

SOME MORE BEGINNINGS OF ARTISTIC RESEARCH¹

Maximilian Lehner

1. Starting from the question whether the combination of non-artistic practices could be part of Artistic Research (AR), this paper goes back to an investigation on whether the approach of art & technology projects could be interpreted as AR. The idea draws on the way these projects sought to combine technological innovation and development with artistic production.² By seeing these aspects as essential parts of AR, a preliminary definition would be:

It is ...

- a) the examination of a defined object or problem (*specificity*),
- b) either a relation of the artist's work to (1), defined by other AR practices, or a trial series that shapes in and through the process (*methodology*),
- c) defined by an outcome considered as art; it may have features useful to other disciplines or be shaped according to other research interests (*artistic & research output*),
- d) a process that is essential to the outcome, which may be multidisciplinary (*relation*),
- e) comprehensible that the outcome is the result of the process, and lets others understand this process or continue from there (*legibility & transferability*).³

For Leon Harmon's and Kenneth Knowlton's *Computer Nude (Studies in Perception I)* (silkscreen print, 87x183 cm, 1967) and the follow-up series, art historians suggest that its creation entailed the development of new methods of computation of images, namely the assertion of values of easily displayable signs to certain shades within the image (Battista 2015: 31; Gere 2016: 204–209; Patterson 2015: 61–63; Piehler 2002: 294–301; Taylor 2014: 96–102). Graphic manipulation as well as facial recognition software developments are tied to these basic features, if we continue the line of thought that the artist-engineers set with further developments in image processing and digital video technologies. Hence, the work is a good example for AR, pointing towards its relation, legibility, and transferability as it shows the way knowledge travels through different spheres and disciplines. This refers to a variety of aspects of the work, understanding technological aspects as well as its visual features, and inferring on the possibilities they entail. The output(s) thus were transferred into the realms of engineering and art, and both, the technological and the visual aspect, played roles in understanding the work which is a perfect visualization of the research process. So, we have to ask: Why, despite the outcome and transfer should we exclude the work from being AR?

2. While acknowledging forms of co-operation, AR should take an original form according to Henk Borgdorff (2012a: 91–96) and he imposes disciplinary boundaries that separate AR from

¹The title refers to an exhibition by E.A.T. containing *Computer Nude* that is the point of departure here, too. Too shorten the text, most artworks discussed in the talk at *Doctors in Performance 2018* were excluded.

² Especially works produced in the frame of *Experiments in Art and Technology*, where connections between developments at Bell Laboratories and their precursors in art projects are documented, see Goodyear 2019; and the contextualization or references in Breitwieser 2014; Ehrmantraut and Wirth 2014: 264–265; Juhee and Deoksun 2018 but also the more anecdotal publications by Gertner 2012 or Gregor 1972.

³ My earlier version of the definition is developed in: Lehner 2017, S. 64. This version reflects not only the discourse on AR but also the EUA's *Salzburg Principles* which state that PhD researchers "make an important contribution to the *creation* of new knowledge, products, methods and systems, and to knowledge *transfer*" (EUA 2005 [emphasis mine]) as well as ELIA's *Florence Principles* emphasizing interdisciplinarity, networks, and external dissemination (ELIA 2016).

the work of academic researchers (2012b: 53). Therefore, already their formation as engineers makes them—at least—very rare examples of an interpenetration of disciplines if not at all, excludes them from AR. To answer the question further, we have to go back to the relation between the (artistic) research process and the output(s). In academic discussions about AR there are multiple options: Schwab and Borgdorff (2014: 15–18) sketch two main tracks of either writing an accompanying publication as a research part or considering an artwork or exhibition as the documentation of the AR, which sum up most of the different approaches and efforts to the dissemination of AR.

Long before the theorization of AR *Studies in Perception* shows the necessity of a definition closer to so-called Mode 2 knowledge production, i.e. related to context and application. The specific case of the response to *Computer Nude* in “two cultures” shows the compatibility of AR to research practices in other disciplines to deploy a similar inference for AR that is relevant, legible, and communicable only in one field of the arts: On the one hand, the technological application of the means developed for the creation of the work is obvious, on the other, we can imagine art as the possible context for further development or use of the research.

