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The structure of thought. On the writings of György Ligeti

It seems common practice today for a researcher of contemporary music to be familiar with statements made by composers. Many researchers are aware of their great importance, as well as their complex relationship with the works of a given composer and his/her social image. In spite of this, particularly in the case of living artists who are active professionally, we still encounter situations where the composers' statements are more readily repeated than subjected to critical analysis. Sometimes they are also reduced to the function of a secondary, supporting source of knowledge about the context in which the works were created, and the creative evolution of the composer in question. However, it is precisely the texts written or spoken by musicians that seem today to be an extremely important subject of research, on par with the works themselves. All the more so since verbal descriptions of music with all their associated specific problems have been the subject of discussion within musicology for a number of decades. However, to come up with a penetrating evaluation of composers' statements requires in-depth and comprehensive knowledge, and sometimes also a degree of temporal distance.

In the context of twentieth-century music, this problem acquires special significance. Ian Pace, drawing on his own experience as a pianist, argues that although we work on the assumption that statements about music must be secondary to the art itself, the written and spoken discourse on contemporary music is today paramount in determining which composers will receive commissions, and which of their works will be performed. "Aesthetic discourse exists whether we like it or not – it is a necessary element within the operation of any developed cultural infrastructure such as is required for the continued existence of artistic activity in a public realm" (Pace 2009, 99). In the case of modernist music the situation becomes even more complicated. The absence of established conventions and expressive categories, and the inadequacy of the available vocabulary, often result in clumsiness and tendentiousness

in the descriptions, or in resorting to the language of marketing. The creation of a differentiating, flexible language capable of describing the subject thus still remains a serious challenge (Pace 2009, 99). It is a challenge not only for music critics, but for composers themselves, since they are often asked to comment on their works.

According to Wolfgang Marx, until the turn of the nineteenth century, talking about music was almost exclusively restricted to composers (Marx 2016, 191). When musical compositions were raised to the rank of works of art, and when musicology became established as an academic discipline, this marked the beginning of rivalry over *Deutungshoheit*, or "interpretative authority". "Who has the final authority over the question of classifying and evaluating contemporary music?" – asks the author—"The composer as its creator, or musicologists as 'experts' on synchronic and diachronic comparative analysis?" (Marx 2016, 192).

In the context of these problems, György Ligeti for a number of reasons represents a special case of a composer who is also a writer. Firstly, he succeeded in creating an individual, suggestive and representational language which, as was noted by Monika Lichtenfeld, clearly stands out from the technical jargon typical of other representatives of the avant-garde during the 1950s (Lichtenfeld 2007, 29).

Secondly, it seems that Ligeti was victorious in the conflict over *Deutungshoheit*, at least during the period which turned out to be decisive in determining the course of his later career. Most frequently it was the composer himself who created and dictated the interpretative categories for his music. Most researchers followed his suggestions, even if they extended or made more precise the concepts he proposed (Wilson 2004, 16). In monographs on Ligeti, both in German and in English, the authors eagerly seize on and expand the metaphorical vocabulary and the manner of presentation proposed by the composer. This is apparent even on superficial reading¹ but is also confirmed by research, such as the quantitative study carried out by Julia Heimerdinger.²

Today, more than ten years since Ligeti's death, we find ourselves at an interesting and important point in time. His *oeuvre*, both as composer and writer, now constitutes a closed whole, although the memory of Ligeti remains alive. Researchers now venture to put forward individual interpretations of his works, sometimes diverging from what was proposed by the composer himself. They also explore areas which until now have been regarded as marginal.³ The researchers themselves rep-

¹ Richard Steinitz's Music of the Imagination (2003) is an excellent example of this.

² This author emphasises the fact that there are no major disputes or divergences around one of Ligeti's most representative works, *Atmosphères* (1961), yet the composer had a significant influence on the reception of this work, also through contact with the authors who wrote about him (Cf. Heimerdinger 2014, 143, 146). It was a different matter in the case of *Gesang der Jünglinge* (1956) by Karlheinz Stockhausen or *Le Marteau sans maître* (1954) by Pierre Boulez. We can only guess as to the extent to which the composer's attractive, sociable personality contributed to this homogenous interpretation.

³ Such as Rachel Beckles Willson's research, inspired by the ideas of Hans Ulrich Gumbrecht, which analyses Ligeti's music in the context of presence and absence (Beckles Willson 2007), while Amy Bauer concentrates on the syndrome of lament (Bauer 2011).

resent various nationalities and cultural backgrounds, and some of them come from the countries where Ligeti spent his childhood and youth.⁴ This means that the discourse about the composer is becoming richer and more multifaceted. His drafts and notes are also being intensively researched, and they reveal unknown inspirations and models at the root of the creative process.⁵ From the perspective of most recent research, with the numerous identities of the composer fluid and irreducible to each other,⁶ Ligeti's personality and achievements turn out to be increasingly complex. On the other hand it is only now, with some distance, that we can more easily see the enormous contribution that Ligeti himself made to the creation of the image of his works, and to assess it properly.

The aim of this text is to identify and characterise the key thematic areas in Ligeti's writings, and to demonstrate their role in shaping and expanding our picture of the composer and his works. The first issue concerns the status of the composer, whose attitude and activities are suggestive of those of a scholar. Ligeti's writings reveal his fascination with science, and his belief in the autonomy of music. Another important thread is the historical placing of Ligeti's work as the composer seems to be very aware of the influences to which he was subject himself. The third element of significance is the references to autobiographical themes, which go far beyond being anecdotal and correspond perfectly to the image of Ligeti's compositions and later inspirations. The special, metaphorised way of describing music based on concrete images and often rooted in childhood memories and phantasies defines the fourth thematic area.

It should also be emphasised that the analysis concentrates largely on the writings which may appear far removed from Ligeti's compositions and his compositional techniques. These writings include reminiscences, articles devoted to other composers, and reflections on the status of music. This choice was mainly dictated by the fact that Ligeti's writings that have a direct link to the poetics of his works

⁴ Publications of such authors as Márton Kerékfy, Anna Dalos or Bianca Ţiplea Temeş can serve as examples here.

⁵ The topic of drafts in Ligeti's oeuvre has been systematised by Jonathan W. Bernard, who identified the verbal and graphic elements preceding the musical notation proper in the process of creating a score (Bernard 2011). An example of more in-depth research which takes into account the evidence of the creative process is provided by Benjamin R. Levy's book on the subject of the changes in Ligeti's music from the 1950s and 1960s (Levy 2017).

⁶ The most recent collective monograph is titled *György Ligeti's Cultural Identities* (Bauer, Kerékfy 2018); the composer's different identities and the diverse lines of research devoted to them are also discussed by Florian Scheding (Scheding 2014).

are more often the subject of research.⁷ While Ligeti is an individual case, the phenomena and strategies discussed here may turn out to be symptomatic for the whole body of contemporary composer-writers.

