

Beyond Validity

Claiming the Legacy of the Artist-Researcher

Henrik Frisk and Stefan Östersjö

Introduction

Artistic research is becoming an increasingly established discipline. In Sweden, research programs in music with a focus on the artistic practice of the researcher have existed for more than thirty years, and in the Anglo-Saxon countries for even longer. A number of theses have been produced in Sweden, and there are regular admissions of new doctoral candidates to the Music and performing arts academies in Stockholm, Malmö, Gothenburg and Piteå. Related qualitative research disciplines with a focus on practice have existed for much longer, primarily in the social sciences, but to some extent also in medicine. In the present paper, we suggest that the development of artistic research is at a point where it is no longer productive to discuss it as a field in development in which methods and formats are in a constant flux, but where we need instead to discuss a set of defining frames and methods for researchers to use or depart from. This is not to say that a single method should (or could) be used for all artistic research but rather to state that there is a great need to establish workable methods that can serve as starting points for future development.

Mika Hannula makes a similar diagnosis and argues that it is time for artistic research to adopt a bolder position in relation to the institutions:

Since artistic research has been accepted and established as credible research within art education and art institutions, we have to keep its possibilities open and move towards a vision of artistic research which is self-critical and self-reflexive. Put differently, we must have the courage to be anarchistic and experimental. (Hannula 2011 p. 70.)

In this paper, we will argue for the need to approach artistic research from an experimental perspective, not as a stylistic measure but as a quality in the artistic aims. A core value in artistic research is, as far as we know it from our own work, the possibility to amplify artistic processes that aim at creating a change in one's own practice, a change that, when it is described and thoroughly documented, can effectively communicate new knowledge.

One criticism against artistic research has been the lack of distance between the researcher and his or her object of research. Contemporary research epistemologies counter such doubt directed towards subjectivity, but we will return to this question below.

Among artistic researchers there is a common criticism against research methodologies and academic writing. The underlying concern is that the academic world will violate the dynamics of artistic processes. This may have been a relevant concern in the earlier stages of the implementation of artistic research. According to Sarat Maharaj, if we want to hang on to the unorganized possibilities of artistic practice we should

avoid defining artistic research simply along institutional academic lines. This means focus on the singularity of how art practice-theory-history and other 'disciplines' intersect and coalesce in individual projects. As we cannot quite know beforehand what form this will take [...] we have to be wary about attempts to regulate artistic research, to knock it into shape of the academic disciplines. (Maharaj 2011, p. 39.)

Helga Nowotny (2011) looks at the same issue and points at uncertainty as a vital property of research and finds that the need to oppose regulations, control and attempts to tame curiosity, so essential to experimentation, is shared also by scientific research:

Between society's preference for the new and its attempts to gain or regain control over what is uncontrollable, since it is not known where curiosity and the 'play of possibilities' will lead or what consequences will result from it, a vast zone of uncertainty is emerging as the true breeding ground of creativity, be it scientific or artistic. The greater the desire for the unexpected and unforeseeable that research stimulates, the more the pressure of expectation grows to bring it under control and steer it in specific directions. (p. xviii.)

The discussion concerning art and research and whether they can coexist and survive the relationship may be seen to rest on misconceptions of both topics. We argue that it is essential that this zone of uncertainty described by Nowotny is properly sustained and that we are able to identify all attempts to diminish or restrict this space, not only those that academia may impose. Furthermore, there are many examples of what is now considered traditional research disciplines that rely on subjectivity and whose research objects are as abstract as the research objects of artistic practices. Philosophy is but one.

We suggest that, rather than being a non-academic and independent research discipline, artistic research is situated in a multilayered and multidimensional space principally defined by four non-conformal fields of gravitation: the subjective, the academic, the experimental, and the field of the art world. Furthermore, these four fields are encompassed by the sociopolitical sphere and together they form the context for artistic research. In the following we will attempt to draw and describe the nature and impact of some of the connections between these entities.

Artistic reflection and methods

During the formative years of artistic research in Scandinavia, several attempts have been made to make artistic reflection the cornerstone of a methodology for artistic research. As we see it, this approach is based on a misunderstanding of the nature of artistic practice and constitutes a confusing and unnecessarily delimiting framework for method development in artistic research.

William Kinderman traces the intervallic pattern found in Beethoven's late quartets back to an unfinished piano sonata for four hands and states that the sketch 'reveals that the basic intervallic configuration so prominent in the last quartets arose during Beethoven's *reflection* on another project altogether, in a different key' (Kinderman 1995 p. 295, our italics). The intertextual references between two or more works by the same artist is a typical kind of reflection but there is also the intrapersonal reflection so important for artistic creation, the impact and significance of which is well described by Stockhausen in his comment on the 1965 version of *Momente*:

My reflection is altered by Webern.

Webern's music is transformed by my reflection.

My reflection is altered by my reflection on Webern's music. (Wörner 1963 p. 51.)

It is hard to imagine any artistic practice that does not rest on the interplay between action and reflection. The connection between the two is perhaps best described in James J. Gibson's ecological psychology in which perception is inextricably linked to action (Gibson 1986). Horacio Vaggione discusses the relation between action and perception in the compositional process with regard to the development of algorithmic composition:

[...] the meaning of any compositional technique, or any chunk of musical knowledge, arises from its function in support of a specific musical action, which in turn has a strong bearing on the question of how this action is perceived. Action and perception lie at the heart of musical processes, as these musical processes are created by successive operations of concretization having as a tuning tool – as a principle of reality – an action/perception feedback loop. (Vaggione 2001 p. 61.)

These action-perception feedback loops can then be understood as the basis for creative processes in which reflection constitutes the link between conscious and subconscious layers. In other words, reflection is an essential component in musical creation. For these reasons, we believe that the common reference to reflection as a 'method' for artistic research is a misconception. If reflection is a central component of any artistic practice, and if it should also be understood as the fundamental method for artistic research, there would be no methodological difference between art and research.

Is artistic research then merely a social or economic construction within European universities? Is the only contribution of artistic research a shift of financial means for artistic production towards the educational institutions? Certainly not, though we wish to emphasize the fact that the notion of research is indeed a social construction. We believe that an awareness of the politics of artistic research, and of the institutional structures behind it, will enable artistic researchers to more actively turn the field into a developmental and experimental force in the art world. But what, then, is the nature of artistic research, and what is its relation to artistic practice?

