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György Ligeti and Antoinette Vischer Explore
the Modern Harpsichord
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“Some Sort of Machine without a Body” György Ligeti and Antoinette Vischer Explore the Modern Harpsichord

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ABSTRACT

From the mid-1950s, Basel harpsichordist Antoinette Vischer (1909–1973) promoted the harpsichord as a modern instrument, commissioning numerous composers to contribute to a new repertoire. To this end, she turned to György Ligeti, who completed *Continuum* for her in 1968. The composer had already used the harpsichord in ensembles several times, but now he had to think about it in a soloistic function for the first time, starting from a specific performer with her specific instrument. In this paper, I focus on this relationship between composer, performer-commissioner, and instrument, drawing primarily on the correspondence between Ligeti and Vischer preserved at the Paul Sacher Foundation in Basel. These unpublished letters document their collaboration and how both negotiated their artistic positions and aesthetic concepts of the harpsichord as “some sort of machine.” An in-depth analysis of Ligeti and Vischer’s exchange about the instrument’s peculiarities and performance issues allows us to better understand their self-conception as artists and their ideas of “modernity.” Furthermore, this case study sheds light on a specific period in the history of an instrument that through the efforts of performers like Vischer was transformed from an artifact of the past to an emblem of the present.

KEYWORDS

György Ligeti, Antoinette Vischer, harpsichord, commissions, patronage

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Today, we are in a technological age, with airplanes, with refrigerators. ... With war, if you will. It is related to all that troubles the individual. And how they express themselves about it is truly their own business, and that is, indeed, art in the end.¹

(Antoinette Vischer, 1968)

In early 1968, György Ligeti completed *Continuum* for harpsichord solo, a short piece lasting no more than four minutes. It stands out as one of the few twentieth-century compositions for the harpsichord that has been, and continues to be, frequently performed and might even be considered “canonical.”² It has also sparked interest in academic circles, attracting the attention of both dedicated Ligeti scholars and wider musicological studies.³ While previous inquiries have predominantly centered on the stylistic intricacies of the music, the circumstances surrounding its genesis have received scant exploration: Ligeti had received a commission (and remuneration) from the Swiss harpsichordist Antoinette Vischer (1909–1973).

Music historiography, entrenched in the ideals of artistic autonomy and the myth of the isolated creative genius, has long been biased against commissioned works, often dismissing them as music of inferior value and denying due credit to those who inspired and enabled their creation.⁴ However, they are integral to such music’s existence on various levels. Their financial support, while crucial, is only one facet of their contribution. Equally essential are their aesthetic ideas, artistic concepts, and often even their physicality as performers. Using the example of *Continuum*, I highlight the interdependent relationship between composer, performer-commissioner, and instrument, which I argue decisively shaped the piece’s genesis, form, and eventual sonic realization. In this regard, I draw on unpublished material from the Antoinette Vischer Collection at the Paul Sacher Foundation in Basel, which consists of personal documents, photographs, recordings, scores, and hundreds of letters from and to composers. Regarding Vischer’s acquaintance with Ligeti, the collection contains an autograph fair copy of *Continuum*, a photocopy of it with Vischer’s performance markings, and some 20 letters between Vischer and Ligeti that document their collaboration and how both negotiated their artistic positions and their aesthetic concepts of the harpsichord in the 1960s.

¹“Wir sind heute in einem technischen Zeitalter, mit Flugzeugen, mit Frigidaire. ... Mit Krieg, wenn Sie wollen. Es hat mit all dem zu tun, was den einzelnen Menschen plagt. Und wie er sich ausdrückt darüber, ist doch wirklich seine Sache und ist nämlich doch letzten Endes Kunst.” (Antoinette Vischer in an interview, held in Swiss German, for “Musik für einen Gast,” SRF radio broadcast by Roswitha Schmalenbach, aired on June 30, 1968; recording kindly provided by SRF; a copy of the interview is also preserved in the Antoinette Vischer Collection, Paul Sacher Foundation, Basel [hence: CH-Bps AVC]).

²In the preface of a dissertation from 1981, *Continuum* is listed alongside the concertos by de Falla and Poulenc, Martinů’s *Deux pièces pour clavecin*, Pinkham’s *Partita*, and Rieti’s *Sonata all’antica*; see THORP, *The Twentieth-Century Harpsichord*, 1.

³Hartmuth Kinzler, for example, presents a detailed musical analysis; see KINZLER, “Allusion – Illusion?” 75–91. Martin Elste uses *Continuum* as a representative example for twentieth-century harpsichord-compositions; see ELSTE, “Kompositionen,” 199–246.

⁴Louis K. Epstein raises this issue fundamentally in the chapter “The Patronage Problem” in his recent book; see EPSTEIN, *The Creative Labor*, 18–41, in particular 18.



1. STIMULATION OF A NEW IDEA

Vischer approached Ligeti in October 1965, having dedicated over thirty years to her artistry as a harpsichordist and been commissioning composers to write for this instrument for nearly a decade.⁵ Such efforts were underpinned by her privileged social background as a member of a wealthy, upper-class family in Basel, Switzerland. Originally a pianist, she turned to the harpsichord and its baroque and classical repertoire in the early 1930s. After her divorce in 1953, Vischer joined an avant-garde group of artists and intellectuals in Basel (including the writer Friedrich Dürrenmatt and the sculptor and painter Jean Tinguely) and her lifestyle was now oriented toward modernity.⁶ The same shift can be observed in her musical artistry. While the harpsichord remained Vischer's medium of expression, her goal was now to establish it as a modern instrument. To this end, she dedicated herself to initiating, commissioning, and facilitating new music. From her first commission in 1956 (Peter Mieg, *Pour le clavecin*) to her last in 1972 (Mauricio Kagel, *Recitativo für eine singende Cembalistin*), Vischer financed at least 24 compositions; just as many were written for her for other reasons, such as friendship.⁷ As an avid visitor to New Music festivals (such as the Donaueschinger Musiktage), she was always on the lookout for prominent names with whom she could promote her project. Thus, Ligeti may have already heard of Vischer before he received her first letter.⁸