Its connotation with use and application lets Mode 2 appear rather unpopular among artists, despite great examples where AR works that way as well as its interrelations with Mode 1 (Dunin-Woyseth 2012). Therefore, the small shift of explicitly including (other) artistic practices in the possible contexts seems crucial for the definition, it even includes a lot of transdisciplinary practices to the field of AR. What seems to keep Borgdorff from this inclusion, is a strict reading of the characteristics of Mode 2 research as elements of a definition *sine qua non*, which would exclude intradisciplinary investigations and would make interdisciplinarity a necessary condition.

He mentions the manifold ways of background knowledge that can be part of the artistic process (Borgdorff 2012b: 46–47)—even though the outcome cannot be reduced to those—while in Christopher Frayling’s (1993: 5) initial paper on AR the background knowledge corresponded to the research part. Borgdorff instead, defends that the content of the artwork surpasses the tacit knowledge as well as the research for the artwork that it carries within. For him this entails that there is no knowledge in the arts, rather “a not-knowing, or a not-yet-knowing” (2012b: 61). According to his view, the difference lies in the orientation of the arts towards discoveries, not hypotheses, therefore they can only point towards non-propositional knowledge. The case of cross-disciplinary practices shows, instead, that knowledge or technologies developed for the research process can be outputs of that process and can contribute to the view of art as research. Even more, these practices raise the question of whether the research practice initially can have that kind of “not-knowing” as a specific research goal.

3. Let us consider another example: *Variations V* (1965) is in its initial version an audio-visual performance by John Cage and Merce Cunningham, involving several radios, phone operators, record players, a film by Stan VanDerBeek, snippets from TV by Nam-June Paik, Theremin-like sticks,⁴ and dancers. In *Variations V*, knowledge around technologies and mass media is embodied, on processes of being influenced by them and criticizing them. Despite the choreography refers to it as a non-relationship, we can understand that performers are following the sound, controlling and being controlled by it; as it became clear, what the photocells and distance-sticks triggered. We perceive random noise intervening, in part effected by the engineers, in part by the dancers, or sudden interventions via phone lines to other countries. In the case of *Variations VII* (1967), at *9 Evenings in Theatre and Engineering*, there are no

⁴ Ute Holl (2010: 245) points out that synthesizer pioneer Bob Moog, who was involved in the project, went back to the Theremin, but in this performance it was for the first time about the relation of body and sound and not about the mere curiosity of the apparatus.

dancers, but the composers who trigger the photocells on stage (Miller 2001: 560) while operating the different sources, using only the sounds available in that space at that specific moment (Morris 2015: 88). By chance, the audience entered the stage, which was too far away to see details, and became part of the performance. The two instantiations show two different modes of illustrating the process leading from experimenting with technologies to finding adequate ways of staging them and interacting with them in the performance, as well as two ways of perceiving them. There is a contrast between the sense-making in thinking about the performance and the statements that the elements within the performance and the sounds should not be related and are merely chaotic montages, rooted in the artists' refusal of the concept of authorship (Dinkla 1997: 35). This attitude, though, could not hide the thorough engagement with technologies and their meaning (Brown 2007: 485; Cage 2016: e.g. 318, 322) and that by chance, chaos, or indeterminacy, they were referring to their concepts of composition and choreography (Copeland 2004: 163; Joseph 2016: 151).

4. The intentional production of the kind of non-propositional knowledge in such a work would take the aesthetic and interpretational stance for a model of research methodology. The example illustrated that this kind of knowledge exists in the arts or is embodied in artworks and artistic processes, and points to certain issues that could not be communicated in another way. Artists produce these effects by shaping the work through their specific research process—which cannot be non-propositional and non-reductive, as they are working on something. Even if the outcome might be non-propositional and—in perceiving it—constantly opens new questions, and is therefore non-reductive, aiming at this kind of knowledge production can neither be the point of departure nor set as a goal of research. The definition lacks the specificity of research (Hahn and Pfaller 2013: 46) and would make art a higher-level research from this non-reductive point of view. When today, artists take part in academic entrepreneurship, longing for research funding, this causes art specifically targeted to fulfil external criteria classifying it as AR—a development that we can subsume to the effects of Mode 2. The goal of reaching non-propositional knowledge thereby becomes part of the jargon of research proposals. Similarly problematic seems the escape route to compare the research of artists to tacit knowledge: as we could see in the example above, the tacit part of knowledge production is the precision, artists employ to reaching certain effects, not a mysterious skill.⁵