Essential to any artistic practice, reflection may be understood as a useful tool in artistic research. Though distinct activities, artistic practice and artistic research are indeed related, and whereas the practice can, and will, exist and continue to prosper without the research, the opposite is unimaginable. Below, in the section 'Knowledge in artistic research', we will argue that artistic research must produce knowledge of the very kind that artistic practice has always produced, but this is not to say that artistic research may not *also* contribute knowledge of kinds that are not found in ordinary artistic practice. The potential for novel contributions from the artistic researcher lies in the meeting between artistic research and other disciplines. We regard interdisciplinary research as the future challenge and developmental possibility for the artistic researcher. Again, we make this claim while maintaining the necessity for the artistic researcher to be, first and foremost, an artist whose practice is solidly situated in the surrounding art world.

Artistic processes may be studied in a number of ways, but one of the defining aspects of artistic research is that the researcher studies his or her own processes. Similarly to how anthropologists and ethnologists participate in the contexts that they study, the artist engages in a systematic study of his or her own artistic processes. However, the interrelation between an artist, the cultural tools (material and psychological ones) and the artistic output is in itself complex, and the interaction between artists is accordingly a complex matter of embodied processes and the resonance between the self, the other and material objects (Coessens 2011; Nancy 2007; Östersjö 2008, 2013). Hence, artistic research cannot simply be defined as a field of study of individual artistic processes. It encompasses the full complexity of artistic thought and practice and, as we will argue

below, takes shape both inside and outside of language. Although there are good reasons to distinguish between artistic methods and methods for artistic research, in this sense the artistic practice is essentially both object and method.

The research process has the potential not only to open the field of artistic knowledge production to other disciplines and to other fields of interest, but also to open up the artistic practice under scrutiny to new and unexpected areas which will guide the development of the artistic work. The closeness of, and feedback between, the artistic work and the research makes it difficult, if not impossible, to identify the exact relation and order of precedence between the two. However, this is not to say that any act of art production involves artistic research. It is the consequences of the two practices that are closely connected, not the initial conditions. Philosopher Kathrin Busch states that

[a]rtistic appropriation of knowledge evokes different, independent forms of knowledge, in order to complement scientific research with artistic research. [...] this implies that artistic practice is more than just an application of theory and that theory is more than a mere reflection on practice. (Busch 2009.)

Reflection is an innate part of artistic practice and a natural aspect of artistic research, but it cannot in itself constitute the research method. Any artistic research method may include reflection as a means to access the processes in artistic production, but reflection should not be called upon as the single solution (or quick fix) to the recurring question of methodology. Reflection without method remains trapped within the researcher and may become a manifestation of some of the elements that have provoked criticism against artistic research as a discipline. It is not difficult to see why artistic research, in its first decades of development, distanced itself from the confines of academic structures. Artistic research is interdisciplinary by nature and may lean on a number of related artistic fields, but it is our belief that the field of artistic research is now stable enough to embrace qualitative research methods found in social sciences to create a hybrid methodology that also includes artistic methods.

Behind validity: subjectivity revisited

Much is to be gained from relating artistic research to the discussion on the subjectivity of the researcher (Denzin et al. 2006). Artistic research may contribute to the discussion, which in turn opens up for a wider understanding of the politics of doing artistic research. Denzin, Lincoln and Giardina, addressing a specific political debate that emerged in the

USA after 9/11, point to how the way we think of the epistemology of our research is never politically innocent:

For the post-pragmatist feminist there is no neutral stand-point, no objective God's-eye view of the world. The meaning of a concept or a line of action or a representation lies in the practical, political, moral and social consequences it produces for an actor or collectivity. The meanings of these consequences are not objectively given. They are established through social interaction and the politics of representation. (ibid. p. 776.)

Even in research grounded on empirical data, contrary to the common apprehension of the natural sciences, a 'phenomenon' discussed is not 'reality' but should rather be understood as a construction from within the research procedure: 'Categories are concepts, derived from data, that stand for phenomena. [...] Phenomena are important analytic ideas that emerge from our data' (Strauss & Corbin 1998 p. 114). In Bruno Latour's ground-breaking sociological study on research in the natural sciences, *Laboratory Life* (Latour & Woolgar 1986), the idea of objectivity in scientific research is questioned, and the notion of 'fact construction' is introduced as a mode of understanding the production of scientific facts. During two years, Latour made a quasi-anthropological study in The Salk Institute, a chemical laboratory in California, making observations, jointly analysed with social researcher Steve Woolgar. Their claim is that even the processes of scientific 'logic' and 'reasoning' are socially constructed.¹ They also provided examples of how these social processes, even in cases referring to a researcher's 'thought-processes' (X had an idea), are hidden in the final accounts of the research (e.g. Latour & Woolgar 1986 p. 168-170).

We suggest that the apparently logic character of reasoning is only part of a much more complex phenomenon that Augé (1975) calls 'practices of interpretation' and which comprises local, tacit negotiations, constantly changing evaluations, and unconscious or institutionalized gestures. (Latour & Woolgar 1986 p. 152.)

The myth of the researcher as an objective observer of nature-given facts has been put in doubt many times, also within the hard sciences. Facts are facts, but only within the specific framework in which they are produced (Guba & Lincoln 1994 p. 107). A growing literature of anthropological studies on laboratories and other production sites within the hard sciences has followed over the years (Longino 2002; Knorr Cetina 1981, 1990; Lynch 1985). Karin Knorr Cetina draws attention to a kind of scientific selection process where the value of previous results is estimated on the basis of how they are incorporated into more recent research, rather than on an assessment built on principles

1 Latour's and Woolgar's study is a classic, not only due to the fact that they happened to study one of the two teams that received the Nobel Prize in Chemistry in 1977. The study remains one of the most powerful critiques of the realist or positivist stance in science.

of logic (Knorr Cetina 1981). Looking at the machinery of knowledge production in high-energy physics and molecular biology, in her book *Epistemic Cultures* (1999) Knorr Cetina brings out the disunity within the sciences in general and the multiplicity of ontologies and epistemologies within the natural sciences.