The status of the composer, the status of music

"[I] would feel very unhappy if I were a narrow specialist. I have always been very enthusiastic about many different realms of knowledge" (Ligeti 2001, 3). The composer made this admission in his remembrance speech made on being awarded the Kyoto Prize in 2001. In Ligeti's statements his cognitive thirst is presented with great consistency. In his childhood reminiscences we encounter the image of the composer fascinated by geography, drawing maps of non-existent lands and collecting postage stamps (Ligeti 2001, 3-5). With time these early enthusiasms were replaced by a youthful interest in chemistry. Ligeti creates a laboratory at home, carries out experiments, becomes excited over the complex structures of particles and tries to fathom the "mystery of life" (Ligeti 2001, 6). On each occasion the composer also emphasises how talented he is, for example how quickly he learned to read (Ligeti 2001, 3-5). Here, he sums up his plans for the future: "When I was a schoolboy, I dreamt that when I grew up, I would have two professions simultaneously: I would be a natural scientist and a composer" (Ligeti 2001, 1). Ligeti's texts are ambiguous on the question of whether in this way the composer was realising his own ambitions or, rather, his father's.8 However, life was later to put these dreams to the test. In spite of having passed the exams, Ligeti was prevented from studying mathematics and physics at the Kolozsvár University because of limited access for students of Jewish origin (Ligeti 2001, 11).

In his statements about the role of a composer Ligeti remains faithful to his youthful ambitions: he declares that, despite very different criteria, both scholars and artists are driven by their curiosity (Ligeti 2007l, 123). Music shares with mathematics the important attributes of internal discipline and consistency (Ligeti 2001,

⁷ In her monograph, Ingrid Pustijanac devotes a whole chapter to the links between Ligeti's theoretical reflection and his compositional practice, discussing such issues as the question of form in serial music or the problematic of imagined space in music. The author also notes the significant influence of reflection about other composers, mainly Webern and Mahler, on the expansion of conceptual apparatus and compositional techniques of Ligeti himself. See *Intersezioni tra riflessione teorica e pratica compositiva*, in Pustijanac 2013, 225–268. Valuable comments are also to be found in the introduction to Ligeti's writings by their editor, Monika Lichtenfeld (Lichtenfeld 2007), while Wolfgang Marx convincingly describes the motivations which might have prompted the composer to write (Marx 2016).

 $^{^8}$ In a text from 1973, Ligeti explicitly mentions his father's ambitions: "eventuelle Geigenstunden paßten nicht in seinen vorgefaßten Plan, nach dem ich jene wissenschaftliche Karriere verwirklichen sollte, die ihm versagt blieb" ["the possible violin lessons did not fit in with his plans, formulated in advance, according to which I should achieve a career as a scientist which was denied him"]. Ligeti 2007i, 14–15. In a speech from 2001, the composer seems to identify with these plans to a much greater extent. However, on each occasion his statements are full of respect for the memory of his father and a belief in his unfulfilled talents.

9); also, musicians, like scientists, are capable of creating new structures and discovering previously unknown relationships (Ligeti 2007l, 123). "In art [...]" - argues Ligeti - "there are no problems, but there are solutions, various representations and their diverse realisations" (2007l, 129). Such declarations bring the composer close to the scientific attitude typical of the Darmstadt avant-garde, in which mathematics and natural and technological sciences occupy a special position in the creative process (Humięcka-Jakubowska 2013, 63). His statements may also be related to the science-oriented theory of music. Joseph Dubiel, when considering the affinity between the roles of composer and theorist, argues that composing is also a testing of particular assumptions:9 "When you are writing music, you're staking something on your way of hearing. You're acting on your perceptions, proposing that the way you hear things hangs together well enough to be accessible to other people - and indeed to be recoverable to yourself" (Dubiel 1999, 275). Distancing himself from the idea of one universally applicable theory, Dubiel mentions more flexible theories, "theories of the composition" which are worked out during the process of composing. The author argues that "A well-considered prediction is apt to anticipate alternative outcomes (as well), naturally, with suppositions about what they would mean; but what is up for testing is always some idea of what will come out - in the musical case, of how it will sound" (Dubiel 1999, 275). The ultimate purpose, however, is not verification, but to enhance the hearing, even if it takes place as a result of empirical resistance encountered during the music. Open horizons of hearing and thinking thus turn out to be more important than unfulfilled hopes (Dubiel 1999, 274, 277). Julia Heimerdinger's research also confirms that questions of reception (Wahrnehmung) and influence on the listener (Wirkung) play an extremely important part in Ligeti's commentary on Atmosphères. Although the composer was reluctant to use the word "effects", he was fully aware of them (Heimerdinger 2014, 136). He also seems to be open to experience and surprise when he admits: "In my own work I prefer to continuously test again and again my approach to the work, to continuously.modify it, and possibly to reject it and to replace it with a different way of working" (Ligeti 2007l, 129).10

Turning to the sciences, the composer defends music's autonomous status. In his text *Apropos Musik und Politik* (1973) the author compares the professional, specialist technical skills of a composer to those of a mathematician. He purposely chooses a scientific field which is far removed from obvious practical applications. Defining the status of mathematics and musical compositions, Ligeti refers to analogous descriptive terms. He presents mathematics as "a structure of thoughts" (Ligeti 1978, 21), and a musical composition as "thought structures closed in themselves or not

⁹ Dubiel's text clearly demonstrates that it belongs to the American tradition of music analysis, represented by, e.g., Milton Babbitt and Benjamin Boretz.

 $^{^{10}}$ "In meiner eigenen Arbeit bevorzuge ich es, Verfahren immer neu zu überprüfen, zu modifizieren, eventuell wegzuwerfen und durch andere Verfahren zu ersetzen."

closed, communicated by means of acoustic signals" (Ligeti 1978, 21). Opposing the demand that music should be socially engaged, he emphasises: "I believe that the mathematician or the composer is actually doing something more worthwhile by concentrating upon his field" (Ligeti 1978, 21). His attitude to socially engaged music and to dreams of "paradise on Earth (for example in Havana)" is ironic (Ligeti 2007j, 66), and his words sound particularly bitter coming from someone who had personal experience of a totalitarian system. According to Frederik Knop, it was precisely his attachment to the sciences and the enthusiasm for current scientific advances that allowed Ligeti to concentrate on objective processes, which transcend the boundaries of national and political divisions. Thus, science with its methodologies and values became a special "site of belonging" for that cosmopolitan composer and enabled him to regain a lost sense of community (Knop 2018, 95).

While rejecting socially engaged music, Ligeti wanted to be seen as someone free of dogma and ideologies. However, the composer had clearly defined political views and expressed them freely. Florian Scheding reminds us that "Ligeti frequently described himself as a political composer, and he certainly took an active political stance in Germany" (Scheding 2014, 217). As an example, Scheding quotes a campaign in Hamburg in 1993 directed against xenophobia. He adds that Ligeti's music, while doing so less openly, also takes a stand in the context of political tensions. Amy Bauer and Márton Kerékfy stress that Ligeti was aware of the argument over the political significance of avant-garde music, which took on different aspects in European and American musicology. The composer saw the inevitable passing of this formation and its vanishing socio-political role; hence with time it became his ambition to fight for a "different modernism", far removed from the earlier utopian postulates (Bauer, Kerékfy 2018, 10).¹¹

Reading Ligeti's writings more closely, we will also find in them a number of statements in which the composer rejects justifying his works by referring to scientific principles. When reflecting on the similarity between music and mathematics, he adds: "In spite of this analogy, I reject the 'strictly scientific', pseudoscientific composing as pure ideology" (Ligeti 2007l, 131). ¹² In his commentaries on the piano etudes he declares, "In my music you will find neither what is 'scientific' nor what is 'mathematical' but, rather, a combination of construction and poetic—emotional

¹¹ The argument over the socio-political significance of Ligeti's music continues in contemporary interpretations of his music; the review of Rachel Beckles Willson's book by Lisa Jakelski may serve as an example here. Jakelski, who is against interpreting musical compositions "primarily as alternative documents of political history" points to the fact that interpreting the music of Kurtág and Ligeti in the light of anti-hermeneutic "philosophy of presence" of Hans Ulrich Gumbrecht and Jean-Luc Nancy may also make the reader sceptical. The author's conclusion is that "Beckles Willson's book is at its best when she writes about music and context together, rather than privileging one at the expense of the other" (Jakelski 2011, 130).

