore only after a repeated and refined use of informal observation that it becomes possible to perform structured observation in the strict sense (i.e., systematic application of behavioral codes according to a specific and often ad hoc developed coding scheme), an observational study using a behavioral sequential approach often consists of several steps of oscillation between informal and structured observation until final behavioral codes are developed. This involves a lengthy process of investigation, but allows scholars to address research questions closely related to real-world behaviors.

An additional aspect lending structured observation the property of a quasi-quantitative method is the ability to measure the annotation's reliability, through inter-observer agreement (IOA) between two independent observers.

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23 Cf. Uwe Seifert and Jin Hyun Kim, "Towards a Conceptual Framework and an Empirical Methodology in Research on Artistic Human-Computer and Human-Robot Interaction," in *Human-Computer Interaction*, ed. Ioannis Pavlidis (Vienna: In-Tech, 2008), 177–94.

24 Cf. Colin Robson and Kieran McCartan, "Observational Methods," in *Real World Research*, ed. Colin Robson and Kieran McCartan (Chichester: Wiley, 2016), 318–45.

IOA is usually achieved by calculating Cohen's kappa coefficient[25] for at least twenty percent of the data.[26]

In a previous analysis, we coded interaction based on empirical (i.e., directly and objectively observable) parameters. This observation allowed us to detect two main empirical categories that play a primary role in the interaction supported by Sentire:

1) whole-body movements delineated by steps (no steps, forward steps, backward steps, etc.);
2) arm movements, particularized by their directedness towards the partner (one or both arms directed towards the partner, arms in a rest position, etc.). Here, it has to be stressed that the importance of arms is strongly related to the use of bracelets to connect participants to the Sentire system.

After coding the video material with empirical categories, we observed several cases where the two participants displayed the same code (i.e., the two participants' codes were overlapping). Table 1 shows the codes for which we considered overlapping and non-overlapping segments, and how we grouped these empirical codes to develop higher-order functional categories. For codes related to whole-body movements, an overlap between participants (e.g., both display the code 'forward_step/s') indicates that behavioral matching has occurred, meaning that similar, and synchronous body configurations or movements are taking place. In this case, directedness towards the partner is not a criterion for the annotation of whole-body movements, and consequently, no information can be detected about the interaction.

For example, if both participants display the code "no_steps," they are exhibiting the same behavior with respect to steps (behavioral matching). This, however, does not provide any information about whether they are interacting or not: they may be looking at each other and moving their arms towards each other; they may equally be looking at the room and not interacting with each other at all. The codes simply do not detect interaction.

25 Jacob Cohen, "A Coefficient of Agreement for Nominal Scales," in *Educational and Psychological Measurement* 20/1 (1960): 37–46.

26 See, e.g., Melanie Pellecchia, Rinad S. Beidas, David S. Mandell, Carolyn C. Cannuscio, Carl J. Dunst, and Aubyn C. Stahmer, "Parent Empowerment and Coaching in Early Intervention: Study Protocol for a Feasibility Study," in *Pilot and Feasibility Studies* 6/22 (2020): 1–12.

Behaviorally matched whole-body movements	Interactive arm movements		
	Partner-directed		Non-partner-directed
	Behaviorally matched	Behaviorally non-matched	
no_steps overlapping forward_step/s overlapping backwards_step/s overlapping lateral_step/s overlapping full_circle overlapping turning_steps overlapping turning_no_steps overlapping	one_towards overlapping both_towards overlapping	one_towards without overlapping both_towards without overlapping	one_not_towards overlapping both_not_towards overlapping one_not_towards without overlapping both_not_towards without overlapping

Table 1: Behaviorally matched whole-body movements and interactive arm movements (see text for a detailed description). In the arm-movement codes, "one" and "both" refer to arms, not to participants. E.g., "one_towards" means: one arm towards the partner

Codes related to arm movements, however, incorporate directedness towards the partner, because every arm movement that can be empirically observed in dyadic interaction in the Sentire environment is coded depending on whether it is directed towards the partner or not. As a result, different functional categories can be inferred based on the presence of directedness and whether or not the two participants' codes are overlapping. When participants display overlapping codes that indicate directedness (both "one_towards" or both "both_towards"), a behavioral matching is occurring in which both participants are directed towards each other, meaning interaction can be inferred (interactive, partner-oriented behavioral matching). When participants display codes that indicate directedness but do not overlap (only one participant shows "one_towards" or "both_towards"), no behavioral matching is occurring, but one of the two participants is exhibiting partner-related, and therefore possibly interactive, arm movements. Finally, when participants display codes that do not indicate directedness but do overlap

(both "one_not_towards" or both "both_not_towards"), or when participants' codes neither indicate directedness nor overlap (only one participant shows "one_not_towards" or "both_not_towards"), no behavioral matching is occurring and no directedness towards partner is exhibited, but interaction may still be possible (e.g., due to mutual gaze or arm movements that are different but might complement each other).

Building on the empirical analysis just described, we developed a functional methodological approach, delineated in the following section. The sequential steps of the implementation of the method are indicated in square brackets.

[1]To answer the research question of whether synchrony emerges as a result of a specific behavioral pattern that is based on cooperative social interactions, we developed categories that can be understood as functional (i.e., that imply a certain degree of interpretation or inference). We organized the analysis in two steps: observation of the couple as a unit (A+B), followed by observation of each participant separately (A, B). In the annotation of A+B, "directedness" is the discerning criterion and its meaning needs to be specified: the iterative process of informal observation has made it evident that a person can be directed towards the partner with any body part, even with just a slight rotation of the head towards them. In fact, when two strangers interact only using body movements for the first time, and especially during the initial phase of the interaction, directedness often occurs only in a cautious, partial form. In our understanding, any form of directedness between participants, from the most cautious to the most complete, which includes gaze and whole-body, is an indicator of interaction. Tables 2.1 and 2.2 present and define functional categories for A+B and for A, B, respectively; the decision tree in figure 1 shows the logical relationship among the codes within and between the two steps of analysis.

[a]At first, functional categories were applied in concomitance with segmentation: every time a certain behavior was observed, it was necessary to identify a segment (i.e., the precise beginning and end of that behavior) before assigning it a specific code (category). While this procedure is convenient for empirical categories where the temporal limits of a behavior are usually recognizable due to a shared definition of that behavior (e.g., step forward), identifying the limits of a functional category is much more prone to subjective judgment and can easily lead to disagreement between observers.

[b]Therefore, we applied the strategy of interval recording: the behavioral flow is pre-segmented in blocks of a specific duration (in our case, ten seconds) and each block must be annotated with one code.

This avoids not only disagreement regarding beginning and end of a behavior, but also excessive or insufficient annotation (i.e., a tendency to detect too many or too few events). Of course, this segmentation being arbitrary, it may well happen that different behaviors occur in the same block: in this case, only the behavior that covers the majority of the block is annotated, whereas any others are ignored.

A + B	
Near-simultaneous, similar or opposite behavior	Movements Both subjects are directed towards each other (through gaze and/or whole body/body part) Movements are near-simultaneous (not necessarily exactly simultaneous, but with temporal overlap) Movements are either similar or opposite
Turn-taking	Movements Both subjects are directed towards each other (through gaze and/or whole body/body part) Movements do not overlap in time
Residual interactive category	EITHER There are no movements, but both subjects are directed towards each other through gaze OR There are movements, and both subjects are directed towards each other (through gaze and/or whole body/body part), but movements are neither near-simultaneous nor turn-taking
No interaction	EITHER Neither of the two subjects is directed towards the other (whether through gaze or whole body/body part) OR Only one person is directed towards the other

Not assignable	Movements or no movements It is not possible to determine whether subjects are directed towards each other (through gaze and/or whole body/body part)

Table 2.1: Coding scheme of functional categories for the observation of the couple as a unit (A+B)

A, B	
Does nothing and waits but watches partner	The observed person does not perform any movement or other action (passive behavior or posture) The observed person watches the partner (and is therefore interactive)
Becomes initiative within the interactive context	The observed person performs movements or other actions (active behavior, including moving away from partner) The observed person takes initiative, performing a movement first (or at the same time as the other person) For all sections where it is very difficult to determine who starts and who follows, we choose for both participants the code becomes initiative within the interactive context.
Follows partner	The observed person performs movements or other actions (active behavior) The observed person does not take initiative but simply follows the partner
Is not directed to partner (neither gaze nor movements)	The observed person does not watch the partner (and is therefore not interactive) The observed person performs one of the following actions: touches the cable* looks around touches her/his own clothes, glasses, etc. * For each situation where a person touches the cable, we need to assess whether touching the cable is really the primary focus (is not directed to partner) or the touch is just a secondary focus (and in this case we choose between becomes initiative within the interactive context and follows partner)

