

Music in the Expanded Field – On Recent Approaches to Interdisciplinary Composition

Marko Ciciliani

1. Introduction

In 1978 the art critic Rosalind E. Krauss wrote in her article “Sculpture in the Expanded Field”: “[R]ather surprising things have come to be called sculpture: narrow corridors with TV monitors at the ends; large photographs documenting country hikes; mirrors placed at strange angles in ordinary rooms; temporary lines cut into the floor of the desert.”¹

Further on in the same text she writes: “[P]ractice is not defined in relation to a given medium – sculpture – but rather in relation to the logical operations on a set of cultural terms, for which any medium – photography, books, linen on walls, mirrors, or sculpture itself – might be used.”²

I am starting this text with these quotes because, with the title “Music in the Expanded Field”, I am making reference to Krauss’ seminal article. What Krauss describes is a situation in which 1) a large number of practices have come to be summarized under the category of sculpture that bear hardly any resemblance to the traditional understanding of sculpture, and 2) that these practices are not associated with any particular media but that their relationship to a particular cultural situation allows a plurality of materials, that has also been described as “eclectic”.

I am referring to this text because I argue that today – although almost forty years later – we have a similar situation in the field of music. Nowadays, many composers are working beyond the traditional boundaries of music, expanding into other media and practices. Jennifer Walshe works with performative elements, Yannis Kyriakides incorporates text videos in his music, Jagoda Szmytka organizes happenings over extended durations,

François Sarhan presents live installations. This list of examples could be continued almost indefinitely. What distinguishes these practices from other interdisciplinary projects is that these artists are realizing the visual or performative elements of their projects, themselves; or – if they collaborate with other artists – they have usually already developed a very concrete idea of the work as a whole independently of other artists involved. Jennifer Walshe says of her work: “I realize the video parts in my work myself. Primarily this is because I want them to be an integral part of the composition – I wouldn’t outsource the cello part in a string quartet to someone else (unless that was the concept of the piece!) so why would I outsource the video part?”³

It seems that these composers are expanding into different practices without abandoning the idea that they are actually composing music. Here is another quote by Jennifer Walshe that supports this: “I want to call this music, rather than interdisciplinary, and for us to discuss it as music.”⁴

The artists I am referring to are thus not attempting to turn themselves deliberately into artists of another additional discipline; rather, they are working from the understanding that sound alone is no longer sufficient to express their musical ideas.

It may seem paradoxical to argue that it may not be possible to express a musical idea through sound alone. This entails that, at least to a certain extent, musical elements exist independently of sound. However, as an idea, this was already articulated by Robert Ashley as early as 1961: “It seems to me that the most radical redefinition of music that I could think of would be one that defines ‘music’ without reference to sound.”⁵

In my opinion, it would not be fruitful to attempt a new ontological definition of music on these grounds. In the given context, however, I would like to focus on music as a practice that allows the inclusion of non-sonic elements, rather than music as an object that has to be defined, in order to describe something that I consider a relatively young development and which I will take the liberty of calling “Music in the Expanded Field”.

2. Reinventing the Instrument

“[...] the shift away from the traditional territory of music often begins with rethinking the role and usage of musical instruments.”⁶

I would like to examine more closely the idea of the instrument and how this might have changed in the light of compositional practices in the expanded field. In 1986 Helmut Lachenmann published the text “Über das Komponieren”, in which one sub-chapter is titled “To compose means: to build an instrument”,⁷ Lachenmann writes that the inner structure of a sound contains aspects which can be translated to longer musical passages, which are a horizontal projection of characteristics of this particular sound. He refers to the individual sound as a “structure-sound” (*Strukturklang*), while its horizontal projection is termed “sound-structure” (*Klangstruktur*).

He conceives of both as a unity. When Lachenmann thus compares the process of composition with that of building an instrument, he is describing a set of contingencies that can be explored by “playing”⁸ that very instrument. A set of timbres can therefore reveal a multitude of musical passages. Conversely, any completed composition can also be thought of as a articulations of the timbres of an instrument.

