Artistic Experimentation in Music

An Anthology

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Darla Crispin and Bob Gilmore (eds.)

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The Exposition of Practice as Research as Experimental Systems

Michael Schwab
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Over the last few years, Hans-Jörg Rheinberger's theory of "experimental systems," which he has developed in relation to the empirical sciences and molecular biology in particular, has gained currency in debates around art and research. While Rheinberger (2007, 2009, 2012a, 2013) acknowledges that a comparison between the advance of art and that of science may be made, it is striking that, in the literature to date, no coherent picture has emerged as to how his theory may productively be employed in this context. Authors who focus on the notion of "experimentation" seem to limit their discussion to practices that conceptually, materially, or aesthetically make reference to the sciences, failing to address the remaining practices in terms of experimentation (e.g., in Friese, Boulboullé, and Witzgall 2007). Authors who focus on epistemological implications may identify "epistemic things" in general within artistic practice, while failing to account for the specificity of experimentation in this context (e.g., Borgdorff 2012a).

My recently published multiauthor book *Experimental Systems: Future Knowledge in Artistic Research* (Schwab 2013a) tries to assemble more voices between those positions, since, when looking at the status of experimentation in artistic practice, it is vital to find an artistic equivalent to a scientific notion of "experimentation" and not limit this search to practices that may simply have appropriated aspects of experimentation from the sciences. Artistic practices outside "experimental art" or "experimental music" in fact may share an epistemological project with experimental science without having any obvious relationship to it. In this short text, I aim to sketch a further possible approach to this problem by relating Rheinberger's notion of "experimental system" to the concept of "exposition" that my colleagues and I have developed in the context of the *Journal for Artistic Research* (*JAR*), of which I am founding editor-in-chief.[1]

1 The relationship between "experimentation" and "exposition" suggested in this chapter will be further investigated as part of my contribution to Paulo de Assis's ERC-funded research project "Experimentation versus Interpretation: Exploring New Paths in Music Performance in the Twenty-First Century" (2013–17).

Writing

Regarding experimentation, the link between laboratory science and an academic publishing project may not be immediately obvious if one does not understand, as Rheinberger (2012b, 90) does, experimentation as a process of writing, or, to be more precise, as a "writing game" where an experimental system known as "graphematic space" produces "graphemes"[2] (Rheinberger 1997, 105–8; 1998). An emphasis on writing is also supported by the analysis of "laboratory life" made by Bruno Latour and Steve Woolgar (1986), who find a "strange mania for inscription" (48) where "the laboratory [takes] on the appearance of a system of literary inscription" (52). Research carried out by Steven Shapin and Simon Schaffer on Robert Boyle's invention of the air pump—and with it, experimental science—may further support such claims due to the importance of "literary technology," where "the text itself constitutes a visual source" rather than simply offering "the narration of some prior visual experience" (Shapin and Schaffer 1985, 61; Shapin 1984).

One may, however, argue that Rheinberger's (1997, 106) explicitly Derridean approach, in which he differs from Latour, allows him to situate writing in the experimental object itself, outside its production through measuring devices, from which it is nevertheless not independent (ibid., 111). When focusing on these devices, one runs the risk of assuming the existence of material from which the device simply produces text through measurement and transcription, a position that does not take into account that such an assumption may actually be the result of experimentation itself. With Derrida, however, one has to argue that the material as it appears in an experimental system (the experimental object) is already part of a writing game and thus dependent on "arche-writing . . . as the condition of all linguistic systems" (Derrida [1976] 1997, 60). As Rheinberger (1997, 111) says, quoting Latour and Woolgar (1986, 51) and Latour (1987, 64–65), "It is thus unnecessary to distinguish between machines that 'transform matter between one state and another' and apparatuses or 'inscription devices' that 'transform pieces of matter into written documents.'"[3]

A focus on Derrida thus relaxes the link between writing and measurement and opens up the possibility for a writing practice manifested not in numbers but in "scribbles" (Rheinberger 2010a, 244–52), in "preparations" (ibid., 233–43), and also in the experimental object itself, which "*is* a bundle of inscriptions" (Rheinberger 1997, 111; emphasis in the original). However, as Rheinberger (ibid., 28) writes, experimental systems "inextricably cogenerate the phenomena or material entities and the concepts they come to embody."

2 The notion of "grapheme" usually refers to the smallest semantic unit of written text. Rheinberger extends the term to also include material traces that emerge from an experimental system, applying Derrida's *Of Grammatology* ([1976] 1997) to empirical science.