^{12 &}quot;Trotz dieser Parellelität halte ich daran fest, dass ich 'szientifistisches' pseudowissenschaftliches Komponieren als pure Ideologie ablehne".

imagination" (Ligeti 2007f, 290). ¹³ Finally, in one of his later lectures he states forcefully "Music is not mathematics" (Ligeti 2007e, 138). ¹⁴ He is also convinced that music is close to natural languages and has its own history and rules familiar to all users, although it lacks the precision of mathematical formulae. ¹⁵

In spite of his belief in the autonomous status of music, the composer also creates extremely suggestive descriptions of his compositions, a question to be discussed in a later subchapter. However, on every occasion Ligeti prefers the term "associations" to "a programme" (Ligeti 2007m, 168). The use of his compositions in films also points to their evocative potential.

How then are we to understand all the tensions and contradictions between the declarations quoted above?

It seems that they document what Wilson describes as "the rhetoric of autonomy" and Julia Heimerdinger as "negative definition". Ligeti attempts to dissociate himself from politics on the one hand, and from programmatic ideas on the other. He also wants to separate his work from serialism and scientism, even if he owes something to each of these approaches. The need for self-definition, fear of interpretative misunderstandings (Heimerdinger 2014, 143) and the constant drawing of attention to his otherness have a deeper origin, including the composer's status as an émigré (Marx 2016, 193–194).

In spite of this, the composer's writings tend to confirm that he is part of the community of creative artists and researchers. It is not enough for him to observe current discussions concerning the status of music; he also becomes a participant. Monika Lichtenfeld reminds us that during his first years in the West, Ligeti was perceived mainly as a theorist and an intellectual. It was only in the early 1960s that he came to be recognised as the author of such compositions as Apparitions (1958–59) and Atmosphères (1961) (Lichtenfeld 2007, 11–13). Ligeti had extensive knowledge not only of the compositions of his contemporaries, but also of specialist musicological research (such as ethnomusicology and psychoacoustics). Research by Martin Scherzinger demonstrates the extent to which the intellectual stimuli of ethnomusicological explorations were reflected in the composer's penetrating studies and his own compositions, even if such inspirations did not take account of many cultural contexts and were sometimes treated in a superficial manner by the researchers (Scherzinger 2006). Ligeti refers to the writings of Thrasybulos Georgiades and to the research of Gerhard Kubik and Simha Arom, Jean-Claude Risset and John Chowning. He shows his commitment to Carl Dahlhaus in the memorial text published after the death of the German musicologist. In all of his arguments, Ligeti appears as a talented partner in the discussions and as someone well-estab-

¹³ "Auch findet man in meiner Musik weder 'Wissenschaftliches' noch 'Mathematisches' wohl aber eine Verbindung von Konstruktion und poetisch-emotionaler Imagination."

^{14 &}quot;Musik ist nicht Mathematik.".

¹⁵ Ligeti 2007l, 123. Ligeti 2001, 9–10.

lished in intellectual circles and the community of avant-garde composers.

Science as a source of musical inspiration, described by the composer in his colourful notes to his works, deserves a special commentary. According to Fabien Lévy, during the mid-1960s very similar changes could be observed in the humanities and in music composition. After the long-lasting primacy of structuralism and notions derived from mathematics (especially from the theory of stochastic processes and set theory) such as parameter, system, transformation and formalization, humanities turned to the human subject and its cognitive limitations. Composers also abandoned strict formal rules, turning towards audiences, their possibilities and perceptual needs. For the middle generation this meant moving away from the strict rules dictated by serial music, while the younger one turned towards minimalism and spectralism. The need for scientific justification for these attitudes remained strong, although this time the choice was the less formal sciences, such as physics or psychoacoustics (Lévy 2004, 103–133). Ligeti was inspired most of all by fractal geometry and the chaos theory. He was always interested in determined and undetermined musical processes, micro- and macro-formal relations, transition from order to chaos and vice versa. In a sense, according to the composer, the famous opposition between clocks and clouds derived from the philosophy of Karl Popper permeated his whole work. It is characterised either by shapeless, dense and smooth musical textures or by structures marked by mechanical precision (Ligeti 2007r, 264).

Ligeti's attitude in this case also appears to mark the middle way. It is closer to applied mathematics, as the composer's favourite mathematical models find their equivalents in the models of nature. These models also manifest in complex, colourful visual representations which are highly popular and closely linked to the human sense of beauty (Lindstedt 2009, 170–171). ¹⁶ In this way, Ligeti, in accordance with his principles, builds "associations" without an intrusive "programme".

PLACE IN THE HISTORY OF MUSIC

The research of Julia Heimerdinger shows that historical placing (geschichtliche Verortung) turns out to be the most important matter in the authorial comments to one of György Ligeti's key works, Atmosphères (Heimerdinger 2014, 129).¹⁷ It seems that other writings and statements by the composer have a similar aim, both when Ligeti is interpreting the achievements of selected musicians from the turn of the twentieth century, and when he traces the lines of development of the history of music over whole centuries. The composer seems to be very aware of the

¹⁶ The association between fractal structures and a sense of beauty has been shown by experiments both in the area of music and the visual arts.

¹⁷ The author has in mind particularly influences (*Einflüsse*), predecessors (*Vorläufer*) and the environment (*Umkreis*). It is also worth mentioning that Ligeti focused on somewhat different aspects of compositions in his published texts and unpublished drafts (Heimerdinger 2014, 127).

influences to which he was subject himself, while the list of his musical examples stretches from the repertoire of the old masters to music from outside Europe (e.g., from Japan and Africa). A privileged position is given in Ligeti's writings to his direct historical predecessors, such as Béla Bartók or Anton Webern, but also to Claude Debussy, Gustav Mahler, Charles Ives or Igor Stravinsky. There are also shorter references to the Viennese classics and to the masters of early polyphony. An important figure in Ligeti's pedagogical activity was Franz Schubert, although no texts are specifically devoted to him (Lichtenfeld 2007, 19–20). Finally, a separate position in the composer's writings is occupied by his contemporary and fellow countryman, György Kurtág. When discussing compositions by others, and the categories which he intends to apply to his own works, Ligeti gives evidence of his erudition and his musical roots.

The composer reveals his fascination with the cohesion of tonal musical language. It is these reflections which most powerfully reveal his belief in the links between music and language (e.g., in the area of metric divisions) and diverse musical cultures. For Ligeti, Haydn and Mozart are composers "in whom tonality [...] appears in perfect balance and in the purest form" (Ligeti 2007l, 127).¹⁹ He also appreciates the elegance and the "supreme subtlety of Mozart's compositional technique" (Ligeti 2007h, 275), particularly in the areas of contrapuntal technique and richness of harmony. He admires Schubert's static moments (*Schwebezustände*) introduced into the directed dynamic of classical forms (Ligeti 2007h, 277).

