

# HYPERMUSIC: NEW MUSICAL PRACTICES AT THE CROSSROADS OF MUSIC, ART AND THOUGHT

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**ABSTRACT.** This chapter presents the concept of *hypermusic*, which is intended as a concrete tool for the generation of new musical practices and for the exploration of fertile encounters between music, art, and philosophy. *Hypermusic* happens at the intersection of two realities: the actually sounding configuration of sonic events (what one usually labels as “music”), and the virtual aesthetico-epistemic constellation of texts, images, ideas, cultural references, and further non-musical components that are integral part of musical works, even if not explicitly conveyed in their performances. *Hypermusic* might refer to compositions, performances, installations, or other modes of musical expression, including digital objects. Moving beyond strict disciplinary divisions and media compartmentations, the concept of *hypermusic* instigates new musical practices that respond to the conditions and affordances of contemporary society, opening up the artistic and conceptual horizon towards expanded fields of activity and expression.

**KEYWORDS:** Hypermusic, Assemblage Theory, Hyperobjects, Composition, Performance

## INTRODUCTION

This essay presents the concept of hypermusic, which is intended as a concrete operative tool for the generation of new musical practices and for the exploration of fertile encounters between music, art and philosophy. While music has always related to other fields of artistic practice and to other modes of thought, the possibilities to foster musical practices via transdisciplinary and transversal connectors across composition, performance, visual arts, and contemporary philosophy have never been so rich as in our time of accelerated transformations in culture, politics, and technology. If one thinks beyond strict disciplinary divisions, new definitions of music and future musical practices that better respond to the conditions and affordances of contemporary society become possible, opening up the artistic and conceptual horizons towards expanded fields of activity and expression.

Hypermusical objects might refer to compositions, performances, installations, or any other mode of musical expression, including digital and virtual entities. As a starting definition, one could say that *hypermusic* is music that factually (and not only implicitly) includes component parts that go beyond music itself; music with multiple dimensions, many of which remain inaccessible to the listener. Hypermusic happens at the intersection of two realities: the actually sounding configuration of sonic events (what one usually labels as “music”), and the virtual aesthetico-epistemic constellation of texts, images, ideas, cultural references, and further non-musical components that are integral part of (hyper)musical works, even if not explicitly conveyed in their performances. Critically, these virtual components are real, they are concrete parts of the whole, and they can be found and traced in the score, script, or extended materials relating to the piece. In this sense, hypermusic can have an intentional non-disclosure of all its constitutive components. It might combine live music, pre-recorded sounds, live-electronics, noises, soundscapes, speeches, texts, digital images, film or video clips. It might involve motion and displacements of both the performers and the audience, and it might be better suited for performance on wide flat spaces or *ad hoc* constructions, using space in order to reconfigure it, to transform it into a “music-tectural” (musical + architectural) four-dimensional reality. Moreover, the concept of *hypermusic* can be used both to refer to the design of totally new musical entities (“compositions”) and to creative explorations of past musical objects (“performances”), critically contributing to new modes of expression and communication.

More than providing final research results or any form of conclusive knowledge, this essay is intended as a gate opener for future research and for the generation of future musical objects. In this sense, it is a proposal for a type of discourse that focusses more on the future than on the past, reversing the conventional temporal directionality of most music research. The essay is organized in five sections, presenting the genesis of the concept of hypermusic, some of its musical precursors, its potential for new performative and compositional practices, and articulating the relation of music to other areas of contemporary thought and knowledge production. Section 1 briefly reviews the music ontological move from the classical paradigm (with its central notion of the work-concept) towards assemblage theory in music (based upon the multilayered notion of musical-work-as-assemblage). Section 2 presents the genesis of the concept, which results from the merging of two originally separated “theories,” namely my own assemblage theory for music [de Assis, 2018] and Timothy Morton’s concept of *hyperobjects* [2013]. Section 3 refers to selected examples of musical “works” from the past that can be seen as precursors of hypermusic, including compositions by Bernd Alois Zimmermann, Luigi Nono, Helmut Lachenmann, and John Cage. Section 4 presents methodological tools for the generation of music performances as hypermusic, while Section 5 suggests some concrete possibilities for future compositional work based upon the concept. Finally, the Conclusion offers an opening towards other fields of practice and knowledge production that can contribute to further extensions of musical practices beyond music itself.