In the broad field of epistemology and methodology for qualitative research, a series of attempts to deconstruct the positivist concepts of validity and reliability have been made.² Rather than focussing on how the methods and the results can be assessed according to positivist criteria, alternative viewpoints on knowledge production have been developed, sometimes exchanging the key words of validity and reliability with related concepts such as authenticity and credibility:

- credibility (in preference to internal validity)
- transferability (in preference to external validity/generalizability)
- dependability (in preference to reliability)
- confirmability (in preference to objectivity) (Guba 1981)

Many attempts at creating different responses to the question of validity have been made over the years, and the variety in terminology and the various typologies can indeed be confusing (Creswell & Miller 2000). However, most of these directions share components and three main strands are discussed by Steinar Kvale (1995):

- validity as craftsmanship
- communicative validity
- pragmatic validity

Common to all three strands is the conviction that credibility emerges from research strategies that make the subjectivity of the researcher visible in all stages of designing and carrying out the project. We believe that all these approaches have a strong bearing on artistic research. Pragmatic validity is perhaps particularly akin to much artistic practice. For the pragmatist, 'truth is whatever assists us to take actions that produce the desired results' (Kvale 1995 p. 32). The knowledge produced is identified through action or its workability.

However, explicit reference to questions of the identity and subjectivity of the artist has not always been well received in contexts that accommodate artistic research in Scandinavia. A well-known example is the dissertation of Riitta Nelimarkka, a successful, female visual artist whose dissertation was rejected by her school's research council,

2 The triad is, of course, validity, reliability and generalizability, but in the context of the present article there is not space for a discussion on all these aspects of the positivist paradigm. We choose to focus on the concept of validity since it is of greater relevance for qualitative research epistemologies than the other two. Also, it should be noted that artists are sometimes the more rigid believers in research as something that should adhere to the positivist paradigm.

and only after a public debate, and after she appealed to have it tried again, was eventually approved. What interests us here is the fact that, methodologically, her approach was clearly autoethnographic while the research community at the time did not seem to acknowledge such an approach (Biggs & Karlsson 2011 p. 420).³ We also believe that a feminist viewpoint may further contribute to an understanding of the dismissal of the dissertation, written by an artist who received the honorary title of professor from the president of Finland in 2008. The subjective stance in the dissertation, and her refusal to turn to a generalizable viewpoint, are properties traditionally attributed to female expressions and that may therefore easily become a threat to the hierarchic, male-dominated academic world.

At this point, we may return to the quote from Denzin et al. (2006 p. 776) and consider the implications for artistic research of taking the step from pragmatism to post-pragmatism, that is of incorporating the political layers of the epistemologies of science. It is essential to acknowledge the political implications that, for instance, a feminist and post-colonial perspective contributes to contemporary research paradigms. Not only is it a way to situate the research in a context larger than the topics it studies, it also opens up towards ways in which the research may resonate with a social or political context. The diasporic subjectivity⁴ of globalized society has shifted the focus towards *subject-position*, approaching formations of identity that are strategic, positional and constructed across different discourses (Hall 2000 p. 17). The film-maker and feminist researcher Trinh Minh-ha discusses the nature of this shift of perspective and emphasizes the need not only to focus on the self-expression of the issues of the world, but to challenge the individual and the self by producing 'texts' that question the systems of domination:

[...] to begin revisioning we must examine the self from a new critical standpoint. Such a perspective, while it must insist on the self as the site for politicization, would equally insist that simply describing one's experience of exploitation or oppression is not to become politicized. It is not sufficient to know the personal but to know-to speak in a different way. (Trinh 1991 p. 163-164.)

The result may be that the impact of both the artistic work and the research is widened. In the process, the artistic research activity may break free from the individual-

3 This was pointed out already in 2002 by Henrik Karlsson in his book on artistic research education in Sweden: 'Från en vetenskapsteoretisk ståndpunkt [...] kan *Self Portrait* ses som ett mönsterexempel på "självetnografi". [...] Genren är alltså mest använd inom den s.k. reflexiva etnologin och antropologin men borde rimligen kunna prövas på andra fält.' (Karlsson 2002.)

4 The concept 'diaspora' is here used metaphorically, and in accordance with Stuart Hall's discussion of diaspora it is defined 'not by essence or purity, but by the recognition of a necessary heterogeneity and diversity; by a conception of "identity" which lives with and through, not despite, difference; by hybridity'. (Hall 1993 p. 235.)

istic perspective that has sometimes been criticized as the solipsistic consequence of practice-based research, and widen the potential for knowledge production.

Knowledge in artistic research

The subjective stance is an essential aspect of artistic research, but how can the knowledge produced within this sphere be understood in a wider context? Henk Borgdorff was one of the first to thoroughly discuss and argue for a position for artistic research within the art academies and his thinking on the topic has been very influential in Europe in the last decade. In his book *The Conflict of the Faculties* he finds artistic research to be distinct from other means of knowledge production:

[...] artistic research seeks not so much to make explicit the knowledge that art is said to produce, but rather to provide a specific articulation of the pre-reflective, non-conceptual content of art. It thereby invites unfinished thinking. Hence, it is not formal knowledge that is the subject matter of artistic research, but thinking in, through, and with art. (Borgdorff 2012 p. 143.)

He continues by asserting that artistic research must also be understood as distinct from other research disciplines by the nature both of its methodologies and its results:

Artistic research therefore does not really involve theory building or knowledge production in the usual sense of those terms. Its primary importance lies not in explicating the implicit or non-implicit knowledge enclosed in art. It is more directed at a not-knowing, or a not-yet-knowing. It creates room for that which is unthought, that which is unexpected – the idea that all things could be different. (Borgdorff 2012 p. 173.)

But is not this movement towards the 'unthought' and the unexpected in fact the driving force behind all research? Returning to the quote from Borgdorff, we now have to examine more closely the notions of pre-reflective and non-conceptual contents of art. Are they the same or different things? Does not 'pre-reflective' indicate that there is something unfinished in its trajectory? The category of non-conceptual knowing seems to us to be distinct from the unfinished. This appears to be a field not sufficiently discussed and theorized within artistic research, and, still, it is the heart of the matter: in all artistic production, knowledge is created and passed on in ways that are most often distinct from the verbal domain, although this discourse-*in*-music can of course be enhanced by another discourse-*on*-music (Folkestad 1996). In the field of music, performance practices have continuously been constructed and transmitted, and, around

them, at specific moments in history, analytic discourses have emerged. An important moment was when J.J. Quantz (1744/1752) and Leopold Mozart (1748/1776) wrote their instructions for correct performance on the flute and the violin respectively, sources that became invaluable material in the scholarship of the musicians of the early-music movement in the twentieth century. If we were to play with the idea of regarding these writings as research outcome (though hundreds of years before the social construction of artistic research), they relate to the development of performance practice in their own time in two ways. Firstly, in that the value of the writings rests on the situatedness of the authors in the surrounding art world. Secondly, it is essential to acknowledge that the writings do not express or contain any new knowledge, but that they are merely different representations of knowledge that normally travels through non-conceptual forms of knowledge production in any musical culture.