– Not assignable	The first and the last categories cannot be distinguished because directedness is not clearly observable

Table 2.2: Coding scheme of functional categories for the observation of each participant separately (A, B)

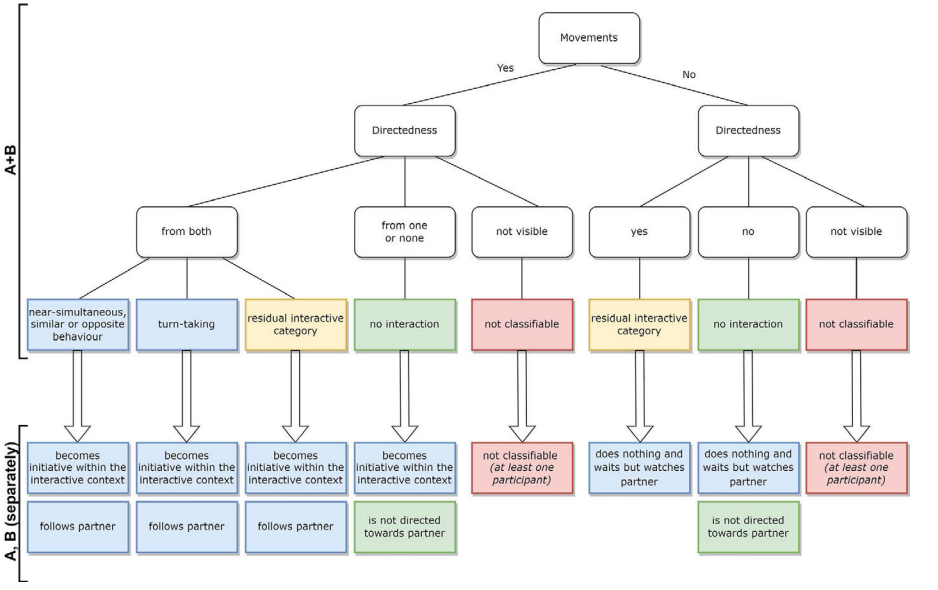

Figure 1: *Decision tree showing the logical path for the attribution of codes, to the couple as a unit* (A+B) *and to each participant separately* (A, B)*, as well as the logical relationship between these two levels. In each column of "A, B (separately)," either a combination of the two existing categories or the duplication of one category is possible. © Marta Rizzonelli (02/2024)*

[2]At this point, a systematic analysis was undertaken to ascertain whether interactive behaviors tended to occur in a specific sequence. Whenever an interactive behavior ("near-simultaneous, similar or opposite behavior," "turn-taking," "residual interactive category") occurred in A+B, the three intervals (thirty seconds) preceding that behavior were observed for A, B, and A+B. The goal was to identify sequences of individual (A, B) or collective (A+B) behavior that repeatedly led to interactive behavior. This procedure allowed us to identify the specific roles of each actant that preceded interactive behaviors. However, the patterns that we identified

both for individual (A, B) and for collective (A+B) behavior did not prove very informative, as in most cases the sequence leading to interactive behavior "x" consisted itself of behavior/s "x."

[3]For this reason, an alternative strategy was undertaken: after two independent observers had annotated each session using the codes shown in tables 2.1 and 2.2, all segments of the A+B level where observers had agreed on the code "near-simultaneous, similar or opposite behavior" were further annotated to identify mirroring. This is based on our informal observation, carried out parallel to [1] and [2], indicating that in many cases observable interactive behaviors are characterized as mirroring. The concept of mirroring as used in the present study makes reference to Donald's[27] distinction between mimicry and imitation. Mimicry is a type of copying, involving a replication of the observed movement as closely as possible—either congruently (right-right or left-left) or inversely (right-left). In contrast, imitation is characterized by the fact that exact replication is not required. We use the term "mirroring" as a synonym for Donald's "mimicry."

[a]To facilitate annotation, at first we distinguished three types of mirroring based on its duration: "interaction without mirroring," "partial mirroring" (shorter than five seconds), "near-complete mirroring" (longer than five seconds).

[b]After annotating mirroring, a comparison was carried out between the segments where "near-complete mirroring" had been annotated with IOA and the segments for which empirical codes overlapped (as described at the beginning of this section). This was conducted to verify whether there was a relationship between mirroring coded for the couple as a unit (A+B) and overlaps of behavior coded for each participant individually (A, B). Since informal observations revealed that there is a phase of the interaction (mostly in the second half of each session) in which mirroring occurred in a smoother, more repetitive, choreomusically and continuously varied way, we undertook a more detailed analysis, taking into account not only the duration of the mirroring episodes, but also movement fluidity, directedness towards the partner and IOA regarding the annotation of the two participants separately (A, B).

27 Cf. Merlin Donald, *Origins of the Modern Mind: Three Stages in the Evolution of Culture and Cognition* (Cambridge, MA, and London: Harvard University Press, 1991).

[4]In parallel with the structured observation of functional categories, informal observation was conducted iteratively to gain insight into how interaction developed on a larger scale (i.e., not based on a ten-second fragmentation of the behavioral flow but considering macro-phases of the whole interaction).

Results

In the following, results will be described reflecting the numbered steps outlined in the previous section.

[1]Even in the first phase of informal observation, it was necessary to refine the codes. In fact, insufficient IOA compelled us to formulate more specific definitions based on a list of necessary conditions for each code (as shown in tables 2.1 and 2.2). Moreover, one of the codes that had originally been proposed, "withdraws from the interaction," was rejected because it was not possible to systematically distinguish it from the code "is not directed towards partner."

[a]We applied a strategy of starting only with the codes related to non-interaction (e.g., "is not directed towards partner" for A and B and "no interaction" for A+B), to verify if sufficient IOA could be achieved, at least with respect to these categories. This was not the case, because IOA in ELAN is calculated by means of the modified Cohen's kappa coefficient,[28] for which segmentation and overlap are crucial. Additionally, even though independent observers generally agreed about where to annotate non-interactive events, they disagreed significantly about how to segment them.

[b]Implementing interval recording with ten-second blocks allowed us to avoid disagreement on segmentation. To comply with this strategy, however, it was necessary to reject another initially proposed code, "uses communicative gestures," because these kinds of gestures—understood as movements intended to convey a message to the partner, such as a shoulder shrug or head shake—are always much shorter than ten seconds. Even for interval recording, we applied the strategy of

28 Cf. Henning Holle and Robert Rein, "EasyDIAg: A tool for easy determination of interrater agreement," in *Behavior Research Methods* 47/3 (2014): 1–25, accessed 10 January 2023, https://www.doi.org/10.3758/s13428-014-0506-7.

starting with only one code ("near-simultaneous, similar or opposite behavior"), achieving agreement for around seventy-five percent of the annotations in the first two tests. The analysis of the complete coding of the four couples considered in the present study yielded an average agreement of around seventy-three percent.

[2]Analysis of the sequences leading to interactive behaviors showed that the most common pattern preceding all interactive behaviors taken into account ("near-simultaneous, similar or opposite behavior," "turn-taking," "residual interactive category"), was a thirty-second block of either "becomes initiator within the interactive context" for individual participants (A, B) or "near-simultaneous, similar or opposite behavior" for the couple as a unit (A+B). It was not possible, therefore, to detect an informative pattern of behaviors leading to interaction.

[3]

[a]The annotation of mirroring categories based on duration yielded an average agreement of around eighty-eight percent.

[b]The comparison between "near-complete mirroring" annotated with IOA and overlaps of individual behaviors—as used in a previous analysis—showed that there was a systematic correspondence between the former and the latter. In other words, all segments where mirroring was long and clearly observable were also segments where both participants were exhibiting the same (overlapping) behavior, either with their whole body or with their arms, or with both (see figure 2). This confirms the relevance of the overlapping empirical codes and proves the logical continuity between empirical and functional categories. Moreover, a further analysis of mirroring revealed that A and B's roles tended to become more evident (thus generating higher IOA) when interaction tended to become more systematic, generally in the second half of each session.

[4]Informal observation conducted iteratively on a timescale larger than ten seconds led to the identification of two main categories: "exploratory phase," a stage of interaction with the partner in which gestures and movements are tested, tried, and explored, often with pauses, uncertainties, and a general lack of confidence towards a) the system, b) a joint affordance offered by the Sentire environment, and c) a situation convention; and "systematic interaction phase," a more structured stage in which a) interaction develops far more smoothly and with fewer or no interruptions, and b) participants are fully directed towards each other with eye contact, and show repeated and choreomusically varied similar behaviors, including more mirroring and residual interactive behaviors

than during the exploratory phase. The superimposition of this informal macro-analysis and the final step of the previously described structured micro-analysis (i.e., the annotation of mirroring, [3]) is intended to clarify whether and to what extent mirroring episodes appear differently in exploratory versus systematic interaction phases. One of our findings was that in the systematic interaction phases, mirroring occurs more frequently and in a higher-quality form (i.e., more synchronous, more fluid and more partner-directed).