Working on a commission was, of course, not an unfamiliar task for Ligeti. Only a few years earlier, for example, he had written *Volumina* at the request of ARD Music Director Hans Otte. Also, *Aventures* and *Nouvelles Aventures* (both in the early 1960s), the Requiem (completed 1965), and *Lontano* (1967) were commissions (although not from individuals but broadcasting companies). In 1978, Péter Várnai asked Ligeti about his approach to such projects, using *Continuum* as a representative example:

V.: An artistic personality is formed by an artist's experiences added to his genetic inheritance. Shall we apply this to a particular work, taking for instance *Continuum*? The immediate reason for writing it was that you were commissioned by the Swiss harpsichord player, Antoinette Vischer. But how did it come to be the music that it is?

⁵Few details about Vischer's musical training are known. As an upper-class daughter, she initially received private piano lessons. According to Ule Troxler, whom she befriended later in life, she attended some classes at the Musik-Akademie Basel around the age of twenty (TROXLER, *Antoinette Vischer*, 23). By her own account, she was also trained at the harpsichord and in early music repertoire in Vienna (see a short autobiographical sketch in CH-Bps AVC), attended one of Landowska's courses in Paris (see *ibid.*), and studied with Ina Lohr in Basel (KIRNBAUER, "... toutes écrites pour la mécène," 97). For an overview of Vischer's personal and artistic life, see TROXLER, *Antoinette Vischer*; KIRNBAUER, "... toutes écrites pour la mécène," 96–105.

⁶This was represented, for example, by the furnishings of her new apartment (she had previously lived in her parents' villa and, with her husband, in a prestigious old building) and the modern architecture of her vacation home in Alsace.

⁷Among the commissioned composers were Georges Aperghis, Luciano Berio, Boris Blacher, Carla Bley, Earle Brown, John Cage, Roman Haubenstock-Ramati, Hans Werner Henze, Alexander Tscherepnin, and Isang Yun. Furthermore, Vischer received dedications from Cathy Berberian, Gottfried von Einem, Duke Ellington, George Gruntz, Melinda Kistétényi, and Rolf Liebermann, among others. A short (but incomplete) overview is provided by Kirnbauer; see KIRNBAUER, "... toutes écrites pour la mécène," 98.

⁸In any case, they did not know each other personally when their correspondence began. The first time they met in person was in Donaueschingen in 1967, as Vischer noted in the index she had made for her collection of commissioned works (CH-Bps AVC).



L.: I can quite clearly remember the circumstances. An event can prompt you: if someone commissions me to write a piece of music or asks me to do it, well that is important. Also composers have to make a living. If I have the work in me potentially, such an event could – as I usually put it – sound the bell in me. ... If an event does not manage to sound the bell in me, nothing happens.⁹

Ligeti justifies the acceptance of commissions by linking them to the condition of genuine artistic inspiration, perhaps to avoid the accusation of commercial banality.¹⁰ In any case, he accepted Vischer's request and estimated his fee to be 2,000 Swiss francs.¹¹ Furthermore, he asked Vischer to send him samples of her recordings.¹² Vischer was an active recording artist. In fact, since her turn to modernism, she was more likely to be found in the studio, recording pieces written for her, than on the concert stage. Several of her recordings (including her early commissions) had already been released by "His Master's Voice" in the series "Schweizer-Aufnahmen mit Schweizer Interpreten" by the time she contacted Ligeti, such as the following examples:

His Master's Voice – 7 EBZ 504 (EP) – "Zeitgenössische Cembalo-Musik"

- Rolf Liebermann, *Musique pour clavecin* (1952)
- Peter Mieg, *Les malheurs de Sophie* (1956)
- Robert Suter, *Jeu inégal* (1957)
- Jacques Wildberger, *Concentrum* (1956)

His Master's Voice – 7 EBZ 507 (EP) – "Zeitgenössische Cembalo-Musik"

- Hans Ulrich Engelmann, *99 Takte für Cembalo* (1959)
- Maurice Ohana, *Carillons pour les heures du jour et de la nuit* (1960)

The listed composers approached modern music for the harpsichord in different and distinct ways, and Vischer's own conception of it, which I will discuss below, was probably still developing during these early projects. Liebermann, for example, whose *Musique pour clavecin* was the first piece written for Vischer (though not as a commission but on Liebermann's initiative as a gift of friendship), drew heavily on the instrument's historical legacy and baroque idioms. Similarly, Ohana incorporated historical references into his composition, such as the use of glockenspiel motifs reminiscent of medieval models, giving his work an air of antiquity.¹³ Others detached their music from any historical references and experimented with the creation and

⁹[Without ed.], György Ligeti in *Conversation*, 21–22.

¹⁰Epstein analyzes the dismissal of patronage and patrons as a strategy by composers themselves, focusing on earlier twentieth-century composers (such as Hindemith) for whom the myth of the lone creative genius was essential to their socialization and self-understanding. He furthermore elaborates how this attitude had a particularly negative effect on the perception of women's contributions in this field; see EPSTEIN, *The Creative Labor*, 21–30 ("Dismissing Patrons").

¹¹Ligeti to Vischer, October 16, 1965 (CH-Bps AVC; the entire correspondence is in German, all translations are mine unless otherwise indicated).

¹²Ibid.