In an article published in 2013, Stefan Prins revisited Lachenmann’s analogy. While Lachenmann used the traditional instruments of the orchestra as building blocks for his metaphorical instrument, Prins posed the question of how far the building blocks of the instrument might have changed for the artists “composing today”,⁹ and what the consequences of such a change might be. He concludes: “Today, this metaphorical instrument no longer merely consists of an orchestra, a piano, saxophone or tape recorder, but includes laptops, game-controllers, motion sensors, webcams, video-projectors, midi-keyboards, internet protocols, search algorithms ... This novel meta-instrument obeys a different kind of logic; it creates different fields of tension; it has different possibilities and different implications; it creates different material and asks new questions. It is urgently in need of other modes of presentation and requests other approaches by composers.”¹⁰

The description of the novel meta-instrument resonates well with many of the practices of composers working in the expanded field. It is important to note that most of the new building blocks that Prins mentions are not directly related to music or art. The choice therefore reflects the permeability of categories that manifest themselves in the practices in the expanded field. The interesting question is, however, why the change from the orchestrally-oriented to the media-oriented instrument has taken place.

A possible explanation is the so-called post-medium condition. Most computer softwares use elements from traditional media as a graphic user interface: the design of word editing programs is derived from typewriters, digital audio workstations from tape machines, video editors from analog film editors, etc. Underneath this representational layer, however, all medium-specific elements which the interfaces still suggest exist have dissolved. From a technical point of view, all information looks the same and is interchangeable at the data level. With a few simple tricks I can import a sound file into a photo editing program and look at it as a visual representation of the same data, or – vice versa – I can listen to the noise my favorite cat photos produce when I import them into a sound editor. Both conversions would have been impossible with the “same” media in their analog format. In his book *The Language of New Media*, the media theorist Lev Manovich refers to the layer of the user interface as the “cultural layer” and the technical layer as the “computer layer.” He argues that if media are nowadays produced predominantly on the computer, “the logic of a computer can be expected to significantly influence the traditional logic of media; that is, we may expect that the computer layer will affect the cultural layer”.¹¹ The counterargu-

ment could be made that for most users, the factual interchangeability of data remains hidden and is therefore not part of their experience. However, although not visible as bytes and bits, almost every website, every blog, and each look at social media nowadays displays this interchangeability when images, sound files, video files, flash animations and text naturally reside next to each other on the same page.

The media-oriented instrument that Prins described may therefore result from the fact that we have internalized the media convergence which results from the interchangeability of data. Or, in Manovich's terms: the "computer layer" has inscribed itself deeply into the "cultural layer". The boundaries between disciplines seem more fluid. From this point of view, the integration of non-musical tools into a composition, or the expansion from one medium to another, become a rather natural step to take.

An additional reason for the changed instrument may also lie in a different perception of the historical and socio-cultural situation that composers of a younger generation have been brought up with. This can clearly be seen in an altered perception of pop culture, when compared to the generation of composers who grew up in the postwar discourse. For many younger composers, the notion that pop culture is merely the pretty face of a culture industry which incapacitates the people and subordinates them to the logic of a capitalist system¹² has lost credibility. In other words, the dominance of the Frankfurt School's doctrine has faded. The younger generation can now more easily embrace elements of pop culture, which does not mean that they cannot observe them critically. But pop culture no longer feels like something that has only been imposed on them by a capitalist system; often it has become part of their own cultural identity. Since pop music has practically always been audiovisual,¹³ it is another example of the permeability of media. Furthermore, computer games, extensive exposure to movies and most of all the Internet, with portals such as *YouTube* and *Vimeo*, also add to the ubiquity of the audiovisual.