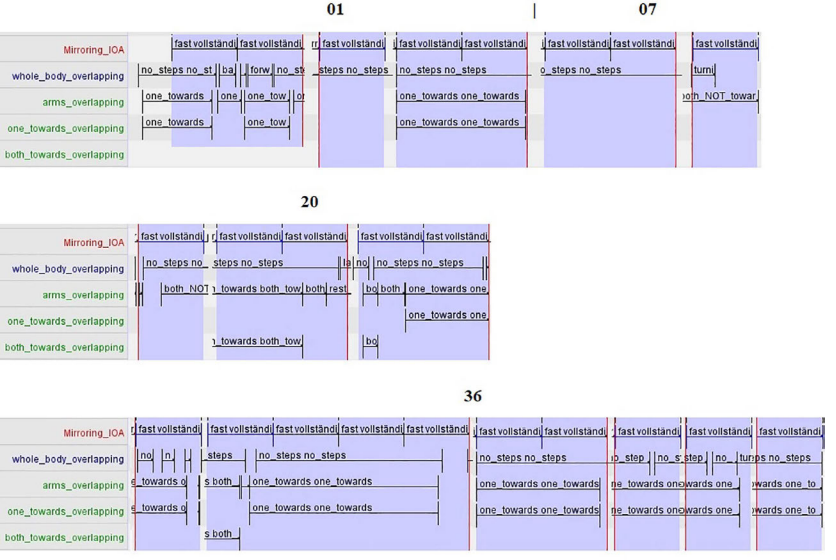

Figure 2: "*Fast vollständig*" is German for "near-complete." *For all segments where "near-complete mirroring" was annotated, there was an overlap of empirical codes as well. Session numbers are displayed above the examples. © Marta Rizzonelli (02/2024)*

Building on this last point [4], several structured observations can be made. The exploratory phase (or phases, as there can be more than one, for example with increasing directedness towards the partner) demonstrates two general features of mirroring behaviors: 1) both "partial mirroring" and "near-complete mirroring" tend to occur less frequently (around thirty percent) than in the subsequent systematic exploration phase (around fifty percent), and when they

do occur, they are generally of brief duration (five, ten or twenty seconds); 2) in the individual analysis (A, B), "near-complete mirroring" generally corresponds to a leader-follower dynamic.

The systematic exploration phase demonstrates five general features: 1) as already mentioned, both "partial mirroring" and "near-complete mirroring" occur more often (around fifty percent); 2) participants are fully directed towards each other with eye contact; 3) their roles are generally unambiguous, as shown by IOA related to the annotation of individual participants (A, B), which corresponds to seventy-nine percent on average. 4) Moreover, within the systematic interaction phase there are two sub-phases: first sub-phase, with a general oscillation between mirroring behaviors (more common) and residual interactive behaviors, and with several cases of clear leader-follower dynamic (around twenty percent on average); second sub-phase, just before the end of the session, with a block of mirroring, either the longest or the second longest of the session, in which both participants are proactive (rather than exhibiting a leader-follower dynamic) and tend towards perfect mirroring.[29] 5) Finally, systematic interaction exhibits more movement fluidity compared to the exploratory phase (i.e., movements occur continuously and almost without breaks between the two interactants). This last aspect, however, was observed exclusively on an informal level; systematic evidence would need to be provided by a further study with structured observation.

Systematizing the observations made on exploratory and systematic interaction phases can be achieved by classifying interindividual synchrony in four successive levels of increasing complexity. The first level corresponds to interindividual synchrony that is understood as behaviorally matched (interindividual) synchrony, and does not rely on cooperative social interaction. The simple overlap (or match) of two interactants' behaviors that we observed through empirical categories in previous studies does not *per se* indicate cooperative social interaction. A second level is what we observed in the exploratory phase/s: here, the interactants' movements do not flow seamlessly from one to the other, but are interrupted by brief pauses and often performed in a fragmentary fashion. However, mirroring behaviors occur repeatedly (around thirty percent of the observed time, as reported above), either in a partial or in a near-complete form; most importantly, interactants are directed towards each other, even if only in a partial way (i.e., with fragmentary eye

29 Under "perfect mirroring" we understand here a perfect copy of the partner's behavior; this differs from "near-complete mirroring," which is identified based on its duration (longer than five seconds), as clarified in section 2.2.

contact). This directedness (albeit partial) is what allows us to infer interaction in a functional sense.

The third, more complex level of interindividual synchrony can usually be observed in the first part of the systematic interaction phase. Movement fluidity increases and the interactants' roles become less ambiguous—that is, it becomes clearer whether a person takes initiative or follows their partner. Mirroring behaviors tend to occur more often than in the previous level, with a slight tendency towards (near-) complete forms of mirroring. Forms of interaction other than mirroring, which we call residual, often occur between or prior to mirroring behaviors and contribute significantly to the interactional flow. More importantly, directedness becomes more comprehensive, involving eye contact and often multiple body parts. Altogether, this form of interindividual synchrony exhibits fluidity, repetitive and choreomusically varied mirroring and directedness, indicating a high level of cooperative social interaction. Finally, the fourth level of interaction, corresponding to the last part of the systematic interaction phase, displays usually long-lasting, symmetric mirroring behaviors where both interactants simultaneously begin to take initiative. Here, a situation convention seems to have been established, allowing interaction to flow according to tacit rules that were not available in the previous phases of the session.

Discussion

The results show that interactions mediated by Sentire involve an exploratory phase/s and a systematic phase, which both include synchronous mirroring behaviors. However, mirroring behaviors emerge through different processes. A low-level of interindividual synchrony could be identified in the exploratory phase/s, consisting of both mirroring and non-mirroring behaviors which occur even when two persons are not fully directed towards each other (i.e., they do not make eye contact). Here, action-based mirroring goes beyond the mirroring that occurs—for instance, when two persons are merely exposed to the same auditory or visual milieu—because in this case participants are explicitly invited to interact with each other in a shared environment and social context. However, action-based mirroring occurring in the exploratory phase/s is not yet based on a "situation convention"—that is, "a socially emergent anticipatory agreement"[30]—but on the simultaneous affordance that allows two persons to

30 Robert Mirski and Mark H. Bickhard, "Conventional Minds: An Interactivist Perspective on Social Cognition and Its Enculturation," in *New Ideas in*

behave in relation to the common features of the environment that they perceive, while being neither fully directed towards nor closely related to each other. Interactive behaviors including mirroring and non-mirroring behaviors that are observed in this level consist of fragmentary single movements, or a series of movements which occur either only once or several times but with breaks, without being fully directed towards the partner.

On the contrary, mirroring behaviors in a higher-level of interindividual synchrony, which could be identified in the first part of the systematic interaction phase, are observed when interactants are fully directed towards each other, making eye contact. Those behaviors are often followed by residual (non-mirroring) interactive behaviors—or, in few cases, by non-interactive behaviors which quickly become interactive (mirroring or residual) again. Interactants' behaviors in this level are based on their previous interactions during the exploratory phase; these interactions allow interactants to perceive a joint affordance offered by the Sentire environment. This joint affordance serves as a basis for interactants' collaboration, although their behaviors might be different; the Sentire environment provides some degree of freedom as to how each interactant can behave. Nevertheless, each behavior contributes to a collective act, involving a joint commitment. Synchronous mirroring behaviors that emerge within that level of interindividual synchrony could be interpreted as a process of mutual adaptation giving rise to a situation convention. In this process, interactive behaviors characterized as partial mirroring or residual interactive behaviors tend towards leader-follower dynamics, whereas in interactive behaviors categorized as near-complete mirroring, both actants tend to be simultaneously proactive. This allows us to pose a research question for a further observational study: whether near-complete mirroring behaviors where both actants become simultaneously proactive emerge as a result of established anticipatory agreement during an improvisatory interaction in the Sentire environment.

Remarkably, every session ends with relatively long segments in which long-lasting, near-complete mirroring behaviors are simultaneously initiated by both interactants, which we characterize as the highest level of interindividual synchrony. Those mirroring behaviors differ not only from fragmentary synchronous mirroring behaviors observed in the very beginning of improvisation, which are not based on an established situation convention at all, but also from those observed in the exploratory and first systematic interaction phases, which involve a process of establishing a

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Psychology 62, 100856 (2021), accessed 15 September 2022, https://www.doi.org/10.1016/j.newideapsych.2021.100856.

situation convention while interactants incrementally choose their behavior (influenced by others' decisions), and mutually adapt their behaviors. These interactions give rise to a socially emergent anticipatory agreement, which serves as a basis for joint decision making.[31] Near-complete, symmetric mirroring behaviors that are displayed towards the end of each session can be interpreted as those that emerge as soon as a situation convention concerning a dyadic interaction within the Sentire environment is established.