## FROM THE WORK-CONCEPT TO ASSEMBLAGE THEORY IN MUSIC

The majority of currently observable musical practices associated with notated Western art music, even if making use of highly advanced technologies and marketing strategies, are fundamentally rooted in compositional, performative, and interpretative traditions that find their origins in the late 19th century, traditions that relate to what art philosopher David Davies [2011] labels “the classical paradigm,” whose central notion is the “work-concept” as thoroughly discussed by Lydia Goehr in 1992 [2007]. Goehr’s analysis of the regulative force of the work concept, its historically situated emergence, and its powerful impact on the legitimation of certain

musical practices, was a major attempt to break down dominant modes of thinking, particularly in the face of several innovative musical practices that were demolishing concepts and conventions, in a period (the late 1980s) when musicians and aestheticians seemed to have no hold on their concepts. Today, entering the third decade of the twenty-first century, musical practices are demolishing the ontological establishment even more than in the late 1980s, particularly due to the digitization of culture and society, with an exponential growth of available sources, editions, recordings, secondary literature, and online platforms. Such a complex combination of superposed materials reflects the overwhelming amount of information in our “network society” [van Dijk, 2005], and the complexity of relations and connectors of the “information age” [Castells 2000, 2009, 2010, 2010a, Floridi 2014, 2015], in which hyper-text, hyper-archives, hyper-information, hyper-technology, hyper-history, hyper-connectivity, and hyper-communication are revolutionizing the ways in which society is structured and organized. All these changes have an impact on the modes in which music is made, performed, communicated and disseminated. In this sense, I believe that composers, performers, and musicologists can greatly benefit from innovative creative strategies and new music-ontological perspectives that concretely challenge not only the work-concept, but “the classical paradigm” of music creation and reception as a whole.

An important step in this direction has been made between 2013 and 2018 in the framework of an artistic research project led by myself ([musicexperiment21.eu](http://musicexperiment21.eu)), which aimed (among other things) at replacing the term “work” (substantive) by “work” (verb), leading to an understanding of musical-works-as-assemblages [De Assis 2018]. Deeply rooted in the differential ontology of Gilles Deleuze<sup>1</sup>, this research project enabled a first definition of a new image of musical objects, considering them as made of innumerable constructive component parts (material and immaterial) that emerge in the real world at specific times and places, which are the result of intensive processes of generation, and which continue to undergo redefinitions, changes, and transformations throughout time. Anyone with experience in preparing editions of musical works (for print), or in research on sketches (in archives) knows that any fixed “definition” of a work is highly problematic, open to criticism, and the object of change over time. Not only do traditions of musical practice and reception change, but the

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1] For a detailed account on Deleuze’s concepts and their impact on my proposed ontological view, see [de Assis 2018, 52-66].

very definition of a musical text is constantly shifting [Grier 1996, de Assis, 2009]. Musical works from the past have been different entities in different times. From this perspective, it becomes central to look at the intensive energetic processes that lead to the factual production of sketches, scores, editions, recordings, analyses, and theoretical reflections on a given “work.” Before gaining their “identity,” their “enduring character,” or their “aura,” musical works are constituted through energetic processes that generate complex “proto-objects” [Schwab 2015]: sketches, manuscripts, scores, editions, recordings, transcriptions, treatises, manuals, instruments, diagrams, analytical charts, theoretical essays, articles, books, CDs, DVDs, and digital modes of existence. All these numerous objects have been historically produced at some precise point in time, and they persist, remaining modally and temporally flexible. Any single item from the list presented above can be differently interpreted, presented, or re-arranged as part of a new performance, scholarly essay, music edition, lecture, installation, or any other thinkable format. What has traditionally been labelled as “musical works” appear thus as specific arrangements of partial elements and components of something bigger, that can be more aptly described in terms of musical *assemblages* [de Assis 2018] or as *hypermusic*, terms to which I now turn.

## FROM ASSEMBLAGE THEORY TO HYPERMUSIC

In the last decades, the concept of assemblage has emerged as central for addressing problems of stability, instability, determination, and, most importantly, transformations regarding social, political, economic, philosophical, and aesthetic phenomena. As with previous concepts from philosophy and the social sciences, such as “complexity,” “chaos,” “fractals,” “turbulence,” “emergence,” or “multiplicity,” it has been developed as a way to move beyond the notion of “structure,” which has dominated many discourses in the human and social sciences in the second half of the 20th century. “Structure” and structuralism clearly obtained important results and were able to explain many problems and phenomena, but they seemed to fail in the face of complex systems, especially when rapid changes, mutations, and transformations led to unforeseen and unpredictable events. Instead of being fixed and resistant to change, complex systems (like musical works) operate in permanent processes of becoming and individuation,

