**Reasoning through Art**

Inaugural lecture, delivered upon acceptance of the Chair in Theory of Research in the Arts, at the Faculty of Humanities, Leiden University, on 10 February 2017, by Professor H.A. (Henk) Borgdorff.

Mijnheer de Rector Magnificus, zeer gewaardeerde toehoorders,

This summer, the Leiden University Academy of Creative and Performing Arts, ACPA, will move from its present quarters on Rapenburg, across the canal from here, to the P.J. Veth Building, next door to the Academy Building where we are now. The P.J. Veth Building borders directly on the Hortus Botanicus, and it overlooks those botanical gardens. It was renamed about 10 years ago in honour of the geographer, ethnologist and historian Pieter Johannes Veth, who was specialised in language and culture of Indonesia. However, from the building’s completion in the early 20th century, it served as the botanical laboratory and the herbarium of Leiden University. The house that stood there in the 18th century was already the home of the professor of botany (or ‘kruidkunde’, as it was called in Dutch at the time). The house located there in the 17th century was the residence of the university's rector, the philosopher Burchard de Volder, one of whose students was the botanist and physician Herman Boerhaave. Now the philosopher Burchard de Volder, although a Cartesian, was inspired by the experimental method of Robert Boyle and the Royal Society in London. He set up Europe’s first university physics laboratory at that same address in this little street around the corner called Nonnensteeg. From that day on, Leiden would become the leading centre in Europe in the emerging field of experimental science.

I myself will definitely feel at home in that building – and not just because my father, a gardener by profession, showed me the treasures of the Hortus Botanicus when I was a little boy. Our institute will also be sharing its new domicile with the Institute for Philosophy, where I did part of my undergraduate studies, and in a certain sense the presence of the Institute for Philosophy at that address will refresh the historical ties to the philosopher Burchard de Volder, and to that moment in history when our understanding of what academia is became so fundamentally transformed. I'd therefore like to propose that the building be renamed Volderhuis, in honour of Burchard de Volder and in recognition of our obligation to continuously rethink what academia is.
The close relation of my institute to philosophy is not without significance. Both institutes – ACPA and the Institute for Philosophy – belong to the Faculty of Humanities, but both of them have remits that extend beyond the humanities. That may justify the slightly greater physical distance between our location and the centre of the humanities campus.

I would like to remind you that philosophy in Dutch universities was previously taught and practised in what were called the Central Interfaculties, in line with the University Education Act of 1960. That emphasised the coherence between the sciences and the philosophical reflection on them – in the words of Jürgen Habermas, ‘the unity of reason in the diversity of its voices’.¹ Today it is still regrettable that the no-nonsense politics of the 1980s Lubbers government and its education minister Deetman put an end to the central status of philosophy – and that at the very time when the dividing lines between disciplines were increasingly being transcended, and the ‘two cultures’ described by C.P. Snow were disintegrating into a many-coloured landscape where interdisciplinarity and transdisciplinarity must serve to provide answers to cultural and societal challenges. Much of the research performed by artists likewise extends beyond the bounds of the humanities. It may exhibit kinships with critically engaged social science research or with engineering, and it reaches out to concerns of the art world and society.

But let there be no misunderstanding. The Academy of Creative and Performing Arts is very happy with its home in the Faculty of Humanities, and with the recognition and support it has received for its remit, which is research in the arts. Leiden University had already taken the lead in this field in 2001. Other Dutch universities are now also exploring ways to support the research of artists.

Many of our neighbouring countries have made even greater headway in bolstering the status of artistic research as an academic discipline. Especially when it comes to research funding, we still have much to learn from organisations such as the Swedish Research Council, with its separate committee for artistic research, or from the Austrian Science Fund’s Programme for Arts-Based Research, or from the Norwegian Artistic Research Programme. None of these programmes are confined to the humanities, and for good reason. That is one of the things I want to consider with you today.

In 2009 I published an article whose title and topic was ‘Artistic Research within the Fields of Science’. It explored the position that artistic research occupies within classifications of science and technology, and particularly in the Frascati Manual classification. In that light I examined what is called the standard model of research and development and the criticisms that have been made of it from several different perspectives – including that of Mode 2 knowledge production and that of the quadrant model of scientific research proposed by Donald Stokes. For the present occasion, I shall take up the issue of the position of artistic research once more, but this time from yet another perspective. I will argue two things. First of all – and it might surprise you to hear this from me – I will maintain that artistic research is not equivalent to academic research. And in conjunction with that, and ostensibly running counter to it, I will urge the people who engage in artistic research to be aware that they do not stand alone in academia.

Let me start with the idea that artistic research has been claimed to be equivalent to other forms of academic research. My point is that it is not equivalent. Let me explain.

The notion of ‘equivalence’ was introduced in 1997 in a report by the working group on practice-based doctorates in the creative and performing arts, commissioned by the Council for Graduate Education in the UK and chaired by Sir Christopher Frayling. A year later, the notion was more extensively introduced and championed in Australia in the so-called Strand Report.² This is how it was formulated in the Frayling report:

[The] inclusive model would involve either demonstrating [and] accepting that the activities and outcomes [of practice-based research in the arts] could reasonably be seen as consistent with a traditional scientific model, or broadening the model so as to encompass the entire continuum from scientific to practice-based research.... It would follow from this approach that the creative process involved in practice-based [research] can be seen as a form of research in its own right and, as such, as equivalent to scientific research (p. 15, my italics).

