Artistic Research

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ARTISTIC RESEARCH

Series Editors: Paulo de Assis and Lucia D'Errico

"Artistic research" is a recent term that relates to a particular mode of artistic practice and of knowledge production, in which scholarly research and artistic activity become inextricably intertwined. Placed at the crossroads of art and academia, inbetween thought and sensible apprehension, articulating different artistic practices and disciplines, and giving a central role to processes and materiality, artistic research questions the boundaries between art, philosophy, and science, enabling the exploration and generation of new modes of thought and expression. Crucial in order to grasp artistic research, and how it differentiates itself from other more traditional modes of research on the arts (such as art history, musicology, sociology of art, or aesthetics), is the focus on practice: it is practice-based, practice-led, and practice-driven, being primarily conducted by practitioners. In this sense, artistic research is a specific area of activity where artists actively engage with and participate in discursive formations emanating from their concrete artistic practice.

Fundamentally cross- and transdisciplinary, artistic research nevertheless starts from specific areas of artistic practices, such as music, cinema, painting, design, architecture, poetry, literature, dance, sound studies, and so on. Within a transdisciplinary horizon of thought and practices the Artistic Research series will address these more specific fields from a practical perspective, offering extended primers intended for students, docs and postdocs, but also for early-career researchers, who will find in them methodologies, strategies, and best-practice examples.

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Artistic Research: Charting a Field in Expansion Edited by Paulo de Assis and Lucia D'Errico

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Artistic Research Charting a Field in Expansion

Edited by Paulo de Assis and Lucia D'Errico

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Expositionality

Michael Schwab

PART 1: TERMINOLOGIES

In 2009, Florian Dombois, then the Head of Y (Institute for Transdisciplinarity) at the Berne University of the Arts, commissioned me to investigate how a peerreviewed journal for artistic research could be introduced. My "Draft Proposal" was published on November 12, 2009, and shared across a number of networks in a "Call for Support" leading to the foundation of the international, non-profit Society for Artistic Research (SAR) in 2010 and the launch of the Journal for Artistic Research (JAR) as well as its technical framework, the Research Catalogue (RC), a year later. The Draft Proposal invested heavily in the notion of "exposition" as key conceptual ingredient through which the "practice-theory deadlock" (Schwab 2018a, 54) as I later called it was proposed to be challenged. With it came the shift from notions of practice-based or practice-led research to artistic research, since the latter emphasises the importance of self-determination for artists in regard to which part of their research may be considered "practice" or "theory"—if this distinction was still deemed relevant, that is. Embracing the adjective "artistic" (as in "artistic research") rather than the nouns "art" or "artist" (as in "art research" or "artist's research") has also shifted the focus away from notions of "high art" and its modernist discourse. As Gina Badger and Alise Upitis remind us with reference to feminist criticism and the case of Ann Bermingham in particular, historically, the "artistic" (as in "artistic female") is also a derogative term for work "embodying art without necessarily mastering it." (Bermingham quoted in Badger and Upitis 2012, 258) My own proposition to look at artistic research as "second-order art-making" (Schwab 2009, 2012a) follows suit; it embraces often minor artistic forms and highlights their particular aesthetic as well as epistemic value. Expositionality in my understanding of the term is tied to these forms, bearing in mind that after the mid-twentieth century and

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the demise of formalist approaches to art, second-order art marking has gained in relevance.

When conceiving of a peer-reviewed journal that is *of* and *for* artistic research rather than *about* it, it is important to relate to what may be called "artistic values" in order to invite artistic modes of research, making and thinking. On a more personal level, as an artist, I expect that aspects central to my practice will remain so even as I develop it as research. In an attempt to spell out those values as explicitly as possible, in the introduction to *The Exposition of Artistic Research. Publishing Art in Academia*, Henk Borgdorff and I suggest that they may be paraphrased as:

- 1. Art is self-determined and suffers when it is told what to do.
- 2. Art challenges existing forms of practice. (Schwab and Borgdorff 2014, 13)

In my text "Imagined Meetings" (Schwab 2015b, 10), I refer to these values also as the self- and indetermination of art, where the indetermination of art's self-determination is potentially so strong as to disrupt historicising models of development including that of one's own practice. I have deployed notions of experimentation (Schwab 2013a, 2014a, 2014c, 2015a) and, more recently, transposition (Schwab 2018b, 2018c) to investigate the kinds of aesthetico-epistemic operations that make expositions of artistic practice as research possible.

The following text serves as a critical introduction to expositionality in the context of artistic research. It is written from a perspective for which the concept of exposition has already entered the general discourse of research in the arts, and where my own understanding of the term matters less than its concrete use and appropriation in different contexts. However, rather than surveying and comparing those at times blurred uses, in what follows, I will aim to re-emphasise that in my understanding expositions are events that problematise rather than represent the artistic practice they embody.

Exposition

The term "exposition" has Latin roots (*exponere* as to set forth, to explain). It has only entered the field of art as "public display" with the emergence of World Fairs and the Great Exhibition of 1851 in particular, in the context of which "exposition" (today: Expo) started being used perhaps also since the French precursors (*Exposition des produits de l'industrie française*, 1798–1849) had suggested that notion for events of this kind. This history, in which the English language has—as so often—appropriated words from other languages, explains why it is difficult to translate back into French the term "exposition" as it is used in the context of artistic research, since its difference and distance to notions of "exhibition" would not be apparent despite the fact that there are expositional aspects in exhibitions and vice versa to the degree that exhibitions and expositions may sometimes coincide.

 As far as the English language is concerned, "exposition" is an apt concept for at least three reasons. First, in its original meaning (to set forth), it alludes to explanations of all kinds, that is, discursiveness. Second, with the French influence, it is suggested that this discursiveness may happen at a site of display, that is, in embrace of non-verbal means. Third, expositions are also technical and hence mediated and choreographed events that demonstrate not only various products, but the art of display itself, with the Crystal Palace (built for the 1851 Great Exhibition) being one of its prime examples.

On the other hand, the proximity of the notion of "exposition" to commerce may be seen as problematic, in a manner not dissimilar to the notion of "research" entering the field of art. As the history, for instance, of the British development shows (Candlin 2001), the 1991 white paper "Higher Education: A New Framework" that prepared the 1992 Further and Higher Education Act, which granted many art schools university status and hence access to research funding, is very much concerned with relations to industry and the capitalisation of research in general very much in line with what today is called "knowledge economy." As a term, "exposition" does not suggest any critical distance to those developments, although in practice when the notion is used, things may be different.