¹³This impression also resonates in the following description on the record sleeve: "The various aspects of the instrument are explored in the present study 'Chimes for Day and Night'. Chime-like motifs sound in short sound structures, similar to medieval models." Orig. German; His Master's Voice, 7 EBZ 507 (EP), "Zeitgenössische Cembalo-Musik".



modification of sound that the concrete instrument model offered (Vischer's "Neupert Bach," see below). Wildberger, who was one of the first composers to receive an actual commission from Vischer, placed such sound differentiations at the center of his piece, exploiting the harpsichord's unique sonic palette.¹⁴ Ligeti chose his own solution, but what he certainly gained from the recordings Vischer sent him was a concrete idea of the performer and the instrument he would be working with and a more tangible and grounded understanding of the artistic context in which his work would be realized.¹⁵

In his first letter to Vischer, Ligeti wrote that the "harpsichord is an instrument which I prefer" and which he had already used as part of larger ensembles.¹⁶ However, he had not yet considered it as a solo instrument, neither had most of the other composers contacted by Vischer. The often-referenced "revival" of the harpsichord, starting around 1900, was primarily driven by performers and instrument makers (Wanda Landowska and the French piano manufacturing firm Pleyel et Cie. being only two names among many).¹⁷ Naturally, they were not content with the mere reproduction of the existing repertoire but were ardent advocates of new music that would bring out the full potential of their instruments in a contemporary manner. Vischer represents a late phase in this development, preceding the instrument's eventual return to its primary role in the performance of "old music."

2. AESTHETIC REFLECTIONS

In his 1994 article "Kompositionen für nostalgische Musikmaschinen," musicologist Martin Elste highlights the fact that instruments always carry social and historical connotations, and that in the case of the harpsichord these usually refer to the past and evoke associations with old-fashionedness ["Altertümlichkeit"] and nostalgia.¹⁸ Vischer, however, was concerned with emancipating herself from this context and positioned her instrument firmly in the realm of contemporary expression and innovation. In a 1968 radio interview, she embraced the zeitgeist of her era, marked as it was by the space race and the advent of the computer, referring to it as

¹⁴On the record sleeve, the piece is described as follows: "Jacques Wildberger's *Concentrum* exploits above all the rich tonal differentiations of the instrument, the gradual dynamics from the splendid unfolding of the opening and closing chords to the transparent and precise articulation of the rhythmic elements." Orig. German; His Master's Voice, 7 EBZ 504 (EP), "Zeitgenössische Cembalo-Musik." For further details on the composition see KIRNBAUER, "ein Kleid nach Mass," 423–432.

¹⁵It could not be determined which recordings Ligeti received. The two mentioned above may well have been among them, given the chronological overlap.

¹⁶Ligeti to Vischer, October 16, 1965 (CH-Bps AVC). He had used the harpsichord, for example, in *Apparitions* (1958/59), *Aventures* (1962), and the *Requiem* (1963–65). For an overview of Ligeti's compositions that include the harpsichord, see NORDWALL, "Ligeti's Harpsichord," 71–78.

¹⁷See, for example, the following on this topic: PALMER, *Harpsichord in America*; ELSTE, "Kompositionen," 199–246, as well as ELSTE, *Modern Harpsichord Music*, xiii–xviii; JOHNSON, "The Death and Second Life," 180–214.

¹⁸ELSTE, "Kompositionen," 199.



the “technological age” and arguing passionately that artists should use “all available technology” to express their artistic visions.¹⁹ She perceived the harpsichord as “a very modern instrument, in that when you hit a note, it’s just there, ... so you have to play very precisely and accurately.”²⁰ In this sense, the instrument is not unlike a technological device or machine with a sophisticated control mechanism. Ligeti seems to have taken a similar approach, as he later explained to Várnai:

It had never occurred to me before to write for the harpsichord, but as soon as I had read Antoinette Vischer’s letter it suddenly came to me that a harpsichord was really like some strange machine – at the time I was rather interested in models of machines. I also remembered that a harpsichord was most typically an instrument with a non-continuous sound, the twang of the string is of short duration, followed by silence. I thought to myself, what about composing a piece of music that would be a paradoxically continuous sound, something like *Atmosphères*, but that would have to consist of innumerable thin slices of salami? A harpsichord has an easy touch; it can be played very fast, almost fast enough to reach the level of continuum, but not quite (it takes about eighteen separate sounds per second to reach the threshold where you can no longer make out individual notes and the limit set by the mechanism of the harpsichord is about fifteen to sixteen notes a second). As the string is plucked by the plectrum, apart from the tone, you also hear quite a loud noise. The entire process is a series of sound impulses in rapid succession that create the impression of continuous sound. As soon as I had read the letter I knew what kind of music I would write, it all arose from the sound quality of the harpsichord.²¹

This impression of a steady, continuous sound achieved by enormous speed is certainly facilitated by a two-manual construction of the instrument, such as Vischer’s. Furthermore, the sudden addition of three stops in the later part of *Continuum* (Facsimile 1), without interrupting the flow of the hands, can only be realized by controlling the registration with pedals (or with the help of additional people). Thus, the proper realization of Ligeti’s idea depends very much on the specific instrument model that Vischer played.

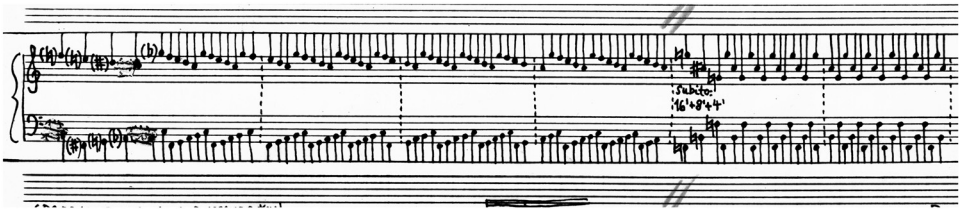
In the history of the harpsichord, Vischer represents a period after the new large-scale designs that Pleyel developed around 1900 for the harpsichord icon Landowska, oriented toward the modern grand piano, and before the dominance of historical “original” models, either restored or reconstructed. During the period from the 1930s to the 1960s, harpsichord design internationally represented a fascinating blend of historical influences and contemporary

¹⁹Vischer in “Musik für einen Gast” (SRF broadcast).