The non-conceptual knowledge production in the arts can indeed be independent of any analytic discourse and should rightly be considered as a primary outcome of any piece of artistic research. It has always been communicated through art itself and will not be in need of any other forms of mediation. However, we wish to contest the notion that knowledge production in artistic research should always be understood as pre-reflective and expressive of 'unfinished thinking'. On the contrary, we believe that the artistic field can be enhanced by embracing any number of methodologies and venturing into any kind of cross-disciplinary research.

The development of documentation and assessment of artistic research

There is a growing discussion concerning bibliometrics and assessment of artistic research in Sweden and Europe. The most ambitious attempt at addressing the needs for documentation and representation of artistic works so far is the development of the online publication *Journal of Artistic Research (JAR)*⁵. However successful *JAR* or any other initiative may be, many general issues are still unsolved, and some of the big questions concerning documentation of practice and thinking in artistic research are still unanswered. Even after decades of artistic research there is a striking lack of communication within the field, and references to other artistic research projects are still sparse. One of the recurring threads in these discussions is the relation between the art object and its representations, and the relation between academic assessment and assessment by the art world. These relations are still far from stable, and, to allow the object of research, the artistic output, to be an integral part of the discussion much work and effort must

5 www.jar-online.net For a further discussion of the implementation of the journal, see the editorial of the first edition: www.jar-online.net/index.php/issues/editorial/483 (accessed 2 July, 2013).

go into supporting forms of documentation of artistic work that allows the practice to be discussed alongside the discursive elements of the research.

Even before the beginning of the large-scale implementation of artistic and practice-based research in Europe, attempts were made to solve the difficult issues of documenting works of art that are evolving, changeable and collaborative in nature. IRCAM, one of the leading centres for electronic music in Europe today, has hosted a few projects centred on the documentation and preservation of volatile musical works where the elements of the performance are neither easily defined, nor stable. Launched in 2003 the *Mustica* project, hosted by the international *interPARES* project,⁶ was an initiative to attack the difficulties of reliably conserving accurate copies of digital art. The *CASPAR* project (*Cultural, Artistic and Scientific Knowledge for Preservation, Access and Retrieval*), co-financed by the European Union within The Sixth Framework Programme,⁷ is clearly in the tradition of the *Mustica* project, and, as IRCAM states:

[...] this platform will make possible the conservation and dissemination of the information and digital elements necessary for the performance of an interactive piece (e.g. Max patches, sound files, elements from the score, etc.) in a structured format. It also aims to move ahead in the formalization of the musical descriptions of the pieces, independent of any technical implementation, in order to prepare their conservation long-term.⁸

All of these documentation projects have in common the wish to preserve and archive musical practice and production. The artistic research field should strengthen its connections to the documentation platforms developed outside academia. Through collaboration with institutions such as IRCAM and with the *CASPAR* project, we believe that the question of bibliometry within the artistic research field could be turned into a new meeting point between the demands of the contemporary art world and academia. The institutions that develop the artistic research field now have the possibility to make a larger contribution to the art world. On the other hand, the experience contained in these projects outside the field of artistic research could be an essential component in establishing workable modes of documentation and assessment of artistic research output. We find this to be one of the essential components in the further development of methodologies for artistic research.

6 See interPARES.org for more information.

7 See www.casparpreserves.eu for more information.

8 See www.ircam.fr

Method development in artistic research: approaches to the subjective, the experimental, the academic, and the art world

As stated in the introduction, a large number of artistic doctoral projects have been carried out in Sweden, and many are currently under way.⁹ When Finland, Norway, the UK, Belgium and the Netherlands are included in the overview, we can easily see that there is no shortage of artistic research projects, but where has the method development been situated in this period when the discipline has become increasingly established – in academia or in the surrounding art world? How has the important relation between theory and practice been dealt with? These questions are clearly related, and in order to continue a strong and healthy development of the field of artistic research it is necessary to study and develop the practical as well as theoretical implementation and assessment of the advancement of these issues. We are convinced that the method development must be situated not merely within academia but also in the art world. A brief overview of some of the projects presented below shows that this process is already in progress. Also, as we suggest above, the ways in which new forms of documentation can contribute to the development of methods for artistic research can be seen as a further link between the specific interests of the academic institutions, the artist, and the art world.

In order to address these issues we will turn to an overview of some of the artistic research that we have ourselves been engaged in during the past 14 years, looking specifically at the relation between theory, analysis, and artistic practice. This short text is not the place for an in-depth description of method development. Instead we choose to present a summary of a few projects which are significant to us and which display the multitude of possibilities for method development in artistic research. While a broader overview of artistic research practices in Europe would indeed be of interest, the purpose of the present overview is mainly to consider the relation between artistic practice and research from a subjective viewpoint. Hence, we will restrain the overview to projects in which we have ourselves been involved as artists. Several of these projects have featured a strong element of method development in different areas: The project *Music in Movement* engages a social and political element as a means to reflect on the artistic practice. Interdisciplinarity is an essential element in *Integra* as well as in *Music in Movement*. The former approaches music psychology and the latter combines scientifically-oriented music technology with artistic practices. The study of interaction between musicians is at the heart of many of the projects, either with a focus on improvising musicians in

9 According to the Swedish Research Council (www.vr.se), in 2012 there were 38 doctoral candidates and 19 doctors in performing arts. In addition, artistic PhD projects are undertaken at Swedish artistic academies in collaboration with the Royal Institute of Technology in Stockholm as well as with the Sibelius Academy in Finland.

different cultures, such as in *(Re)thinking Improvisation*, or on collaborations between composers and performers. Most pertinent to the present inquiry is the question whether or not one can identify a clear interaction between the artistic production and the various research methods.

Repetition Repeats all other Repetitions

Repetition Repeats all other Repetitions (Frisk 2006) is an open-form composition for ten-stringed guitar and electronics by Frisk.¹⁰ The piece emerged out of a collaboration between the two of us, a project in which interaction in the widest sense was allowed to play a principal part already at the outset. As research, the project focused on early stages of interaction between composer and performer and was part of our respective doctoral projects. The preparatory work on the piece involved an extended artistic research process that included an analysis of video documentation from Östersjö's collaboration with another Swedish composer. For this purpose, we developed a method for analysing the composer-performer interaction. Before starting our work on the piece itself the results of that study, as well as the method itself, provided topics for several papers and conference presentations (Frisk & Östersjö 2006, 2007). During this period, our casual discussions of how the new piece might take shape were also significant. The resulting work employed a radically open form in which the collaborative interactions between composer and performer were situated at the centre of the practice.