Another important aspect has to do with the monumental character of the historical form of exposition as World Fair, which suggests some form of overview over a totality and a celebration of its greatness—such as the British Empire in 1851, for instance. Should an exposition in the context of artistic research aim at an overview? At a celebration? And if yes, of what kind? When looking at, for instance, Robert Smithson's more ironic appropriation of the term "monument" in his 1967 text "A Tour of the Monuments of Passaic, New Jersey" (Smithson 1996, 68–74) that followed his 1966 essay "Entropy And The New Monuments" (pp. 10–23), a changed relation to history is suggested as well as very different associations of form, materiality, and locality pointing to possible new understandings of that heavily historicising notion in contemporary art.

For those reasons, I have always been uneasy about "exposition" as a noun, only accepting it in the context of the RC, where an exposition is a clearly defined digital object—a set of multimodal web pages created on the RC for the purpose of presenting artistic research (Schwab 2014b). As a verb (to expose), the notion of "exposition" has very different connotations suggesting in particular a relationship to photography and the politics of light and visibility. In this sense, exposition is also exposure—a making-available of something to perception and, as indicated earlier, discourse, which qua enlightenment carries its own relationship to visuality. Crucially, however, through the suffix -ure, exposure suggests a certain passivity on the side of that which is exposed. In comparison, the notion of exposition is neutral in this respect.

However, when the verb "to expose" is used, it is not immediately clear whether it is meant as exposure or exposition—that is, suggesting passivity or neutrality. By

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default, I would suggest that a sentence such as "to expose my research" will lean to an understanding infused with some degree of passivity since "exposure" is the more dominant term also perhaps related to the ubiquity of photography.² This suggests that when referring to the activity of exposition care needs to be taken to avoid those connotations, which is important to me but which complicates the language to be employed when expositions are discussed.

At the same time, since they offer points of entry into the articulation of research, slippages to exposure are not unwelcome as it is a familiar concept expressing a certain wish by many researchers to bring into the light of discourse what they have been doing in the comparative darkness of their studio or lab. The fact that an exposition affects what we assume is simply exposed is at times forgotten—that is, more representational understandings may take hold and a difference may get lost between "to expose my research" and "to represent my research," for instance in a talk. Hence, an awareness is required that, despite the ease with which I can talk about "exposure," the reality of things is more challenging. As Ella Joseph (2014) remarks in her chapter in The Exposition of Artistic Research: Publishing Art in Academia, there is a complex relationship where "exposure and exposition generate each other" (p. 166) where the role, for instance, of Jean Cocteau's (1986) Beauty and the Beast: Diary of a Film is "that of exposing his own self, which has the function of making clear what the film as exposition veils" (Joseph 2014, 170). In other words, the positive import of notions of exposure to an understanding of exposition lays in the fact that acts of exposition affect everything including the image and the body of the artist, on which discourse may be seen to be inscribed. Exposition cannot escape making implications; nakedness, veiled or otherwise, is always on the cards—but perhaps not in the sense of "undressing."

To Expose "As"

The sense of passivity in a statement such as "to expose my research" is also created since in this construct the act of exposition does not appear to affect the research other than making it visible. Hence, in order to avoid a folding of "to expose" into notions of exposure, the more complex phrase that I have been advocating always comes with the preposition "as"—to expose A as B. This grammatical construct makes it much more difficult to think of photography, where silver salt is exposed to light but not "set forth" in any meaningful way.

Hence, more than the noun "exposition," it is the phrase "to expose practice as research" that has the most critical potential—short-hand usages, such as "my exposition" or "to expose my research" are easier to use and deploy, but they always run the risk of being understood in such a way as to put practice at a place of passivity.

With this shift yet another term proposed to identify our emerging field—"art as research"—becomes relevant. However this phrase, while also relying on the preposition "as," is at risk of shedding some of its critical potential if it is meant to express that "art is and always has been a research practice" (Mersch 2015, 24), perhaps

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also in the sense in which Borgdorff (2012, 230) characterises the "Nordic model" as "sui generis"—that is, "foreground[ing] artistic values when it comes to assessing research in the arts." In his text "What Is Artistic Research?," Julian Klein (2017) is also sceptical about possible re-definitions of art as research, since they fail to capture "artistic experiences" to be had outside of art. Hence, while I support the term "art as research" due to the importance of the preposition "as," I question the grammatical construct linking two nouns, "art" and "research." To my mind, this signals a context of ontology; that is, an interest in fields and disciplines rather than processes of understanding—epistemology—and the labor to be carried out when the one becomes the other. "Art" may or may not be research; without building bridges that ground either kind of understanding all we can do is rest on presuppositions, which is precisely what the notion of "research" fundamentally suggests challenging.

"To expose" is not only a verb, but also a practice. In fact, being a practice is all that counts in this construct—the notion of "exposition" perhaps chosen on the background of my own engagement with photography could easily be replaced by other indicators of practice, such as "to perform practice as research," "to curate practice as research," or "to stage practice as research," since they all describe similar grounded movements of articulation. Such shift towards forms of practice seems a more recent, important development in the field. The book Künstlerische Forschung. Ein Handbuch (Badura et al. 2015), for instance, is organised around entries as diverse as "to annotate," "to think; to reflect," "to form; to arrange," "to improvise," "to set in scene," "to compose," "to model," "to practice," "to work serially," "to exhibit," "to diagram," "to experiment," "to design," "to install," "to interact," "to work collectively," "to concert," "to note," "to publish," "to sing," "to translate." Focusing on aspects of "non-propositionality," Mira Fliescher and Julia Rintz (2014) also propose a "toolbox" that includes practices such as "to think," "to say," "to show," but also notions that may act as ingredients to practices such as "joke/wit [Witz]," "model," "force." In other words, the preposition "as" must be seen as situated in a practice that delivers practice's articulation as research—that is, its epistemic claim.