²⁰Asked about her passion for modernist music, Vischer replied: “Das kommt aus folgender Leidenschaft heraus, dass ich überlegt habe, dass Cembalo, das man ja für ein sehr altes Instrument mit Kerzenlicht etc. hält, und eher alte Musik spielt – ich komm ja auch vom Barock her und schätze das überaus – aber ich habe auch noch entdeckt, dass es ein ganz modernes Instrument ist, indem, wenn man einen Ton greift, dass der einfach da ist, und man gar nichts mehr mit Pedal machen kann, und man darum ganz genau und exakt spielen muss.” “Musik für einen Gast” (SRF broadcast).

²¹[Without ed.], *Ligeti in Conversation*, 22–23.





Facsimile 1. Detail from a photocopy of Ligeti's autograph score, which Vischer used as performance material (CH-Bps VC)²²

materials. These instruments sometimes borrowed dimensions from harpsichords in historical collections and museums while incorporating more robust and modern materials in their construction.²³ Above all, they retained a key feature rooted in Pleyel's design: the operation of the stops by multiple pedals.²⁴ Figure 1 shows an example of such an instrument, crafted by the German manufacturer Neupert in Bamberg in the 1930s.

In her correspondence with composers, Vischer repeatedly referred to playing such a "Neupert Bach."²⁵ This harpsichord had a range from F₁ to G³, was equipped with two manuals, and offered a variety of register options: 16', two 8', 4', a buff stop, and a coupler. Knowledge of these features was essential for composers to envision the potential sonic spectrum and playing techniques available on the instrument. The rapid, seamless change of registers made possible by the shift pedals is often the central stylistic element in the compositions created for Vischer. At the push of a button, without interrupting the musical flow, the entire acoustic character can be changed from an intimate lute to a magnificent orchestral sound. This ability for rapid register changes allows for contrasting colors and textures within a single piece and has fascinated and inspired many of the composers who have worked with Vischer, including Ligeti.

Ligeti described his basic concept in his first letter to Vischer: "I have ideas for a rather virtuosic, toccata-like piece (admittedly nothing to do with neo-baroque: no 'motoric', but elastic-swaying movements)."²⁶ Ligeti's emphasis on avoiding an imitation of the past aligned seamlessly with Vischer's own visionary approach, which saw the harpsichord not as a relic of a distant past but as an instrument with immense contemporary and future potential. While

²²At this point, at "measure"/"unit" 126 ("subito: 16'+8'+4'"), the second 8'-, as well as the 16'- and 4'-stops of the instrument are added; this effects a sudden change to a full, splendid orchestral sound.

²³See, for example, the following on this topic: PALMER, *Harpsichord in America*; ELSTE, "Kompositionen"; JOHNSON, "The Death and Second Life."

²⁴Of course, forms of pedal registration can occasionally be found in instrument models of earlier centuries as well, but they did not prevail as consistently as they did from about 1900 onward, a development which might have been related to the desire to approximate the variable dynamics of the grand piano.

²⁵See, for example, Vischer's correspondence with Luciano Berio, Boris Blacher, John Cage (she even insisted on that specific model for her participation in the premiere of *HPSCHD* in Chicago in 1969), or Alexander Tscherepnin (CH-Bps AVC).

²⁶"Ich habe aber Vorstellungen für ein ziemlich virtuosos, Toccata-artiges Stück (freilich mit Neo-Barock nichts zu tun: keine 'motorischen', sondern elastisch-schwankende Bewegungen)." Ligeti to Vischer, October 16, 1965 (CH-Bps AVC).





Fig. 1. Neupert harpsichord “Bach,” designed by Hanns Neupert in 1932²⁷
(Photo provided by the company Neupert with permission for publication)

Vischer occasionally emphasized the harpsichord’s motoric, mechanical, and even percussive attributes, Ligeti focused on overcoming the inherent limitations and discontinuities of the instrument’s sound production mechanism, which relied on the plucking of its strings.

Ligeti accepted Vischer’s request already in his initial answer in October 1965.²⁸ However, it was to be more than two years before Vischer held the manuscript in her hands. She was repeatedly put off by the composer, who cited his busy schedule, and delivery was postponed. Ligeti did not resume work on the composition until (very) late 1967, perhaps even early 1968.²⁹ In a telegram dated December 29, 1967, he confirmed that he planned to complete the piece in the first half of January.³⁰ A month later, on January 30, 1968, he confirmed the finalization of

²⁷Based on the harpsichord no. 316 model in the Museum of Musical Instruments in Berlin. For a description, see NEUPERT, 1868–2018. *J.C. Neupert*, 35.

²⁸Ibid.

²⁹In his letter dated November 9, 1965, Ligeti announced that he would not work on the piece before 1967. In telegrams dated December 29, 1967 and January 14, 1968, he apologized for delays (CH-Bps AVC).

³⁰Ligeti to Vischer, December 29, 1967 (CH-Bps AVC).

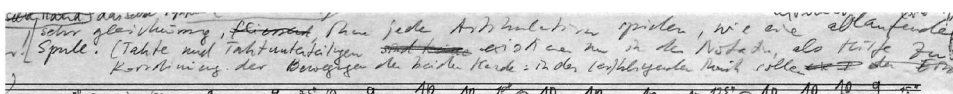


the fair copy.³¹ Thus, the handful of sketches in the György Ligeti Collection at the Paul Sacher Foundation (CH-Bps GLC), through which we gain some insight into Ligeti's further associative process, are likely to be dated in late 1967/at the very beginning of 1968. The first one is not preserved in the folders directly related to *Continuum*, but located on the reverse side of a sketch of Organ Etude no. 2. As shown in [Facsimile 2](#), in this version, the groups of notes in the right and left hands consist of different numbers, and these numbers change, although not in uniform proportions. This approach seems to have been an attempt to achieve the desired swaying elasticity originally envisioned. In addition, Ligeti may have been attempting to create an effect similar to static tone clusters as present in many of his compositions from this period (e.g., *Atmosphères*, 1961), where the blending of different layers creates rhythmic or sonic patterns with intriguing developments.

