Dialogues Between Artistic Research and Science and Technology Studies

This edited volume maps dialogues between science and technology studies research on the arts and the emerging field of artistic research. The main themes in the book are an advanced understanding of discursivity and reasoning in arts-based research, the methodological relevance of material practices and things, and innovative ways of connecting, staging, and publishing research in art and academia. This book touches on topics including studies of artistic practices; reflexive practitioners at the boundaries between the arts, science, and technology; non-propositional forms of reasoning; unconventional (arts-based) research methods and enhanced modes of presentation and publication.

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The Passage from Documented Work to Published Research

Henk Borgdorff

Artistic research is a rewarding subject for science and technology studies (STS). Here we can 'catch in the act' a field-in-the-making, delving into the controversies and demarcations that are almost always at play when a field or discipline is born. Moreover, the central epistemological and methodological concerns in the field of artistic research are likewise central to the study of science and technology – how knowledge and understanding are generated in the interplay between artefacts and human agents and what tools are mobilized to that end.

Since the advance of the social study of science in the 1960s we know that academics in retrospect often conceal the internal contradictions and controversies involving the 'first principles' of a research field and the (usually messy) ways in which the field gained its coherence, secures its stability and sustains its durability. Those contradictions and controversies are partially black-boxed by the field as soon as it is considered to be established. The artistic research field has not yet reached such a closure. In fact, due to the fluidity of its substance, it may never reach nor aspire to such a condition. This makes it an interesting case for the dialogue between artistic research and STS.

One of the major controversies with regard to artistic research concerns the problem of demarcation. Artistic research is positioned at the borderline between the art world and academia. Its substances – artworks and artistic practices – are meaningful in the art world, while at the same time they embody or enact knowledge and insights that function as commodities in academia. A recurrent question is what conditions and criteria should be met in order for artistic practices and artefacts to count as valid vehicles for academic research. And might not the introduction of artistic research into academia alter or amend our understanding of what academic research is? (Borgdorff, 2012; 2018)

A way to approach the problem of demarcation, without reproducing the dichotomies that it constructs, is to focus on what happens when artworks and artistic practices 'travel' from the art world to academia, from the realm of the aesthetic to the realm of the epistemic. What kinds of translation, transformation or transposition happen here (see Schwab, 2018a)? How can we trace an artwork from its indeterminate place in practice – indeterminate because no final description exists of what the limits of that practice are – to its epistemological articulation and impact in scholarly discourse? And how can we retrace the outcome of artistic research to its home in the art world, thereby adding in an infinite loop to the abundance of meaning an artwork might display and convey. Here the problem of demarcation comes down to the problem of reference. Bruno Latour has studied the problem of reference in his

description of the chain of transformations taking place between world and words in his article 'Circulating Reference', where he follows the trail of the Amazonian soil to the scientific publication (Latour 1999, pp. 24–80). The transformations involved in the travelling – in our case from art-making, composition and exhibition via documentation and publication to dissemination and discussion – can be described in terms of gain and loss: a trade-off between the particular, the material and the local on the one hand and the general, the discursive and the communal on the other.

In this chapter I will zoom in on one important stage in that chain of transformations: the material passage from the documentation of artistic practice to the publication of research. In my approach to that passage, I will draw on Latour's work on reference, combining it with insights from the Social Construction of Technology (SCOT) programme on the closure of controversies (Pinch & Bijker, 1984). The purpose of this exercise is to illuminate from an STS perspective and, partly based on my own involvement, the internal dynamics of the artistic research-field-in-the-making and to discuss epistemological concerns that are central to both STS and artistic research. In this exercise I will focus on the controversies about that concrete moment in which the documentation of artworks translates into published research.[1]