The most general formulation would thus be: "to practice practice as research" where the first "practice" is a verb, the second "practice" a noun, and the third practice a noun ("research") as practice's transposition into the epistemic. As becomes apparent here, then, "practice" is a multiplicity and simplifications such as "artistic practice" do not do justice to the various practices involved in artistic research, which must interrelate in such a way as to carry the weight of the distributed uniqueness that is being articulated. Moreover, it means accepting difference in practice and the differentiation of practice as epistemically productive, even in their crudest form of "art making" and "writing," or "practice" and "theory" both of which now, after the "practice turn" (Schatzki, Knorr Cetina, and Savigny 2001), I am suggesting are terms that allow for an understanding of the differentiation of practice and not for its demarcation. "Theory" is as much a practice as "practice" is.

Esa Kirkkopelto is right to suggest that what is ultimately at stake in "artistic research" are relationships to institutions, and the institutions of "art" and "academia"

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in particular. In his text *Artistic Research as Institutional Practice* (Kirkkopelto 2015), he questions whether approaches usually referred to as "institutional critique" act sufficiently deeply on the problematic of institutionality ultimately idealising counter-institutional practices while failing to understand that those practices collectively referred to as "critique" amount to institutions in their own right seemingly passing below their own (critical) radar. In difference to this, Kirkkopelto suggests that artistic research is also a practice of "instituting"—that is, whatever artistic research produces must have the potential to be instituted into "new knowledge" without which its inventiveness must be challenged. The relation to institutions of knowledge offers the critical dimension to the practice of instituting, which is historical—it needs to research and work on existing institutions and is as such not so much an expansion of knowledge than always also re-institution of what it is we know and how we know it.

In effect, to expose practice as research as genuine departure from what is already institutionally captured, existing notions of "research" must be investigated, challenged and replaced by new understandings. It is only when new notions of research are registered beyond simple claims to it that we can assume that a case has successfully been made for this and that new practice to count as research. This implies that forms of epistemology must be part of expositionality, but also that expositionality may offer new departures for epistemology, which now becomes neither a theory of knowledge nor its sociocultural genesis, but a materially situated, exemplary, and speculative enterprise and a proliferation of possible knowledges beyond what a single *logos* can capture.

The same case must also be made for the institution of art. Klein (2017) in effect turns the construct of expositionality around suggesting that at stake are also *expositions of research as art*, since the question of institution very much also applies to art. With regard to transpositionality, which I see as fundamental to expositionality (Schwab 2018c), I suggest characterising such double operations of exposition as "aesthetico-epistemic"—that is, the multiplicity with which I characterise artistic research practice needs to be extended to also include its institutions. On this level, the institutional context of JAR in which the notion of "exposition" has been developed becomes relevant. What may be a suitable format for an academic peer-reviewed journal dedicated to the exposition of practice as research?

Expositions are aesthetico-epistemic transpositions of practice aimed at articulating artistic research. While we can see such expositions working on all levels of complexity, we need to keep in mind that this understanding is not as yet sufficiently secured. In other words, part of the reason why the short history of artistic research has been so confusing stems from attempts in grounding it in what ultimately are unsuitable adaptations from non-artistic fields, such as the humanities or the sciences, which by and large do not do justice to the importance of the aesthetic for research reducing the epistemic implications of aesthetical labor to some form of sensory or experiential input. Frustratingly, this problem is not new to art education, where on all levels forms of verbal expression are prescribed that are supposed to deliver "reflection." Thus, the link that Tom Holert (2009), in his article "Art in the

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Knowledge-Based Polis," suggests between artistic research and the transformation of art education in the twentieth century needs to be followed up with the question: Have the forms, which have been developed as the studio became a place of conversation, been radical enough to critique both the traditional art education ("atelier," "master class") and the critical response often idealised under the label of "1968"? For instance, when looking at Mick Wilson's (2018, 34f.) suggestions about "the crit"—the "group critique and analysis sessions" that form a key institution of arts pedagogy, as he says—in the context of a discussion on method in artistic research, it is important to ask whether its auto-critical elements when described as "discursive reflection" can touch upon the more fundamental operations of knowledge creation. Rather than suggesting that artistic research should be discussed as extension of these developments, we should perhaps take it as an opportunity to question the nonartistic elements of current art education, which have been haunting debates about artistic research. This is not to say that art must be idealised once again; it is to say that under post-media conditions, hierarchies are not (yet) flat enough and that there should not be predetermined sites for, for instance, "reflection" or "creation."

In this sense, expositionality has the potential to question and replace the ongoing emphasis on criticism. However, there is no existing theory as yet to actually make the case on the scale that is required. When discussing notions of exposition in the context of artistic research, one needs to keep in mind that the field is very much in movement and that there is a lot that needs to be tested, evaluated, or better understood. In fact, I very much consider JAR a research project in its own right and an attempt at finding out what happens when practice expresses itself in articulations of research outside conventional orders of production and reflection.

PART 2: IMPLICATIONS

In this second part, I want to indicate two lines of enquiry that could suggest the kind of work required to test and secure notions of expositionality in a wider field. The first is taken from an epistemological context, the second from the field of art. In a final section I aim to bring those approaches into greater proximity as a basis to introduce some of the experiences had as we edited the first fifteen issues of JAR.

Experimentation

The often extremely material processes through which art is developed suggest a certain proximity to the experimental sciences, which could likewise be described as "practice-led." Despite this, the importance of practice in experimentation has often been limited to the testing of hypotheses—that is, theoretical constructs. For instance, Karl Popper, a key proponent of this view, does not sufficiently discuss the generative potentials of experimentation in his seminal book *The Logic of Scientific Discovery* (Popper 2007), underestimating aspects of "exploratory experimentation"

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(Steinle 1997). It is those understandings, however, that are led by practices and not theories that have the greatest potential to help developing the epistemological implications of expositionality. More specifically, I want to suggest that in order to work, expositions of practice as research must have a matter-of-fact character. "Matter of fact" is a concept that Stephen Shapin and Simon Schaffer take from Robert Boyle, the inventor of the air pump and arguably one of the fathers of experimental science. In fact, it must be argued that much of the historical success of this kind of science rests on our ongoing belief in matters of fact. As they say: "In the conventions of the intellectual world we now inhabit there is no item of knowledge so solid as a matter of fact. . . . A discarded theory remains a theory. . . . However, when we reject a matter of fact, we take away its entitlement to the designation; it never was a matter of fact at all" (Shapin and Schaffer 1992, 23). When, for instance, Boyle demonstrated in experiment twenty-seven that the ticking of a watch could no longer be heard after the air had been removed from his pump, this new and surprising matter of fact is nothing that can be contested without suggesting that one would have been tricked. This is because matters of fact appear as natural phenomena and not as human interpretations. Counterintuitively, though, despite being given, matters of fact are created—Boyle set up the air pump, invited witnesses and reported matters of fact in his writings—that is, material, social, and literary technologies are employed that seem to disappear as matters of fact emerge.