In addition, Ligeti associatively jotted down various thoughts about the character of the piece, comparing the harpsichord to an evenly spinning wheel ([Facsimile 3](#)) or a precise machine ([Facsimile 4](#)); he also brainstormed ideas for the title, including a version that emphasized speed and elasticity ([Facsimile 5](#)).



Facsimile 2. Detail from a sketch related to *Continuum* (CH-Bps GLC)

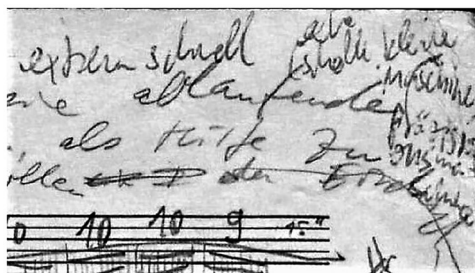


Facsimile 3. Detail from a sketch related to *Continuum* (CH-Bps GLC)³²

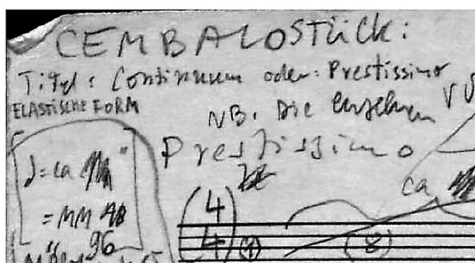
³¹“My two telegrams referred to the fact that I promised you the piece for the end of 1967 (and thus far I have never missed a deadline), but I was in a tricky delay with an earlier piece that I was supposed to have finished before, and so there was a slight delay with the harpsichord piece. I hoped to have it finished by mid-January, then that didn't work out because of illness, so I telegraphed a second time, asking for an extension of the deadline until the end of January. Now the end of January is here, and the piece is, indeed, finished. It is entitled 'Continuum'.” Ligeti to Vischer, January 30, 1968; orig. German (CH-Bps AVC).

³²Transcription of Ligeti's sketch: “To be played very evenly, without any articulation, like an unwinding spool.” (“Sehr gleichmässige, ohne jede Artikulation zu spielen, wie eine ablaufende Spule.”)



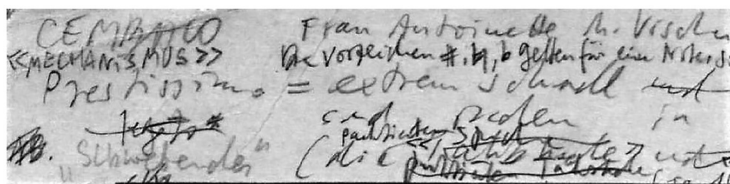


Facsimile 4. Detail from a sketch related to *Continuum* (CH-Bps GLC)³³



Facsimile 5. Detail from a sketch related to *Continuum* (CH-Bps GLC)³⁴

The György Ligeti Collection at the Paul Sacher Foundation additionally contains two double-sided sheets on which the piece is essentially laid out, now with an equal number of strokes/notes per ‘unit’ and thus synchronous motions in the right and left hands. Further drafts for the title reflect the ongoing thought process regarding the overall form and sound impression, using vocabulary such as “mechanism” or “floating/hovering” (Facsimiles 6 and 7).



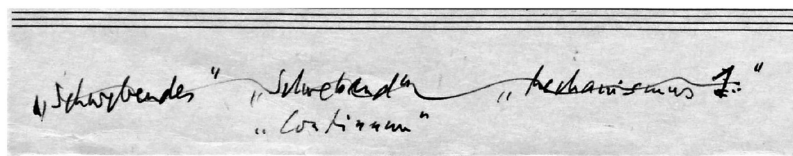
Facsimile 6. Detail from a sketch related to *Continuum* (CH-Bps GLC)³⁵

³³Ligeti’s text in the right upper corner: “small / machine / precision / machine” (“kleine / Maschine / Präzisions / maschine”).

³⁴Drafts for the title: “HARPISCHORD PIECE / title: Continuum or: Prestissimo / ELASTIC FORM” (“CEMBALO- / STÜCK: / Titel: Continuum oder: Prestissimo / ELASTISCHE FORM”).

³⁵Drafts for the title: “HARPISCHORD / «MECHANISMUS» / Prestissimo” (“CEMBALO / «MECHANISMUS» / Prestissimo”).





Facsimile 7. Detail from a sketch related to *Continuum* (CH-Bps GLC)³⁶

Eventually, Ligeti settled on the impression of continuity evoked by an instrument whose mechanism does not actually allow for the production of continuous sound. Announcing the completion of the piece at the end of January 1968, Ligeti told Vischer:

A change occurs during the process of composition, compared to the original plan: namely, there are now no “elastic-swaying motions” – the initial sketch was still of this kind, but then I decided for a continuous steady motion, whereby with the extreme speed (achievable since in the piece there is no putting [the fingers] under) and with the blending of the tones by letting the strings resonate into one another (the keys are held down as long as the speed allows), the impression of an almost perfect continuity is created: the rhythm transitions into a kind of static through the speed and the merging of tones, not unlike a harp *bisbigliando*, although, of course, the typical harpsichord strike noise masks the harp-like quality, resulting in more of a pleasant hum, which at times condenses into a delicate rustling cluster of sound and at other times brightens into a harmony that is nevertheless stationary in its motion.³⁷

Shortly after completing the composition, Ligeti explained in a letter to Ove Nordwall that the piece, now entitled *Continuum*, was “technically developed entirely from the possibilities of the harpsichord” and that “all is, so to speak, ‘in the fingers,’ I already thought the tones in such a way that they are like coming out of the fingers. ... Two hands were composed, as moving objects.”³⁸ These two hands, however, still belonged to a person whose physical constitution might just as well have informed the setting of the musical idea into the score. Vischer

³⁶Drafts for the title: ‘Continuum’ (‘Continuum’).