What these remarks and examples hopefully could clarify, seems simple: the aesthetic evaluation is linked to the artistic process but cannot be targeted in the sense of defining the research process as one that produces a not-knowing, or non-propositional and non-reductive knowledge. This kind of knowledge has always been fascinating about artworks that we can ascribe an own *episteme* to art (Mersch 2015). The reference to aesthetic objects, though, is the basis to constituting this experience (Rebentisch 2018: 80, 96), the process of research and production in the arts can contribute to having this kind of aesthetic experiences. But as research does not always succeed, the aim of my initial definition should have become clearer: even though the questions might be more open, there must be some specificity in the process that provides a line of thought through the process and its interpretations (with all its deviations), more like an “organized pursuit of knowledge” (Mäki 2017: 20) than aiming for the aesthetic qualities from the start.

⁵ The idea of tacit knowledge as non-explainable skills is popular in theories of AR while the concept by Polanyi indicates e.g. visual inferences medical doctors recognize, and therefore should refer to artists' specific knowledge in their field, which doesn't make all their practice research (cf. Jung 2016).

BIBLIOGRAPHY

- Battista, Kathy. 2015. E.A.T.—The Spirit of Collaboration. In: Sabine Breitwieser (ed.). 2015. *E.A.T. Experiments in Art and Technology*. (Catalogue published in conjunction with the exhibition at Museum der Moderne Salzburg, July 25 to November 1, 2015). 28–37. Cologne: Verlag der Buchhandlung Walther König.
- Borgdorff, Henk. 2012a. *The Conflict of the Faculties: Perspectives on Artistic research and Academia*. Leiden: Leiden University Press.
- Borgdorff, Henk. 2012b. The Production of Knowledge in Artistic Research. In: Michael Biggs and Henrik Karlsson (eds.). *The Routledge Companion to Research in the Arts*. 44–63. London / New York, NY: Routledge.
- Breitwieser, Sabine (ed.). 2015. *E.A.T. Experiments in Art and Technology*. (Catalogue published in conjunction with the exhibition at Museum der Moderne Salzburg, July 25 to November 1, 2015). Cologne: Verlag der Buchhandlung Walther König.
- Brown, Carolyn. 2007. *Chance and Circumstance: Twenty Years with Cage and Cunningham*. Evanston, IL: Northwestern University Press.
- Cage, John (ed. by Laura Kuhn). 2016. *The Selected Letters of John Cage*. Middletown, CT: Wesleyan University Press.
- Copeland, Roger. 2004. *Merce Cunningham*. New York, NY / London: Routledge.
- Dinkla, Söke. 1997. *Pioniere Interaktiver Kunst*. Karlsruhe / Ostfildern: ZKM Karlsruhe and Cantz Verlag
- Dunin-Woyseth, Halina. 2012. Some Notes on Mode 1 and Mode 2: Adversaries or Dialogue Partners? In: Michael Biggs and Henrik Karlsson (eds.). *The Routledge Companion to Research in the Arts*. 64–81. London / New York, NY: Routledge.
- Ehrmanntraut, Sophie and Sabine Wirth. 2014. Computer und Digitalisierung. In: Stephan Günzel and Dieter Mersch (eds.). *Bild. Ein interdisziplinäres Handbuch*. 259–266. Stuttgart: Metzler.
- ELIA [European League of the Institutes of the Arts]. 2016. *The 'Florence Principles' on the Doctorate in the Arts*. https://www.elia-artschools.org/userfiles/File/customfiles/1-the-florence-principles20161124105336_20161202112511.pdf (accessed: 12 May 2020).
- EUA [European University Association]. 2005. *Salzburg 2005 – Conclusions and Recommendations: Bologna Seminar on "Doctoral Programmes for the European Knowledge Society"*. <https://eua.eu/resources/publications/626:salzburg-2005---conclusions-and-recommendations.html> (accessed: 12 May 2020).
- Frayling, Christopher. 1993. Research in Art and Design. *Royal College of Art Research Papers* 1 (Vol. 1), 1–5.
- Gere, Charlie. 2016. The Hauntology of the Digital Image. In: Christiane Paul (ed.). *A Companion to Digital Art*. 203–225. Chichester: Wiley & Sons.
- Gertner, Jon. 2012. *The Idea Factory: Bell Labs and the Great Age of American Innovation*. New York, NY: Penguin Press.
- Goodyear, Anne Collins. 2019. Launching “Hybrid Practices” in the 1960s: On the Perils and Promise of Art and Technology. In: David Cateforis, Steven Duval and Shepherd Steiner (eds.). *Hybrid Practices: Art in Collaboration with Science and Technology in the Long 1960s*. 23–44. Oakland, CA: University of California Press.
- Gregor, Arthur. 1972. *Bell Laboratories: inside the world's largest communication center*. New York, NY: Charles Scribner's Sons.
- Hahn, Mona and Robert Pfaller. 2013. Fünf Beiträge zur Magie der Kunst. In: Eva Laquière-Waniek and Robert Pfaller (eds.). *Die letzten Tage der Klischees: Übertragungen in Psychoanalyse, Kunst und Gesellschaft*. 19–61. Vienna: Turia + Kant.