The Journal and the Catalogue

In 2010, when the institutional anchoring of artistic research in higher education and research was already some ten to twenty years on its way – in some countries earlier than in others – artists were increasingly feeling the need for an adequate platform for publishing outcomes of this kind of research. This led to the founding of the *Journal for Artistic Research* (*JAR*). It was set up as an open-access, peer-reviewed international journal for the publication, dissemination and discussion of artistic research and its methodologies and outcomes in all art disciplines.[2] *JAR* was designed as an enhanced web-based multimedia periodical, where different media formats – texts, images, videos, sound files – could be combined and displayed to make epistemological claims in ways that fulfil the expectations of artists and where the artist/author is in control of how content is displayed. This meant, more specifically, that the journal should enable authors to deviate from the standard format of journal publications. It would be able to display images, sound and text in non-hierarchical ways and would allow a research narrative to be composed and 'read' along a non-linear path. Existing repositories and publication platforms did not meet those requirements. In order to establish such an online academic journal for artistic research, one had to develop new software in addition to editorial policies and review procedures. As a consequence, an open-access, open-source multimedia repository was also developed alongside *JAR*. This Research Catalogue (RC), as the repository was called, was to serve as the technological backbone of the journal. The RC would be a free-of-charge, publicly accessible platform through which authors/artists could self-publish their work or submit their work to *JAR*.[3]

This is the place where I have to more clearly confess my complicity in the birth of both the journal and the repository. I was happy to act as one of the editors of *JAR* from its inception in 2009/2010. Together with Michael Schwab, founder and editor-in-chief of *JAR*, I led a two-year funded project that conceived and developed the first instantiation of the Research Catalogue. My involvement with the enterprise changed after a while. From 2015 to 2019, I was privileged to chair the board

of the Society for Artistic Research (SAR), a legal entity initially set up for the sole purpose of making *JAR* and the RC possible. In this chapter, I will reconstruct, as a kind of participant observer, some stages in the RC's development. I will try to strike a balance between my being a part of the process of establishing *JAR* and the RC (including some of the controversies it entailed) and the scholarly distance to these controversies that an analytical perspective requires.[4]

Since 2010, *JAR* and the RC have unfolded in many ways. *JAR* has adjusted its article submission process, experimented with publishing peer-review reports, incorporated network conversations alongside its peer-reviewed publications and, importantly, adjusted the peer-review guidelines by specifically asking reviewers – both artists and academics – to reflect on the potential of a submission and how it might be improved (Schwab, 2018b). The thinking behind the publication policies of *JAR* – that is, what it means for *JAR* to publish artistic practice as research – can be apprehended by inspecting what *JAR* has published over the years. It can also be traced by studying the informative editorials in all issues.

The Research Catalogue will be the focus in my discussion.[5] It is 'owned' by the Society for Artistic Research, and it has developed over the years into a widely used platform for the archiving, documentation, management, publication and dissemination of artistic research. While still functioning as the technological base of *JAR*, the RC is now also used by several other journals as a multimedia platform to handle and display research.[6] An important asset is the use of the RC as an institutional repository. A growing number of European higher education institutes, most notably art schools and art universities, use the RC as their local research portal, through which research by students and faculty is administered and communicated. Together the journals and institutes constitute the Society for Artistic Research's 'portal partners', a group of dedicated RC administrators that meets on a regular basis, exchanges experiences and discusses future adaptations and extensions of the software platform.

Now the RC is mostly employed outside the portals – by artists who use the free-of-charge platform as an archive, as a private or collaborative workspace, as a web channel to share their work-in-progress or as site to self-publish their work in the ever growing network of other artists using the RC. Over the years, the number of users has grown from about 250 in 2011 (when the beta version of the RC was released) to upwards of 12,000 from all over the world in 2019. In what follows, I will describe how the RC operates in the chain that connects artworks and artistic practices with academic publication and evaluation and how this can be illuminated from the perspective of the SCOT programme.

The Artefact

The RC can be described as an instrument in a series of transformations. On the one extreme, there are the works of art made in the studio or the live action on stage or in public space – material tangible or ephemeral artefacts, live performances et cetera. On the other extreme, there is the peer-reviewed publication that circulates in academia. As noted, Latour has discussed the reference between world and words as a chain of transformations or translations, in each stage of which you gain some and lose some (Latour, 1999, p. 70). You gain stability and the potential for distribution at the cost of the singularity and materiality of the operator. In artistic research this involves the chain of reference between artworks at one extreme and artistic

research publications at the other. In this series of transformations, the work of art passes through several stages in which the 'common operator' (ibid., p. 69) is matter at one point and form in the next – from material artefact to archived material, from archived material to presentation (for example: exhibition or performance, offline or online), from presentation to documentation, from documentation to publication and so on, whereby you gain some and lose some at every stage.