The composer's memories of the musical fashions of his youth are tinged with nostalgia and irony; he describes how in his works the father figure represented by Bartók was gradually replaced by the figure of Debussy. As a young composer, he was mainly inspired by the Beethovenian concept of form, motivic work and development transmitted in the music of Bartók. Debussy seemed to him old-fashioned because he used thirds, whereas Bartók was much more modern in his use of semitones. This French composer was also devoid of the heroic aura of atonal music (Ligeti 2007l, 128). It was only around 1950, when teaching harmony and counterpoint, that Ligeti came to understand that Debussy did not extend tonality, but simply abandoned it. Under the influence of the music of Java and Bali, he freed himself from closures and leading tones. Here we find again the terms in which he previously described Schubert's music: "The static nature of these forms was in my understanding linked to vibration and irisation" (Ligeti 2007l, 128). Later these terms were to describe the works of Ligeti himself, where the polyphony of the

¹⁸ Rachel Beckles Willson devoted her whole book to precisely this relationship; according to her thesis, the music of Ligeti and Kurtág represents two complementary faces of Hungarian music during the Cold War period (Beckles Willson 2007).

^{19 &}quot;bei denen die Tonalität [...] in der perfektesten Balance und in der reinsten Form erscheinen".

In spite of Ligeti's claims, research shows that his analytical thinking and works were influenced by Bartók's music to a much greater extent than the composer was willing to admit. Cf. Anna Dalos, Peter Edwards 2018.
 "Die Statik dieser Formen verband sich in meiner Vorstellung mit Vibration und Irisieren."

old masters was combined with the static form. "The inner vibration arose through interference patterns which resulted from the drifting of voices rubbing thickly against one another" (Ligeti 2007l, 128).²²

Ligeti was also fascinated by the imagined space of Webern's music, by its construction, poetry and timbre. For him it was Webern who had drawn the ultimate consequences from the work of Schoenberg. The composer unified different dimensions and elements such as melody, harmony, rhythm, dynamics and timbre into one structure. It was supported by a network of rests and changing instrumentation. In such compositions time seems to lose its directionality, and its flow is suspended. "When all development ceases, the time in which such structures play out seems suspended in its course: particular spatial dimensions become much more definite" (Ligeti 2007a, 328).²³ Instead we can observe what Ligeti calls the imagined space, the autonomous cosmos of sound: "By means of such subtle compositional technique Webern makes the forces which maintain this cosmos act only towards the interior; the cosmos as a whole rests upon itself, floating freely in the imagined space described earlier" (Ligeti 2007a, 328). 24 According to Gianmario Borio, the analysis of Webern's works proposed by Ligeti, similarly to the analyses conducted by Henri Pousser, stresses the organisation of sounds in space. In this respect it moves away not only from the polyphonic conception of Webern himself (Borio 2005, 88), but also from the earlier analyses by avant-garde composers, which focused on the use of the series. Ligeti concentrates on the harmonic structure which may arise in conditions of total chromatics and emphasises that removing the differences between the horizontal and vertical dimensions leads to the formation of an imagined space (Borio 2005, 118).

It is worth noting that Ligeti intended to write a book on the music of Anton Webern. Ingrid Pustijanac stresses the fragmentary nature of the discovered archival material but also its extreme relevance to Ligeti's theoretical concerns. She claims that many compositional processes in Ligeti's music (such as the exploration of sound masses in space, expansion and contraction processes, polarization in registral space or staticism) are rooted in the analyses of Bartók's and Webern's compositional technique (Pustijanac 2018, 173).

Ligeti also admires the elegance, the intelligent pastiche and the disposition of time in the music of Igor Stravinsky. He describes the fragmentation of musical processes, the interplay of distance and proximity of Gustav Mahler, and the polymetric blends of Charles Ives. Pustijanac demonstrates that deliberations on the subject

²² "Die interne Vibration entstand durch Interferenzmuster aus den Schwebungen der sich dicht gegeneinander reibenden Stimmen."

²³ "Mit der Ausschaltung jeglicher Entwicklung erscheint die Zeit, in der sich solche Strukturen entfalten, in ihrem Ablauf aufgehoben: vorgespielt werden vielmehr bestimmte räumliche Dimensionen".

²⁴ "Mit den Mittel solch subtiler Satztechnik erreicht Webern, daß die Kräfte, die diesen Kosmos zusammenhalten, ausschließlich nach innen wirken, der Kosmos als Ganzes jedoch in sich selbst ruht, ohne Stützpunkt frei schwebend im zuvor beschriebenen imaginären Raum."

of imagined space in Mahler's music (contrasted with the use of physical space by distributing instruments on a stage), as well as the effects of distancing, or moving closer, or changes in perspective obtained using appropriate instrumental effects, such as a combination of colours or change of dynamics, allowed Ligeti to revitalise his own compositional technique in the mid-1960s (Pustijanac 2013, 262). The author also notes that Mahler's oeuvre was not included in the area of interest typical of the representatives of the avant-garde.

The multiplicity of influences and the ability to combine them creatively can be viewed as a particular manifestation of the composer's sensitivity and his "cosmopolitan" imagination, open to otherness.²⁵ For example, Ligeti was able to discern kinships between the music of Bartók and Webern in the areas of chromatics and symmetrical centralisation (Ligeti 2007o, 362). He compared the music of Webern and Debussy in respect of the abandonment of thematic work, restrained expression and concentration on single motifs (Ligeti 2007p, 345).

All the analyses reveal a tendency to "historical appropriation", discussed by Gianmario Borio: "Through analysis, unconsciously or purposely, the composer introduces the conceptual apparatus which he had developed, defined and transformed in confrontation with his own material. In this sense the analysis is part of the musical theory of its time, even if in a latent manner" (Borio 2005, 88). ²⁶ And in fact, when describing the works of Webern or Mahler, Ligeti uses a vocabulary which will serve him when describing his own compositions, including such concepts as the metaphor of a web and its transformations – distancing, tensing or tearing.

In his writings the composer reveals a special talent for constructing compact and convincing historical narratives. These are very clearly presented stories, demonstrating his extensive experience as a teacher. Thus, for example, the history of musical grammar sketched by Ligeti journeys from the music of Perotinus and Machaut, through the works of Bach, Haydn, Mozart and Schubert, to Wagner, Debussy and Schönberg (Ligeti 2007l). En route to the creation of tonality dependent on closure, Ligeti ascribes individual discoveries to each of these musicians.

The composer is also very conscious of the historical course of his own creative development. He arranges this history into a particular sequence and knows which works he would like to regard as important. In his narratives we see consistent repetition of the titles *Viziók*, *Apparitions*, *Atmosphères* and *Aventures*. Even from the perspective of an advanced age, Ligeti continues to regard micropolyphony as his most important technique (Ligeti 2001, 18).

The composer is very consistent in focusing on the continuity of changes in his compositional style and on the independence of his creative explorations, playing

²⁵ The subject of Ligeti's cosmopolitan attitude and imagination is extensively discussed in Bauer, Kerékfy 2018 in the context of contemporary concepts in sociology and cultural studies.