- Holl, Ute. 2010. Ein taktil-skulpturales Sound-System. Variations V von John Cage und Merce Cunningham. In: Daniel Gethmann (ed.). *Klangmaschinen zwischen Experiment und Medientechnik*. 249–261. Bielefeld: transcript.
- John Cage Trust. *Database of Works*. <https://johncage.org/pp/john-cage-works.cfm> (accessed: 13 May 2020).
- Joseph, Branden W. 2016. *Experimentations: John Cage in Music, Art, and Architecture*. New York, NY / London: Bloomsbury Academic.
- Juhee, Kang and Park Deoksun (eds.). 2018. *E.A.T. (Experiments in Art and Technology): Open-ended*. (Catalogue published in conjunction with the exhibition at National Museum of Modern and Contemporary Art, Seoul, May 25 to September 16, 2018). Seoul: National Museum of Modern and Contemporary Art, Korea
- Jung, Eva-Maria. 2016. Die Kunst des Wissens und das Wissen der Kunst: Zum epistemischen Status der künstlerischen Forschung. In: Judith Siegmund (ed.). *Wie verändert sich Kunst, wenn man sie als Forschung versteht?* 23–43. Bielefeld: transcript.
- Lehner, Maximilian. 2017. Can Art-Technology Co-Operations Provide a Paradigm for Artistic Research? *Artnodes* 20, 57–66. DOI: 10.7238/a.v0i20.3141.
- Mäki, Teemu. 2017. A Few Remarks on Artistic Research: Not only for knowledge. In: Daniela Jobertová and Alice Koubová (eds.). *Artistic Research: Is There Some Method?* 14–41. Prague: Academy of Performing Arts in Prague
- Merce Cunningham Trust. *Variations V*. <https://www.mercecunningham.org/the-work/choreography/variations-v/> (accessed: 13 May 2020).
- Mersch, Dieter. 2015 *Epistemologien des Ästhetischen*. Zurich / Berlin: diaphanes.
- Miller, Leta E. 2001. Cage, Cunningham, and Collaborators: The Odyssey of Variations V. *The Musical Quarterly* 85 (3). 545–567.
- Morris, Catherine. 2015. 9 Evenings: Theatre & Engineering. In: Sabine Breitwieser (ed.). 2015. *E.A.T. Experiments in Art and Technology*. (Catalogue published in conjunction with the exhibition at Museum der Moderne Salzburg, July 25 to November 1, 2015). 80–91. Cologne: Verlag der Buchhandlung Walther König.
- Patterson, Zabet. 2015. *Peripheral Vision. Bell Labs, the S-C 4020, and the Origins of Computer Art*. Cambridge, MA: MIT Press.
- Piehler, Heike. 2002. *Die Anfänge der Computerkunst*. Frankfurt am Main: dot-Verlag.
- Rebentisch, Juliane. 2018 [2003]. *Ästhetik der Installation*. Frankfurt am Main: Suhrkamp.
- Schwab, Michael and Henk Borgdorff. 2014. Introduction. In: Michael Schwab and Henk Borgdorff (eds.). *The Exposition of Artistic Research: Publishing Art in Academia*. Leiden: Leiden University Press.
- Taylor, Grant D. 2014. *When the Machine Made Art: The Troubled History of Computer Art*. New York, NY / London: Bloomsbury.