The RC can be put to use in different stages of this chain. It can be employed as an archive of digitally preserved media distilled from the actual work; as a platform for the web presentation of digital art; as an instrument for the documentation of work, which is always also an exercise of selection; as a web-based studio space to work, alone or collaboratively, on a project; as a publication platform to make a point; or as a public or semi-public channel to share, distribute or discuss works and insights.

In the context of artistic research, the RC is positioned precisely in the gap between the documentation of the work using texts, images and sound and the publication of the work as research. Something happens here that is crucial: a transposition of the work from the aesthetic realm to the epistemic realm. Or rather, a translation or interpretation of the artistic work as research. In the chain of reference from art-work to publication, several earlier transpositions and translations have already been made. To black-box for the moment the making of the art itself, the artistic work goes through a transformation at the moment when it is exhibited or staged. Numerous choices are made about the what, when and how of the presentation of the work. To curate is to translate. And documenting the work – a next step in the chain – also implies a selection with respect to what one wants to convey, aesthetically or otherwise. What images, videos or descriptions will be used to capture the work, in order to gain a specific understanding of it, and what will be lost in that translation? The transition into the epistemic realm is an explicit next move to inscribe the documented work together with other materials (for example: texts) in academia in order to make a claim, to convey knowledge and understanding, shot through with aesthetic experiences. Michael Schwab (2010) has coined the term 'expositionality' for this move from documentation to publication: 'With the notion of 'exposition', we wish to suggest an operator between art and writing. … [It] is meant as the re-doubling of practice in order to artistically move from artistic ideas to epistemic claims' (Schwab & Borgdorff, 2014, p. 15; cf. Schwab, 2014a; 2014b). If we want to understand how the RC platform works as an instrument for that operation, we should shift our attention for the moment from the question of reference to the RC as an artefact itself, and look at how the platform is produced and used by people and at what controversies were involved in its development. Those controversies, and the work done to overcome them, might tell us something about what it means to expose art practice as research, and hence also about how reference functions in that operation.

The RC can be seen as a 'technological artefact' (Pinch & Bijker, 1984). In the 1980s, the SCOT programme complemented the social study of scientific knowledge and in particular the Empirical Programme of Relativism. The SCOT programme holds that one should look at the social factors and actors involved in technological development – including cultural and political factors and actors – in order to under-stand why technology works or fails, as well as why technological developments follow mostly non-linear courses in practice. SCOT uses concepts from the Empirical Pro-gramme of Relativism as its main analytical tool. There is the principle of symmetry – that is, that any success and any lack of success of technological artefacts should both

be treated at the same level and analysed with the same tools and not merely explained after the fact by the supposed superiority or inferiority of the technology. The often erratic course of technological development can be explained by considering the conflicting and constructive roles that social factors and actors play in that development. For analytical purposes, relevant social groups – including the users, the audiences and the producers of the artefact – must be identified, for they play a decisive role in the evolution of the technology. Also, the artefact-in-the-making is not just one thing. Different social groups attach different meanings through the specific ways they use the artefact. The dynamic of technological development is a consequence of this 'interpretative flexibility' (Pinch & Bijker, 1984, p. 409), and it is characterized by controversies about what direction the development should take and what the best solution will be to the problems raised by the various social groups that are involved.

The SCOT programme has meanwhile amended its unidirectional scenario, where the social, cultural and political were constitutive for technological evolution and change. The scenario has been corrected, partly under the influence of actor – network theory, by demonstrating that the principle of symmetry also operates on another level. The social is not the bedrock explanatory force, for the social is itself constituted, staged or assembled in the interplay between – here another symmetry – human and non-human (for example: technological) actors, while the social, in its turn, also constitutes those actors (Latour, 2005). Though keeping that in mind, it still makes sense here to use the early SCOT approach in order to understand how different people have different interpretations and different problems with respect to the RC as a technological artefact and how such diversity co-determines the course of its development. The RC could stabilize over time when 'closure' is achieved – that is, when the controversies over interpretation and use of the artefact itself arrive at a point where consensus exists on a single set of interpretations and uses. But closure does not necessarily have to be reached, as we will see when we discuss the present state and utilization of the RC.