So far, three different versions of the piece have been produced. In the first two, the structure was settled prior to the performance, and in the third version, choices were made interactively in real time. The preparatory work involved improvisation sessions recorded on audio and video that were later transcribed by Frisk to become part of the score. In the process following the first performance in Beijing in 2006, several initiatives were taken to force the development of the piece in a different direction. Some of the work in this process clearly had a research-oriented character, whereas some of it quite naturally belonged to the artistic process. In practice, however, the recursive nature between the research and the artistic practice makes it very difficult to pinpoint exactly what belongs to which category. *Repetition Repeats all other Repetitions* is therefore an example of how artistic research can resonate in the artistic work and output, as well as of how specifically artistic and aesthetic concepts may fuel the research and force it into unforeseen areas (Frisk 2008; Östersjö 2008).

¹⁰ So far, two recordings of highly distinct versions of the piece have been published. The first is a live recording released on *Spanning* (Chamber Sound 2010) and the second appears on Östersjö's solo album *Strandlines* (dB/Naxos 2011).

(Re)thinking Improvisation

(Re)thinking Improvisation was an international artistic research project on improvisation in different cultures that ran between 2009 and 2012, in which we both took part. The project brought up several of the themes discussed in this article, notably the subjectivity of the research, the political and social spheres of artistic research, and method development. In the early stages of *(Re)thinking Improvisation*, there was an outspoken wish among some of the members of the project group to investigate more radically the role of the researcher as a performer and as a writer. Our commitment to intercultural interaction on equal terms was developed by our participation in the music group *The Six Tones*, which involved musicians from different musical traditions in Hanoi.

The project culminated in a festival and a conference in November–December 2011 at the *Inter Arts Center* in Malmö, Sweden. This event hosted performers and researchers from three continents and consisted of 19 public performances and seven lab sessions in which conceptual and non-conceptual approaches to improvisation were presented and discussed. The research combined qualitative research methods with philosophical writing inspired by cultural studies. For us, the most interesting outcome was to see how intercultural work that was already going on could be radicalized by the adoption of a global and post-colonial perspective. A publication with two CDs, a DVD and an edited book was released in 2013 (Frisk & Östersjö 2013).

Music in Movement

In a study on the German composer Rolf Riehm's *Toccata Orpheus* (1990) for solo guitar, Östersjö identified an original approach to musical composition and performance. The bodily action of the performer is treated as an intentional compositional parameter in a way that makes a rare kind of theatricality of the performance emerge as a result of the composed structure. In his analysis, Östersjö argued that the expressive units in the piece cannot be analysed merely as sonic events but that they are better understood as gestural-sonorous objects (Godøy 2006; Östersjö 2008). The further artistic quest, that emerged from the interpretation of the score, resulted in the making of several installation works – all drawing on material from the guitar piece – as well as in artistic projects developing the concept of musical composition as the organization of gestural-sonorous objects. This continued development has resulted in *Music in Movement*, an ongoing international artistic research project funded by the Swedish Research Council. This project is clearly multidisciplinary both in terms of analytical methodology (qualitative and quantitative data are analyzed by gesture researchers from musicology, linguistics and

semiotics) and from an artistic viewpoint (it explores ways of merging the practices of choreography and musical composition). The terminology for, and analytical understanding of, musical gesture are in rapid development. The major challenge seems to be how to bring together multiple perspectives, like the first-, second- and third-person perspectives (Leman 2010), and data ranging from autoethnography to motion tracking.

In October 2012, the premiere of the installation and performance work titled *Inside/Outside* took place at the Cheo Theatre in Hanoi. This work is a collaborative composition by the Vietnamese/Swedish group *The Six Tones*, the Swedish choreographer Marie Fahlin and the British laptop improviser Matt Wright. Based on a concept by Nguyen Thanh Thuy of *The Six Tones*, the piece wants to discuss traditional Vietnamese music of today from a gender perspective, building on an analysis of gesture in the performance of traditional Vietnamese music in TV shows. In the piece, the three musicians of *The Six Tones*, dressed in traditional Vietnamese queen costumes, make a choreographed performance in glass boxes as if exhibited in a museum.¹¹

The way the series of works in *Music in Movement* are taking shape it seems it might become the most conceptually novel and explicitly political project that we have been involved in so far, taking a more decisive grip of issues concerning migration, identity and gender.

Collaborative creativity and contemporary performance practice

Since 2002, Östersjö has been involved in a series of projects that address the interaction between performer and composer. He started out with the PhD project *SHUT UP 'N' PLAY!* (Östersjö 2008), a study concerned with contemporary performance practices and, specifically, how these practices are created and transmitted in the interaction between composer and performer. With the addition of qualitative analysis of the social play between the parties, the research method became the starting point for new projects which further explore the possible dynamics of the relationship between composer and performer. A current example is the ongoing study within the CMPCP project¹² in which the London-based composer David Gorton and Östersjö are carrying out a longitudinal study in collaboration with the music psychologist Eric Clarke within the frame of Clarke's project *Creative Practice in Contemporary Concert Music*. This study is an attempt to situate artistic research in a broader analytical frame in which the two participating artistic researchers make an independent analysis of their work which is eventually complemented with an analysis by Eric Clarke and his assistant as external observers.

11 Excerpts from the premiere can be viewed at <http://goo.gl/RZSTFg> (accessed 2 July, 2013).

12 www.cmcp.ac.uk

The usefulness of carrying out this work in the form of artistic research can be identified in two main fields: artistic development – sparked and enforced by the analysis of the interaction – and the need for documentation and analytical understanding of these emerging contemporary performance practices.

Integra

Integra was a pan-European, inter-disciplinary project that approached specific artistic needs in music technology. The project engaged programmers, experts on music technology, musicians and composers. Together they worked on methods for increasing sustainability in the electronic music world, leading to the development of the *Integra Live* software. One of the main goals of *Integra* was to develop a software environment for the composition and performance of live electronic music that would make it easier for new music ensembles and chamber groups to play music with live electronics (Frisk & Bullock 2011; Frisk, Bullock & Coccioli 2008). *Integra* was a three-year project led by Birmingham Conservatoire, following another three-year project also named *Integra*. Both projects were supported by the Culture programme of the European Commission.