which contribute to their resilience. Thus, the notion of assemblage, with its interplay between structure and contingency, organization and chance, “can be seen as a relay concept, linking the problematic of structure with that of change and far-from-equilibrium systems” [Venn 2006, p.107]. In music, especially under the dominant model of the “classical paradigm,” modes of making and thinking music preferentially insist on stable formations and well-defined sonic (and social) entities. The heterogeneity of available materials is acknowledged, but the goal is to recapture such heterogeneity in a homogeneous and unitarian whole (the work). Contingency is also accepted, but as “noise,” as undesired events that distract from the “essence” of musical artworks. In this sense, the notion of assemblage, with its focus on the fluidity of matter, materials, signs, and functions, appears to be extremely powerful in enhancing creative explorations of new modes of conceiving musical objects and practices. It places research within a framework that considers musical works as being made of complex arrangements of aesthetico-epistemic components, forces, intensities, and signs, which establish several superposed networks of historical, cultural, material, symbolic, and psychological dimensions. Under this light, musical works cease to be conceived as sets of instructions or as ontologically well-defined structures. They become reservoirs of forces and intensities, dynamic systems characterized by meta-stability and transductive powers, affording unpredictable future reconfigurations. Not only have they been the object of changes in the past, but they will also continue to undergo mutations and transformations in the future.

Moving beyond ontological queries that deal with questions of being and identity, and insisting on an approach to musical entities that privileges processes of continuous change and transformation, the “image-of-work as assemblage” [de Assis, 2018] enables investigations of musical works not so much from a conventional ontological perspective, but rather in terms of *ontogenesis* [Simondon, 2013], and of productive operations with historically inherited materials. Thus, the problem shifts from ontology to epistemology, and to the modes according to which musical works can be apprehended in the real world.

Musical works are perceived and known always through concrete performative operations that (re)construct them anew every single time one is facing them. Such operations might bring to the fore some sort of “structures,” but also, and more importantly, zones of indeterminacy, grey spots, cracks in the structure that no identity-based ontology is able to explain. Additionally, musical assemblages cannot be supposed to appear in

the world independently of their environment. On the contrary, they permanently emerge in the field of the visible and of the audible through new social, aesthetic, and cultural takes on them, which are also permanently changing and evolving from one state to the next. Thus, the proposed image of work addresses ever-changing constitutions and perspectives of such musical entities, as well as the corresponding subject positions from where they are perceived, received, or criticized. The object is changing, the environment where it is posited is changing, and the subject-receiver is changing. This requires new ways of conceiving the overall ecological network of objects and concepts around any possible formalization of a musical work, taking into account its various components and privileging the notion of permanent transformation.

This view of “musical-works-as-assemblages” can be further developed when linked to Timothy Morton’s eco-philosophical concept of *hyperobjects*. Morton presented the concept for the first time in his book *The Ecological Thought* [Morton, 2010], where it refers to things that are massively distributed in time and space relative to humans, that is: things whose life span is much longer than that of humans. One could claim that hyperobjects are special cases of assemblages, keeping in mind that “assemblages” (as defined above) do not refer to collections, superpositions, or arrangements of other things. Assemblages, like hyperobjects, include human and non-human component parts, and have emergent properties, making them irreducible both to their material constitutive parts and to their abstract modes of functioning. Additionally, one can only see parts of a hyperobject at any one moment. Like the emergent properties of an assemblage, hyperobjects are objects that “seem to contain more than themselves” [p.78], and they continuously reveal further objects pertaining to them: “when you approach an object, more and more objects emerge” [p.54].

According to Morton, hyperobjects have five common properties, which can be transposed to or appropriated for musical works: *viscosity*, *nonlocality*, *temporal undulation*, *phasing*, and *interobjectivity*. Hyperobjects are *viscous*, “which means that they ‘stick’ to beings that are involved with them” [p.67]. They are *nonlocal* in the sense that any “local manifestation” of a hyperobject is not directly the hyperobject. They reveal or manifest different temporalities (temporal undulation), they are extended “into” the future “from” the past, revealing that more than existing “on time,” they emit spacetime, accelerating or slowing down events around them. They can only be apprehended partially, requiring different phases to be perceived (phasing). Finally, they exhibit their effects interobjectively, “that is,

they can be detected in a space that consists of interrelationships between aesthetic properties of objects" (p.2).