³⁷“Eine Veränderung tritt beim Komponieren ein, gegenüber dem ursprünglichen Plan: nämlich gibt es jetzt keine ‘elastisch-schwankenden Bewegungen’ – die erste Skizze war noch von dieser Art, doch dann habe ich mich entschlossen für eine durchgehende gleichmässige Bewegung, wobei bei der extremen Geschwindigkeit (die erreichbar ist, da im Stück kein Untersetzen vorkommt) und bei dem Verschmelzen-lassen der Töne durch Ineinanderklingen der Saiten (die Tasten werden so lange niedergedrückt gehalten, wie das die Geschwindigkeit nur zulässt) tatsächlich der Eindruck einer fast vollkommenen Kontinuität entsteht: der Rhythmus geht durch die Geschwindigkeit und durch die Tonverschmelzung in eine Art Statik über, nicht unähnlich einem Harfen-*bisbigliando*, wobei freilich der [sic] typische Cembalo-Anschlag-Geräusch das Harfenartige wiederum überdeckt, so dass eher ein schönes Summen entsteht, das sich einmal zu einer zarten geräuschhaften Klangballung zusammenzieht, einmal zu einer in ihrer Bewegung dennoch stehenden Harmonie sich aufhellt.” Ligeti to Vischer, January 30, 1968 (CH-Bps AVC).

³⁸Ligeti to Nordwall, February 19, 1968 (quoted transcription in CH-Bps GLC); excerpts from the letter were published in a compilation of introductory texts; see LICHTENFELD (ed.), *Gesammelte Schriften*, vol. 2, 250.



repeatedly drew the attention of the composers she worked with to her small hands.³⁹ Ligeti assured Vischer early on that his composition would be “dominated by narrow intervals” and that he typically composed directly “from the instrument.”⁴⁰ Thus, the use of a keyboard instrument meant that the layout of the keys and the inherent capabilities of the hands served as a profound “source of inspiration.”⁴¹ In fact, the stretching of the fingers in *Continuum* covers at most an octave.

3. REALIZATION AND PUBLICATION

At the end of March 1968, Vischer confirmed that she had received the score and already started rehearsing the piece.⁴² Her goal was not to present a live premiere on the concert stage but a recording. For Vischer, sound recording had become the quintessential form of performance, deeming live renditions redundant. She regarded recordings as the ultimate, authoritative realization of a work. In 1967, she wrote to Eckart Rahn at the Hans Wewerka publishing house, stating that she would no longer perform her repertoire: “Why should I, the tapes are valid.”⁴³ This was Vischer’s approach to reaching the public (and securing her legacy as a performer), as exclusive performing rights were ensured with each commission until her recording was released.

Although Vischer was quite confident in her position as initiator, financier, and ultimately performing musician when negotiating with the composers, she was deeply committed to fulfilling their wishes and intentions in her interpretations of the compositions. She would not record a piece without regularly consulting the composer during the preparatory phase, and, if possible, would send them at least one rehearsal tape. Thus, between March and June 1968, she repeatedly approached Ligeti with minor inquiries about such issues as fingerings or difficulties with her reading of enharmonic changes.⁴⁴ The main issue was the tempo, which Vischer understood to be “fast and even faster, as if it were a zephyr wind,” assuming that the “single notes do not have to be worked out like a Beethoven run.”⁴⁵ Ligeti replied: “Zephyr wind: that is

³⁹Vischer to Boris Blacher, November 23, 1964: “I have very small hands. I can comfortably stretch an octave, but 1, 2 – 8 is impossible.”; Vischer to Ligeti, March, 27: 1968: “My hand span is just so small, but I’ll just handle it as best as I can.”; Vischer to Mauricio Kagel, November 5, 1969: “I have, as I’m sure you’ve seen, very small hands and I don’t like stretching for large chords.” (orig. German; CH-Bps AVC).

⁴⁰Ligeti to Vischer, November 9, 1965 (CH-Bps AVC).

⁴¹Ibid.

⁴²Vischer to Ligeti, March 27, 1968 (CH-Bps AVC).

⁴³Vischer to Rahn, May 23, 1967 (CH-Bps AVC).

⁴⁴Vischer to Ligeti, March 27, 1968; Ligeti to Vischer, May 17, 1968; Vischer to Ligeti, not dated; Ligeti to Vischer, June 19, 1968 (CH-Bps AVC).

⁴⁵“Wie habe ich mich nur gefreut über Ihr wunderbares Stück. Ich danke Ihnen viel vielmals dafür. Seither habe ich nun das Stück schon ein wenig gearbeitet. Es ist mir klar, dass dieses sehr schnell und noch schneller gespielt sein muss als ob es ein Zephyrwind wäre oder? Also mir scheint auch, dass die Einzeltöne nicht wie ein Beethovenlauf gearbeitet sein müssen.” (Vischer to Ligeti, March 27, 1968, CH-Bps AVC).



right. Notes whirling together – yes, not a Beethoven passage, more like Debussy, if he had composed for the harpsichord.”⁴⁶ Zephyr, a figure from ancient mythology and the personification of the west wind, is often associated with gentle spring breezes. This suggests that a certain lightness should be maintained despite difficult tone combinations and perhaps mechanical obstacles.