Taking into account the role of past interactions in the emergence of an anticipatory agreement, we may state that our behavioral sequential approach to improvisatory musical interaction allows us to identify a sequential order of behaviors. Some limitations of the present study need to be addressed. Due to the time-consuming, iterative process of structured observation, it was only possible to analyze a few sessions. The analysis led to several specific research questions, some of which would have required a more thorough investigation and the development of further steps of structured observation. Despite these limitations, our in-depth analysis of sequential behaviors on a moment-to-moment basis showed that some features of the interindividual synchronous behaviors observed during each session are distinguishable from one another, and result from a degree of continuous mutual adaptation which unfolds parallel to musical improvisation.

Contrary to some scholars' claim that synchrony or mirroring alone is insufficient for understanding the joint action that occurs when interactants are dynamically coupled and follow a common goal,[32] the present study showed that both residual interactive behaviors and synchronous mirroring behaviors can be characterized as dynamically coupled rather than simply aligned, depending on the process of mutual adaptation. As a result, we can rethink the roles of basic social behaviors that have long been disregarded in social sciences and social cognition (albeit more recently acknowledged in an increasing

31 Cf. Uri Hasson, Asif A. Ghazanfar, Bruno Galantucci, Simon Garrod, and Christian Keysers, "Brain-to-brain Coupling: a Mechanism for Creating and Sharing a Social World," in *Trends in Cognitive Sciences* 16/2, 114.121 (2012): 114–21, accessed 15 September 2022, https://www.doi.org/10.1016/j.tics.2011.12.007.

32 Cf. Riitta Hari, Tommi Himberg, Lauri Nummenmaa, Matti Hämäläinen, and Lauri Parkkonen, "Synchrony of Brains and Bodies During Implicit Interpersonal Interaction," in *Trends in Cognitive Sciences* 17/3 (2013): 105–6, accessed 15 September 2022, https://www.doi.org/10.1016/j.tics.2013.01.003 and Uri Hasson and Chris D. Frith, "Mirroring and Beyond: Coupled Dynamics as a Generalized Framework for Modelling Social Interactions," in *Philosophical Transactions of the Royal Society B: Biological Sciences* 371:1693, 20150366 (2016), accessed 15 September 2022, https://www.doi.org/10.1098/rstb.2015.0366.

number of studies on infant-caregiver interaction and basic interindividual behaviors underlying social interaction). The present study shows that synchronous mirroring behaviors not only serve as a prerequisite for a higher-order form of social interaction, but emerge as central interindividual behaviors during an interaction involving joint commitments and we-intentions.

This result could provide a fruitful perspective for future research on social cognition, in which non-linguistic forms of interaction that neither bear representational semantics nor involve given social norms could be better integrated into empirical studies on social cognition. A question to be addressed would be whether and to what extent interindividual synchrony not only underlies cooperative social interactions, but also emerges as a systematic form of behavior while mutual adaptation occurs during interactions. In particular, musically oriented interindividual behaviors that can be investigated in the context of cooperative social interaction could help assess whether a sequence of interindividual behaviors that emerges towards the end of that interaction could be seen as a result of the mutual adaptation that occurs during different exploratory and systematic interaction phases, establishing a situation convention. This is due to the fact that a musically meaningful unit of behavior that does not bear representational semantics but is considered to make sense in a given musical context emerges through the relation of each behavioral event to another, and cannot therefore be reduced to a single event.[33] A linguistic-semantic unit, on the other hand, which has a representational reference to the world, can be assigned to a discrete linguistic event (albeit also related to other linguistic events).

Of particular note is the fact that interactions previously observed in free musical improvisation could be limited to those that only take place in a given context of improvisation, since past interactions going beyond that context cannot be presupposed. The field of free musical improvisation is therefore appropriate for investigating how interindividual synchrony emerges due to a dynamic and mutual process of anticipation and intermediate-term memory, and not necessarily relying on explicit knowledge that is available outside of an interactional context and long-term memory. This would allow scholars to investigate whether cultural norms could be established through musical

33 Cf. Jin Hyun Kim, "From the Body Image to the Body Schema, From the Proximal to the Distal: Embodied Musical Activity Toward Learning Instrumental Musical Skills," in *Frontiers in Psychology* 11:101 (2020), accessed 15 September 2022, https://www.doi.org/10.3389/fpsyg.2020.00101.

interindividual interaction involving synchronous behaviors that could be conceived of as synergetic interactive behaviors.[34]

34 E.g., Riccardo Fusaroli and Kristian Tylén, "Investigating Conversational Dynamics: Interactive Alignment, Interpersonal Synergy, and Collective Task Performance," in *Cognitive Science* 40 (2016): 145–71, accessed 15 September 2022, https://www.doi.org/10.1111/cogs.12251 and Hasson and Frith, "Mirroring and Beyond."

Intertwined
Resonance, Affect, and Resistance in Open-Form Music–Dance Performance

Jan Schacher

Abstract: *This chapter explores how sounding and moving mirror each other, how dancers and musicians rely on the same perceptual and affective phenomena. And equally, how for the viewer and listener, being connected to the performers is through a phenomenon of corporeal resonance.*
Beyond the idiomatic elements of dance and music, intentions are transmitted through common bodily patterns. The artist's inner states are completed and reconstructed by audiences and co-performers. The key element enabling the connection is Resonance, an intertwining in mutual adaptive oscillations by impulses, phrases, actions, and perceptions.
Resistance appears as a necessary catalyst and effort generator for heightened awareness states and tensions that contribute to a transformative performance. Pushing with body against body, through an ecological, embodied relation, the self, its agency, and the perception of time condense into a complex manifold that is negotiated by performers and audience alike.

Introduction

Sound can be perceived as movement, action, and intention, particularly when set in a frame that says "music," "performance," "stage," and above all, "listen to me." And movement may be perceived as sound, resonance, and vibration, as an enveloping action that creates a space of echo, melody, and rhythm. From the performer's perspective the entanglement between making sounds and moving is central—between listening to and feeling oneself and the other, in proximity and intimately shared space.

In this chapter, I explore how the perceptions of sounding and moving mirror each other.[1] I try to bring out what the experience of the combined performance and its inner traces can show that is not immediately apparent and measurable, but may appear to the outside viewer and listener through a phenomenon of resonance. I ask how the performer's intentions are transmitted, how concentration and inner states of perception can and will be felt, completed, and reconstructed by the attentive audience or co-performers. I will draw from first-hand experience in a collaborative performance mode between sound and movement in an open, improvised form. I will also draw from literature on the subjects of the self, perception of agency, and the perception of time and memory, and will use the concepts of affect and resonance as lenses through which to study this particular state of affairs. With this frame I will attempt to contextualize tacit knowledge and experience gained in performance and to articulate and explicate it while looking for specific insights.

Our basis for sounding and moving in expressive and intentional ways is anchored in a sense of time and intensities that originates from our embodied nature. Somatic practices teach us how to listen to the body, sounding practices teach us how to listen to our actions, and both emphasize the relation to our environment and to the other. Awareness of both domains alters the way we prepare, perform, and think about the moments of sensory folding and compression during a sound-movement performance. Applying an embodied perspective when reflecting on music and dance, sound, and movement—considering them as twins intertwined on a corporeal level—can provide a key to understanding multimodal perception and expression.

Any performance with sound or movement is active in more than just the domain of their principal focus. A musician's performance is tied to bodily actions and movements in the same way a dancer's body is tied to melodies and rhythms. Translations occur, or rather shifts between explicit expertise and imprinted patterns. The movement dynamics in a dance phrase are tied to feelings of dynamic shaping of time, drawing on musical capabilities; the fluently executed instrumental phrase is drawing on integrations active on a somatic level (the sonic imagination of such a phrase, even, can originate from movement dynamics inscribed in the body).[2] The multimodality doesn't stop here.

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1 Parts of this chapter were previoulsy published in: Jan Schacher, *Sound Presence, Performing with Bodies and Technologies*, PhD thesis, Royal Conservatoire and University of Antwerp, Belgium (2017).

2 Beau Sievers, Larry Polansky, Michael Casey, and Thalia Wheatley, "Music and Movement Share a Dynamic Structure that Supports Universal Expressions of Emotion," in PNAS 110, no. 1 (2013): 70–5, accessed 24 July 2022, https://doi.org/10.1073/pnas.1209023110.