These five properties enable a transposition of Morton's concept to music, especially under the light of the notion of the musical-work-as-assemblage. Morton himself centrally includes art and aesthetics in his writings, and he concretely makes reference to composers such as John Cage, Keith Rowe, and Francisco López. After discussing the long march of the "-isms" in the arts, which moved "from one form of Romanticism after another: Romanticism, Realism, Impressionism, Expressionism" [p.107], he concludes that we are now in a totally different situation, especially because "We know more than we can embody and we can't put the [romantic] genie back in the bottle" [p.163]. This is a crucial point: the hyper-text, hyper-archives, hyper-information, hyper-technology, hyper-communication, and hyper-history mentioned above—which are concrete manifestations of the Information Age we are living in—are symptomatic expressions of that infinite knowledge that we can no longer embody. A performer knows much more about any given piece than what can possibly be rendered in one performance; a composer develops many more materials than those that will enter the "final" composition; and a musicologist knows infinitely more on a given work than what ends up as a written essay. To make music, be it as performer or composer, is to deal with entities that are bigger than our capacity of timely-bound expression. Such entities require series of events, taking place at different times in different spaces, and using different media. Timothy Morton's concept and ideas open up a promising field for musical practice and reflection, for a profound investigation of musical entities as hyperobjects that has not been made yet. Beyond the few examples of musical pieces that Morton himself briefly discusses, one needs a much more fundamental study, crucially including different times, epochs, and styles. Moreover, such investigations can benefit from being made by investigators who are music practitioners themselves, focusing on state-of-the-art musical challenges, generating aesthetically convincing examples, and exposing the results of the investigations in-and-through the making of music.

The next three sections will briefly expose some examples of hyper-music *avant la lettre*, (Section 3), possible avenues for experimental performance practices (Section 4), and speculative openings toward future musical entities (Section 5).

## HYPERMUSIC ANTE LITTERAM: SOME PRECURSORS

If I would have to name one piece that encapsulates most (if not all) the characteristics of hypermusic *ante litteram*, I would refer to Bernd Alois Zimmermann's *requiem für einen jungen dichter* (1967/69), a work that sometimes is described as "extended composition" for obvious lack of a better word. It features an enormous variety of music (originally composed, quoted, arranged, recorded) and of non-musical material. Labelled by the composer as a "lingual", the *requiem* is constructed upon a highly elaborated "meta-text" that juxtaposes the Latin Mass for the Dead with literary, philosophical, religious and political texts. In addition to the texts spoken and sung, Zimmermann uses taped recordings in the style of a radio drama including the voices of the philosopher Ludwig Wittgenstein, Pope John XXIII, James Joyce, Alexander Dubček, Hitler, Chamberlain, Georgios Papandreou, Ezra Pound, Kurt Schwitters, Albert Camus and Sándor Weöres, as well as reports from newspapers. Quoted music includes fragments from Wagner's *Tristan und Isolde* (1859), Milhaud's *La création du monde* (1923), Messiaen's *L'ascension* (1933) and The Beatles' *Hey Jude* (1968). In the section "Dona nobis pacem," excerpts from Beethoven's Ninth Symphony are dramatically (and painfully for the listener) contrasted with texts by Joachim von Ribbentrop, Stalin, Goebbels, Churchill and Bayer. Rather than trying to describe the *requiem* as a cantata, an oratorio, or an audio play, I propose to label it as hypermusic, indicating the multiple dimensions of its constitutive parts and complexly articulated relations. As van Deurzen [2008] writes, "not everything in the *requiem* — or perhaps almost nothing — is comprehensible."(p.9). The superposition of different semantic and semiotic layers creates a sonic situation with two levels, one direct, the other indirect. In the direct level, there are some words and sentences that one understands, such as the profoundly disturbing text *der sechste sinn* ("Worauf warten?") by Konrad Bayer, which is elaborated in a multiple-channels section in the "Ricercar" (Requiem I, 29:03-33:13), or the second text by Bayer ("Wie jeder weiss..."), that concludes the work with a radically dramatic and hopeless view on the construction of "knowledge," especially in politics, but also in science and academia. The indirect level is presented and achieved through the complex montage of fragments of texts and music, "through which a network of intertwining links is formed between the texts used and the writers, politicians and historical context" [van Deuzen 2008, p.9]. To what an extent this network of relations and links should be communicated

to the audience remains a matter of debate, which could be creatively explored in future performances of the piece. From a music-architectural point of view, the *requiem* is equally challenging, requiring a huge space with the capacity to position the orchestra, the three choirs, the jazz combo ensemble, the soloists and speakers, as well as the loudspeakers, all around the audience. While this is not something “new” today (and it wasn’t new already at the time of the composition), this is an aspect that deserves further consideration and that might lead to even more spatially expanded performances.