This strange, two-way operation may explain why the history of the theory of science only very recently has been able to more fully engage with experimentation in a way that takes its practice into account. In fact, as I have argued elsewhere (Schwab 2015a) this is comparable to the history of art, in which representational conceptions of realism were in the way of understanding realism as an effect of a certain type of painting practice—one whose apparatus disappears in the reality-effect of the painting. Thus, certain types of articulations, to which I refer here as expositional, have the ability to self-ground reversing as it were the temporal order of cause and effect thus de-historicising the impact of historical action; matters of fact, be they scientific phenomena or works of art, are eternal—once they exist, they may be forgotten, but they cannot be undone.

Out of the three interconnected technologies (material, social, and literary) that Shapin and Schaffer mention, I will not expand any further here on aspects of the social apart from reiterating that potentials for institutionalisation are necessary, and that the communities that, for instance, JAR, the RC, or SAR represent may be as vital for the establishment of expositional approaches to artistic research as the Royal Society was for the experimental sciences, since they create sites for expositions of practice as research and behaviours around them—for instance, in JAR's peer-review process, which includes aesthetic dimensions allowing for reviewers to divert from what otherwise would be the application of criteria to identify research (Schwab 2018a). As for the material technology, I will approach it rather from the arts than from the sciences in the later section "Counting As." Here, though, I want to expand

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a little on the concept of literary technology, since it will help keep the focus on the context of publishing in which notions of exposition have been developed.

Literary Technology

The concept of "virtual witnessing" is central to Shapin's understanding of literary technology. Fundamentally, if matters of fact appear as natural phenomena, they need to be witnessed to become epistemically relevant; at the same time, being created in often complex settings perceptible only for limited amounts of time, the witnessing of matters of fact is problematic. As a result, matters of fact in their material state are difficult to conceptualise (unstable referent) and also have a limited reach (people able to witness them first-hand). Replication—repeating experiments in different social and geographic contexts in particular by multiplying the experimental apparatus—provides some remedy, although fundamentally the proliferation of a matter of fact will be limited and its impact restricted. Boyle's literary technology, so Shapin, allowed him to overcome this socio-material bottleneck; his writings and publications were done in such a way that readers could trust his description to the degree that by reading the report they believed to have witnessed the matter of fact. As Shapin (1984) says: "The validation of experiments, and the crediting of their outcomes as matter of fact, necessarily entailed their realization in the laboratory of the mind and the mind's eye. What was required was a technology of trust and assurance that the things had been done and done in the way claimed" (p. 491). A publication that manages to create such a "laboratory of the mind" by substituting material aspects through literary devices is the basis for a virtual witnessing that can secure matters of fact without direct material access.

In artistic research the problem is not dissimilar, although further, more subjective dimensions—such as embodiment and affect—may make it even harder to engage virtual witnessing. At the same time, if virtual witnessing can be extended to also cover those dimensions, "matters of fact" could phenomenally become much more varied, making it harder to challenge artistic insights as merely "subjective." How this can be done is part of the research on artistic research that is still lacking.

Going back to Shapin's analysis of Boyle's books, it is at least possible to indicate how the virtual witnessing of matters of fact can be achieved. Important seems to be, first, the use of different media—here text and image—rather than relying on a single media type to do the work. While Shapin stresses with Boyle that the use of a variety of media can communicate with a wider readership (including those "requir[ing] visual assistance" [Shapin 1984, 492] by the illustrations) I would focus more on the multiplicity that this creates. There is no preferred form in which matters of fact can be encountered, which by extension includes also the material experimental situation. Such distribution also suggests that each form adds its own qualities to it, to the degree that what is understood through a publication may experientially be poorer but epistemically enriched in a way that a "real" but discursively

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limited encounter may not be able to deliver. Ultimately then, there is no single original site despite the fact that the distributed multiplicity manages to bring into focus the matter of fact as if there were one.

While Boyle's work is historically distant, it is these aspects that make it systematically relevant, in particular since ideas of distribution have also been linked to contemporary art (Osborne 2013, 120ff.). In the field of artistic research one should perhaps point to Project Anywhere, an umbrella for research projects with inaccessible or unclear sites "at the outermost limits of location-specificity." As Sean Lowry and Nancy de Freitas (2013) explain, such distributions "symbolically represent the aesthetic *experience* as network" (p. 141) with the result that "we are now less likely to expect artworks and their documentation to exist in a singular destination, but rather, to be situated and understood within an unfolding process of formation" (Lowry and de Freitas 2013, 146) which, I would add, includes the formation of the work in "the laboratory of the mind."

A second aspect of Boyles's use of media has to do with a-representational modes of realism of the kind indicated earlier. In other words, the experience of a reader entering a page must not be too dissimilar to a visitor entering a site of experimental demonstration. In Boyle's case, as Shapin (1984) reports, this is achieved through "the density of circumstantial detail" and a level of "noise" not detrimental to the communication but epistemically productive (Malaspina 2018; Serres 1982). There is no formation of knowledge without a background from which and against which it is formed; removing that background in a directed, representational communication might tell me what it is that I should see, but it will not allow me to see for myself, a necessary requirement for virtual witnessing. Hans-Jörg Rheinberger (1997), whose "epistemic things" (Schwab 2013b) could be conceived as matters of fact, is very clear that, at the bench of the experimenter, epistemic things are first experienced as disturbance, irritation, or contamination. Rather than excluding those from processes of communication and dissemination, Shapin's (1984) "literary technology" embraces them in order to keep the experimental situation open. This includes not only depictions of experimentally irrelevant details but also descriptions of failed experiments, whose main function is not to report negative results but to convey the reality of the experimental situation. In terms of writing, it also includes a style that is "plain, puritanical, unadorned (yet convoluted)" as well as modest and functional (Shapin 1984, 495). In Shapin's (1984) explanation of "literary technology" those qualities of Boyle's writings are described to originate from the images as "mimetic devices" (p. 492), which is the reason why Shapin (1984) suggests that "we should also appreciate that the text itself constitutes a visual source" (p. 491). However, important to my understanding of expositionality is also a discussion of the inverse, namely, how those images also become a form of text, or, rather, what image of "text" might appear through such forms of inter- and trans-mediality. Text or "the literary" would then be liberated from its historically close proximity to written language and linguistics in a way that Roland Barthes (1977) may have had in mind in his essay "From work to text," which discusses many aspects that I have already mentioned in

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the context of literature, such as, "the activity of production" (p. 157), "plurality" (p. 159), or "network" (p. 161).