In May 1968, Ligeti received a tape copy of Vischer’s first recording and gave her immediate feedback:

Basically, the preparation is going in the right direction, and after further work, you will be able to play the piece wonderfully. This further work relates to the tempo. This would have to be SIGNIFICANTLY faster, so that everything “mechanical” disappears and there is a very continuous buzz (yes, in a sense this would also be mechanical, just some sort of machine without a body).⁴⁷

Ligeti’s vision of the “disembodied” correlates with the general acoustic impression of harpsichord models of the first half of the twentieth century. Elste attributes this characteristic to those instruments’ weak resonance, which lacks a “sensual physicality” because it does not allow spatial sound propagation.⁴⁸ Vischer was probably aware of this as well, which is why she saw so much potential in the possibility of studio recording and record production. For the proper realization of *Continuum*, she would also take advantage of this possibility to overcome the limitations she had observed in terms of tempo: she would use manipulated recording technology to increase the playback speed.⁴⁹ Since her vision was to merge the harpsichord with new technologies, she had no reservations about doing so. In fact, several pieces written for Vischer required technological advances before or during a performance or could only be realized on tape, such as Carla Bley’s *Untitled Piece in Eight Layers* from 1968, which was “intended to be realized on tape, either directly on eight tracks or through multiple overdubs” and “dynamics could be achieved electronically for each layer” *after* the recording.⁵⁰ To Ligeti, Vischer argued:

After much hesitation, I recorded the piece with manipulated recording technology. I think it corresponds better to the work, and in today’s time, where everything is done with technology

⁴⁶“Zephirwind’: das stimmt. Töne zusammenschwirrend – ja, kein Beethovenlauf, eher wie Debussy, falls er für Cembalo komponiert hätte.” Ligeti to Vischer, April 11, 1968 (CH-Bps AVC).

⁴⁷“Im prinzip [sic] ist die Einstudierung in richtiger Richtung und Sie werden nach weiterer Arbeit das Stück wunderbar spielen. Diese weitere Arbeit bezieht sich auf das Tempo. Dieses müsste WESENTLICH schneller sein, so dass alles ‘Maschinelle’ verschwindet und ein ganz kontinuierliches Schwirren entsteht (ja, in gewissem Sinn wäre das auch maschinell, nur eben eine Art Maschine ohne Körper).” Ligeti to Vischer, May 17, 1968 (CH-Bps AVC).

⁴⁸ELSTE, “Kompositionen,” 237–238. One reason for this is that the soundboard of these instruments is open toward the floor (as in modern pianos), whereby in historical models it is closed.

⁴⁹Vischer’s recording (with a duration of 3:36) was first issued in 1969 by WERGO in the series “taschendiskothek 20. jahrhundert” (WER 305 [EP], title: “György Ligeti”), together with *Atmosphères* (Sinfonieorchester des Südwestfunks, Baden-Baden, conducted by Ernest Bour); see also ELSTE, *Modern Harpsichord Music*, 107. Nordwall describes this recording as using a “technique of counter-revolving tone heads to speed up tempo without affecting pitch,” a relatively new invention in the 1960s; see NORDWALL, “Ligeti’s Harpsichord,” 73.

⁵⁰Bley to Vischer, not dated (CH-Bps AVC).



anyway, it's no longer a secret. I played it as fast as possible and then recorded it on tape faster. I think there is so much more zephyr wind and for records certainly very beautiful.⁵¹

Ligeti raised no objections; in contrast, he embraced this solution for the recording.⁵² Both Vischer and Ligeti regarded live concerts and recordings as two distinct performance spaces, each deserving of its own tailored treatment. In a subsequent letter to Ligeti, Vischer explained:

Of course, for public concerts, I would put more rubati. I completely agree with you regarding the speed, and one can play faster than one believes. In regard to recordings, I am also concerned about preserving the intention of the work, ensuring that the recording remains clear because there is nothing as indiscreet as the microphone. As I said, in a concert it is entirely different, the audience can then watch and is more tolerant of register changes, etc.⁵³

Ligeti himself had previously suggested that the piece should not be played live at a fixed tempo but rather allowed to oscillate according to the respective level of difficulty:

If you play the piece in public, and the studio-technical possibility of acceleration is therefore not given, then I have the following opinion for the realization of the high tempo:

... the piece can easily tolerate some rubato, i.e., the speed can oscillate. In passages where the same note returns very soon on the same manual (e.g., as the next but one note), the speed is reduced somewhat because of this limitation of plucking. (Although, as far as I have tried harpsichords, a very high speed can be achieved here).

In places where several different notes come in succession and the same note does not return immediately, there is time for the mechanism, so the tempo can be increased.⁵⁴

⁵¹“Also nach langem Zögern habe ich das Stück mit Manipulierter Aufnahmetechnik aufgenommen. Ich meine es entspricht dem Werk besser und in der heutigen Zeit wo sowieso alles mit Technik gemacht wird auch kein Geheimnis mehr. Ich habe es so schnell wie möglich gespielt und dann auf Band schneller. Ich meine es sei so viel mehr Zephyrwind dabei und für Schallplatten sicher sehr schön.” Vischer to Ligeti, not dated (CH-Bps AVC). Vischer's letters sometimes have a rather colloquial tone, with incorrect spelling, grammar, and punctuation. I have kept such deviations from the standard language in my transcriptions of the original German quotations in order to represent Vischer's specific voice.

⁵²“Thus, I think: at concert the maximum speed, varying depending on the ‘technical limit’ and therefore tempo changes can occur. For the record, however, I find this ‘manipulated’ solution wonderful, it should remain that way!” Ligeti to Vischer, June 19, 1968; orig. German (CH-Bps AVC).

⁵³“Natürlich würde ich bei öffentlichem Konzert, mehr Rubatis einbauen. Ich [bin] völlig mit Ihnen einverstanden, wegen der Schnelligkeit, und man kann schneller spielen als man glaubt. Bei Aufnahmen geht es mir eben auch darum, dass die Intention des Werkes da ist, dass die Aufnahme klar bleibt, weil es ja nichts so indiskretes gibt wie das Mikrophon. Wie gesagt in einem Konzert ist ja das ganz anders, das Publikum kann dann zuschauen und ist duldsamer für Register Bewegung etc.” Vischer to Ligeti, June 22, 1968 (CH-Bps AVC).