Another piece with a monumental kaleidoscopic montage of texts, and with a major architectural component is Luigi Nono’s *Prometeo, tragedia dell’ascolto* (1981-84) for singers, speakers, chorus, solo strings, solo winds, glasses, orchestral groups, and live electronics. In this case, the premiere of the work was even done in a specially constructed wooden structure (designed by the architect Renzo Piano) that hosted the musicians, the sound technicians, and the audience. Whereas Zimmermann’s *requiem* ends with a devastating and hopeless view on the future, Nono’s *tragedia* concludes with suggestion of the emergence of “a new utopia out of the rubble of cultural history” [Jeschke, 2007, p.21]. In both cases, there is a profound reflection on historical events, philosophical and ideological positions, as well as composite aesthetic modes of expression, merging instrumental and electronically modified sounds, using the voice both for singing and speaking. Moreover, both pieces “create” new musical forms: Zimmermann makes a requiem that is a “lingual”, Nono an opera that is a “tragedy of listening,” thus, both refuse conventional genre and formal schemes, favoring the definition of unclassifiable aesthetic formats. Nono, in collaboration with philosopher Massimo Cacciari, borrows texts from Hesiod to Walter Benjamin, from Aeschylus, Hesychius, and Sophocles to Hölderlin and Cacciari himself. Musical quotations—always hidden and actually not recognizable for the listener—, range from Giuseppe Verdi to Arnold Schoenberg, from Robert Schumann to Gustav Mahler. They are present not for the sake of music alone, but “in terms of their contribution to an awareness of history that points to the future” [Jeschke, 2007, p.21]. In terms of performance, it is important to mention the fact that every single performance requires site-specific musical decisions, making of it an exclusive and unique event that cannot be exactly replicated anywhere else. This is mainly due to technical requirements and to very specific instrumental techniques that have to be learned and experimented over long stretches of time. Nono’s late music (not only *Prometeo*) cannot be “just

played" from the score, it requires a whole process of full immersion into and deep understanding of his musical and aesthetic world.

Another example could be Helmut Lachenmann's *Das Mädchen mit den Schwefelhölzern* (1990-96), a work that problematizes the notion of "opera" by defining a musical object that is not officially labeled as such, but as "music with images" (even if it was commissioned as an opera). The text materials are fragmented and pulverized in different levels: there is the tale *The Little Match Girl* by Hans Christian Andersen, which serves as unspoken (and unsung) dramaturgical foundation of the whole musical composition; there is a text by Leonard Da Vinci from the *Codex Arundel*, some few words form Nietzsche's *Zarathustra* (*Mitternacht*), and a letter written from the prison in 1975 by Gudrun Ensslin, a convicted member of the terrorist group Baader-Meinhof who had set a department store on fire in 1968 in Frankfurt (which provides a direct link to the matches in Andersen's story). On a subterranean level, there are many other texts, some of which very long, which are almost never heard, and never semantically presented. These texts are recorded in CDs that are "played" by musicians just like any other instrument—that is: the CD performers have a simple potentiometer that opens and closes the output of the CD track and that regulates its volume level, following a fully notated score. Thus, all those texts function like sonic material and are audible only at the level of their acoustic (not semantic) reality. This is a unique feature of this piece, and I must mention that I only came to know about this when I was participating in a performance of this piece as one of the CD players (Madrid, Teatro Monumental, 2008). This was the only opportunity to hear one of the CDs in full-length (the one I had to "play"), which I heard at home while "practicing" my part. It contained a text on the making of pianos, specifically of Steinway instruments, certainly an activity that implies the functioning of advanced forms of capitalism, which might be the link to the little girl's story of social oppression and human coldness. The music includes some very short musical quotations from Igor Stravinsky (*The Rite of Spring*), Ludwig van Beethoven (*Coriolan Overture*), Arnold Schoenberg (*Variations for Orchestra*), Pierre Boulez (*pli selon pli*), Gustav Mahler (Sixth Symphony), and Alban Berg (one chord from *Wozzeck*), all of which appear in an unrecognizable, estranged way. In short, Lachenmann's *The Little Match Girl* provides yet another compelling example of hypermusic *avant la lettre*, with its manifold and heterogeneous superpositions of materials, with its subterranean textual dimension, its musical complexity, with the inclusion of extra-European instruments (Shô, a Japanese mouth

organ, and Dobachi, a Japanese bowl gong) that are used in a way that estranges them from their traditional practices, and with hyperconnections to different times and geographies (the times of Leonard, Nineteenth Century Europe, post-World War II Germany, and the mental spaces of South Italy, Scandinavia, Japan, other-worlds, etc.).

One could further think of other pieces, like John Cage and Lejarren Hiller's *HPSCHD* (1967-69) for seven amplified harpsichords, 52 tape machines, 6.400 slides and 40 films, that shows John Cage's interest in bringing together a wide range of different elements for audience members to experience simultaneously, and in which to immerse themselves. All these pieces could be the object of detailed studies in relation to the notion of hypermusic. For the purposes of the present essay, I simply wanted to mention them as a way to convey my understanding of the notion of hypermusic, and how it can be traced back to some musical experiences from the past.