3. Skills

Composers working in the expanded field are typically confronted with a number of tasks that greatly differ from the skills composers had to acquire according to a more classical education. The traditional role of a composer would suggest that throughout one's career one develops an increasingly profound understanding of music as a sonic art with a particular tradition. Primarily, this would take place by developing a thorough understanding and so-called tacit knowledge through one's artistic practice. Often this goes hand in hand with the acquisition of better analytical skills, which are then applied to one's own works as well as those of others. Through the study and analysis of older works, a better understanding of music historical tradition and its repertoire would also be acquired, and the context to contem-

porary practices would be better understood. By studying scores of colleagues, reading relevant magazines and attending festivals, one would acquire a growing general awareness of one's field and how other contemporary composers are working.

This is, of course, a crude simplification and generalization, but according to these patterns, which probably sound familiar to anyone who has gone through an academic education in composition in the Western world, a detailed and multi-faceted expertise in a very confined and largely homogeneous field would be developed.

When working in the expanded field, however, I see that many composers turn to different points of orientation, often several at the same time. This goes together with having to face different demands, many of which did not formerly belong to the skill set of a composer taught in academia. In 2016 I conducted interviews with a number of colleagues working in the expanded field and asked them what extra skills they had to learn in order to realize their art. Here is an incomplete list of the points that were mentioned: the use of video editing softwares, VJ tools, film and photo cameras, staging, lighting, programming languages, communication protocols, working with microprocessors, physical computing, soldering, tailoring, book layout, and more. This list sounds similar to Prins' description of the new "instrument" mentioned above. Usually composers learn these additional skills autodidactically, remote from academic institutions. This also distances them from the typical discourse, which I will address further below.

In addition to these skills, composers in the expanded field have to learn about the background of the disciplines into which they are expanding: their history, their traditions, their current discourses.

Confronting different discourses and traditions is usually complex. When expanding into other fields, the homogeneity of one's enterprise is not only disrupted at the level of material, where one almost inevitably has to work with disparate elements. Homogeneity is also questioned in its very logic, its basic set of values. Certain elements which might be new in one discipline may already have been dealt with decades ago in another discipline, and therefore be unsuitable in their expressive potential. At times this can be quite disillusioning. For example, one might be excited at finding a clever way to turn pixel information into sound synthesis, only to discover that the same idea was already realized by experimental film makers in the 1940s, who were drawing their sound onto film manually. However, the confrontation with different discourses, their ideas and values, can also have a stimulating and inspiring effect.

It is important to note that when composers expand into other disciplines, this usually also changes their understanding of music – the field they departed from. Therefore, this expansive movement is not only one-directional, but also changes the general understanding of music among those practitioners.

4. Accents in Discourse

In the following paragraphs I would like to discuss the fact that composers working in the expanded field cannot rely on a consistent and homogeneous discourse. Rather, they are working across individualized patchworks of heterogeneous discursive references which form various “accents” of what was once a more commonly shared discourse.

The traditional education in composition described in the previous sub-chapter traces out a homogeneous discursive field. I would like to call it the cradle of the discourse of *New Music*. Within such a field, there might still be disagreement about how individuals interpret or value the work of a particular predecessor, for example, but by and large there would be a common understanding of the tradition of this field with a number of seminal figures, works and events. Discourses form safe zones in which particular values predominate and mechanisms of exclusion protect the integrity of the system from undesired contradictions.¹⁴ For example, the interpretation of Adorno’s writing has functioned as a mechanism of exclusion, as for several decades it justified the oblivion of pop culture within the discourse of *New Music*.

I should point out that more recently, also for many composers who are not working in the expanded field, the discourse of *New Music* has lost credibility as a point of reference, as was shown in Michael Rebhahn’s article “I hereby resign from New Music”.¹⁵ This is an interesting phenomenon on which I cannot elaborate further in this context, though.