3 While Rheinberger (1997, 77–78) acknowledges the tacit dimension, one needs to see the body as complicit in writing rather than as yet another "inscription device" that produces text, in this case, through experience. It is the materiality of the body rather than the subjectivity of either artist or audience that is relevant to an experimental approach to embodiment. Neither device (explicit) nor body (implicit) can have authorship in an experimental system conceived as writing space.

Thus, following Rheinberger, inscriptions take place simultaneously in two spaces: the material, graphematic space and the representational space of science.[4]

There is no space in this short chapter to discuss Rheinberger's theory in detail, in particular his notion of the "epistemic thing" as the guise in which new knowledge enters the (experimental) scene. For the purpose of this text, it is sufficient to point out the deeply differential nature of experimental systems where "experimenters are not interested in identities; they proceed in the search for 'specific differences'" (Rheinberger 1997, 79).[5] Naturally, research has to be focused on such specific differences, since by definition new knowledge will differ from what is known already. In this sense, "method" may be doubted as crucial for substantial progress in research—as it was famously by Paul Feyerabend in his book *Against Method* (1988)—since "method" to some degree predicts the outcome.[6] Following Derrida's approach, this doubt needs to be extended to the source material on which experimentation takes place; possible preconceptions about dormant properties in a material will limit what might emerge, requiring the "dislocation" (Rheinberger 1997, 82) of those preconceptions. It is thus crucial to Rheinberger (ibid., 81) that "an experimental arrangement must be managed in such a way that it keeps being governed by difference. I use the term *difference* to characterise the specific, displacing dynamics that distinguishes the research process."

Writing is nothing but this dislocation, displacement, or deferral, to introduce yet another, this time more temporal, Derridean term.[7] Something needs to re-emerge as different during the process of writing (or experimenting, for that matter), regardless of whether this alteration is caused by the material at hand or by the experimental approach that is employed. After the fact of writing, what is given has reshaped its own origin *as if* what is given now has always been given, *as if* no difference ever occurred. To explain the naturalness with which this process takes place, Shapin (1984) borrows Robert Boyle's notion of the "matter of fact" (in opposition to "matter of law") that is produced through an experiment, where, with the help of a highly artificial construct (the experimental apparatus), facts emerge that are beyond doubt, like nature itself. This paradoxical situation makes it difficult to question whether what has emerged in the experiment was, in fact, the cause and origin for precisely this emergence. Deconstruction, which cannot be called a method following the above

4 For a discussion of the relationship between the graphematic and the representational space see Schwab (2013b, 7–9)

5 Rheinberger here makes reference to Robert B. Loftfield, a researcher interviewed in Rheinberger's case study.

6 The questioning of "method" appears to be particularly strong in artistic research, where nobody seriously believes that artistic research practice can be explained as sets of methods (see Slager 2009; Miles 2012).

7 According to Derrida, *différance* governs both difference in space and time as "the becoming-time of space and the becoming-space of time" (Derrida 1982, 8). In effect, the position from which all differences (space) may be assessed needs to be deferred into the future (time) since the position would otherwise be part of what it tries to assess. This is the reason why according to Rheinberger (quoting François Jacob), experimental systems are "machines for making the future" (Rheinberger 1997, 28).

(cf. Gasché 1986, 121), is Derrida's attempt to bring back into the discourse what that same discourse expels in its formation (cf. Schwab 2008b).[8]

Publishing

Focusing on the role of formation, Rheinberger argues that in an experimental system "the scientific object is shaped and manipulated 'as' a traceable conformation" (Rheinberger 1997, 111). However, since the scientific object is conceived as a "bundle of inscriptions," and since those inscriptions are made both in the graphematic and in the representational space, there is always a public dimension even to what happens on the presumably private space of a scientist's workbench. One may thus say that the transformation of a material object is strictly speaking also a publication activity, if the term "publication" were not limited—as it usually is—to the production of conventional text, illustrated or not.

Interpreting transformational activities as publication is perhaps easier to accept if one follows Latour and places "series," "chains," or "cascades" of transformation between the poles of "world" and "language," which he illustrates with the example of a field trip to the Amazon rainforest. In his understanding, material is transformed from its local, particular, material, multiple, and continuous pole through such chains into a form of "compatibility, standardisation, text, calculation, circulation and relative universality" in a movement that he calls "upstream" and "amplification" (Latour 1999, 70–71). Crucially, in his understanding, if meaning is to be retained, it must be possible to retrace those transformations (downstream): "To know is not simply to explore, but rather it is to be able to make your way back over your own footsteps, following the path you have just marked out" (ibid., 74). In this way, an inner link is provided between knowledge encoded in (academic) writing and in material objects without any formal correspondence, where the one need not resemble the other.