## **EXPERIMENTAL PERFORMANCE PRACTICES AND NEW RESEARCH METHODOLOGIES**

For all those operating in the field of artistic research, the most interesting aspect of the notion of hypermusic is that it has the potential to foster unprecedented creative practices both for music performance and for composition. Artistic research is conducted by artists, by practitioners that configure and reconfigure the materials of their artistic area of activity. Thus, in addition to music analytical studies of past musical works that can be read as hypermusic *ante litteram* (as suggested above), the concept of hypermusic affords innovative practices and research methodologies.

From the perspective of creative performance practices undertaken within the framework of artistic research, the central question is: how can the performance of music, considered as a field of research in its own right, expose the complexity of materials and practices that characterize existing musical works if regarded as hypermusic? How to articulate the dimension of "archive" (the collection of traces and inscriptions that constitute the material sedimentations of musical works) with the dimension of the "diagram" (the ever-changing constellations of material and immaterial connectors between the archival components)? How to challenge existing

models and working methodologies in order to generate innovative performances, installations, recordings, online manifestations, but also new kinds of publications and further modes of communication?

In order to address such questions, I have developed a working methodology, which has been specifically designed for arts-based research in music [Assis, 2018]. It is a tripartite methodology, involving philological investigations, inter-textual studies, and arts-based problematizations.

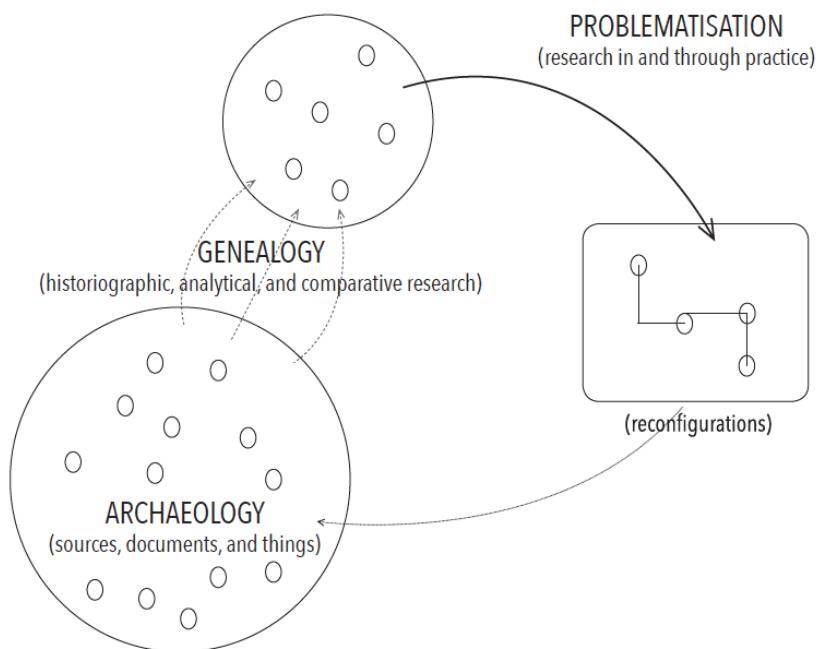


Figure 1. *Working methodology for artistic research in music.*

First, the innumerable material traces and things that construct any given musical work are “archaeologically” identified and scrutinized for further consideration. Next, the relations and connectors they entertain with one another, as well as their transmission over time, are studied in terms of a “genealogy,” disclosing special passages (also from the sketches and early versions), particular points that can be read as especially rich in terms of aesthetic potential. Finally, specific selections of such singularities are brought together as new combinations or reconfigurations that

problematic them anew. This methodology has several relevant features. Firstly, it allows the integration into performance of diverse materials that go beyond the score (sketches, texts, images, and videos), offering a broader contextualization of works within a transdisciplinary horizon. Secondly, it fosters new modes of conducting research in music, overcoming traditional divisions and boundaries between music theory and creative practices—the practitioner becomes profoundly rooted in scholarly research, and this research is a meaningful and integral part of the artistic results. Thirdly, it creates the conditions for a unifying approach to performance and composition, as the three steps and their respective operations are very similar for both composers and performers. Fourthly, it makes graspable the potential of performance and composition to operate as knowledge-producing activities. Lastly, beyond the (re)creation or (re)production of a musical “work,” it enables an understanding of musical components as objects for thought through performative or compositional devices.

The “archaeological” moment relates to conventional scholarly research, including archival and source studies; the “genealogical” phase calls for interpretation, semiotics, and transtextuality; and “problematization” happens by constructing new and experimental arrangements. With the latter, the artistic dimension becomes inescapable, requiring a kind of artist and researcher who cohabit in one single person. It is in this phase of the research process that the notion of arts-based research becomes particularly relevant and fruitful. The circularity of this research methodology facilitates the realization of series of performances and installations based upon a restricted group of starting materials, leading to the generation of “differential repetition” and to the proliferation of research results.