The People and the Problems

So who were the people that came up with the idea of creating a journal for the publication, evaluation and dissemination of artistic research in 2009? And what social groups can be identified that are or have been involved in the development and use of the platform? The two main initiators of the journal, Michael Schwab and Florian Dombois, both worked, as now, in the domain of visual art (photography, post-conceptual art, installations) and had backgrounds in philosophy and science (one in information technology, the other in geophysics).[7] That triple background – philosophy, technology and visual art – was to steer the initial concept and design of *JAR* and the RC platform.

Philosophy, and then specifically theory of knowledge, informed the project from the beginning. It was clear that, related to the problem of demarcation sketched above, epistemological issues come into play when one publishes artistic work as research. What kind of knowledge and understanding does the work embody or convey? And how to present that knowledge and understanding on webpages, using different media in addition to texts? Can one justify non-propositional and non-conceptual forms of knowledge in the context of research? How can such implicit (tacit) understandings, which are generally entwined with aesthetic experiences, be scrutinized in public academic discourse?

Proficiency in areas of technology, in particular information technology and human–computer interaction, was not only helpful in the initial conception of the RC software platform, it also steered the project in a direction that later turned out to have its own difficulties. The technological artefact proved difficult for some social groups to master, and this challenged its usefulness. Musicians, for instance, more often than not lacked affinity with IT instruments, whilst also experiencing the platform as disproportionately attuned to the visual.

In some respects, the visual-arts background of the platform's architects turned out to be decisive for the initial direction of its development. The international consortium that discussed and tested the Artistic Research Catalogue[8] (as the funded project was called at the time) likewise consisted mostly of artists (and curators) affiliated to art schools and art institutes with backgrounds in visual arts – with a few exceptions that would prove relevant at a later stage. Moreover, the development of the RC technology did not start from scratch. The planned software was to be an adaptation of DILPS – Digital *Image* Library Processing System (my italics) – developed as an advanced media archive at the Karlsruhe University of Art and Design.[9]

The three groups involved – initiators, users and developers – were, one could say, somewhat biased towards the visual. Although the intended technological artefact was targeted from the start at displaying images, videos *and* sound alongside text 'on the same plane' on the webpages, the way in which the platform was envisaged betrayed the social (in this case, artistic) backgrounds of the stakeholders. It also revealed the extent to which disciplines matter when it comes to how we understand 'art'. Illustrative is the language initially used to describe the RC webpage by the people involved. It was said to be a 'canvas' on which you can 'draw' your argument, a 'weave' in which material can be 'woven' together, a 'poster' to show your research and to display visually how the different elements relate, or a 'desk' on which material can be 'mapped' and organized (cf. Döbereiner, forthcoming). And in the guidelines for the *JAR* peer reviewers, questions were included about the graphic design of the pages and about whether the visual navigation along the rectangular boxes with texts, images, videos et cetera made sense.[10] The visual nature of the RC arguably facilitated some forms of artistic research exposition more than others.

Soon after the release of the beta version of the platform, the RC was tested in various environments, including the realm of higher arts education, and most extensively in the master's programmes at the Royal Conservatoire in The Hague. Since 2013, the RC had been implemented in the curriculum there to enable music students to 'compose' their master's theses and to publish and disseminate such 'expositions' via the institute's website.[11] This implementation in a music environment incited much feedback on the functioning and dysfunctioning of the platform, as well as suggestions for improvement. The conservatoire in The Hague, for instance, supported the development of a new footnote tool that enabled notes to be inserted as rich-media popovers; the University of Music and Performing Arts in Graz hosted a project that funded an improved media player that promised to deliver a more advanced web audio tool.

Now music students (and teaching staff) are, by and large, rather less visually oriented and also less acquainted with the use of technological devices that fall outside the repertoire of standard consumer electronics, with the notable exception of students and staff in the fields of sound art and sonology. Yet the latter judged the platform from their disciplinary perspective as too limited or too conservative, as did some other artists working in areas of digital or new media art. Students in music

are familiar with new media web applications (most have social network accounts) but are hesitant to learn an unfamiliar instrument, let alone to design an argument with that instrument. Such an activity is seemingly far removed from their core field of study, which is usually playing a musical instrument and not a technological one. Although music students and staff have increasingly learned over the years to appreciate the enhanced media possibilities that the RC affords – often by taking notice of successful expositions from earlier cohorts – some of the chief problems with the platform experienced by this social group have persisted and have fed into the controversies to be described below.