As suggested by this reference to Barthes, it is important to stress again that what the history of science has described—which I suggest taking into consideration for a better understanding of expositionality—is not meant as a blueprint for what I expect the arts to do. That is, while its analyses have bordered on the aesthetic (such as Shapin's (1984) "literary technology"), it has by far not connected with the aesthetics of contemporary art, which is the context in which artistic research has been emerging. In fact, it is only very recently that science and technology studies has registered "artistic research" as a phenomenon to engage with. Hence, with "matter of fact" and "virtual witnessing" in mind, I want to jump in the next section into the context of art to suggest the kind of research needed to engage with the aesthetical dimensions of artistic research.

Counting As

As I indicated at the beginning of this chapter, expositionality is tied up with a paradigmatic shift in the development of artistic research away from notions of "practice-based" or "practice-led." In other words, as "practice" was conceived to be fixed at a particular point either below, before, or after research, regardless of how much it may affect notions of "research" itself, expositionality cannot take centre stage. This is also a problem of writing, insofar as writing, if associated with aspects above or behind practice, cannot come close enough to the issues developed in many projects. Standards of academic writing, thus, need to be adapted (Schwab 2012b) at the same time as writing as practice is addressed. Again, research is missing into the links between artistic research and art writing as well as the ever-increasing amount of artists' publications, but as a more general point for artistic research, Katy MacLeod and Lin Holdridge were right when 2006 they demanded: "We need to bring our writing nearer to our making" (p. 12).

In fact, the introduction to their book *Thinking through Art: Reflections on Art as Research* (Macleod and Holdridge 2006), in which that statement was made, was instrumental to the development of my own thinking at the time (in the closing stages of my doctorate) since it offered as far as I was concerned a new departure for the field. Crucially, however invested the volume was in the academic problems of artistic research, the departure that I am referring to did not stem from this context but from an appropriation of a contemporary art exhibition and its catalogue to the debates around research, a fact that I find significant. This already tells us that, as writing moves closer to practice, artistic research might move closer to contemporary art. Or, conversely, artistic research's unresolved relationship to academia holds artistic research at a distance to contemporary art, which may explain some of the unease and struggle that many artists experience as they embark on research degrees. In other words, expositionality does not only deal with problems of practice and theory in artistic research, it also offers a bridge to contemporary art and potential critical interventions into it (Schwab 2019).

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The exhibition to which that catalogue belongs is As Painting: Division and Displacement (Wexner Center for the Arts, Columbus, Ohio; 5 December 2001-8 December 2001; curated by Philip Armstrong, Laura Lisbon, and Stephen Melville); the essay from the catalogue that MacLeod and Holdridge focus on is Melville's "Counting/As/Painting" (Melville 2001). In it, Melville describes the point of departure of the exhibition—an interest in what today can count as painting. Implied are at least two equally important aspects: (1) that the category of "painting"—its ontology—is in flux, since otherwise we would not need to ask the question, and (2) that how something can count as painting—a question of epistemology—comes to the fore once we are in doubt what it is. Both are of course issues that only arise under conditions of post-media in a way that, for instance, Rosalind Krauss (2000) conceptualises. In some sense, these debates in the context of contemporary art can be seen as a further problematisation—and also liberation—of mediality that above I introduced with reference to Boyle. The multiplicity of media that I hint at in that section is now complicated by their distinction from notions of "technical support" suggesting that the mediality of works—or expositions—may be emergent rather than invested.

Before and beyond a discussion of any details that follow, the transposition of this exhibition-event to the field of artistic research is what facilitates the departure I am referring to, that is a shift in the vocabulary leaving behind notions of "practice-led" in favour of the critically more relevant term "as research." It suggests that the question of "What is artistic research?" which had been dominating the field, could be replaced by "How do we know that something is artistic research?" (or, "When is artistic research?"), a shift from ontological to epistemological concerns that put into jeopardy all the presuppositions that hitherto had been taken for granted, albeit often gruntingly so. However, if that step was made in a sufficiently radical manner—for instance, if we recognise painting in something that is not a painting, or if an artistic research project convinces while defying all criteria of research we could throw at it—something in the thing itself needs to provide the grounding for the proposition of something as research as the basis for serious engagement and assessment.

How can criteria for painting—or artistic research—be immanent? Melville answers this question in a number of ways, but fundamentally, as he says, "whatever sense it [the work] makes has finally to be measured against one's experience of that work" (Melville 2001, 2). In other words, what the work is taken for is a matter of fact and not a question of interpretation. This requires, if not the abolishment of subject and object positions, at least their complication to a degree at which a work starts to have qualities of both, subject and object, or, as Melville (2001) says, "matter thinks" (p. 6). Melville summarises the implications of this statement as such:

1. Matter thinks. "Thinks" here means "makes a difference," so the proposition is that matter gives itself over to difference or to a process of difference.

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- 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 structures 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, and so also no visibility not structurally worked by invisibility, blindness, reserve (Melville 2001, 8).

Although Melville does not conceptualise what he calls "articulation" as exposition, what he writes here describes many relevant aspects. Despite this, I am not sure how much I am willing to follow him into the more ontological dimensions of his point; for instance, I doubt whether one should make statements about what matter in general is or does. In fact, such generalisations may be afforded in art criticism, but they also show the limits of interpretation when it closes the "experimental situation." In the context of a debate about expositionality a sensitivity to this shift is important since "subject-works"—to use a notion that Philippe Lacoue-Labarthe and Jean-Luc Nancy (1988) have introduced—are not simply given but part of larger processes with multiple agencies and affordances, in which not just the art works matter, but also artistic practices and as well as the problematisation of art.

Regardless of the question of ontology, expositional matter—as which I understand Melville's formulation "matter thinks"—must be a differential construct since it otherwise could not *make* a difference and rupture what is already given and known. It folds in such a way that its unfolding in various acts of articulation is implied (Latin: *implicare* as "to enfold") including those acts that operate at greater distance—that is, in absence of "the work." In fact, only through a network of articulations can the multiplicity of expositional matter be represented. The inverse is however also the case: as what we take the work to be—what is enfolded, for instance, in its title—also follows its articulations. In other words, expositional matter unfolds and enfolds simultaneously, allowing it, by suspending the order of cause and effect, to disrupt time itself.