Visual, spatial, kinesthetic, tactile, and other sensory channels are equally involved, and contribute to the density, or "thickness"[3] of the performance. Their contributions are more difficult to discern, and their cross-domain effectiveness stays more hidden than the domains apparent on the surface. Nonetheless, it is only by taking into account and understanding the entanglement of all of the possible sense-modalities that the connection between sounding and moving should be approached. The question is for whom these entwined senses and schemata are active and how. It is evident that when talking of a performance situation, the artists are in focus: that is, musicians and dancers. But the performance situation is always a relational social moment, where the presence of audience represents a constituting factor. Co-performance arises not just between the artists but also between the audience and the performers. The sharing mechanisms at play between these actors may be resonance, embodiment, and affect, as will be discussed in the following sections.

Figure 1: One hand clapping: *Angela Stoecklin, Jan Schacher. 18.12.2015 Shinjuku, Tokyo, Japan. © Jan Schacher*

3 Clifford Geertz, "Thick Description: Toward an Interpretive Theory of Culture," in *The Interpretation of Cultures* (New York: Basic Books, 1973), 3–30.

Resonance

> When a field of resonance is rolled out, an entanglement of sonic relations can take place. Through embodied interaction we are able to attune ourselves to one another in dynamic connections that run simultaneously in various directions, in a rhizome of affective and affinities connections.[4]

Resonance is a phenomenon known from physics, where an object or space enters into oscillation in response to a cyclical energy-input, be it through a sound wave or physical contact that excites the oscillation. In common language, resonance also denotes a person's response to a communication or experience, resulting in an expression. Etymologically it is derived from the Latin *sonare* and might be translated as "re-sounding." The central process of oscillation or vibration is qualified by an isomorphic or reciprocal response. The resulting relation is the central characteristic of resonance and is also why it functions so well metaphorically.[5] Arguably, affective impacts in general and emotional responses in particular represent a bodily resonance response to a perceived event. Therefore, inter-personal kinesthetic responses represent resonance phenomena, albeit effective on a pre-reflective and somatic level, in a "tactilely and kinesthetically resonant" mode.[6]

For a performer, in the moment of adaptive self-control, when listening to and perceiving oneself in the context of action, a type of self-oscillation arises that acts as a regulation and energizing factor. Adaptive feedback and oscillations do not necessarily become conscious but have an impact on the performer's self-perception and appraisal of the situation—perceived as the energy level of a performance and potentially distorting time perception.

For the public, the primary resonance is set in place when attention is given to the performance. The viewer's and listener's perception—in particular of bodily states, tensions, and dynamics constituting the action—is elicited by

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4 Juliana Hodkinson, "Moving and Being Moved, Affective Resonance at Play in Sonic Performances," in *Performance, Subjectivity, and Experimentation*, ed. Catherine Laws, Orpheus Institute Series (Leuven: Leuven University Press, 2020), 45.

5 The difference with re-flection is of course crucial as well. The optical phenomenon implies an active engagement with something past, a "turning back one's thoughts." Rodolphe Gasché, *The Tain of the Mirror: Derrida and the Philosophy of Reflection* (Cambridge, MA: Harvard University Press, 1986), 16. As an optical term, "reflection" describes the process of mirroring light and images.

6 Maxine Sheets-Johnstone, "Kinesthetic Memory," in *The Corporeal Turn: An Interdisciplinary Reader*, ed. Maxine Sheets-Johnstone (Upton Pyne, UK: Imprint Academic, 2009), 265.

entering into resonance and empathy with the performer. For movement-based practice, this connection can give rise to perceivable bodily sensations in the viewer; in the auditory domain, the effect of sound dynamics is more subtle, but also present for the listener.

The presence of instruments as sound producers adds to the entwining, since playing them requires a bodily action. If sound is produced in a technologically mediated form, detached from a visible causal action, auditory perception still attempts to reconstruct the source of sound and produces a physiological response to it. This culturally acquired capacity is integrated to such a degree that the effect resembles that of a direct experience and can be leveraged as if the sound performance were immediate, for example in club dancing. When the cause of a sound is directly visible and attributed to a physical action, such as in a live performance, the physiological resonance will synchronize itself with the performer's actions.

The act of listening demands an opening up and entering into a mode of resonance, which by itself already precludes an exclusive attentional focus.

> To listen is to enter that spatiality by which, at the same time, I am penetrated [...] it opens me inside me as well as outside, and it is through such a double, quadruple, or sextuple opening that a 'self' can take place.[7]

And even though focused listening resembles the act of pointing at something, the periphery's presence remains much stronger than in the visual mode.[8] Furthermore, listening is not merely a function of the ears; the entire body takes part in it as well, and is even capable of providing, if not a focal, then a very distinct global perception of the immersive aspects of sound through our capacity for vibratory perception. "Sound permeates and penetrates my bodily being. [...] Listening begins by being bodily global in its effects."[9]

Body and Environment Entwined

Through the body the world comes into focus and can be experienced. The experience of actions and their outcomes during dancing and music making, for example, are based on the education and acculturation processes acquired in

7 Jean-Luc Nancy, *Listening*, trans. Charlotte Mandell (New York, NY: Fordham University Press, 2007), 14.

8 Don Ihde, *Listening and Voice: Phenomenologies of Sound*, 2nd edition (Albany, NY: SUNY Press, [1976] 2007).

9 Ibid., 45.

childhood. They are also leveraging fundamental properties given by the body, such as creating a site where all the capabilities, impulses, and resonances come together, are filtered, channeled, and transformed by intentions. As Varela et al. state, the directed action with its intentionality is constituted by the potentials given by the situation.[10] The entwining of body and environment form the basis for what is termed "enaction." Sensorimotor "enactivism" claims that action, perception, and experience are intrinsically interlinked and co-dependent. The claim is that "perceiving is a kind of skillful bodily activity,"[11] where the mastery of navigating the environment generates emergent experiential capabilities without the need for top-down cognitive input. The relation between sensory experience and movement, mediated by the skillful use of implicit, practical, and non-propositional knowledge generates perceptual experiences. In the continuous feedback loop between behavior and sensory stimulation, experience is inscribed on a pre-reflective, sub-personal level. Through the continuous and direct interaction with the context and by leveraging the practical knowledge obtained, experience of how sensory perception is generated and modulated as a function of engagement is accumulated into a guiding structure.[12]

The repeated process generates a habit[13] that develops during and because of prior experiences,[14] which is what produces practical knowledge in the form of the sensorimotor contingencies[15] or affordances. The contingencies inform "the ways in which stimulation in a certain sense modality changes,"[16] and are based on the active engagement of the organism, a fact that becomes central during intentional shaping of sound and movement.

Instead of internal representation through a type of cognitive model, by virtue of the enactive interweaving, the world itself becomes "an external memory" that is "probed at will by the sensory apparatus,"[17] "guided by practical

10 Francisco Varela, Evan Thompson, and Eleanor Rosch, *The Embodied Mind: Cognitive Science and Human Experience* (Cambridge, MA: MIT Press, 1991), 206.

11 Alva Noë, *Action in Perception* (Cambridge, MA: MIT Press, 2004), 2.

12 Ibid., 119.

13 Maurice Merleau-Ponty, *Phenomenology of Perception* (London and New York: Routledge & Kegan Paul, 1962), 177.

14 Erik Myin and Jan Degenaar, "Enactive Vision," in *The Routledge Handbook of Embodied Cognition* (London and New York: Routledge, 2014), 94.

15 J. Kevin O'Regan and Alva Noë, "A Sensorimotor Account of Vision and Visual Consciousness," in *Behavioral and Brain Sciences* 24, no. 05 (2001): 939–73.

16 Daniel D. Hutto and Erik Myin, *Radicalizing Enactivism: Basic Minds without Content* (Cambridge, MA: MIT Press, 2013), 25.

17 O'Regan and Noë, "A Sensorimotor Account of Vision and Visual Consciousness," 946.

knowledge of the effect movement will have on" the sensory stimulus.[18] In the different sensory modalities, different dependencies on patterns of contingencies exist. These patterns inform how "perceptual experience emerges from the continuous and reciprocal (non-linear) interactions [...] and is thereby constituted by motor behavior, sensory stimulation and practical knowledge."[19] The sensorimotor position insists that there is no propositional or conceptual knowledge involved in generating an experience, and that having expectations—sub-personal protensive capabilities—concerning the variations effected by movement constitutes the central element of practical knowledge.[20] Thus the "embodied" relationship with the environment obviates the need for internal symbolic representations.[21]

Rather than being based on propositional knowledge of a representational model of the world, so-called practical knowledge—that is, the imprint through continuous, adaptive, and reinforcing action-perception loops—can be considered to emerge out of a resonance phenomenon. The perceiving organism, through the repeated process of adapting to external impulses and the resulting environmental changes of its own action in a looping manner, enters into a resonance with its context. In fact, from its first engagement onwards, the perceiving organism never leaves the resonating relationship with its world; through its history of interactions it obtains a sensitivity to the changes in the environment, in a state of "attunement."[22] Through this interactional relationship that is taking place in a continuously self-reinforcing cycle, the adaptation to external environmental conditions serves to coordinate the behavior in the face of stimulation. Above all, it enables anticipation or expectation, which is the essential skill necessary to effectively negotiate changing situations. Experience can therefore be described as modulating patterns inscribed in the organism, where even "without being representational, these changes can still retain their causal power and allow for a bridge between the past and the present."[23]

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18 Ibid., 970.