As an example of such practices and their outcomes, I would like to mention the research project Rasch-X, conducted by my research team at Orpheus Institute between 2013 and 2018. This project<sup>2</sup> has been constructed around Robert Schumann’s *Kreisleriana* op. 16 (1838), and Roland Barthes’s essays on the music of Schumann, particularly focusing on ‘Rasch’ (1975), a text exclusively dedicated to *Kreisleriana*. To these materials other components have been added for every single particular version: visual elements (pictures, videos), other texts, or further aural elements (recordings

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2] For an overview see: <https://orpheusinstituut.be/en/projects/raschx-schumanns-so-mathemes>.

For further details and online presentations of all versions: <https://www.researchcatalogue.net/view/64319/64320>.

or live-electronics). The project generated a series of mutational modes of appearances (performances, lectures, installations), which enabled and enhanced an intricate network of aesthetico-epistemic cross-references, through which the listener was invited to focus on different layers of perception: be it on the music, on the texts being projected or read, on the images, or on the voices. Situated beyond ‘interpretation’, ‘hermeneutics’, and ‘aesthetics,’ Rasch-X can be seen as part of a wider research on what might be labelled as “experimental performance practices”, which productively deviate from conventional (repetitive and reproductive) performative strategies and that invite the audience to actively engage with the performative moment, transforming familiar artistic objects into objects for thought.

Focusing on the intertwining of traditionally strictly separated functions (the performer, the composer, the listener, the scholar) this project proactively merges all of them in the figure of the artist-researcher, an artistic and academic operator that has the capacity to enact and embrace a constructive critique of current modes of thinking and making music.

## FUTURAL MUSIC ASSEMBLAGES

As for the generation of totally new musical entities, the question is how to relate to the concept of hypermusic in order to create artworks that move beyond the notion of “work,” investigating new definitions of what composition means, and exploring innovative musical practices altogether. How to invent new sonic agencies that are sustained by practice-based research and that aim at the simultaneous generation of scholarly and artistic outputs, including compositions, performances, installations, recordings, arts-based websites, as well as texts and essays? How to detect and capture the “futural” powers of contemporary signs, symbols, and acoustic realities, in a way that might contribute to a horizon widening of musical composition for the 21st century? In what follows, I suggest four starting lines of inquiry, which are neither intended as exhaustive nor as independent from each other. They indicate possible paths for future compositional practices, focusing on a specific research topic at a time. These topics are:

- (1) *temporal undulation*, (2) *superpositions/polyworks*, (3) *non-human sounds*, and (4) *self-organizing musical hyperobjects*.

(1) The notion of *temporal undulation* relates to the study and invention of new temporal and metrical properties for new musical entities, aiming at generating sonic objects that contain and manifest different temporalities, and not—as in the classical paradigm—one single, common tempo to all musical parts. Multiple temporalities can become an important characteristic of future musical objects, raising issues of coordination between the performing musicians and of unified perception at the listener's end. How to build such different temporalities in the musical fabric itself? How to establish coherent, but not totally predetermined relations between them? This research topic can lead to musical entities that manifest different temporalities, including sonic objects that can be rendered at different paces (absolute and relative to each other). Building upon already done scholarly and artistic work on multiple temporalities [Assis, 2013, 2017], this topic can be expanded by investigating Timothy Morton's philosophical notion of *temporal undulation*, which serves as an important inspiration for this desirable research endeavor.

(2) *Superpositions* and *polyworks* refer to musical objects ("works") that are made of several other musical "works," which can be rendered either together (superposed) or independently from each other. This is a fertile field for compositional practices, especially in view of the number and variety of currently available modes of musical performance. Moreover, there are already numerous examples of composers already working in this direction.<sup>3</sup> One suggestive example, is Klaus Huber's *Schattenblätter* ['Shadow Leaves'] for bass clarinet, piano, and cello, which can be performed both as a trio and, "like a tree losing its leaves," in any other combination of the single parts: clarinet and piano, cello and piano, clarinet and cello, even solo piano, in which case the title changes to *Blätterlos* ['Without Leaves']. Another interesting example is his piece *Plainte – Die umgepfligte Zeit. In memoriam Luigi Nono* (1990), which uses the same idea: it can be performed in its full score or in four other modes of appearance, without the solo voices, without the viola d'amore (which seems central in the full score), and even with the option of replacing some instruments by others. Such constructions resonate with Morton's notion of *phasing*, the fact that hyperobjects can only be apprehended partially. Polyworks, even if played "together," generate a perceptual overflow that makes it difficult

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3] Among others, one can mention composers such as Chaya Czernowin, Julio Estrada, Vinko Globokar, Georg Friedrich Haas, Adriana Hölszky, Claus-Steffen Mahnkopf [see Hiekel 2016], and Klaus Huber (1924-2017).

to grasp them in their “integrity.” In addition to musicological studies on these pieces [Hiekkel, 2016], one can undertake creative investigations from an arts-based research perspective, through the making of musical objects that are constituted by several other objects, which can be rendered either together (in superposition) or independently from each other.