To Melville, the grammatical construct suitable to capture the differential operator invested in painting practice revolves around the preposition "as." He moves from "to count paintings," where what a painting is, is ontologically clear, to "to count as painting," where what is at hand becomes a painting through the act of being counted as such. The difference between those two statements has a lot to do with how active we consider things to be and whether it can only be us who do the counting. Again, I am not too sure whether one should enter ontological discussions about the "work," since it is sufficient to say that the effect of being counted as painting emerges from a distributed articulation that includes human and non-human actants—say, myself and a canvas. More recent literature that is increasingly

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relevant to the discourse of artistic research is discussing those distributions in terms of entanglement (Barad 2007).

The aesthetics of this process (which is, as I hope has become clear, also always epistemically active) must be described as post-conceptual, also in a historical sense. With this, I mean that the exhibition "As Painting" can be used to mark a historical point at which post-conceptual practices could be developed to engage with forms of art ("painting") whose aesthetics don't necessarily strike one as being of that type. Post-conceptualism in this sense engages the history of art differently without requiring artists-creators to authenticate what their work should be understood as. This point is very much related to what Barthes says about the emergence of "text" at the site of reading: "The text . . . decants the work . . . from its consumption and gathers it up as play, activity, production, practice. This means that the text requires that one try to abolish (or at the very least to diminish) the distance between writing and reading, in no way by intensifying the projection of the reader into the work but by joining them in a single signifying practice" (Barthes 1977, 162).⁴

Exposition Writing

With regard to expositionality and the current situation of artistic research, it is very clear that there is still a massive deficit in the field: expositions of practice as research tend still to be made first of all by the artists who put their own practice forward rather than by researchers whose work does not discriminate along lines of creative authorship. At the very least it should be said that a discourse is lacking that recognises as artistic research such post-conceptual practices carried out by people who don't call themselves "artist" in a way that I suggest here for the curators of "As Painting" or, to take a more prominent example, as Mika Elo (2018), one of my colleagues on the editorial board of JAR, has done for the work of Walter Benjamin.⁵

This contemporary moment is, thus, part of much larger historical developments, which could be revisited with a focus on expositionality, such as when Lucy Cotter (2014) conceives Brian O'Doherty's guest edited double-issue (5+6) of Aspen magazine as an "early exposition." As she says: "The pertinent question for the artistic research exposition is how O'Doherty creates those framing conditions for the material in the box, how he actualizes an artistic way of thinking. How might an artistic research exposition be set up so as to enable others to think outside of the conventions of disciplinary lineage and methodology?" (Cotter 2014, 227). Engaging with the expositionality of historic examples has at least two positive effects: in terms of the history of art, discussing works of art as expositions may help shed light on some of the artistic concerns that may otherwise be overlooked; in terms of the contemporary practice of artistic research, it may become possible to engage with them in a way that continues their own unfolding either through appropriation of materials or transposition into one's own practice.

Very recently, Theodor Barth (2018) has proposed yet another, very interesting application of expositionality in his introduction to the special issue on "Drawing"

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of the Norwegian journal FormAkademisk. Here, the notion of "exposition" is used as analytical tool to compare the individual articles collected in the issue. This seems to follow my suggestion that expositions have matter-of-fact character they disappear when they produce their objects and can be made to appear only if looked at an angle provided by other cases. As Barth (2018) says: "Indeed, the idea that initially contradictory positions can be developed in a pattern where they hold each other—such as in a 'holding pattern' (Barth and Raein 2009)—proposes a learning strategy where exposition can hit and impact at a variety of different junctures, where decisions made and understandings reached occur simultaneously. They do not have to happen before a privileged instance nor at one point in time, bringing a distributed intelligence into the equation" (p. 7). The suggestion here, then, is that expositionality emerges more across than in expositions, which might explain why it is so difficult to describe the specific labor that a single exposition of practice as research performs. In fact, it may be that the layers of multiplicity, which amount to ideas held in material constellations involving us, make thinking about expositions so exciting.

Returning to the more practical implications of expositionality in the face of such fundamental intellectual implications, I would suggest that the making—or writing—of expositions as well as their appreciation isn't a simple task. Or rather, its "im-plications" have the potentials to grow. In this sense, I consider, for example, more conventional scholarly writing supported by images also as expositional, albeit in a more limited sense (Schwab 2018a, 55). The question to the practitioner—or writer of an exposition—then is: How far can you go before expositionality disintegrates—that is, before the complex fabric you weave comes apart and stops making sense? I for one, despite all my investment in the topic, keep being disappointed by my own ability to hold sufficient thought in the pages of my own expositions despite the excitement of having begun.

A "reader" has an equally difficult task since conventions do not necessarily help in establishing how to read an exposition of practice as research. When we point to examples, we cannot really point to the way in which an exposition—sometimes also through rhetorics of frustration—makes itself read. In this sense, they are "thick descriptions" (Geertz 2017) that must be activated to allow a reader's position to be sufficiently shifted to a place from which what is in front of his or her eyes and ears can unfold. As a peer reviewer to JAR explained her experience to us when she became a "deep reader": "It is only in this close reading that I became aware of how effective your format works," which I understand to mean that the work required of a peer reviewer does not only lead to a list of desired revisions but also to his or her transformation—feeling, as it were, the en- and unfolding in oneself. I very much share this view and continue to be positively surprised by submissions to JAR, which on first sight don't promise as much as they later deliver. At the same time, since the reader is also "im-plied" and as such brings something to an exposition, we should not suggest that it always works, which of course poses a challenge to peer-review and editorial processes.

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These are some of the reasons why I cannot easily point to examples of "best practice"; instead, in order to get a sense of how expositionality is engaged with for example in JAR, I would suggest paying particular attention to examples:

- where media content (audio or video) starts straight away;
- that give visual guidance of how and in which direction to read;
- that create productive confusion/overload/multilayeredness;
- where the effect is less in the design but in the multimodality of language (at times also including multiple languages);
- that present alternative archives;
- that allow for a comparison between documentations of external events and their recreation in the exposition;
- that play with the size of media elements including how wide text columns run;
- where presentations of works happen through process descriptions (and how they deal with "failure");
- that use and problematise the first person singular;
- where materials are repeated.