This resonates with Henk Borgdorff's (2012b, 197–98) understanding that an experimental space is already a space of publication. According to Borgdorff, publication is not something that is done after the experiment has been conducted, as is the writing-up of its results; rather, publication is always already taking place in experimental systems. While publication may appear to be secondary in the sciences, it cannot be so in art. Artworks are not simply "written-up"—that is, they are not published results, where the work happened somewhere else—they are engaged from the outset in the work of publication.

With reference to Rheinberger's quotation (above), during "the shaping of an object *as* traceable conformation," the "as" indicates a differential redoubling,

8 In Schwab (2008a, 217) I argue with reference to Winfried Menninghaus (1987) that, with deconstruction, Derrida's emphasis remained on the critical rather then the formative side of discourse. Rheinberger's work on experimental systems that trace the formation of new objects in the context of experimental science shifts the balance and brings Derrida's thinking in closer proximity to processes of creation, which in books such as *The Truth in Painting* (1987) is still largely an exercise of interpretation.

where difference is inscribed as identity—a differential process that makes an identity (the scientific object) manifest *a posteriori*.[9] Likewise, the notion of "exposition" that the *Journal for Artistic Research* employs to describe its format of publication is defined as "the exposition of practice *as* research," where, through forms of exposition rather than documentation, an artistic object's (epistemic) identity is made manifest (see Schwab 2011, 2012a). Crucially, in terms of form, such an exposition need not resemble what it exposes, since what is exposed may have been transformed during the process. Mika Elo (2008, 1) even insists on such formal difference in terms of media when he says that "one essential task of the artist/researcher is to provide well-articulated passages between different media while maintaining high sensitivity to their mediality."

Although the concept was touched upon by others around the same time (e.g., Sullivan 2005; Lesage and Busch 2007; Barrett and Bolt 2007), Katy Macleod and Lin Holdridge were the first to focus on the importance of the "as"-construct in the context of artistic research. In the introduction to their book *Thinking Through Art: Reflections on Art as Research* (2006), they borrowed the concept from an essay by Steven Melville (2001) published in the catalogue to the exhibition "As Painting: Division and Displacement" at the Wexner Center for the Arts in Columbus, Ohio. As the exhibition's title suggests, here too one finds emphasis on difference, but also on the role of material (in this case painting) that is not dissimilar to Rheinberger's approach. Melville summarises his argument very persuasively when he says:

1. Matter thinks. "Thinks" here evidently means "makes a difference," so the proposition is that matter gives itself over to difference or to a process of difference.
2. This process must be grounded in matter opening itself to sense through some interruption of its apparent absolute continuity with itself; the ground of thought is something like a cut or fold, a moment of delay or excess, in which substance refigures itself as relation.
3. Because thought taken this way is above all articulation, matter is not conceivable apart from language and the structure of difference to which it gives particularly compelling expression. There is no perception and so no visibility that is not also a work of articulation. (Melville 2001, 8)

It is through this move that Macleod and Holdridge (2006, 12) can, at the end of their introduction, call for the "need to bring our writing nearer to our making"; however, despite their best efforts, it still seems unclear "how research artwork might be more fully understood" (ibid., 6). While, as facilitated by the recourse to Melville, the philosophical underpinning seems to be in place, their book is not yet able to overcome the academic framework and its lim-

9 This historical dimension is an epistemological necessity, which in turn requires one to "historize epistemology" (Rheinberger 2010b).

ited understanding of writing: the implications of Melville's thinking are only partially developed. This in turn prevents a full understanding of "research artwork" as (material) writing practice that academia can assess as text.

Comparing this situation with Rheinberger's thinking, the crucial missing element in the creative field is no longer the academic framework that institutionally locates "research," since this has been increasingly developed since the 1990s (for the UK see, for example, Candlin 2001); rather, what is missing is a conceptual framework that delivers writing as practice, akin to what Rheinberger in his scientific domain calls "experimental system." Between material practice and scientific discovery, with "experimental system" he traces a concept that protects and formulates the material writing space, not in radical opposition to academia, but as a differentiation and localisation of those of its practices that deliver what it can know.