In my opinion, however, the situation with composers working in the expanded field is still a special case. The fact that these composers are confronted with a diversity of other disciplines and discourses means that they do not build their work within the confined and agreed discursive field of *New Music*. In other words, their work cannot be understood solely with reference to a single discourse. At the same time, there is no discourse of the expanded musical field that has taken its place. Rather, each individual composer who has expanded their practices refers to an individual set of additional discourses. This mix of discursive references is therefore mirroring the diversity of the practices of each individual composer. If, for example, Jagoda Szmytka’s points of reference were compared to those of Yannis Kyriakides, there still might be a significant amount of overlapping areas, but probably also several entirely disconnected elements. What was once a homogeneous field is now an individualized patchwork of discursive islands. The musicologist Joanna Demers refers to this situation as “discursive accents”: “[J]ust as spoken accents often convey knowledge about the provenance of a speaker, these *discursive accents* exist as tell-tale markers that [...] indicate the genre, style, or medium into which a work falls.”¹⁶

When I am familiar with the discourse that a particular work originates from, I should not have any problems understanding the work’s cultural connotations and references. However, if every single work that is created in

the expanded field combines a mix of different discursive influences or references, it becomes an increasingly difficult task to decipher them. When the decoding fails, the accents thus stop functioning as signifiers in the sense that they point us to a particular context which illuminates a work. Instead of offering cues, they become part of the aesthetic experience; mere pointers to ‘otherness’.

“Discursive accents, then, exist in a state of ambivalence. They are hinges, and circumstances will dictate whether they veer into the territory of concepts or surface phenomena.”¹⁷

This “linguistic confusion” might be seen as negative. After all, when accents become too strong, communication fails and a Babylonian confusion results. However, the multitude of accents can also give a unique vitality and liveliness to the moment in which we live and practice our art. It can be understood as a reminder that, as George Brecht already said in 1964, “[...] the bounds of art are much wider than they have conventionally seemed, or [...] art and certain long-established bounds are no longer very useful.”¹⁸

5. The Rise and Fall of Parameters

After World War II, sound phenomena were decomposed in their interdependent parametric features: pitch, amplitude, duration, timbre etc. The application of such an abstraction facilitated a thorough questioning of established musical habits and connotations that dominated music until the first half of the 20th century. Parametrization was an appropriate approach at a time when composers felt compelled to fundamentally question all musical traditions.¹⁹

More recently, I have observed that new sets of criteria have gained importance which approach sound phenomena in their entirety and full complexity, and that cannot be grasped with the parametric decomposition of sound. The importance of parameters is therefore fading, while new objectives gain in relevance. This can clearly be seen with composers working in the expanded field, but is in no way restricted to them.

While it would be impossible to examine all of those criteria, I would like to discuss three that also have special relevance in the expanded field. These are:

- intertextuality
- physicality
- modes of listening/economy of attention.

5.1 Intertextuality

Indexicality and intertextuality can be seen as core methods of postmodernism. The difference between the terms is that indexicality is an element that merely points to something outside of the work itself, something that can be either musical or non-musical. Intertextuality additionally refers to the con-

tent of the destination being invoked. When, for example, Frédéric Chopin opens his *Études* op. 10 with arpeggios in C major, he is creating an indexical reference to the opening of J. S. Bach's *Well-Tempered Clavier*, Book I. He points to this particular work he admired, but does not attempt to evoke the particular time, culture, or context in which Bach composed this work; thus it is not intertextual. However, when Public Enemy open their song *Bring the Noise* with a sample of a phrase by Malcolm X, this is an intertextual reference, as it points to the entire political movement that Malcolm X represented, in addition to its sonic and semantic qualities.

John Fiske further differentiates between horizontal and vertical intertextuality, with the former denoting references within the same medium and the latter across other media.²⁰

The two aforementioned examples already give an impression of the diversity of references that are used in artworks in order to create relationships on a meta-level. All sorts of conceptualism in music rest on the invocation of additional meanings that certain materials carry. Indexicalities and intertextualities are also the dominant – although not exclusive! – carrier of content.

Nowadays, the focus on music's potential to function as a signifier, to evoke additional meaning, and to convey a particular content is an important aspect for many composers. "Meaning is the new material", Michael Beil declares.²¹ This is most obvious in the *New Conceptualism* or the *Diesseitigkeit* movement, both based in Germany. However, intertextualities have recently also gained relevance outside of these particular fields, for example in works by Steven Takasugi, Brigitta Muntendorf or Stefan Prins.