Most music students, at the start of their studies, have a rather traditional idea of what research is. They do not initially aim at integrating their own artistic practice into the research design – let alone at making it part of the documented outcome of their research. Instead they tend to fall back on the idea of research as resulting in 'academic writing'. The RC challenges such a text-based conception of research. 'Writing' in the context of artistic research involves the very integration of different media in order to make a claim. That said, this social group felt strongly that the RC was in many respects a hurdle they did not feel the need to tackle. So they often opted instead for uploading traditional text-only documents to the RC, sometimes spiced up with illustrations next to the linear narrative. The reliance on texts goes hand in hand with shying away from the blank page that the RC editor starts out with when an exposition has yet to be created. Such difficulties with the platform translated into the explicit request to be able to work with templates, in which text can be rendered without having to think about the composition of the page or about ways in which content in different media could be displayed. It should be clear that the idea of such 'templates' runs counter to the initial rationale of the platform. Remember that the RC was conceived as a device to display multimedia content in ways whereby the artist/author decides on the layout, the hierarchies and the form and course of the narrative.

But beyond the architects and users portrayed above, an additional social group was involved, and this was to substantially influence the RC's further course of development. These were people representing the interests of higher education institutes. As mentioned above, the RC came to be used more and more as an institutional repository by art schools and art universities in Europe. Research coordinators and local RC portal administrators, along with institutional management representatives who secured funding for adaptations to the RC software, acquired a major influence on the platform's development. Without saying that whoever pays the piper calls the tune, significant amendments to the platform were prompted by the feedback and input of those institutes. For instance, much time and energy (and funding) was put into developing an 'application module' in the RC. It enables funding agencies or art schools to administer and review rich-media applications for project funding or online applications for acceptance to degree programmes, whereby a portfolio can be included in which the research proposal and artistic work are integrated. This allows artist-applicants to communicate their proposals in ways much closer to their actual work. Even so, although the unique assets of the RC could benefit higher education institutions in a variety of ways (education, communication, application procedures), such institutional interests might not always be the primary concern of independent artists who want to expose and share their artistic research.

One of the institutes, not by chance a music academy, expressed the wish to design an alternative workspace, a second editor of the RC that could be used alongside the existing one to cope with problems that users experienced with the platform. In addition to the aforementioned lack of templates to assist students and staff in designing an exposition, there were also other issues with the 'old' editor that might be resolved with the new one. Acknowledging that many users wanted to create expositions that were primarily text-based, with additional other media on the side, the new editor was to take text display as its starting point. The original RC editor indeed had some problems with texts. Different browsers displayed text differently; sometimes scroll bars appeared in one browser, which had carefully been avoided when the exposition was created in another browser. The absolute positioning of media content in rectangular boxes with fixed sizes on the webpage might be good enough for reading from desktops and laptops, but it was not suitable for reading on tablets and smartphones. It was proposed that the new editor should arrange content responsively: that is, the RC would display webpages adequately on different devices and on screens of various sizes. Responsive design would dynamically adjust the positioning of elements on the page to the affordance of each device, including a relative rendering of texts, flexible image size and similar functions – nowadays the common way in which webpages are designed, created and displayed.

Without addressing the pros and cons of responsive design in too much detail, it should be clear that this move from absolute positioning to responsive design constitutes a major change in the way artistic research can be exposed on the RC platform. One of the thoughts behind the old 'graphic' editor was that it matters epistemologically how texts, images, videos and other content are graphically interrelated, although no clear-cut understanding exists about what rules to follow here. But once we abandon this graphic 'logic', what other logics will come in its place? If we lose this asset, what will we gain? Or to phrase the question in the Latourian prose used earlier: how can we rethink and remake the technological artefact in such a way as to avoid breaking the chain of transformations in the unfolding of artistic practice as research? Will a new logic still perform the translation of the aesthetic to the epistemic or might it redefine both limits of the chain, thus affecting our understanding of artistic work or of academic work (or both)?