Likewise, within the creative fields, with the notion of "exposition" a concept has been established that is currently being tested in relation to both its quality as writing, which can interface with academia, and its acceptance by researchers in the various disciplines in relation to its usefulness. While the outcome of this process is still open, I would at least like to try to sketch how the exposition of practice as research may be set in place to deliver a space comparable to that of experimental systems.

Importantly, the term "exposition" is arbitrary.[10] Alternative terms may be used, as long as they facilitate a similar redoubling as introduced above. For example, one may speak of "the performance of practice as research" or "the staging of practice as research."[11] Whatever notion is used, however, it seems to be important for this notion to be defined by a specific practice, that is, by that within which difference is made. Although developed in the context of the *Journal for Artistic Research*, because of this very general definition "exposition" transgresses the very limited confines of academic publishing and emerges as a fundamental part of any research practice.

The exposition of practice as research is not limited with regard to its form; it may occur in any context—such as journal publications, conferences, concerts, exhibitions, or even during teaching sessions—while within those contexts, exposition may occur in any medium or form.[12] As argued by Tom Holert (2009), who discusses artistic research in more general terms, "exposition" may be a (late) consequence of "talk" entering the studio when, after the Second World War, academies were reformed to accommodate contextual studies that would influence the formation of "critical practice" (see also, Candlin 2001).

10 Having been instrumental in the development of this concept, I concede that part of this particular choice has to do with my own artistic roots in photography, where, for instance, an image emerges through exposure.

11 Further notions that are suggested are the translation, the reflection, the unfolding, the exhibiting, or the curating of practice as research (Schwab 2012b, 342–43).

12 It cannot be assumed, for instance, that text is by definition more expositional that an artistic presentation, although it may be so.

In general, "exposition" may be defined as the discursive supplementation of practice that can allow for the emergence of different identities of this practice. While practice may be exposed as research, it may also be exposed, for example, as political action (e.g., Daniel Buren), as commercial activity (e.g., Andy Warhol), or simply as life (e.g., Joseph Beuys). As I argue elsewhere (Schwab 2012a), such a notion of exposition makes it necessary to distinguish between first- and second-order art-making, since it cannot be assumed that all art engages in such notions of writing, particularly not with the paradigm of research. In that text, I reserve the expression "first-order art-making" for a more conventional conception of artistic practice, whereas I use "second-order art-making" to indicate artistic practice as writing, in which one may see art's embrace of secondary formats that engage in difference or even *différance* (Öberg 2010, 14–15) as a means to self-define a practice without relation to discipline or similar external frames that can be used to construe the identity of that practice.[13] As a consequence, rather than judging by fixed criteria, the assessment of artistic research, as it is done, for instance, in the *Journal for Artistic Research,* may focus on a submission's expositionality and the way it engages difference to produce "epistemological gain" by allowing reviewers to retrace the transformational relationships that are set up in it.[14]

As indicated in the domain of scientific experimentation by Boyle's notion of the "matter of fact," in art too, the level at which those tracings operate needs to be within the material itself while signalling traceability, that is, intelligibility. However exciting (or not) it may be, if evidenced in the material, an artistic proposition must be beyond doubt, since what it presents is part of the material's potential even if it is unexpected, unusual, or unprecedented. It is this aspect that allows one to suggest, with Melville, that "matter thinks,"[15] not as a primary cause for artistic research but as a result of its artistic exposition, which shares with experimentation a dedication to its own practice-base.

13 There is no space to elaborate on this here, but one could argue for a definition of "modern art" as first-order art-making and "contemporary art" as second-order art-making. See Aranda, Wood, and Vodokle (2010) for an investigation into "What is Contemporary Art?" and Osborne (2013) for the relation between contemporary art and postconceptual art practice.

14 "Epistemological gain" is a concept that Isabelle Graw introduces in her book *High Price* (2009) in order to speak about the (priceless) value of art. In my understanding, "epistemological gain" needs to be reserved for art that exposes itself as research.

15 The suggestion that objects, and in particular artworks, may "think" is rapidly gaining currency. While in their book *The Literary Absolute*, Philippe Lacoue-Labarthe and Jean-Luc Nancy (1988, 115) speak of a "subject-work" to express this reflective dimension, Jacques Rancière (2009, 107–32) argues for the "pensive image." In Schwab (2008a) I argue that this trajectory was begun by Walter Benjamin's reassessment of early German Romanticism. In this respect, I want to point out that already for Novalis there is a deep similarity between art and science when he says that "the innermost principles of art and science are mechanical" (quoted in Menninghaus 1987, 36), which being governed by difference produce matters of fact.

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