5.2 Physicality

The physiognomy of the body has always determined music in the way instruments have been built and played. While traditional notions of virtuosity since the mid-18th century have focused on the transcendence of the technical challenges of a score, in order "to reveal the form, flow, and essence of the piece",²² some composers have more recently placed the body, with its particularities and limitations, center stage. A growing awareness of corporeal logic has thus led to compositional approaches in which concepts such as physical affordance and constraint, and embodiment have triggered new notions not only of performance, but also of listening.

What Jennifer Walshe calls "The New Discipline"²³ draws strongly on this focus on physicality. By declaring it a new discipline, Walshe points to the fact that questions of physicality have become a concern for many composers. A different approach that assigns importance to the human body can be found in the work of Marco Donnarumma. Here, the human body is entangled in a technological configuration where physical strength, effort and failure are displayed.

A very particular sort of physicality is also invoked by certain styles of electronic music that work with very high amplitudes, and thereby create a haptic experience of sound in which the vibrations can be felt on the skin or through the bones. This can be found in drone or power noise music, but also in almost any form of pop music that is expected to be experienced through dance. Probably the most intense and excessive form can be found in the rave parties of the 90s.

I observed that such overwhelming perceptions of sound, paired with its haptic sensation, create such an intense experience of the “here” and “now” that anything which has passed is forgotten, or rather overwritten by the present exposure to sound. I am not aware of any scientific experiments that have investigated the correlation between musical memory and loudness but, in the context of acoustic ecology, Augoyard and Torgue also conclude that “when the intensity of a background noise exceeds a certain threshold, mental activity can become paralyzed”.²⁴ This indicates that intense experiences of musical physicality have an impact on musical memory, and might therefore call for a different treatment of form and structure. From this perspective, rave parties can also be seen as a coherent new performance practice and a new treatment of musical time. As the music critic Simon Reynolds puts it: “Where rock relates an experience [...], rave constructs an experience. Bypassing interpretation, the listener is hurled into a vortex of heightened sensations, abstract emotions and artificial energies”.²⁵ This leads me to the next point: modes of listening and economy of attention.

5.3 Modes of Listening and Economy of Attention

For a long time, structural listening was unquestioned as the only appropriate mode of musical perception. It “was intended to describe a process wherein the listener follows and comprehends the unfolding realizations, with all of its detailed inner relationships, of a generating musical conception”.²⁶ In her book *Listening through the Noise*, Joanna Demers introduces the term “Aesthetic Listening” as a mode of perception that she describes as primarily aesthetic rather than musical. It “acknowledges that nonmusical sounds of the outside world can have aesthetic interest and that we can listen to them for more than simply their informational value”.²⁷ What Demers describes could be further subdivided into modes of listening as *distracted*, *casual*, *environmental*, *fragmented* or *intermittent* listening. These modes of listening mirror different ways in which attention can be directed towards sound, and how habits of music consumption have evolved through, among other factors, developments in technology. Listening to music in clubs, for example, provides a situation in which people move through many different ways of listening. For a moment they might listen carefully to musical passages they find interesting – musical listening – then they might engage with the music through dancing – physical listening – and after some more time they might start a

conversation with a friend – distracted listening. On the way home they might put on an MP3-player and listen to various tracks for a few seconds each before skipping to the next track – fragmented listening. Back home they put on some relaxing music on the stereo to wind down – casual listening. Some of these modes of listening might be truly new, while others have always existed in milder variations. The important point, however, is that while most of these modes would for a long time have been considered “regressive listening”,²⁸ and therefore deemed unacceptable in artistic contexts, they have more recently emancipated themselves as aesthetically valid modes of perception in many kinds of contemporary music.