Even though *Integra* was not an artistic research project as such, to a large extent it was governed by some of the same principles. It is also an example of the potential power of artistic knowledge production and of the ways in which such knowledge can inform neighbouring fields. Methodologically, the project used artistic knowledge and experience to guide the development of tools, the output of which would similarly be in the artistic domain, even though the tools themselves were constructed in a more scientifically-oriented context of music technology. Furthermore, *Integra* was a conscious attempt to dismantle the long-standing, patriarchal and hierarchical structures in much electro-acoustic music by moving the artistic initiative from the studios and its technicians to the musicians performing the music.

Discussion

In the development of artistic research in Sweden, many attempts have been made to distance the development of this new discipline not only from the academic field, but also from artistic research programs in other countries, and even, in some cases, from other artistic fields. Initially there may have been good reasons for this impelled isolation, and there is currently a multitude of available modes for artistic research, but, as Mika Hannula points out, 'there has not been enough internal scrutiny and definitely not enough fruitful comparison and constructive criticism among all the different approaches' (Hannula 2011 p. 70). A common worry related to the academic influence on artistic practice is that the research will have to be communicated in academically formatted

text. To understand this worry one must consider the complex web of power relations and special interests within artistic research, but, as we have tried to show in this short paper, this concern is a mistake in at least two dimensions: Academic writing is an efficient means to communicate ideas and results, also in artistic research, but it is not the only means, nor is it always the best choice for representing artistic knowledge.

However, the opposition against established research methodologies has been quite strong in various parts of the field. It should be said that the search for identity and the resistance against established research fields might in fact have contributed to the rather solid and fast formation of artistic research as a distinct discipline in Sweden. At certain stages of the development of a field, it may be necessary to prepare time and space for it to define its own vocabulary and its own methods. 'Reflection' is one term that has been used as a substitute for 'method', 'theory' and 'representation'. 'Trial and error', 'silent knowledge', 'new knowledge', 'introspection' and 'narration' are other examples.¹³ We do believe, however, that it is now necessary to question these replacement terms and to trust the power and efficiency of the artistic practice to be solid enough to embrace the impact of established and hybrid qualitative research methods without losing its qualities as art. In our own experience, academic writing techniques and research-oriented methods strengthen rather than dismantle the expressive and experimental qualities of artistic research. Such methods have provided us with information and data that in turn have helped us to develop our artistic work in unforeseen ways. For these reasons, we do not see the need to develop alternative writing techniques specific to artistic research. While our primary claim in this paper is that artistic research is now mature enough to trust the power of the knowledge innate to artistic practice, there is obviously still much to be done on the formal level concerning artistic research education and research institutions. An even greater challenge is the further development of the use of research in art institutions.

Although artistic research has a formidable potential to explore knowledge in art, not all art is, nor should it be, an object for artistic research. The fact that artistic expressions such as music can manifest themselves in many different modes is clearly a strength rather than a weakness. Furthermore, there will be no danger of art becoming too academic as long as artistic research is focused on the artistic practice, and there will be no opposition between research credibility and artistic freedom as long as methods are made explicit. Similarly, artistic research institutes will have no problem to evaluate the artistic quality of their projects as long as there is healthy and widespread collaboration between these institutes and the surrounding art world. There is, however,

13 We owe these examples to Henrik Karlsson.

a need for efficient documentation models and databases to which texts and descriptions can be linked and made available to other artists and researchers and to the general public.

What, then, is the potential usefulness of research for the arts? When looking at the ramifications of various artistic projects in our own practices over the past fourteen years, and at their relations to artistic research projects and contexts, we draw the following conclusions:

- Artistic research can amplify the developmental aspects of experimental artistic projects and make possible more extensive explorations of a certain field.
- A successful research design should not only afford time and space where personal reflection can be worked into the creative process, but should also include methods that allow new understandings and new artistic directions to emerge.

As for the first point, we believe that the making of Frisk's *Repetition Repeats all other Repetitions* is an example of how the exploration of open form in the interaction between composer and performer as well as that between man and computer can be highly supported by a multi-faceted research process. The multiplicity of all approaches – qualitative analysis of our interaction, collective writing and analysis of these materials, further artistic experimentation and implementations of new versions – contributed to the creative process.

Though some of the elements of the most recent versions of the piece were intuitively or conceptually a part of it already at the outset, the research process gave us the tools to include them. In other words, in this case the research made it possible to achieve the initial artistic goals. One may say that our collaboration tended to oscillate between the three poles of the academic, the experimental, and the subjective. These poles were articulated in different ways: the subjective and the academic aspects were discussed in the writing while the experimental practice was expressed most clearly in the versions of the work displayed in the numerous performances of the piece in Europe, Asia and the USA, and in the recordings.

In a somewhat similar way, but less clearly articulated and documented, the working process in the *Integra* project pointed to the usefulness of interaction between artistic practice and other disciplines and to the fact that artistic development can be the outcome in inter-disciplinary work. Some of the more technically-oriented research in *Integra* also found its way into the method development in *(Re)thinking Improvisation*. We also believe that the trajectory from *(Re)thinking Improvisation* and our growing understanding of the implications of carrying out the work in the Vietnamese/Swedish *The Six Tones* in a postcolonial and multicultural context and, specifically, our growing understanding of the political nature of this practice, had not been possible without the

research context in which we developed the work between 2009 and 2012. Further, in the recent developments of the work of the group in the context of *Music in Movement*, the first clearly articulated artistic outcomes of these political understandings are now being produced.

It is essential for artistic research that the space for subjectivity in research in general is expanded, and this expansion is what we refer to by 'beyond validity'. We believe that it is time to develop an epistemology for research that is responsive to the demands from modern society to move towards a decolonized and ethically grounded paradigm. The positivist belief in a value-free, 'objective' science is a delusion and has already been decisively countered by a subjectivist turn. In this context, the artistic researcher can be a vanguard representative of an autoethnographic and politically aware counter-reaction. The delusive view on science as an expression of objectivism is present also in the art academies. Hence, to claim the legacy of the artist-researcher is a necessary turn to further establish artistic research as a natural aspect of art education. Returning to the discussion of the positivist concepts of validity and reliability, we believe that the development of methodologies in the qualitative sciences in this respect presents a framework for artistic researchers to develop. Looking beyond validity, the credibility of the research would then become a matter of making the subjectivity of the artist visible in the research design. The need for creating a multi-layered understanding of subject positions comes out clearly in the study of collaborative creativity, of which research into contemporary performance practices is but one important field.¹⁴ Any possible generalisation at a later stage depends on artistic researchers being honest with the subjective nature of their practice.