19 Evan Thompson, *Mind in Life: Biology, Phenomenology and the Sciences of the Mind* (Cambridge, MA: Belknap Press of Harvard University Press, 2007), 256.

20 Noë makes this point clear with the claims that "the work of the enactive approach is done by the perceiver's expectations of the sensory effects of movement, not their knowledge of those effects." Noë, *Action in Perception*, 119.

21 Myin and Degenaar, "Enactive Vision," 90.

22 Ibid., 93.

23 Ibid., 94.

Affective Connections

As we have seen, relationality is the central element of performing between sound and movement, because the two disciplines activate perception and sensation on multiple sensory levels and invoke a number of basic social and cultural schemata. We can consider the two disciplines as a unified space with diverging manifestations, united by the underlying dynamic schemata, the cultural links of tradition, and the notion that despite the difference in "instrument," dance and music evoke the same effects in performers and public. Both disciplines operate on the kinesthetic and energy levels, where an impulse and dynamic shape—a phrase, both sounding or moving—may trigger a response in the co-performer and partaking audience. This affective resonance

> is not only a synchronization of performers' articulations and expressions, perceived and contemplated by listeners. It is a convergence of many people's experiences of being in the middle of a dynamic, interactive situation, where sense-making is formed at the intersection of moving (expression) and being moved (affect).[24]

Based on affect and pre-reflexive automatisms, interactions between performers and the transmission between performer and audience have their primary impact on the sub-personal, even physiological level; they often remain below the threshold of conscious perception. Affect in this situation denotes the physiological reaction to a stimulus; it forms the basis for feelings and emotions,[25] but does not necessarily lead to them. The elusive affective qualities arise from

> activation contours of the discrete affects[26] and qualify the discrete affects, corresponding to the pace of rising and falling levels of their arousal [...] [and thus] incite our own bodies into immediate mimetic response.[27]

The affective response through mimesis forms the basis for synesthetic sensations that arise when sound and movement are perceived as synchronous and analogous. The multimodal nature of perception reinforces the affective impact and linking of synchronous sound-movement pairs, in particular when they are

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24 Hodkinson, "Moving and Being Moved," 33.

25 Antonio Damasio, *The Feeling of What Happens: Body, Emotion and the Making of Consciousness* (New York: Vintage Books, Random House, 2000).

26 Silvan S. Thomkins and Carrol E. Izard, *Affect, Cognition, and Personality: Empirical Studies* (London: Tavistock Press, 1966).

27 Anna Gibbs, "After Affect, Sympathy, Synchrony, and Mimetic Communication," in *The Affect Theory Reader*, ed. Melissa Gregg and Gregory J. Seigworth (Durham and London: Duke University Press, 2010), 192.

temporally locked, i.e., in rhythmical synchrony.[28] The fusion of two elements as a unified or dynamic "Gestalt"[29] can also occur with mixtures between aspects other than the audio-visual. Furthermore, the fusion even occurs in contrasting situations, when only a few aspects correspond (such as timing, intensity, phrasing, or just shared space) and the principal ones diverge.

Simulation and mimesis represent the fundamental principles of connection through affects, reaching from biological, physiological processes to the social and cultural dimensions of the performance space; from core consciousness to the autobiographical self,[30] on towards communication through social signifiers and codified situations.[31] On these higher levels of integration, the implicit and pre-reflective processes given by affective linking still exert their power and are a precondition for subjectivity: "A long chain of affects, linking primordial biological emotions with social emotions and eventually with feelings, accompanies and structures the formation of subjectivity."[32]

The affect relation that emerges from the (mimetic or voluntarily resisting) interaction in sound-movement performance in particular, is driven by the subjective position, yet extends to become an inter-subjective relation, a link that mixes mimesis, simulation, and projected intentionality.

> Within these mixed capacities of the in-between, [...] something emerges, overspills, exceeds: *a form of relation* as a rhythm, a fold, a timing, a habit, a contour, or a shape comes to mark the passage of intensities [...] in body-to-body/world-body mutual imbrication.[33]

In the relationship with the other the aim is not knowledge, but communication as the primary form of interaction. Thanks to the affective, effective,

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28 Jessica Phillips-Silver, C. Athena Aktipis, and Gregory A. Bryant, "The Ecology of Entrainment: Foundations of Coordinated Rhythmic Movement," in *Music Perception* 28, no. 1 (2010): 3–14.

29 Rolf Inge Godøy, "Knowledge in Music Theory by Shapes of Musical Objects and Sound-Producing Actions," in *Music, Gestalt, and Computing* (Cham, Switzerland: Springer International, 1997): 89–102.

30 Damasio, *The Feeling of What Happens*.

31 Jean-Luc Nancy, *Corpus*, trans. Richard A. Rand (New York: Fordham University Press, 2008).

32 Adrian Johnston and Catherine Malabou, *Self and Emotional Life: Philosophy, Psychoanalysis and Neuroscience* (New York: Columbia University Press, 2013), 33.

33 Melissa Gregg and Gregory J. Seigworth, *The Affect Theory Reader* (Durham, NC: Duke University Press, 2010), 13.

transformative, yet elusive relationality of resonance,[34] meaning arises from the other's actions and triggers immediate responses without requiring a recourse to reflection. By the same token, the field that is established by social interactions is always-already present and intrinsically linked in the same manner as the link to the natural world. As embodied subject and relational being,[35] the performer is always-already situated relative to the social world; the social dimension existing before being made aware, even if only "obscurely and as a summons."[36] In performance, then, these aspects are intensified and may be considered driving forces of the entwined involvement through action. There is no need for an "abstraction from the world;"[37] meaning arises from those habits that have been cultivated and form a common ground.

Practice Modes and Attention

The practice of improvised performance, be it in music, sound, dance, or movement, detaches itself from central structuring techniques defined in the canon of performing arts. Although the practice remains strongly based on a person's cultural background and previous dance, movement, and musical experience, many prescriptive norms and power relations are removed (e.g., musical score, fixed choreography, dependence on musical structure for dance structures, etc.). Instead, the practice of improvisation adds a different focus and puts additional demands on the performers. Compounding these demands, the synchronous, boundary-crossing sound-movement forms of joint music-dance improvisations increase the complexity but also the potential for compact, synchronous moments which are not possible with any other approach. The flow of elements and the chaining of actions creates a coherence, particularly through the multi-layered, situational links that the improvisors use to negotiate the space, which becomes more and more marked and filled with points of reference.

Bound, channeled, and helped by these resistances, in control of the direction or merely tumbling from one moment to the next, the improvising performer creates a continuously becoming present moment,

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34 Hartmut Rosa, *Resonance: A Sociology of Our Relationship to the World* (Cambridge, UK: Polity Press, 2019).

35 Max Van Manen, *Phenomenology of Practice* (Walnut Creek, CA: Left Coast Press Inc., 2014), 225.

36 Merleau-Ponty, *Phenomenology of Perception*, 422.

37 Nick Crossley, "Phenomenology and the Body," in *Routledge Handbook of Body Studies*, ed. Bryan S. Turner (London: Routledge, 2012), 137.

> an unbroken now—something akin to what Gertrude Stein called a 'prolonged present'[38] to what William James [...] called 'a specious present'[39] and to what Henri Bergson called 'a live present'[40]—an ongoing flow of movement from an ever-changing [...] world of possibilities.[41]

At the same time, the increased accumulation of knowns (experience) in the unfolding performance demands a movement away from certainty and fixity towards more unmarked space or towards a point of balance between the two. It "presses us to extend into, expand beyond, extricate ourselves from that which was known. It encourages us or even forces us to be 'taken by surprise.' Yet we could never accomplish this encounter with the unknown without engaging the known."[42] That which is present prior to the beginning of a performance serves to frame the improvisation, the situation, the life-state; it removes the existential threat that truly unknown situations pose, which would force the individual to act in modes of mere survival.

The "impossibility of improvisation"[43] brings to the foreground the unavoidable influence of the already inscribed and pre-programmed that cannot be evaded. Qualitative differences arise in the balance between the known and the unknown, the amount of unmarked space and the situational demands. They reside on a sliding scale between reproducing or recreating the pre-given and the cliché of the well-established forms, and the materials and open spaces that exist without templates.