This can be found in live installations, for example, where performers are involved in similar ways to concerts, although the setup usually allows the audience to come and go as they please. Also, one often finds various points of attraction simultaneously being offered for attention, for example in live installations by Lars Petter Hagen or François Sarhan that were presented at the most recent International Summer Course for New Music in Darmstadt. But similarly, concert music often confronts the listeners with musical textures where structural listening does not seem to be the only plausible approach, as in many of Peter Ablinger’s works.

Regarding different approaches to structure and memory, apart from the aforementioned presumed amnesia induced by high volumes, the late work of Morton Feldman is also a noteworthy early example. Already several decades ago, he felt that “the memory forms in music were primitive”,²⁹ and therefore approached musical form by treating forgetfulness as equally no less important than remembering.

Many of the modes of listening I have listed above indirectly describe how our attention focuses on different stimuli. While taking structural listening for granted, the question of directing one’s attention was hardly ever an issue. Rather, the listener’s attention was treated like a blank canvas onto which the music heard would be imprinted with the neutrality and spatial extension of a musical score. Since the rise of TV culture began, the exposure to different amounts and formats of information has been an important topic in media theory.³⁰ Today’s integration of smartphones and various forms of artificial intelligence into everyday life has trained us to treat and filter information in ways that are substantially different from half a century ago. It therefore seems plausible that reflecting on economies of attention and different modes of listening can be an important aspect of contemporary composition.

5.4 The Three Criteria in the Expanded Field

I specifically selected these three criteria as examples, since they also relate in various ways to the practices of composers working in the expanded field. *Intertextuality*: although not necessarily part of practices in the expanded

field, the use of various media multiplies the possibilities of creating extrinsic references of different kinds. When looking at various examples of works in the expanded field, it is striking that intertextual indices are often used. *Physicality*: explicitly dealing with the human body as described above is already an expanded practice in itself, as it often deals with aspects of performance art and post-dramatic theater. *Modes of Listening*: the differentiation between various modes of listening and the implicit behaviors of attention inevitably become an issue when a number of different media are used, as is the case when working in the expanded field.

6. Conclusion

In this paper I have described several transdisciplinary tendencies I observe among a significant number of contemporary composers. What I find striking is that contrary to more traditional approaches to intermedia, these composers typically include other media as an expansion of their musical means. This indicates that the expansion into the domains of other media takes place because the artists find sound alone insufficient to express their musical ideas. I have taken the liberty of labeling these practices with the phrase “music in the expanded field”.

After analyzing the conditions that contributed to the rise of this relatively recent development, I subsequently addressed a number of interesting implications that the work in the expanded field entails. I focused on the expansion of the skill sets that these composers usually need to master, which are often not taught in academia. Although most of the composers I discuss have an academic background, they have to acquire a number of abilities apart from this educational frame, which also distances them from the typical academic discourse. After that I addressed the fragmentation of discursive references which often takes place among composers working in the expanded field. In order to describe this phenomenon, I borrowed Demers’ term “discursive accent”. Finally, I focused on Intertextuality, Physicality and Modes of Listening as examples of criteria that have recently gained importance for composers in general, but particularly for those working in the expanded field. What characterizes these criteria is that they treat sonic phenomena as complex entities with various layers and connotations, which contrasts with the more abstract parametric approach to sound that was dominant after World War II.

In this paper, then, I have tried to cast some light on the phenomenon of the expanded field from very disparate angles, ranging from aspects concerning the nitty-gritty details of compositional material to larger socio-cultural phenomena such as the formation and dissolution of discourses. My intention was to show that the approach which characterizes the practices in the expanded field entails changes that propagate on many different levels. As a form of “eventful aesthetics”,³¹ practices in the expanded field are

usually multilayered, not only because of their interdisciplinary nature but also because they are anchored in diverse discourses. They often break homogeneities, “speak” in different accents, and thus entail a shift in reception and perception. In my opinion, they are relevant because they form a particular response – though certainly not the only possible one – to the situation we live in today.