(3) Another topic that will probably gain further centrality in the next decades is the study and artistic work with *non-human produced sounds*. This will allow and enhance a move from subject-oriented text-based inscriptions to object-oriented sonic-based inscriptions, especially focusing on the sounds in and around us. While the paradigm of absolute music relied primarily on musical works that resulted from human invention, a widening of our ears reveals immense alternative sonic worlds. Non-humanly produced sonic agencies can be investigated as musical objects in their own right. The notion of “expressivity” has for too long been considered as emanating only from humans or from human activity, but realist and new-materialist accounts insist on the expressivity of matter [DeLanda, 2002, 2006, 2016] and things [Bennett, 2010], shifting the focus from the human experience of things to things themselves. After decades of field and experimental sound recordings of natural sonorities of the earth, recent developments make it plausible to think of musical hyperobjects totally construed on the sole basis of non-human engendered sonic objects. Timothy Morton offers one reference to such works, done by the sound artist Francisco López, whose *La Selva* [1998] is an impressive example that “evokes the hyperobject in an object-oriented way... The result [of which] is far from an ambient rendering or simulation of the real” [Morton 2013, p.184]. What one hears in López’s CD *La Selva* (the music piece) is not a representation of ‘*La Selva*’ (the natural reserve in Costa Rica), even if it “contains elements that can be understood as representational, but the essence of the creation of this sound work... is rooted on a ‘sound matter’ conception, as opposed to any documentary approach” [López, 1998]. In this sense, an artistic research investigation on non-humanly produced sounds shall not aim at representing sounds of the nature *per se*. It shall much more move beyond subject-oriented inventions to object-oriented sonic-based explorations, especially focusing on the non-human expressivity of nature, technology, and all the sounds (natural and artificial) that surround us.

(4) Lastly, the emergent area of research on *self-organizing music* deserves attention and dedicated projects. This area of activity builds upon systems theory [Bertalanffy, 1968] and in it composer-researchers investi-

gate different forms of self-organizing music interfaces, including “intelligent” sonic systems characterized by autonomy, distributed/decentralized feedback processes, and environmental awareness. According to Phivos-Angelos Kollias [2018, p.2], self-organizing music interfaces are “interfaces composed by generative music processes directly influenced by their sonic environment.” Processes of capture are done through microphones (acting as sensory organs), elaboration of responses happens through algorithmic controllers (including Digital Signal Processing and Control Signal Processing), and the exposure of results is mediated via loudspeakers. The move from *self-organizing music* to *self-organizing hypermusic* will enhance these practices, possibly leading to the generation of musical objects that are ever-different and changing, reacting to their environment, and having (potentially) infinite duration, thus breaking the notions of beginning and end.

## TRANSDISCIPLINARY WEBBINGS

To conclude, I would like to stress that the concept of hypermusic has the potential to articulate an important challenge that relates to the role and function of musical creativity in our contemporary society. Beyond music itself, the concept and practice of hypermusic enables the relation and connection of music to other areas of contemporary thought and knowledge production, particularly to critical thought, contemporary philosophy and practice-based epistemologies. Such intricate networks of cross-references and cross-pollinations have the capacity to engender transdisciplinary webbings. More than asking what an artwork was, or how it has been assembled in the past, such webbings indicate a constructivist approach that interrogates how things are constantly dis- and re-assembled. This research gesture resituates musical practices in their relation to other practices and systems of knowledge production. If one understands hypermusic as music made of concrete particles and dynamic structuring forces, it is thinkable that other modes of thought—in spite of their disciplinary specificity—share similar structures. Intrinsically related to the ongoing information and digital revolutions, hypermusical investigations offer an opportunity for future musical practices, which have to be scholarly and artistically grounded, that use different modes of research (basic, applied, critical,

arts-based), and that include researchers from different fields of knowledge production (composers, performers, musicologists, philosophers). Such practices will combine different modes of research, particularly focusing on the emergent mode of practice-based research; they will contribute to the implementation of cross-pollinating methodologies within an artistic, aesthetic, and scholarly field of operations, and they will enhance innovative approaches to music performance and composition solidly anchored in research and critical thought.

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