In doing this, one will find that not all submissions are equally developed, nor that they need to be developed according to such lists. In fact, as I hope has become clear, there are no formal criteria for effective expositions; at the same time, while anything might "go," the aesthetics of expositionality are clearly not arbitrary. Much more research would need to be invested to better characterise the aesthetics that are emerging, in particular in context and perhaps also contrast to contemporary art as well as non-artistic publications in enhanced journals.

As a very final point, I want to suggest my personal take on the urgency of matters of expositionality, that is the self-grounding of knowledge in its articulation, at a point in time where external frameworks are either crumbling or encrusting into increasingly hollow forms, due to the complexities of contemporary life. In effect, strategies of epistemic distancing that provide "overviews" or "representations" either fail by excluding phenomena (simplification) or by missing the historical moment at which action is still possible (delay). Both fail to do (epistemic) justice to the world and plethora of phenomena at hand. This results either in (1) impoverished knowledge that Boaventura de Sousa Santos (2014) characterises as the result of an "epistemicide" when it suppresses or erases the knowledges of the world and—closer to "home"—the knowledges that artistic practices might hold or (2) a decoupling of knowledge and action of a kind that perpetuates "progress" regardless of the political and environmental fallout that we have now been witnessing for some time without much ability to change direction. More positively put—and this is the experience of expositionality in action as proposed departure from this crisis—it is the sense that local, situated, material, affective, or contradictory knowledges are not only possible but also sharable, and that learning and understanding need not be built on one's own presuppositions. For the time being, "artistic research" is the name that I give to this dream.

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NOTES

- 1. In "The Case of the Journal for Artistic Research: Or How a New Field of Research Is Articulated"—chapter 11 of his book *The Conflict of the Faculties: Perspectives on Artistic Research in Academia* (2012)—Henk Borgdorff describes the process that led to SAR, JAR, and the RC in detail.
- 2. Using Google's Ngram Viewer, https://books.google.com/ngrams, to compare the use of the terms "exposure" and "exposition" in books from the period between 1800 and 2000 reveals that exposure is dominant only since approximately the 1930s; in 2000, for instance, the use of exposure is approximately eight times more likely than exposition.
- 3. These could be inaccessible "subjective" places or remote places that an art audience would not visit (e.g., a remote desert) or cannot visit (e.g., outer space). https://www.pro-jectanywhere.net/
 - 4. I conceive of this "single signifying practice" as distributed.
- 5. See also Elo's lecture here: https://www.youtube.com/watch?v=vhIYLwzNFsE&t=470s (in Finnish).

REFERENCES

- Badger, Gina, and Alise Upitis. 2012. "On the Research Paradigm in Contemporary Art Discourse: A Dialogue." In *Intellectual Birdhouse: Artistic Practice as Research*, edited by Florian Dombois, Claudia Mareis, Ute Meta Bauer, and Michael Schwab, 257–69. London: Koenig Books.
- Badura, Jens, Selma Dubach, Anke Haarmann, Dieter Mersch, Anton Rey, Christoph Schenker, and Germán Toro Pérez, eds. 2015. *Künstlerische Forschung. Ein Handbuch.* Zürich / Berlin: Diaphanes.
- Barad, Karen. 2007. Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning. Durham, NC: Duke University Press.
- Barth, Theodor. 2018. "Drawing in Artistic Research—Whence and Wherefore?" *FormAkademisk* 11 (3): 2–7. https://doi.org/10.7577/formakademisk.2945.
- Barth, Theodor, and Maziar Raein. 2009. "Walking with Wolves—Displaying the Holding Pattern." *Journal of Writing in Creative Practice* 1 (1): 33–46.
- Barthes, Roland. 1977. "From Work to Text." In *Image Music Text*, 155–64. London: Fontana Press.
- Borgdorff, Henk. 2012. The Conflict of the Faculties. Perspectives on Artistic Research and Academia. Leiden: Leiden University Press.
- Candlin, Fiona. 2001. "A Dual Inheritance: The Politics of Educational Reform and PhDs in Art and Design." *Journal of Art & Design Education* 20 (3): 302–10.
- Cocteau, Jean. 1986. Beauty and the Beast: Diary of a Film. New York: Dover Publications.
- Cotter, Lucy. 2014. "Between the White Cube and the White Box: Brian O'Doherty's Aspen 5+6, An Early Exposition." In *The Exposition of Artistic Research: Publishing Art in Academia*, edited by Michael Schwab and Henk Borgdorff, 220–36. Leiden: Leiden University Press.
- Elo, Mika. 2018. "Ineffable Dispositions." In *Transpositions. Aesthetico-Epistemic Operators in Artistic Research*, edited by Michael Schwab, 218–95. Ghent/Leuven: Orpheus Institute/ Leuven University Press.