The politics of making artistic research essentially consists of situating artistic practice in a wider discourse, and of strengthening the aim of producing artistic work that is in itself shaped by this augmented space. We do not mean to promote 'political art', but rather to encourage an expanded awareness among artists and researchers of the political implications of their practices. Political art has some problematic connotations, but what we are discussing here is a development beyond any specific modelling of the artistic output along political lines. The contextualization of art as artistic research is in itself a politicization, but it is also the placing of the artistic work in the light of a particular social, theoretical, cultural, or philosophical framework that makes the political dimension surface. Such awareness may constitute a foundation for artistic production and research that is responsive to the four gravitational fields discussed above – the subjec-

14 See for instance the ongoing CMPCP project (www.cmpcp.ac.uk), an example of the development in performance studies and in individual pieces of research into contemporary performance practices (Clarke et al. 2005; Roe 2007; Östersjö 2008).

tive, the experimental, the academic, and the field of the art world – while being solidly, and consciously, encompassed by a sociopolitical context.

References

- Biggs, Michael and Henrik Karlsson 2011: 'Evaluating Quality in Artistic Research' in *The Routledge Companion to Research in the Arts*. Eds: M. Biggs & H. Karlsson. Oxon & New York: Routledge.
- Borgdorff, Henk 2012: *The Conflict of the Faculties: Perspectives on Artistic Research and Academia*. Leiden: Leiden University Press.
- Busch, Kathrin 2009: 'Artistic Research and the Poetics of Knowledge' in *Art & Research: A Journal of Ideas, Contexts and Methods*, Vol. 2, No. 2.
- Clarke, Eric, Nicholas Cook, Bryn Harrison & Philip Thomas 2005: 'Interpretation and Performance in Bryn Harrison's être-temps' in *Musica Scientiae*, 9(1), p. 31-74.
- Coessens, Kathleen 2011: 'An Artistic Logic of Practice: The Case of the Performer' in *The International Journal of the Arts in Society*, Vol. 6.
- Creswell, John W. & Dana L. Miller 2000: 'Determining Validity in Qualitative Inquiry' in *Theory into Practice* 39, p. 124-134.
- Denzin, Norman K., Yvonna S. Lincoln & Michael D. Giardina 2006: 'Disciplining Qualitative Research' in *International Journal of Qualitative Studies in Education*, Vol. 19, No. 6, November-December 2006, p. 769-782.
- Folkestad, Göran 1996: *Computer Based Creative Music Making: Young People's Music in the Digital Age*. Gothenburg: Acta Universitatis Gothoburgensis.
- Frisk, Henrik 2008: *Improvisation, Computers, and Interaction: Rethinking Human-Computer Interaction Through Music*. PhD thesis. Malmö Faculty of Fine and Performing Arts, Lund University.
- Frisk, Henrik & James Bullock 2011: 'An Object Oriented Model for the Representation of Temporal Data in the Integra Framework' in *Proceedings of the International Computer Music Conference 2011*. ICMA.
- Frisk, Henrik, James Bullock & Lamberto Coccioli 2008: 'Sustainability of 'Live Electronic' Music in the Integra Project' in *The 14th IEEE Mediterranean Electrotechnical Conference Proceedings*. Ajaccio, Corsica: IEEE.
- Frisk, Henrik & Stefan Östersjö 2013: *(Re)thinking Improvisation: Artistic Explorations and Conceptual Writing*. Lund: Lund University Press.
- Frisk, Henrik, & Stefan Östersjö 2006: 'Negotiating the Musical Work. An empirical study.' Paper presented at the International Computer Music Conference, New Orleans.
- Frisk, Henrik, & Stefan Östersjö 2007: 'Negotiating the Musical Work. An Empirical Study on the Inter-Relation between Composition, Interpretation and Performance' [electronic version]. *EMS Proceedings*: www.ems-network.org/spip.php?article245
- Gibson, James J. 1986: *The Ecological Approach to Visual Perception*. Hillsdale, N.J.: LEA.
- Godøy, Rolf Inge 2006: 'Gestural-Sonorous Objects: Embodied Extensions of Schaeffer's Conceptual Apparatus' in *Organised Sound* 11(2), p. 149-157.
- Guba, Egon G., 1981: 'Criteria for Assessing the Trustworthiness of Naturalistic Inquiries' in *Educational Technology Research and Development* 29, No. 2, p. 75-91.
- Guba, Egon G. & Yvonna S. Lincoln 1994: 'Competing Paradigms in Qualitative Research' in *Handbook of Qualitative Research*. Eds: N.K. Denzin & Y.S. Lincoln. Thousand Oaks: Sage, p. 105-117.
- Hall, Stuart 2000: 'Who Needs Identity?' in *Identity: A Reader*. Eds: Paul du Gay, Jessica Evans & Peter Redman. London: Sage.
- Hall, Stuart 1993: 'Cultural Identity and Diaspora' in *Colonial Discourse & Postcolonial Theory: A Reader*. Eds: Patrick Williams & Laura Chrisman. New York: Harvester Wheatsheaf.
- Hannula, Mika 2011: 'River Low, Mountain High. Contextualizing Artistic Research' in *Artistic Research*. Eds: A. Balkema & H. Slager. Amsterdam: Lier en Boog.