Acknowledgement

Many of the findings described in this paper are based on email interviews I conducted in 2016 with a number of colleagues, whose practices I see as part of the expanded field. I would like to express my gratitude to Michael Beil, Cathy van Eck, Johannes Kreidler, Yannis Kyriakides, Stefan Prins and Jennifer Walshe for giving me valuable answers to my questions and additional insights. Also, I would like to thank Alyssa Aska and Matthew Sholomowitz for giving me feedback on a draft version of this paper.

1 Rosalind E. Krauss, “Sculpture in the Expanded Field”, in *The Originality of the Avant-Garde and Other Modernist Myths*, Massachusetts 1986, p. 277.

2 Ibid., p. 288.

3 Jennifer Walshe, private email correspondence on August 6, 2016.

4 Ibid.

5 Quoted in Michael Nyman, *Experimental Music*, Cambridge, UK 1974/1999, 2nd Ed., p. 11.

6 Seth Kim-Cohen, *In the Blink of an Ear – toward a non-cochlear sonic art*, New York 2009, p. 249.

7 Helmut Lachenmann, *Musik als existentielle Erfahrung*, Wiesbaden, 1996, p. 77, transl. by the author.

8 Ibid., p. 79.

9 Stefan Prins, “Componeren Vandaag: Luft von diesem Planeten”, Seasonal Brochure of the Klangforum Wien 2013/14, Vienna, 2013 (pp.18 f), p. 18.

10 Ibid., p. 19.

11 Lev Manovich, *The Language of New Media*, Cambridge, 2001, p. 46.

12 See Theodor W. Adorno, *Philosophie der neuen Musik*, Frankfurt am Main, 1948/1995, p. 23 f.

13 See Diedrich Diederichsen, “Sound and Image Worlds in Pop Music”, in Dieter Daniels / Sandra Naumann (eds.), *Audiovisuology 2 Essays*, Cologne, 2011, p. 121.

14 See Michel Foucault, *Die Ordnung des Diskurses*, Frankfurt am Main, 1991, p. 15.

15 Michael Rebhahn, “I hereby resign from New Music”, in *Darmstädter Beiträge zur Neuen Musik*, Vol. 22, Mainz, 2014.

16 Joanna Demers, “Discursive Accents in Some Recent Digital Media Works”, in Carol Vernallis et al (eds.), *The Oxford Handbook of Sound and Image in Digital Media*, New York, 2013, p. 141.

17 Ibid., p. 149.

18 Quoted in Nyman, *Experimental Music*, op. cit., p. 77.

19 See Walter Gieseler, *Komposition im 20. Jahrhundert*, Celle, 1975, p. 33 f.

20 See John Fiske, *Television Culture*, London, 1987/2010.

21 Michael Beil, private email correspondence on August 2, 2016.

22 Jennie Gottschalk, *Experimental Music since 1970*, London, 2016, p. 77.

23 Jennifer Walshe, <http://www.borealisfestival.no/2016/the-new-discipline-4/> (accessed July 13, 2017).

24 Jean-Francois Augoyard/Henry Torgue, *Sonic Experience: A Guide to Everyday Sounds*, Montreal, 2005, p. 41.

25 Simon Reynolds, *Energy Flash: A Journey Through Rave Music and Dance Culture*, Berkeley, 1998, p. xxv.

- 26 Rose Rosengard Subotnick, *Deconstructive Variations, Music and Reason in Western Society*, Minneapolis, 1995, p. 149.
- 27 Joanna Demers, *Listening through the Noise – the Aesthetics of Experimental Electronic Music*, Oxford, 2010, p. 16.
- 28 Theodor W. Adorno, "On the Fetish Character in Music and the Regression of Listening", in *Essays on Music*, Berkeley 2002, quoted in Demers (2010), op. cit.
- 29 Morton Feldman, *Essays*, Kerpen, 1985, p. 206.
- 30 See Fiske, *Television Culture*, op. cit.
- 31 Matthew Sholomowitz, private Skype-conversation on July 21, 2017.