²⁶ "Par l'analyse, le compositeur utiliseu inconsciemment, ou met en oeuvre intentionnellement, un appareil conceptual qu'il aura développé, défini et transformé dans la confrontation avec son propre matériau. En ce sens, l'analyse fait partie de la théorie musicale de son époque, même si c'est de façon latent."

down the role of external factors. Among other things, he claims that of groundbreaking significance for him was the composition Musica ricercata (1951-53), where, regarding all the musical tradition known to him as "irrelevant", the composer decided to radically limit his compositional devices and began experimenting, creating "new music from nothing". Ligeti also emphasises that the processes which led him to compose static sound masses began while he was still in Hungary, in works such as Viziók (1956) or Sötét és Világos (1956). He argues that his interest in illusory "inherent patterns" began long before he came into contact with African rhythms in the mid-1980s. Evidence for this is supposed to be provided by such works as Continuum (1968) or Monument (1976). Today, claims of this kind are regarded by researchers with some scepticism, all the more so since references to specific composers or stylistic idioms were often noted in Ligeti's drafts. Martón Kerékfy and Benjamin R. Levy show that Musica ricercata remains deeply rooted in the models of the music of Bartók, Sándor Veress and Igor Stravinsky, as well as Hungarian, Romanian and Balkan folk music.²⁷ Levy emphasises that the experience gained in the electronic music studio at WDR in Cologne, but also the shortlived encounter with the Fluxus movement, marginalised by the composer, had a significant influence on his later compositions.²⁸ In turn, Martin Scherzinger argues, on the basis of notes for drafts, that even as early as the end of the 1960s Ligeti was inspired by the music of Steve Reich, thus indirectly drawing on African culture (Scherzinger 2006, 256).

According to Peter Burkholder all twentieth-century composers have to square up to the dominance of classical repertory in musical life when they struggle to achieve a permanent place for their own works (Burkholder 1991, 412–413). This relationship has been described in a variety of ways. Some, like Joseph Straus, stress the composers' "fear of influence"; others, such as Karol Berger, perceive the relationship between past and present as more harmonious, pointing to composers who strove to enrich the tradition of artistic music and have entered the musical canon in spite of the apparent signs of cultural crisis. Berger describes György Ligeti, and. those highly regarded by him, György Kurtág and Witold Lutosławski, as modernists, for whom, however, the ideology of "progress" or historical necessity were alien concepts (Berger 2014, 192).

In fact, the most important features of the vision of history adopted by Ligeti are, on the one hand, belief in the gradual character of change and, on the other, admiration for the craft of his predecessors, manifested to a much greater extent than for his contemporaries who were competing with him. His historical narratives seem to confirm his claim that "[t]he renewal of arts consists every time in gradual modifi-

²⁷ See Levy 2017 and Kerékfy 2008,13–22. A curious fact is that Levy even found a satirical quotation from Wagner's *Lohengrin* in a draft for *Movement X* from *Musica Ricercata* (Levy 2017, 20–22).

²⁸ See Chapter 2: *Electronic Works* (1957-58) (Levy 2017, 50-84) and Chapter 4: *Fluxus and the absurd* (1961-62) (Levy 2017, 128-162).

cation of that which exists already" (Ligeti 2007l, 129).²⁹ Great emphasis is always placed on the knowledge of one's craft, formal elegance, sophisticated solutions and striving for perfection: "Traditional techniques should undoubtedly be taught not simply in order to continue the transmitted knowledge, but to be, on the one hand, equally skilled materially, and on the other to raise what is newly shaped to the level of the music of the past" (Ligeti 2007k, 132.)³⁰ We also learn much about the author from his message to young composers, by that time pronounced from the perspective of the twenty-first century:

Try to receive the best possible education in traditional harmony and counterpoint, as this forms the basis of compositional craft. A good teacher is important, but you learn the more valuable lessons from reading and playing scores and from listening to music. [...] In the end, you must be the one to impose the highest possible standards on your music. (Ligeti 2001, 18)

But with all his respect for the past, Ligeti defends the value of modern music, situated in a niche between popular culture and the prestigious market of classical music. He argues in a kind of mathematical riddle that "[i]ts extent is infinitely small, but the possibilities for its spiritual expansion are infinite" (Ligeti 2007j, 134).³¹

In spite of all the logic of Ligeti's historical syntheses, what is striking is that the composer himself seems to be aware of the provisional and discretionary nature of the lines he has drawn, of the alternative character of the narratives and the perspectives adopted: "This route I have sketched here, 'from Lorrain to Mondrian', is of my own freely chosen design, and other freely chosen links can be demonstrated; what is involved is not historical necessity, but 'moves on the chessboard'" (Ligeti 20071, 130). ³² The composer is also aware of the various directions which his own works could take. He quotes here his favourite metaphor: "At present I have no firm idea about where this will go. I have no ultimate vision of the future, no general plan. I proceed in the dark from composition to composition, like a blind man in a labyrinth" (Ligeti 20071, 129). ³³

²⁹ "Die Erneuerung der Künste bestand jeweils aus einer graduellen Modifikation des schon Existierenden."

³⁰ "Traditionelle Techniken soll man gewiß nicht lernen, um das Überlieferte bloß fortzusetzen, sondern einerseits um gleichsam materialkundig zu werden, andererseits um das neu zu Gestaltende auf das Niveau der vorgangenen Musik bringen zu können."

^{31 &}quot;Ihre Breite ist unendlich klein, ihre geistige Ausbreitungsmöglichkeit aber unendlich weit".

³² "Dieser Weg'von Lorrain zu Mondrian', den ich hier skizziert habe, wurde aber von mir ganz willkürlich entworfen, beliebige andere Verkettungen wären aufzeigbar, es geht nicht um historische Notwendigkeit, sondern um 'Schritte auf dem Schachbrett'."

³³ "Nun habe ich keine feste Vorstellung, wohin das tendieren wird: Ich habe keine endgültige Zukunftsvision, keinen Generalplan, sondern taste mich von Werk zu Werk, wie ein Blinder im Labyrinth."

MEMORY AND AUTOBIOGRAPHY

Awareness of links to the musical tradition and respect for the historical achievements of his predecessors are complemented by the composer's nurturing of the remembrance of his own roots. A typical feature of his writings are recollections of autobiographical threads. This happens with increasing frequency from the 1970s on, when his writing clearly changes character, becomes more retrospective, and reminiscences and summings-up naturally combine with participation in prestige publications or speeches given at award ceremonies (Lichtenfeld 2007, 24). References to his childhood are also to be found in commentaries to his compositions. These descriptions have a powerful effect on the imagination, transporting the reader to the time and space of the world in which the composer spent his childhood. In fact, they also fulfil numerous functions far beyond that of an anecdotal narrative.

A very important feature of the reminiscences recalled by Ligeti is the fact that on the whole, they correspond perfectly to the image of his compositions and later inspirations. Monika Lichtenfeld writes that it is precisely in the reminiscences that we find "gathered together almost all the 'proto-themes' of his artistic cosmos" (Lichtenfeld 2007, 26). The term "proto-themes" conveys very clearly the carefully thought-out framework in which Ligeti placed his stories. Nearly every detail can be successfully linked to the composer's later development. Even as a boy, Ligeti is enchanted by sub-Saharan Africa, and during his first piano exercises he is fascinated by the black keys and "Japanese music", unknown to him at that time (Ligeti 2007i, 13). On the other hand, his interest in organic chemistry focuses on the "complex structure of particles", which may be associated with the privileged role of the concept of structure in the descriptions of his own music at a later stage.