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- Fliescher, Mira, and Julia Rintz. 2014. "Tool-Box. Für die Arbeit zwischen Nicht-Propositionalität und ästhetischem Denken." In Ästhetisches Denken: Nicht-Propositionalität, Episteme, Kunst, edited by Florian Dombois, Mira Fliescher, Dieter Mersch, and Julia Rintz, 134–300. Zürich: Diaphanes.
- Geertz, Clifford. 2017. The Interpretation of Cultures. 3rd ed. New York: Basic Books.
- Holert, Tom. 2009. "Art in the Knowledge-Based Polis." *E-Flux Journal*, no. 3 (February). http://www.e-flux.com/journal/view/40.
- Joseph, Ella. 2014. "When One Form Generates Another: Manifestions of Exposure and Exposition in Practice-Based Artistic Research." In *The Exposition of Artistic Research: Publishing Art in Academia*, edited by Michael Schwab and Henk Borgdorff, 165–76. Leiden: Leiden University Press.
- Kirkkopelto, Esa. 2015. "Artistic Research as Institutional Practice." In Artistic Research Year-book 2015: From Arts College to University, edited by Torbjörn Lind, 48–53. Stockholm: Swedish Research Council. https://publikationer.vr.se/en/product/arsbok-kfou-2015-fran-konstnarlig-hogskola-till-universitet/.
- Klein, Julian. 2017. "What Is Artistic Research?" *Jar-Online.Net.* https://doi.org/10.22501/jarnet.0004.
- Krauss, Rosalind. 2000. A Voyage on the North Sea: Art in the Age of the Post-Medium Condition. New York: Thames & Hudson.
- Lacoue-Labarthe, Philippe, and Jean-Luc Nancy. 1988. *The Literary Absolute*. Albany: State University of New York Press.
- Lowry, Sean, and Nancy de Freitas. 2013. "The Frontiers of Artistic Research: The Challenge of Critique, Peer Review and Validation at the Outmost Limits of Location-Specificiy." In 2013 Conference Proceedings, 137–51. Adelaide, South Australia.
- Macleod, Katy, and Lin Holdridge. 2006. "Introduction." In *Thinking through Art: Reflections on Art as Research*, edited by Katy Macleod and Lin Holdridge, 1–14. London: Routledge. Malaspina, Cecile. 2018. *An Epistemology of Noise*. London: Bloomsbury Academic.
- Melville, Stephen. 2001. "Counting/As/Painting." In *As Painting: Divison and Displacement*, 1–26. Columbus: Wexner Center for the Arts MIT Press.
- Mersch, Dieter. 2015. Epistemology of Aesthetics. Chicago: University of Chicago Press.
- Osborne, Peter. 2013. Anywhere or Not at All: Philosophy of Contemporary Art. London: Verso. Popper, Karl. 2007. The Logic of Scientific Discovery. London: Routledge.
- Rheinberger, Hans-Jörg. 1997. *Toward a History of Epistemic Things: Synthesizing Proteins in the Test Tube*. Stanford, CA: Stanford University Press.
- Schatzki, Theodore R., Karin Knorr Cetina, and Eike von Savigny, eds. 2001. *The Practice Turn in Contemporary Theory*. 1st ed. London: Routledge.
- Schwab, Michael. 2009. "First the Second: The Supplemental Function of Research in Art." In Art and Artistic Research: Music, Visual Art, Design, Literature, Dance, edited by Corina Caduff, Fiona Siegenthaler, and Tan Wälchli, 6:56–65. Zurich Yearbook of the Arts. Zürich: Zürcher Hochschule der Künste/Scheidegger & Spiess.
- ——. 2012a. "Exposition Writing." In *Yearbook for Artistic Research and Development*, 16–26. Stockholm: Swedish Research Council.
- ——. 2012b. "The Research Catalogue: A Model for Dissertations and Theses in Art and Design." In *The Sage Handbook of Digital Dissertations and Theses*, edited by Richard Andrews, Erik Borg, Stephen Boyd Davis, Myrrh Domingo, and Jude England, 339–54. London: Sage.
- ———, ed. 2013a. Experimental Systems: Future Knowledge in Artistic Research. Orpheus Institute Series. Leuven: Leuven University Press.

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- ——. 2013b. "Introduction." In Experimental Systems: Future Knowledge in Artistic Research, edited by Michael Schwab, 5–14. Leuven: Leuven University Press.
- 2014a. "Artistic Research and Experimental Systems: The Rheinberger Questionnaire and Study-Day—A Report." In *Artistic Experimentation in Music: An Anthology*, edited by Darla Crispin and Bob Gilmore, 111–23. Orpheus Institute Series. Leuven: Leuven University Press.
- ——. 2014b. "Expositions in the Research Catalogue." In *The Exposition of Artistic Research: Publishing Art in Academia*, edited by Michael Schwab and Henk Borgdorff, 92–104. Leiden: Leiden University Press.
- ——. 2014c. "The Exposition of Practice as Research as Experimental System." In *Artistic Experimentation in Music: An Anthology*, edited by Darla Crispin and Bob Gilmore, 31–40. Orpheus Institute Series. Leuven: Leuven University Press.
- ——. 2015a. "Experiment! Towards an Artistic Epistemology." *Journal of Visual Art Practice* 14 (2): 120–31.
- ——. 2015b. "Imagined Meetings." In Why Would I Lie?, edited by Susannah Haslam and Peter Le Couteur. London: Royal College of Art.
- ——. 2018a. "Peer-Reviewing in the 'Journal for Artistic Research." In Evaluating Art and Design Research. Reflections, Evaluation Practices and Research Presentations, edited by Walter Ysebaert and Binke Van Kerckhoven, 52–59. Brussels: VUBPRESS. https://www.research-catalogue.net/profile/show-work?work=483124.
- 2018b. "Transpositionality and Artistic Research." In *Transpositions. Aesthetico-Epistemic Operators in Artistic Research*, edited by Michael Schwab, 191–213. Orpheus Institute Series. Leuven: Leuven University Press.
- ———, ed. 2018c. Transpositions. Aesthetico-Epistemic Operators in Artistic Research. Orpheus Institute Series. Leuven: Leuven University Press. https://www.oapen.org/search?identifier=1000226.
- ——. 2019. "Experimental Systems. Contemporaneity, Untimeliness, and Artistic Research." In *Futures of the Contemporary. Contemporaneity, Untimeliness and Artistic Research.*, edited by Paulo de Assis and Michael Schwab, 159–77. Orpheus Institute Series. Leuven: Leuven University Press.
- Schwab, Michael, and Henk Borgdorff, eds. 2014. "Introduction." In *The Exposition of Artistic Research: Publishing Art in Academia*. Leiden: Leiden University Press.
- Serres, Michel. 1982. Parasite. Baltimore, MD: Johns Hopkins University Press.
- Shapin, Steven. 1984. "Pump and Circumstance: Robert Boyle's Literary Technology." Social Study of Science 14 (4): 481–520.
- Shapin, Steven, and Simon Schaffer. 1992. Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life. Reprint. Princeton, NJ: Princeton University Press.
- Smithson, Robert. 1996. Robert Smithson: The Collected Writings. Berkeley: University of California Press.
- Sousa Santos, Boaventura de. 2014. *Epistemologies of the South. Justice against Epistemicide*. Boulder, CO: Paradigm Publishers.
- Steinle, Friedrich. 1997. "Entering New Fields: Exploratory Uses of Experimentation." *Philosophy of Science* 64 (December): S64–74.
- Wilson, Mick. 2018. "Engaging Perfomative Contradiction: Introducing the Rhetorics of Practice and Method to Artist Researchers." In *Practicing Art/Science: Experiments in an Emerging Field*, edited by Philippe Sormani, Guelfo Carbone, and Priska Gisler, 21–44. New York: Routledge.

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