⁵⁴“Wenn Sie das Stück öffentlich spielen, und die Studio-technische Möglichkeit der Beschleunigung also nicht gegeben ist, so habe ich folgende Meinung für die Realisation des grossen Tempos: ... das Stück kann ruhig etwas Rubato ertragen, d.h. die Geschwindigkeit kann oszillieren. Bei Stellen, wo der selbe Ton am selben Manual sehr bald wiederkehrt (z.B. als übernächster Ton), wird die Geschwindigkeit etwas herabgemindert, wegen dieser Zupf-Grenze. (Obwohl, soweit ich Cembali ausprobierte, hier auch eine sehr grosse Geschwindigkeit erreicht werden kann). Bei Stellen, wo mehrere verschiedene Töne nacheinander kommen, und derselbe Ton also nicht sofort zurückkehrt, gibt es Zeit für den Mechanismus, da kann das Tempo vergrössert werden.” Ligeti to Vischer, June 19, 1968 (CH-Bps AVC).



The flow of information between Ligeti and Vischer was by no means one-way. The composer also benefited from the performer's expertise. Before publishing his work with Schott, Ligeti asked the specialist for a few more details regarding the notation:

So, is there something "not harpsichord-like" in the score? Your comments would be very valuable to me since I am a pianist myself, [and moreover, I composed *Continuum* completely according to the harpsichord idea (also technically, the piece could never be transcribed for piano, the basis is the 2-manual technique and the specific humming of the harpsichord)], but as a pianist, I do not have all the knowledge of the typical "harpsichord-like" as far as the notation + annotations are concerned. I want the published score to be completely "harpsichord-like."⁵⁵

Vischer confirmed that the composition was indeed "harpsichord-like."⁵⁶ In addition, Ligeti asked Vischer for her opinion on the instructions he had given in the autograph as footnote (***) "Molto legato," in which he explained in detail how he imagined the legato to be realized (Facsimile 8). After the exchange with Vischer, however, he was unsure whether this instruction would be useful at all.⁵⁷ Vischer conceded that such remarks were indeed relevant for the "internal shape of one's own feeling" but that variations of legato and non-legato playing could, in fact, not be realized since the work was played "so fast and even faster than fast."⁵⁸ As a result, Ligeti removed this instruction, and it was not printed.



Facsimile 8. Excerpts taken from pp. 1–3 of a photocopy of the autograph score (CH-Bps AVC)⁵⁹

⁵⁵ "Also gibt es einiges 'nicht Cembalomässiges' in den Noten? Ihre Bemerkungen wären mir sehr wertvoll, da ich selbst ja Pianist bin, [und zudem komponierte ich 'Continuum' ganz von der Cembalo-Vorstellung her (auch technisch, das Stück könnte für Klavier auch nie transkribiert werden, zu Grunde liegt ja die 2-Manualen-technik und das spezifische Surren des Cembalo)] aber als Pianist habe ich freilich nicht alle Kenntnis vom typisch 'Cembalomässigen' was die Notation + Anmerkungen betrifft. So möchte ich, dass die publizierten Noten ganz 'cembalomässig' sein sollen." Ligeti to Vischer, June 19, 1968 (CH-Bps AVC).

⁵⁶ Vischer to Ligeti, June 22, 1968 (CH-Bps AVC).

⁵⁷ "Whether the 'lying legato' or the reverberation of the notes etc. is not actually to the disadvantage of the speed? Sonically I would like this reverberation with keys held down – how does this relate to the inertia of the plectrums? Any advice would be valuable to me, to what extent I should keep or change this instruction for the final publication." Ligeti to Vischer, June 19, 1968; orig. German (CH-Bps AVC).

⁵⁸ Vischer to Ligeti, August 30, 1968 (CH-Bps AVC).

⁵⁹ "Molto legato = each key struck remains depressed as long as possible (until just before it is repeated or until it is struck again with the same finger) so that the notes resonate together as on a piano with the pedal pressed down. [examples] However, the resonance of the notes should not be achieved at the expense of speed. Speed is more important. Consequently, meno legato is played in the difficult passages." (Orig. German.)



Vischer's exploration of the harpsichord's potential role in modern music ended with her death five years after the completion of *Continuum*, having enabled numerous further compositions, several of which incorporated technologies such as tapes and computers. Ligeti continued to use the harpsichord in ensembles (*Chamber Concerto*, 1969–70, and *Le Grand Macabre*, 1974–77). As a solo instrument, he reconsidered it in 1978, with entirely different instruments (and performers) in mind: *Hungarian Rock* (for Elżbieta Chojnacka) and *Passacaglia ungherese* (for Eva Nordwall). Major sources of inspiration at this time were Eva Nordwall's instruments, which were copies of historical models.⁶⁰ By the early 1970s, historically informed performance practice and the use of "original" harpsichords had gained momentum. Instruments like those played by Vischer fell into irrelevance. Hearing Bach on them today often evokes only a smirk, sometimes even a disdainful snort. However, Vischer and Ligeti were not in search of an accurate historical artifact, but a medium through which to develop their artistic ideas reflecting their zeitgeist. Vischer was not alone in her endeavor. Many harpsichordists of her time, such as Chojnacka, Alice Ehlers, or Sylvia Marlowe, did the same, introducing composers to their specific instruments. Aside from the handful of canonized pieces, such as *Continuum*, there is a vast amount of music waiting to be re-evaluated in the way Ligeti himself approached it: "from the instrument,"⁶¹ its materiality, and its specific sound world.

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⁶⁰NORDWALL, "Ligeti's Harpsichord," 73.

⁶¹Ligeti to Vischer, November 9, 1965 (CH-Bps AVC).



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