Recalling images from childhood also affects his special way of describing music. Usually it is grounded in the inaccessible, difficult-to-capture sphere of memory or imagination, yet at the same time it is always music being heard, taking place in time. We are dealing here with musical reminiscences on the one hand, which at times acquire fantastical, exaggerated shapes and, on the other, with music imagined by a little boy. Writing about the sounds coming from a nearby inn where Gypsies used to play, Ligeti says: "and this sound pressed, in tatters and terrifyingly, into my child's room, as if somewhere, a long way away, enormous beetles with heavy wings were regularly beating against the wall" (Ligeti 2007i, 12). He tells us about his childhood fantasies: "as a small child, I had always imagined music: when I got up in the morning, washed, brushed my teeth, or when I went to bed at night. To each of these daily duties belonged a different kind of musical ceremony, and these imaginary music pieces didn't change" (Ligeti 2001, 1). Most often Ligeti describes

³⁴ "[...] hier findet man nahezu sämtliche 'Urthemen' seines künstlerisches Kosmos versammelt."

^{35 &}quot;[...] und dieser Klang drang in Fetzen und bedrohlich bis in mein Kinderzimmer, als ob irgendwo, in großer Entfernung, riesige, hartbeflügelte Käfer regelmäßig an eine Wand stießen."

his imaginings as complete works being realised in time, going so far as to describe precisely their genre or musical influences. Thus, for example the 40-minute journey to his piano lesson was sufficient for him to hear a symphony (Ligeti 2007i, 16).

The reminiscences also tell us about the repertory which shaped him as a composer and about the compositions which could be heard in his closest environment. They reveal in this way not only Ligeti's fascination with recordings, but above all the composer's sensitivity to the surrounding soundscape and awareness of how strongly it influenced his imagination.³⁶ For Ligeti this is a pretext for describing the community and the culture in which he grew up, the social and historical changes, and the development of the media which took place during his childhood and youth (Ligeti 2007i, 16). As it happens, describing these changes with the help of music turns out to provide a significant commentary on the belief in its autonomy declared elsewhere. A powerful example of such a description is the moment when the composer's father, listening to the news on the radio about the growing political tensions prior to the outbreak of the Second World War, freezes on his chair and the clatter of his typewriter grows silent. This means that he has given up on his writing plans. The composer tells us: "Previously I would almost always fall asleep to the calming sound of the clatter of his typewriter in another room" (Ligeti 2007i, 15).³⁷ The calming, mechanical sound of the typewriter is replaced by the invasive sound of the radio bringing bad news, and conflict in the external world intrudes into the familiar household reality. The impending threat, both political and existential, has been transformed here into the memory of a sound. We know from Ligeti's statement what tragic fate awaited his father, and how traumatic for him was the loss of the person nearest to him.

We might speculate on how the already-mentioned sensitivity to sound resonated with the musical representation of time, together with its irreversible processes of decomposition in Ligeti's works. Images of mechanical movement, chaos and organic decay were, after all, to become the fundamental authorial metaphors describing musical processes.

It is worth recalling that Ligeti, while distancing himself from programmaticity, admired the awareness of environmental sounds and the ability to transform them musically in the music of Anton Webern, which constituted one of his main points of reference. "Perhaps Webern's extraordinary differentiation of sound colour results from his ability to listen out for the subtlest sounds of nature and shaping the sound

³⁶ Louise Duchesneau undertook an interesting attempt to recreate the list of recordings to which Ligeti listened at various stages of his life. The author emphasises Ligeti's fascination with phonography, as well as the fact that in many of the composer's drafts we can trace references to the records he knew (Duchesneau 2011).

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relationships which had previously remained hidden" (Ligeti 2007p, 345).38

In his reminiscences Ligeti consistently avoids pathos and constantly oscillates between various registers of seriousness and comedy. The seriousness of the situation is here linked to focusing on insignificant, prosaic details. We thus learn that during his first visit to the opera Ligeti sat squeezed between elderly ladies, and a cousin fed him morsels of nougat. His musical initiation and lone practising were disturbed by the sight of a figurine of a semi-nude lady catching a butterfly, and the attempt at his first symphony was aimed at drawing the attention of a girl away from his teenage pimples (Ligeti 2007i, 13, 17, 18). When we read Ligeti's texts, full both of irony and warmth, we have the impression of quickly making friends with him, of his being close to us both as a storyteller and as a person.

However, in the final analysis, behind the cheerful, colourful stories we find nostalgia, existential reflection, suffering and fear. Even in childhood death is close enough to touch.³⁹ Political changes are observed from the perspective of a child, but in the background there is always awareness of the trauma which is to come later. It is also here that we find the greatest contrast between the writings, where the composer talks openly about escaping the Holocaust, and his compositions, where the subject is not taken up directly and where we find only its echoes.⁴⁰

Writing about creative inspiration, Jonathan Harvey argues that we can never learn whether composers tell the truth about themselves, since it is impossible to enter into their inner world (Harvey 1999, xix). Going back to the memories which were to be the beginning of his later creative work, Ligeti brings this inaccessibility even more into focus. Talking about the composer's images of his childhood, Charles Wilson makes the point that:

The very fact that they cannot be straightforwardly contradicted or gainsaid lends them an authority that claims of a more orthodox technical or historical nature, more readily vulnerable to refutation or challenge, will rarely possess. These autobiographical "alibis" help to dispel the aura of chilly remoteness that normally surrounds avant-garde figures, presenting, by contrast, a friendly and personal image of the composer and a view of the music rich in metaphorical, even quasi-programmatic, content. (Wilson 2004, 14.)

There is another reason why we find it difficult to dispute this vision. The world described by Ligeti no longer exists. It was brutally destroyed by war and genocide. All that is left of it is a myth of childhood, and Ligeti emigrated, leaving the ruins of that world behind. Remembrance of childhood is also a return to the place which has to be pictured anew for the listening strangers and for oneself. In this context,

³⁸ "Vielleicht ist Weberns auβergewöhnliche Klangfarbendifferenzierung gerade seiner Fähigkeit zu verdanken, die subtilsten Klänge der Natur zu erlauschen und klangliche Beziehungen die bisher verborgen waren, aufzuspüren und zu gestalten."

³⁹ In Ligeti 2007i, 12 we find a description of the ceremony of the burial of children.

⁴⁰ Cf. Scheding 2014. Wolfgang Marx defines the symptoms of cultural trauma in the stylistic features and specific types of expression in Ligeti's music (Marx 2018).

the recurring theme of Kylwiria, his childhood utopia, appears to be yet another important comment on the composer's situation. An attempt to construct something non-existent, so typical of a child, is driven by the need to possess something of one's own that cannot be taken away by anyone.⁴¹

Wilson suggests that Ligeti's references to his private reminiscences in the public sphere contributed to his self-promotion, even though the composer himself officially distanced himself from the progressive commercialisation of music (Wilson 2004, 20). Marx adds that we may only speculate whether Ligeti was aware of this marketing mechanism, even subconsciously (Marx 2016, 198). On the other hand, Rachel Beckles Willson argues that the composer's attitude has a psychological explanation. After escaping from Hungary, Ligeti purposely distances himself from his experiences, gives them an almost fairytale, stylised form, in order to preserve his privacy in this way: "These examples point to a constant presence of memory, but also a strategy of transforming memory into play. One might go so far as to say that Ligeti avoided taking the memories seriously in public, to avoid become a typical exile, a 'pitiful monument' to his grief" (Beckles Willson 2007, 118).