> All improvisation takes place in relation to the known, whether the known is traditional or newly acquired. The only real difference lies in the opportunities [...] to renew or change the known and so provoke an open-endedness which by definition is not possible in idiomatic improvisation.[44]

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38 Gertrude Stein, *Composition as Explanation*, Second Series (London: Hogarth, 1926), 16–7.

39 William James, *Principles of Psychology*, vol. 1 (London: Macmillan, 1890), 609.

40 Henri Bergson, *Matter and Memory* (London: George Allen and Unwin Ltd., 1911), 176.

41 Maxine Sheets-Johnstone, "Thinking in Movement," in *The Corporeal Turn: An Interdisciplinary Reader*, ed. Maxine Sheets-Johnstone (Exeter: Imprint Academic, 2009), 30.

42 Susan Leigh Foster, "Taken by Surprise: Improvisation in Dance and Mind," in *Taken by Surprise: A Dance Improvisation Reader*, ed. Ann Cooper Albright and David Gere (Middletown, CT: Wesleyan University Press, 2003), 3–4.

43 Jacques Derrida, "Psyche: Inventions of the Other," in *Reading de Man Reading*, ed. Lindsey Waters and Wlad Godzich (Minneapolis, MN: University of Minnesota Press, 1989), 28.

44 Derek Bailey, *Improvisation: Its Nature and Practice in Music* (Ashbourne: Da Capo Press, 1992), 142.

The task is therefore, as we are made to understand from Bailey's statement, to push towards the open-ended, the re-configuration and translation of the given, rather than chasing after a clean-slate "new" which cannot exist.

Improvised performance inherits all the characteristics of performatively charged, ritual significations that are attributed to performances in general. However, given improvisation's focus on recombining and recreating the given into something "new," the demands on the attention of the performer and the audience are intensified and more resources need to be invested in order to fulfill the aesthetic, situational, social, and individual ideas, goals, and expectations. The highly concentrated state of the performer, for whom the challenge of the situation and the skills available should be in a balanced state,[45] increases awareness and mobilizes more perceptual resources.

Figure 2: One hand clapping: *Angela Stoecklin, Jan Schacher. 17.12.2015 Tokyo, Japan. © Jan Schacher*

The concepts, specific forms, and preoccupations that inform and accompany the practice of improvised performance constitute a frame within which to inquire about those qualities that are at the core of experience. The core that

45 Mihaly Csikszentmihalyi, *Flow: The Psychology of Optimal Experience* (New York: Harper & Row, 1990).

is subjected to scrutiny lies in the experience of the artists, a perspective that is delicate, personal, subjective, and difficult to grasp.

From the Inside: Traces and Focal Points

The collaborative project "one hand clapping" took a practice-centered as well as dialogical and discursive approach to experiencing the encounter between music and dance. It did so by selecting improvised performance as the experience format, but also by actively investigating the states of presence, the shaping of compositional or choreographic form, time, and space on stage.

Through the cyclical process of doing and discussing, of experimenting, experiencing, and unfolding reflection, each artist and the project as a whole moved forward. The exchange between the artists, by sharing experience from two distinct disciplinary backgrounds, by sharing experiences from residencies and intercultural encounters, and by developing other projects in parallel, indeed generated some of the deepened understanding that was sought. As the fabric of experience grew, the unreflected aspects of the practice diminished and a strengthened knowledge of the other (discipline) developed.

The non-textual, non-discursive, irretrievable states and situations that formed the improvised actions exposed the intrinsic qualities of the shaped time-space and the materiality of the body. Embedded within the event of each performance they were indeterminate, excessive, and affective: indeterminate because they contained no narrative or representational intention; excessive because in their densely compressed, enfolded situations, more was contained than could be apprehended and extracted; affective because their signification and logic functioned more intensely on the level of kinesthetic, pre-reflective corporeal response than cultural meaning.

Nevertheless, performances in this mode are also always the site of knowledge. Some of the encapsulated knowledge is only ever present in the contingent, multi-layered, complex fabric that is made of the timespan, attention, tension, communication, and action within the performance. This "knowledge" or "know-how" is embedded within the practice and is about dynamics, shaping time, tension, bodies, sounds, and it develops with moving, sounding, relating, listening, watching, doing: a representation of a non-representational activity that resists, yet also depends on allusions and narrative references. Through this secondary, dialogical mode of performance, the knowledge situated in jointly performed dance and music is extended, even if only for us artists.

During an improvised performance, with a heightened state of attention and presence, different elements move into perceptual focus. A multi-focal field becomes activated that encompasses all the perceptual elements that are present and all the elements with which an active engagement is undertaken. The field is continuously shifting.

The following observations are based on memories written down immediately after improvised performances.[46] "The attention cannot be fixed on a single focus for an extended time-span. The perceptual field is extended in different modalities at the same time, mostly in a peripheral, non-reflective way." Even if engaged with one thing or activity, "the focal point may wander from space to situation, from sound-material to instrument (for a musician), from perceiving the inner affect and emotional effect to the outer, from the tension of the moment to the awareness of the overall shape of the elapsed time span, from the perception of my corporeal position and feeling to the relationship to the others." Dividing up the senses in such a manner is not per se a problem. On the contrary, it is a necessary strategy to deal with the unforeseeable contingencies of the situation. The "squint-eyed" peripheral perception may take away concentration from a single point and distribute awareness more evenly. "The focal point is less acute, less exclusive, this gives more room to the surrounding field of elements." Maintaining several domains in a peripheral awareness allows to switch rapidly and engage with a newly important level almost immediately. It also allows for engagement with multiple aspects in the field simultaneously, sharing the cognitive load across a wider range and "switching which layer the focal attention is oriented towards—it's not really a continuously shifting attention, more a jump-like shift, attaching the attention to the dominant element, the one that demands the most attention."

The performer's perspective represents a subjective position where different levels of self-perception coexist: "Self-perception changes, I'm not self-aware but rather focused on the situation and the way the elements are intertwined." Levels of self-perception range from an outward-looking, experientially transparent "being-in-the-moment," to a diffuse perceiving of one's own bodily state, to a more abstract observational state, that may include a self-narrative. The basis for these perceptions is to be sensitive to active components in the situation: "[I perceive] myself, the other, taking up the space, the initial impulse." This grounds perception and the subsequent action in a relational field which is framed by intentions, affordances, and the

46 For documentation of these performances see https://www.jasch.ch/one_hand_clapping.html and https://www.researchcatalogue.net/view/269265/272401 (URIs valid in November 2022).

other: "the initiative is with the other, I wait, find the impulse, it's a shape, the beginning of a movement, is it an action? No instrument at hand but the body, still, I act with what there is, the hands—there is, will be a lot of body, shapes, actions, places … always in relation … to the other's presence, to the other's flow of energy and my own …" The different types of perceptual directedness that are pointing inwards or outwards engender varying perceptions and therefore provoke action or movement patterns that correspond to the site of attention. An example everyone recognizes from their own childhood is proprioceptively motivated swaying and spinning: "I discover the spin, I discover that by closing my eyes, I sway and that this is sufficient as an action for a while, standing still and doing nothing but swaying, until the urge to break out of this static situation arises—I take a few steps, everything changes, I do the same some more, it has intensified?"

Self-perception also extends to abstract, analogous, and image-based sensation: "The space envelops us, gives us a 'shell,' a skin to enter/play the game of inter-acting/inter-relating not with words and concrete meanings, but with more basic elements such as movement, sound, body-spaces-shapes, signs, rhythms, blocks of time, tension, receiving/giving impulses from within and without." The experiences of the materiality of sound or the way that space envelops the doing are rooted in actual bodily elements. These perceptions, however, are not entirely based on imagery. Rather, they are based on resonance with known effects on corporeal equivalents, which get projected onto abstract, less immediately accessible aspects of the performance environment, as a kind of perceptual surrogate. This transfer enables a pragmatic handling of abstract environmental elements with the same perception and behaviors that are active for actual bodily experiences.

Space has different meanings during the performance. Naturally, the immediate surroundings and architectural characteristics inform and constrain the doing: "I remember being in the space and the light coming in through the large windows, the tan cork-floor and the white walls, serene, quiet space." The presence of other performers, materials, props, walls, and specific features of the space create a secondary space, within which they are actively exerting forces of attraction or repulsion. The spatial relationship between each element creates tension, locations, and points in space that are mirrored in time. "Perceiving the other and what she is offering, perceiving my space and materials/instruments" guides the attention towards the physical anchors, which in turn trigger temporal points. By "giving attention to the junction points, [I perceive] the decision points that demand to be expected, anticipated, realized, perceived, and acted upon." The blending of the architectural space with the action space as well as the temporal space—that is, the durational extent—rep-

resents a tiered space that is structured and subdivided in the same manner as the inner space of attention: "There must be at least three levels of perception: my stuff, the other's stuff, and our stuff together, all packaged as one." This highlights the similarities and differences between moving and sounding, between being "in space" and being "in sound."