- Hughes, Rolf, Catharina Dyrssen & Maria Hellström Reimer 2011: 'Artistic Research Today and Tomorrow' in *Form och färdiktning - strategiska frågor för den konstnärliga forskningen* (Årsbok KFoU 2011). Ed: T. Lind. Stockholm: Vetenskapsrådet.
- Karlsson, Henrik 2002: *Handslag, famntag, klapp eller kyss?* Stockholm: Sister.
- Kinderman, William 1995: *Beethoven*. Berkeley: University of California Press.
- Knorr Cetina, Karin 1999: *Epistemic Cultures: How the Sciences Make Knowledge*. Cambridge, Mass.: Harvard University Press.
- Knorr Cetina, Karin 1990: 'The Couch, the Cathedral and the Lab: On the Relationship between Experiment and Laboratory in Science' in *Science as Practice and Culture*. Ed: A. Pickering. Chicago: University of Chicago Press.
- Knorr Cetina, Karin 1981: *The Manufacture of Knowledge: An Essay on the Constructivist and Contextual Nature of Science*. Oxford: Pergamon Press.
- Kvale, Steinar 1995: 'The Social Construction of Validity' in *Qualitative Inquiry*, Vol. 1, No. 19, p. 19-40.
- Latour, Bruno & Steve Woolgar 1986: *Laboratory Life: The Construction of Scientific Facts*. Princeton, N.J.: Princeton University Press.
- Leman, Marc 2010: 'Music, Gesture, and the Formation of Embodied Meaning' in *Musical Gestures: Sound, Movement, and Meaning*. Eds: R. I. Godøy & M. Leman. New York: Routledge.
- Longino, Helen 2002: *The Fate of Knowledge*. Princeton, N.J.: Princeton University Press.
- Lynch, Michael 1985: *Art and Artifact in Laboratory Science: A Study of Shop Work and Shop Talk in a Research Laboratory*. London: Routledge & Kegan Paul.
- Maharaj, Sarat 2011: 'Unfinishable Sketch of "An Unknown Object in 4D": Scenes of Artistic Research' in *Artistic Research*. Eds: A. Balkema & H. Slager. Amsterdam: Lier en Boog.
- Mozart, Leopold 1948/1776: *A Treatise on the Fundamental Principles of Violin Playing*. London: Oxford University Press.
- Nancy, Jean-Luc 2007: *Listening*. New York: Fordham University Press.
- Nowotny, Helga 2011: 'Foreword' in *The Routledge Companion to Research in the Arts*. Eds: M. Biggs & H. Karlsson. Oxon & New York: Routledge.
- Östersjö, Stefan 2013: 'The Resistance of the Turkish Makam and the Habitus of the Performer' in *Contemporary Music Review*, Vol. 32, No. 1.
- Östersjö, Stefan 2008: *SHUT UP 'N' PLAY! Negotiating the Musical Work*. PhD thesis. Malmö Faculty of Fine and Performing Arts, Lund University, Sweden.
- Quantz, Johann J. 1974/1752: *Versuch einer Anweisung die Flöte traversiere zu spielen*. Reprint. Kassel & Basel: Bärenreiter-Verlag.
- Roe, Paul 2007: *A Phenomenology of Collaboration in Contemporary Composition and Performance*. PhD thesis. The University of York.
- Strauss, Anselm L. & Juliette M. Corbin 1998: *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (2. ed.). Thousand Oaks, Calif.: SAGE.
- Trinh T. Minh-ha 1991: *When The Moon Waxes Red*. New York: Routledge.
- Vaggione, Horacio 2001: 'Some Ontological Remarks about Music Composition Processes' in *Computer Music Journal*, Vol. 25, No.1, p. 54-61.
- Wörner, Karl Heinrich 1963: *Stockhausen: Life and Work*. Berkeley & Los Angeles: University of California Press.

Scores

- Frisk, Henrik 2006: *Repetition Repeats all Other Repetitions*. STIM: Svensk Musik.
- Riehm, Rolf 1990: *Toccata Orpheus*. Munich: Ricordi.

Abstract

Beyond Validity: Claiming the Legacy of the Artist-Researcher

In this paper we argue that it is essential for artistic research to develop an epistemology and methodology that is responsive to modern society's demands to move towards a decolonized and ethically grounded paradigm. The positivist belief in a value-free, 'objective' science has already been decisively countered by a subjectivist turn. In this context, the artistic researcher can be a vanguard representative of an autoethnographic and politically aware counter-reaction in which the space for subjectivity in research in general is expanded – an expansion that goes 'beyond validity'. Rather than being understood as a non-academic and independent research discipline, we claim that artistic research is situated in a space principally defined by four non-conformal fields of gravitation: the subjective, the academic, the experimental, and the field of the art world. The complexity of this picture should not prevent the development of frames and methods for artistic researchers to use or depart from, while still maintaining an experimental perspective. Drawing on theoretical currents in the social sciences and cultural studies as well as method development in the artistic research field, our argument builds on the conviction that artistic practices have always constituted a source of dissemination of particular kinds of knowledge. These non-discursive forms of transmission of knowledge constitute a foundation for artistic research.

Keywords

Artistic research, method development, artistic practice, subjectivity, research assessment.

The authors

Dr. Henrik Frisk is an active performer – saxophones and laptop – of improvised and contemporary music, and a composer of acoustic and computer music. With a special interest in interactivity, most of the projects he engages in explore interactivity in one way or another. Interaction was also the main topic for his artistic PhD thesis *Improvisation, Computers, and Interaction* (Malmö Academy of Music, Lund University, Sweden, 2008). Henrik has performed in many countries in Europe, North America and Asia including performances at prestigious festivals such as Göteborg International Biennial for Contemporary Art, Bell Atlantic Jazz Festival (NYC) and the Montreux Jazz Festival. As a composer he has received many commissions, made numerous recordings for American, Canadian, Swedish and Danish record labels and is currently a member of the collective Kopasetic Productions, an independent label owned and run by improvising musicians. Henrik Frisk is also associate professor at the Malmö Academy of Music, Lund University,

and assistant professor at the Royal College of Music in Stockholm, and works with the Swedish National Artistic Research Academy. As a visiting lecturer he has taught at several schools and universities.

Dr. Stefan Östersjö, guitarist, is a prominent soloist within new music in Sweden. Since his debut CD (Swedish Grammy in 1997) he has recorded extensively and toured Europe, the US and Asia. His special fields of interest are the interaction with electronics, and experimental work with different kinds of stringed instruments other than the classical guitar. As a soloist he has cooperated with conductors such as Lothar Zagrosek, Peter Eötvös, Pierre André Valade, Mario Venzago, Franck Ollu, Andrew Manze and Tuomas Ollila. His thesis *SHUT UP 'N' PLAY! Negotiating the Musical Work* (2008) was published by Lund University, Sweden. He is presently engaged in artistic research on improvisation in different cultural contexts at the Malmö Academy of Music and, since 2009, is a research fellow at the Orpheus Institute in Ghent, Belgium. He is also working in a CMPCP project together with the composer David Gorton and professor Eric Clarke, and in the AHRC-funded environmental sound art project Landscape Quartet, headed by Newcastle University.