The tone of a fairy story was not restricted to purely private reminiscences. Ligeti can comment in this manner also on historical reality. The indulgent description of a childish utopia conceals an ironic conception of a "paradise on earth", and with it all the political systems which demonstrated their weakness in the twentieth century: "The legal system and social structure were completely liberal and perfectly just. I didn't bother with illness and death [...] It was a kind of 'land of milk and honey' with no government, no money and no criminals" (Ligeti 2001, 3).

In a programme for WDR in 1958, Ligeti outlined the situation of the music of the first half of the twentieth century using a similar device of a fairy story: "In that jungle there were enough paths and hunting grounds [...] The children entered an enormous, mysterious Hall filled with surprising, extraordinary toys. It was paradise" (Ligeti 2007d, 79).⁴² Among the children were Anton Webern, Alban Berg, Paul Hindemith, Darius Milhaud, and Edgard Varèse.

The paths, one after the other, came to be known and familiar. Not all of them led to the new; some even led back to areas already explored. The explorers who set out in different directions unexpectedly met each other again. The new, shiny toy soon wore out, and the fairytale hall got smaller (Ligeti 2007d, 79–80).⁴³

⁴¹ The attempt to escape into his own world probably was a natural reaction of a child after the birth of his younger brother. Lukas Ligeti gave a similar description during his presentation at György Ligeti Symposium in Helsinki (11 February 2017).

⁴² "In diesem Dschungel boten sich für alle genügend Pfade und Jagdreviere [...] Die Kinder betraten einen riesigen geheimnisvollen Saal, der mit ungeahntem, wundersamen Spielzeug angefüllt war. Es war ein Paradies."
⁴³ "Die Wege wurden allmählich nacheinander erkundet. Nicht alle führten zu Neuem, ja manche führten sogar zurück zu schon erforschten Gebieten. Wanderer, die in verschiedene Richtungen gegangen waren, begegneten sich unerwartet wieder. Das neue, glänzende Spielzeug nutzte sich bald ab, und der Märchensaal schrumpfte zusammen."

Echoes of utopia can also be heard in this text. There is talk of authority and its fall, of the tonal empire and regional provinces. The metaphor of a forest, thicket, paths, wandering, labyrinth, usually associated with polyphony, this time serves to outline the alternative paths of the history of music.

"Konkrete Vorstellungen klingender Musik". Metaphorical description of musical structures

The words "konkrete' Vorstellungen klingender Musik", which keep appearing in Ligeti's writings (Ligeti 2007i, 16; Ligeti 2001, 1,7), express the main premise behind his description of music. That description is to be concrete, not abstract, and the music itself is to be sounds, not parameters. The composer's drafts indicate that the phase of verbal description also played a very important role in the creative process and preceded the later, graphic stage (drawings, charts and tables) as well as the actual music notation. Ligeti noted in a concise manner the qualities of sound or specific points of reference and sources of inspiration (e.g., Nancarrow, Central African rhythm), most frequently using Hungarian, in contrast to publicly formulated statements in the German language (Bernard 2011, 151).

Although the word "structure" still remains the key concept for Ligeti, one may have the impression that the composer's main aim is to give its description a more accessible, human dimension. The well-known text Zustände, Ereignisse, Wandlungen. Bemerkungen zu Apparitions (1967) provides a very good illustration of this. Ligeti begins with a reminiscence full of the fantasy and terror of a childish dream, in which "the whole room was filled with a finely spun but dense and extremely tangled web" (Ligeti 1993, 164). Here we find the key images, such as network (Netz) or the tangled web (Gewebe). Insects ("moths and beetles of all sorts") not for the last time serve Ligeti to anthropomorphise sounds. After a brief literary description of the dream scenery, the composer moves on to more abstract terms, such as States (Zustände), Events (Ereignisse), Transformations (Wandlungen) or System. He emphasises that none of the configurations of the network will ever be repeated, and the nostalgic experience of transience is integral to the process of transformations: "There was something inexpressibly sad about this process: the hopelessness of elapsing time and of the irretrievable past" (Ligeti 1993, 165). Further on in the text we have an analysis using authorial vocabulary and representations. "In this way arises an unceasing development: the former states and events reciprocally exclude their repeated occurrences, are irretrievable" (Ligeti 1993, 170). It would be difficult to think of a more suggestive description of music as an art form which is realised in time, or simultaneously a more subtle reference to the composer's biography, where the past can never be put right.

Amy Bauer analyses the metaphors used by Ligeti from the perspective of cognitive linguistics and searches for conceptual metaphors which lie at the root of the linguistic expressions. The author argues that they are mainly metaphors of space and movement: "The web itself is understood as a physical space [...] Movement through that space manifests as a change in the condition of trapped objects [...] The overwhelming sense of entropy stems directly from the association of time with the traversal of a landscape" (Bauer 2011, 37). The described identifications may be described using typical conceptual metaphors, such as TIME IS LANDSCAPE or CHANGE IS MOTION/MOVEMENT. The last, most original, metaphor where the WEB IS PHYSICAL SPACE allows Ligeti to describe the special, organic properties of his composition as well as its multidimensionality.

The composer often uses related spatial and visual metaphors. Alongside the web, we have the metaphor of labyrinth, fabric, surface or mirror image (Kostakeva 1996, 71-77). Bauer stresses the cognitive role of Ligeti's metaphors, which "import the structure of a natural domain to the self-conscious and artificial realm of new music" (Bauer 2004, 132). Disputing the thesis that modern music (in contrast to hierarchically structured tonal music) was inaccessible for the listeners, the author argues that "musical understanding for a competent listener, not to mention musical meaning, is never restricted to parsing a work's concrete, self-referential details, but relies on conceptual mappings both from other music and other experiential domains" (Bauer 2004, 132). It should be noted that there is nothing exceptional about using metaphors, since many twentieth-century composers used conceptual metaphors, which sometimes formed whole cognitive systems (Schreiber 2016). In fact, they were doing that long before the cognitive theory of metaphor made it an object of interest to musicologists. However, in the case of Ligeti, this involves additional aspects. Firstly, Ligeti finds a special, "personal" justification for his metaphors in the form of synaesthesia. The composer refers to his tendency to combine three kinds of experience: visual, tactile and acoustic. It also affects his reflections on the subject of the interpenetration of the arts in the twentieth century.

Secondly, the metaphors are strikingly multifunctional. They can be interpreted as an allusion to modern science (network and system), but at the same time they bring to mind fairy tale and suggestive contexts (labyrinth). They suggest a rich internal structure, and not just the superficial colourfulness of composition. ⁴⁴ In this way they express respect for those historical compositional techniques which make it possible to create a complex work. Thus in the final count, metaphors play an evaluating role.

Finally, we come to the author's great verbal profligacy, probably related to his

⁴⁴ See Kostakeva 1996, 70–71 Evidence for how much Ligeti valued the term "structure" comes from the fact that in his correspondence with Harald Kaufmann, he suggested that emphasis should be placed on the structural and formal aspects instead of on the concept of colour. This caused the researcher to change the final title of his text from "Klangfarbentextur unter dem Mikroskop. Über das Orchesterstück *Atmosphères* von György Ligeti" to "Strukturen im Strukturlosen. Über György Ligetis *Atmosphères*" (Heimerdinger 2014, 145).

literary passion. Among the authors quoted in Ligeti's writings we find not only those gifted with a rich imagination, but also with linguistic inventiveness: Frigyes Karinthy, Gyula Krúdy, James Joyce, Jules Verne, John Kenats, Eugène Ionesco, Jorge Luis Borges and, and above all Franz Kafka and Lewis Carroll. Referring to his tactile, synaesthetic experiences, Ligeti introduces a whole series of material descriptions. In relation to music he uses such words as "Material" and "klingende Flächen und Massen", which can also fall to pieces (Fetzen, Floskel, Splitter). What is described are both tactile attributes (körnig, brüchig, faserig, trocken, nass, schleimig, klebrig, gallertartig, kompakt), relations between individual elements of a network (ablösen, durchstechen, ineinanderfließen), and various types of processes (Vorgänge, Verschmelzungen, Verwandlungen, Katastrophen) (Ligeti 2007m). The key word in Ligeti's writings is "imaginary".