Figure 3: *Angela Stoecklin, Jan Schacher. 09.01.2014 Bregenz, Austria. © Jan Schacher*

Corporeal presence is the foundational focus of perception for both the performer and the audience, already active before attention is diverted to materials and forms of sound and movement. Each improvised performance begins by deliberately placing the performer's body in space, by establishing physical presence as a primary material and significance. Colored by this precedence, all other physical elements, and in particular a human-sized object such as the double bass, inherit the perceptual focus on presence: "body, figure, object in space; the instrument can become a third body in space." Playing the instrument as a source of sound immediately shifts its significance; object perception moves back to that of an instrument or tool. Even if the categorical character of the instrument determines "the difference between architectural object (a box), an unspecified object (a woodblock), and the highly culturally specific object of

the instrument," the intentional relationship determines the perception of its role and presence in the situation. This poses the question: to what extent "the instrument is a body, [and how it] can [...] be perceived as an 'agent' or 'figure' as opposed to an object?" And "if the [double-bass] can have its own space and presence without me playing it, [is it] integrating into my body (extended) and my space [?]" Traditional instruments, in particular those with a figure-of-eight morphology, are immediately seen as figures, where "the contrast to the woodblock is quite striking, mainly because as an instrument, the woodblocks are relatively unspecific, whereas the double-bass is very highly specific and culturally charged." If the instruments and objects have an independent presence, in relation to the human performers in a stage situation that is defined and established as space for interplay between bodies, the instruments and objects can obtain an agency and "figure"-hood that affects the performers and the audience alike.

Mediated Relationships

The most "immediate" or "un-mediated" type of a performer's presence resides in the body and gets generated through physical presence. But is the body's physical presence truly "immediate," without any interspersed agencies? Can a musician's body be perceived and understood without considering the role of the instrument and sound? And a dancer's without the notion of technique?

For a musician, the instrument exists between body and sound, and always functions as a conduit and mediator between intention and expression. This "organum,"[47] in some instances even the vocal tract, interjects transformations between the subject's intentions and the sounding result. As with any tool, the instrument takes up the place of the performer's own physical capabilities, and extends them; the technicity of instruments is therefore no different from that of any tool.[48] The instrument mediates the musician's corporeal actions, and enables the listener to recognize in the perceived sound—through knowledge of the sonic and timbral signature of the instrument and sound production physics in general—the goals and intentions expressed by the musician.

> In sound's presence, we recognize not only the contact between the performing body and the instrument, but also the sound intentions with

47 Peter Szendy, *Membres Fantômes, Des Corps Musiciens* (Paris: Les Éditions de Minuit, 2002), 126.

48 Gilbert Simondon, *On the Mode of Existence of Technical Objects* (Paris: Editions Aubier-Montaigne, 1958).

> which the music-making body makes his or her instrument resound. […] It is because of the intentional sound nature of the contacts between the performing body and the instrument that the morphology and the mechanics of the instrument can become a determining factor in the identity of the music-making body.[49]

By contrast, for dancers, movement, space, the body's materiality, and its potential shapes in a dynamic flow are more "immediate."

Nevertheless, translations are at work here as well, be it when considering the body as a material, when developing a semantic relationship to movement through choreography, through the historical relationship with style, and through the prior experiences that reside in a dancer's movement skills and body techniques. In contemporary forms of dance and movement performance, the body often functions as medium and material as well as a signifier of sociality. It transforms the relation to itself and alters its own status, on several levels at once, not the least being the ethical dimension:

> If dance is gesture, it is so, rather, because it is nothing more than the endurance and the exhibition of the media character of corporal movements. The gesture is the exhibition of a mediality: it is the process of making a means visible as such. It allows the emergence of the being-in-a-medium of human beings and thus it opens the ethical dimension for them.[50]

The directness of the dancer's actions does not detach or remove the layers of signification and projection from the body. Therefore, perhaps, the dancer's presence is only marginally more immediate than that of the musician with an instrument.

Resistance, then Connecting through Listening

Resistance is the complementary counterpart to resonance. When in a mode of resistance, the body not only does not willingly enter into sympathetic oscillation with an outside impulse, but it even blocks or diverts that energy. The transmission of an intention or an expression is diminished, and this in turn provokes a reaction. Where affective and effective forms in sound and movement constitute the basis for transmitting a performance's impact, resistance

49 Paul Craenen, *Composing Under the Skin: The Music-Making Body at the Composer's Desk* (Leuven: Leuven University Press, 2014), 105.

50 Giorgio Agamben, "Notes on Gesture," in *Means without End: Notes on Politics* (Minneapolis, MN and London: University of Minnesota Press, 2000), 57.

is a necessary obstacle to create tensions, inflection points, and compression, and to move decision-making into unexpected, surprising, and less easily anticipated directions. Resistance can take on the form of a refusal to engage in a proposed interaction by the other performer. It may ask the performer to push through an uneasy situation. The increased effort necessary for dealing with resistance potentially heightens presence, urgency, and intensity. Invariably, the dynamics of the performance change; the "compositional" form obtains a defining edge.

But of course, claiming an antagonistic relationship between the principles of resonance and resistance does not do justice to the actual negotiation that is taking place. The creative frictions[51] and the inter-individual differences between the musicians' and the dancers' states that are at play during a performance constitute one of its driving forces. Listening and sounding, kinesthetic and somatic proprioception, and movement expression are not always mirroring each other. They function as analogues and are always already present to different degrees in each individual, including both performers and audience members.

In the auditory sense modality, and building on the body's resonating capacity, to be listening is to be (in-)tending "toward a present sense beyond sound,"[52] where meaning develops. Listening bases itself on the will to understand, with the intentional component of experience. By the nature of sound, however, which constitutes as much the limit as the content, listening reaches "an edge, an extremity, a margin"[53] and is reflected. If sound's principal characteristic is that it exists through "a coming and a passing, an extending and a penetrating,"[54] then its absent state, the edge of its manifestation at the auditory horizon is an essential component that is necessary for generating its meaning and sense in resonance.

The physiological, somato-sensory level of pre-reflective awareness may only generate a diffuse sense of self, but in an ecological, embodied manner[55] engenders a "core self."[56] Reflective or explicit body perception builds on this level in order to contribute to constituting a sense of identity and providing the sense of "being-in-the-world."

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51 Stefan Östersjö, *Listening to the Other*, Orpheus Institute Series (Leuven: Leuven University Press, 2020), 89.

52 Nancy, *Listening*, 6.

53 Ibid., 7.

54 Ibid., 13.

55 José Luiz Bermúdez, *The Paradox of Self-Consciousness* (Cambridge, MA: MIT Press, 2000), 131.

56 Damasio, *The Feeling of What Happens*, 17.

During a performance the musician oscillates between three modes of consciousness of self.[57] The primary sense of self, which is embedded within the experience of the environment and the actions, is an indispensable and essential form of presence, and not just on stage. The performance is built on the foundation of a primary, pre-reflective, sub-personal awareness of the performing body and its extended body-schema which includes the instrument. In parallel, reflective awareness and attention gets focused on the intentional contents of the music, letting the body frame the experience in a "transparent" manner. Finally, the body can become the focus of awareness itself—an object in the shape of a represented body-image—constituted through a conscious reflection on the corporeal activity and the emerging resonances with the environment.[58]

Intertwined, enmeshed, the practice of improvised performance in the exploratory mode uses movements, sounds, actions, reactions, inter-subjective tensions, resistances and opening up through listening to give rise to a moment of intense becoming. The intensity resonates, affects, and motivates us to keep going, despite the uncertainties and risks caused by relinquishing control.

57 Guy Pinku and Joseph Tzelgov, "Consciousness of the Self (COS) and Explicit Knowledge," in *Consciousness and Cognition* 15, no. 4 (2006): 655–61.

58 Jin Hyun Kim and Uwe Seifert, "Embodiment musikalischer Praxis und Medialität des Musikinstrumentes—unter besonderer Berücksichtigung digitaler interaktiver Musikperformances," in *Klang (ohne) Körper, Spuren und Potenziale des Körpers in der elektronischen Musik*, ed. Michael Harenberg and Daniel Weissberg (Bielefeld: transcript, 2010), 105–17.

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Composed Theatre. Aesthetics, Practices, Processes (with Matthias Rebstock, 2012), *Musicality in Theatre. Music as Model, Method and Metaphor in Theatre-Making* (2014), *Theatermusik. Analysen und Gespräche* (2019) and *Music and Sound in European Theatre* (2025). For a full list of publications and projects see: http://mhn.academia.edu/DavidRoesner. ORCID: 0000–0002-4371-1852

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About This Volume

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