Here I have to introduce an additional social group that was, and still is, heavily involved in the development of the RC. In 2015, the expansion of the RC endeavour necessitated creation of a RC management structure to support future development. A steering committee was installed, whose members were key users of the RC. One, and later two, Research Catalogue managing officers were also appointed: in consultation with the steering group, they were to provide a road map for future developments and advise the executive board of SAR about where and how investments should be made. Soon after the beginning, observations were made by the RC managing officers, who had a background in sonology and were familiar with computer engineering technologies, that the platform did not adequately align with current developments in information technology and web design. And although the RC software was in principle open-source, the way in which the platform was conceived, constructed and disclosed was not sufficiently inviting to the open-source community. Nor did it have enough appeal to artist-researchers working in fields like media and digital arts or computer music who also possess the technological knowledge, knowhow and interest to potentially contribute to the platform's development.

The Closure of a Controversy?

The introduction of the beta version of the responsive text editor in 2018 coincided with a yet ongoing discussion within the core RC community. It addresses the question of how to further transform or redefine the platform so as to align it more closely with the latest developments in information technology – and thereby also to better secure the RC's adaptability, accessibility and sustainability for the longer term. As things look now, the key to that redefinition is located at a more fundamental level. There are suggestions from the community that we should think of the RC exposition as a programmable digital object (Döbereiner, forthcoming), which can be processed in a variety of digital environments (including, but not limited to, graphical ones). It would hence not be based in the first instance on the spatial relations and distribution of content on the page. The logic of such an exposition would be computational not graphical. It would allow the composing of expositions that follow alternative routes and relations, such as sonic ones, whereby the ways and the moments in which media are displayed are staged and performed temporally not visually. The computational logic of the RC exposition as a digital object would also make it easier to flexibly communicate and transact with other environments, such as search engines or other 'libraries', that also work with the abstract relations and ontologies of digital objects. It is unclear, however, how the exposition as a programmable digital object can preserve the quality of being a technological bridge between the documentation of art and the publication of research – unless we begin thinking differently about what 'research' is in the context of the RC.

This is exactly what is being voiced in the current discussion, and here we can capture the epistemological controversy at hand and try to understand the mechanisms that move towards a potential closure – or not – of that controversy. In the debate about the future of the software platform, some people stress the use of the RC as a platform for work-in-progress. The 'open' character of the RC exposition as a digital object empowers its flexibility as a research tool. It invites us, as it were, to see materials as adaptable and portable sketches, as fragmentary notes and scribbles, and to see the exposition as a diary or log book where preliminary thoughts are brought together in an experimental environment where provisional knowledge can emerge. Epistemologically, this points in the direction of a theory of unstable knowledge, or a 'xeno-episteme' (Maharaj, 2004), which incorporates and embraces differences and ambiguities. Methodologically, it points to the RC as a framework for discovery, as an experimental system, which provides the ground for the realization and articulation of indeterminate 'epistemic things' (Rheinberger, 1997). And with regard to the outcome of the research, the mode of its publication and the justification thereof in academic discourse, it points to a suspension or deferral of final results – to an understanding of research outcomes as always work-in-progress, not least where the non-human actors in play, such as browsers, co-determine those outcomes.

The choice to be made in the further development of the RC platform echoes, in a sense, the dichotomy sketched earlier in this chapter, which is also the hallmark of the demarcation problem: does the RC foster knowledge and insights suitable for circulation in academia, or does it serve experimental artistic practice? But perhaps we do not have to choose between the rock of academia and the hard place of the art world. The RC as a bridge in the chain of transformations can surely – precisely thanks to its interpretative flexibility – move from one point to the other in that chain, as long as the reference is not broken (see Figure 2.1). In that respect, there is no stabilization of the RC as a technological artefact. No closure of the controversy is needed.
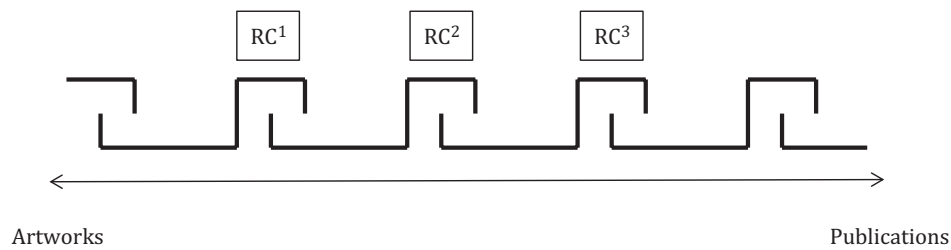
Artworks   Publications

Figure 2.1 An adaptation of Latour, 1999, fig. 2.21. The Research Catalogue as technological artefact that produces transformations in the gaps of the chain of reference between artworks and publications. The numbering (RC^1, RC^2 etc.) does not refer to earlier or later versions, but to different uses of the platform.