Ligeti also uses descriptions such as mixture and permeability, which originate from chemistry. In his famous article *Wandlungen der musikalischen Form* (1960), he speaks of sculpture, texture and the plasticity of sonic material (Ligeti 2007n, 98) and compares shaping the musical line to moulding plasticine blocks. It is there that he uses the term "permeability" (*Permeabilität*), referring to the impossibility of identifying interval structures because of their coming together and superimposition.

A thorough analysis of this type of metaphor and its role in the description of music has been proposed by Francesco Spampinato. According to this author, the absence of clear form, rhythm or melodic line results in the impossibility of separating out the figure and the background of perception. The sense of dealing with an inarticulated sound encourages a synaesthetic and holistic reception of music (Spampinato 2008, 157). While music does undergo reification, it takes place at another, higher plane. It is perceived as texture and grain. It becomes a sound body (corps du son), characterised by such properties as volume, density, cohesion or roughness (Spampinato 2008, 159).

The basis of this kind of reception is expressed by two conceptual metaphors: PERCEPTION IS PHYSICAL CONTACT and MUSIC/SOUND IS MATE-RIAL SUBSTANCE. The first assumes that physical contact is the most elementary relationship with the external world (Spampinato 2008, 142). The second relates to experiencing music as moving objects or substances (Spampinato 2008, 144).

Analysing the composer's statements about *Lontano*, Bauer reconstructs numerous metaphors contained in them. She stresses that in the case of these descriptions, it is more appropriate to talk of multiple space mappings, and for this reason she refers to the more complex idea of conceptual blending, which involves more specialised and limited mental spaces instead of vast areas of knowledge represented by a source and target domain (Bauer 2004, 139). The input spaces consist of informa-

⁴⁵ It is difficult here to avoid comparisons with the statements of Iannis Xenakis or Pierre Schaeffer. However, in the case of both of these composers, the metaphors were used in a much more technical context.

tion from different cognitive domains. We find among them such diverse spaces as moiré fabric, vast space, illuminated picture, building or organism. The result is a rich blended space filled with selected elements of input spaces, forming a new emergent structure. ⁴⁶ In Bauer's opinion, the multitude and diversity of metaphors testifies to the richness of the music being described: "I would argue that the richest music would be that which is capable of the widest range of associations. Those associations may arise through cross-domain mappings from one work or genre to another, or through conceptual blends that link one area of sensory and intellectual experience to music" (Bauer 2004, 139).

Robert Adlington does not follow the metaphors proposed by Ligeti himself, but focuses on his own audial experiences. In the fragment *Atmosphères*, he perceives above all an association with vertical movement and accumulating tension (Adlington 2003, 313–314). This work, like the selected compositions of Claude Debussy or Kaija Saariaho, in Adlington's view inclines one to an atypical experience of time. It does not suggest directed movement, but rather different kinds of change – "moving beyond motion".

It is worth noting that the cognitive theory of metaphor, represented in musicological literature mainly by Lawrence Zbikowski, Candace Brower or Janna Saslaw, has been criticised by Michael Spitzer, who points to the considerable, sometimes arbitrary leap of cognitive categories which takes place between the simple schema originating from the body's orientation in space (the so-called image schemata) that lie at the root of conceptual metaphors, and the sophisticated methods of musical analysis. Spitzer draws attention to the fact that when we talk and think about music, we make use of a whole number of concepts with a medium degree of generality, the so-called basic-level categories, which better fulfil their cognitive aims. Among them are such basic concepts as harmony, rhythm, counterpoint or timbre (Spitzer 2004, 10). It seems that Ligeti, as a thorough and mindful analyst, was searching not only for new metaphors, but also for new analytic categories. This can be seen, for example, in his plan of a monograph about Webern, where we find terms such as "temporal form", "chromatic organization", "compositional distribution of tone colours" or "horizontal and vertical density", as well as "relation of structure and experienced time" (Pustijanac 2018, 166), while his authorial analytical concepts include such terms as "micropolyphony", "intervallic seed crystals" or "meccanicotype music". Their success in being adopted as part of research terminology is an indication of their communicative power (Wilson 2004, 13).

⁴⁶ The mechanism of conceptual blending in relation to music was described in detail by Lawrence Zbikowski (Zbikowski 2002, 77–94).

LIGETI'S UNDERSTATEMENT: CONCLUSION

"I love allusion, ambiguity, polysemy, false bottom, another level. Many representational associations linked to my music that I talk about, think about, or experience when I imagine my music are also polysemous" (Häusler 1971, 138).⁴⁷ This was the composer's comment in an interview with Joseph Häusler. In his compact, witty *Bagatellen*, he adds that above all he values English "understatement" (Ligeti 2007g, 71). While his words are quoted very often, drawing full conclusions from them still remains a serious challenge. The above reflections show that each of Ligeti's texts referred to above contains many suggestions and puzzles which, like his music, require careful and multidimensional interpretation. Thus, even though so much has already been said, we must keep retelling Ligeti's story anew, and keep making new "moves on the chessboard".

The editor of Ligeti's writings draws attention to the fact that the composer's texts clearly evolve. From texts supporting the position of the avant-garde, already written with a degree of critical distance, he moves on to laudations and reminiscences. At one point he declares directly that writing is not necessary and that even the best article will not save a weak composition (Lichtenfeld 2007, 36).⁴⁸

However, all of the issues raised here show that for Ligeti, writing was simply essential. It served as a toolbox of vocabulary and representations which defined his compositions in a unique way. They became a means of defining his self-identity, of working out his own intellectual stance and of constructing an individual vision of the history of music which focuses on those aspects most precious to him. Writing was probably also a way of working through his emotion, of cleansing, of nurturing memories and doing justice to past events.

Many themes remain which deserve to be explored in greater depth. Among them is the thread of soundscape and its influence on Ligeti's creative imagination, a detailed description of historical appropriation and the analytical categories developed by the composer through familiarity with the music of other artists, as well as tracing the role which references to childhood and youth played at various stages of Ligeti's career.

When trying to get to know Ligeti's various identities, his identity as composer—writer seems absolutely essential in this. And if we wish to discover the "thought structures communicated by means of acoustic signals", let us take care to do so in their full abundance.

Translated by Zofia Weaver

⁴⁷ "Ich liebe Anspielungen, Doppeldeutigkeiten, Mehrdeutigkeiten, Doppelbödigkeiten, Hintergründigkeiten. Mehrdeutig sind auch die verschiedenen bildhaften Assoziationen zu meiner Musik, die ich sage und die ich denke oder spüre, während ich mir Musik vorstelle".

⁴⁸ It should be stressed that Witold Lutosławski, the most fertile Polish writer-composer from the second half of the twentieth century, made similar statements.

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