Artistic research can be described as a coupling of experimentation and interpretation. The RC nourishes both sides. Just as the contrast between the context of discovery and the context of justification is tempered in contemporary theory of science, particularly in STS, we likewise should not worry about the consistency of the RC throughout the chain of transformations. The RC as technological artefact offers a hybrid and unconventional 'knowing space' (Law, 2014, p. 47) of artistic research, inhabited by various social groups that use the artefact in a variety of ways to experiment with and expose artistic practice as research.

The aim of the exercise in this chapter was to train a spotlight on several stages in the development of the Research Catalogue and to follow the actors involved, in order to say something about what is epistemologically at issue in artistic research. By drawing on Latour's work on reference and using SCOT's toolbox, we were able to unpack the moment in which the artwork passes the gap dividing the aesthetic from the epistemic. At the same time we saw that the controversies about the RC as technological artefact problematized our understanding of where research should be located (cf. Latour, 1998). Do we focus on processes or on outcomes? Should the RC act as an experimental system, facilitating discovery – the emergence of the yet unknown – or should it be geared towards justification of artistic research publications?

The development of the RC, like the field of artistic research itself, has not reached a final closure – and it may never reach, nor even aspire to, such a closure. The work by the RC community on the 'logics' of exposition is itself a research-project-in-progress into the rationale of artistic research. The dispute about the RC exposition that would follow a computational logic – as opposed to an understanding of the exposition as a framework where the positioning of research elements matters to how knowledge and understanding are conveyed – contributes to that wider research project. As such, the artistic research project can inform STS about how a field performs research whilst refusing to place too much confidence in first principles. Such principles would surely reinstall the very demarcations and boundaries that the artistic research project strives to challenge. STS has helped us to understand how the RC, as a hybrid knowing space, negotiates and traverses the boundaries between the art world and academia. At the same time, artistic research exemplifies a central concern of STS – the constitutive role of people, practices and things in the production of knowledge and technologies. It thereby presents to STS an unconventional research-field-in-action.

Notes

1 'Artworks' here denotes all kinds of artistic practices and the artefacts or events that are integral to those practices, such as paintings, sculptures, installations, designs, performances and digital art.
2 www.jar-online.net. For the story of *JAR* and its peer-review policy, see Borgdorff, 2012, ch. 11.
3 The RC website is found at www.researchcatalogue.net.
4 This chapter could not have been written had I had no access to the scribbles, notes, draft papers and discussion contributions of the people involved in the development of SAR, *JAR* and the RC. I am especially obliged to Michael Schwab, Luc Döbereiner, Casper Schipper and Gabriel Paiuk for their thinking about the future of the RC and for their commentary on earlier versions of this text.
5 A more elaborate description of the ins and outs of the RC can be found in Schwab (2014a).
6 *RUUKKU. Studies in Artistic Research*, http://ruukku-journal.fi/en/web/ruukku; *Journal of Sonic Studies* (*JSS*), https://www.researchcatalogue.net/view/558606/558607; *VIS. Nordic Journal for Artistic Research*, https://www.en.visjournal.nu.
7 Florian Dombois (https://www.researchcatalogue.net/profile/?person=499); Michael Schwab (https://www.researchcatalogue.net/profile/?person=10953).
8 The project and its consortium are described in Borgdorff, 2012, ch. 11.
9 This initial framework has meanwhile been replaced.
10 See the *JAR* peer-review form at http://www.jar-online.net/peer-reviewing-and-artistic-research.
11 The research portal of the Royal Conservatoire, The Hague, is found at https://www.researchcatalogue.net/view/517228/517229.

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