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² Christopher Frayling (1997), Practice-Based Doctorates in the Creative and Performing Arts and Design (Warwick: UK Council for Graduate Education); Dennis Strand (1998), Research in the Creative Arts, (Canberra: Department of Employment, Education, Training and Youth Affairs).
The diffusion of disciplinary boundaries within academia and the rise of interdisciplinary and transdisciplinary research programmes testifies, as said, to a ‘unity of reason in the diversity of its voices’ and it provides good grounds to defend what is known as the ‘inclusive model’. This is the idea that there is room in academia for a wide variety of research approaches, programmes and methodologies. The edifice of higher education and research provides a home for such divergent research fields as medical engineering, international law, social geography and theology. It is in line with this ‘inclusive model’ that the highest degree in academia, the PhD, is now regarded not so much as a qualification in or for a particular field – which it was originally – but as a testimony that the holder has reached the highest level of competence, irrespective of the field of study involved. The ‘proliferation of academic titles’ which one can witness here and there alongside the PhD in the field of artistic research – for instance the doctorate in fine art(s) (DFA) in the United States, artistic doctorates in Sweden and Austria, and other titles for artists with even more fancy names in other countries – is at odds with the idea of academia as an ‘inclusive’ sphere of endeavour. And indeed, if we need to broaden our understanding of what academia is in order to include and accommodate new research fields and approaches, then that is exactly what we should do. The history of higher education and research provides many examples of how our understanding of what research and science is has altered with the introduction of new fields, approaches and knowledge claims. The *physica experimentalis* of Burchard de Volder from the 17th century is one such example. From that perspective we should welcome the arrival of artistic research – research in and through the creative and performing arts – to academia.

So, to avoid misunderstandings, talk about ‘equivalence’ was very important at one time for the recognition of practice-based, artistic research, and it helped to establish the field. But the problem with ‘equivalence’ is that, by putting things in parallel, it presupposes or creates an opposition at the same time. Maintaining that ‘artistic research is equivalent to academic research’ is also saying it is not really academic research. Why would you need to say that in the first place if artistic research is at home in academia? I shall come back to this in a moment.

But let me first devote a few words to the phenomenon of artistic research itself. I do not have to rehearse here the ‘first principles’ of the research domain, although opinions still
differ somewhat about the theoretical rationale supporting it. There is one thing I do want to highlight in this context, though: in artistic research, *practice* is central. One might say it is practice-infused research. That is, practice permeates the research at every level.

That is true first of all with regard to the object of the research. Artistic research concerns knowledge and understanding that are embodied and enacted in art works and practices — in compositions, performances, installations, artefacts. Second, practice permeates the methods of research. The research takes place in and through artistic practice, in and through playing and making (which is why some people refer to it as studio-based research). And third, the result of the research is also practice: the research delivers concrete art works and practices that figure in the world of art. Any added discursive outcome is there to support, not to replace, the artistic contribution the research claims to make. Art practice is therefore also the relevant context for the research. As we know, artistic research operates in two contexts: academia and the art world. The value of the research is assessed partly in terms of the relevance of its outcomes for, and within, art practice.

There is another way to describe this. First, the research aims at *non-propositional* forms of knowledge and understanding, at knowledge and understanding that cannot readily be put into verbal assertions. I know, this is a much-debated issue, and people disagree about what non-propositional or non-conceptual knowledge exactly is. Second, it may use *unconventional* research methods in doing so. I will come back to this as well. And third, the results of the research are what are called ‘*non-traditional research outcomes*’ that have significance in practice. It follows that opinions from the art world (you might say: from *non-academic* stakeholders) also play a role in assessing the value of the research and the contribution it makes to art.

The problem with these formulations is that all of them are negative expressions: *non-propositional, unconventional, non-traditional, non-academic*. As if there is traditional research — that is, established, recognised, accepted, founded research — in opposition to non-traditional and, by implication, unfounded research. That is the problem with the notion of equivalence. It suggests an implicit hierarchy between real, serious research and less valuable, second-rate ‘research’. I think nobody could tell me what it would mean to say: ‘Research in biochemistry is *equivalent* to academic research.’
It is time to develop, advocate and possibly export a positive understanding of artistic research, of reasoning in and through art, within academia. Here again, one can distinguish three interrelated themes. The first concerns the epistemology of artistic research. The focus of artistic research is placed, as I have mentioned, on embodied and enacted forms of knowledge and understanding – forms of knowing and understanding that are intimately bound up with practice and that cannot easily be translated into or transmitted by language. The idea of non-conceptual, non-propositional knowledge – as we now call it – has been a subject of philosophical thought since ancient Greece, starting famously with Aristotle’s distinction between theoretical knowledge and practical knowledge. During the history of philosophy, we encounter the idea of non-conceptual knowledge in art under different names: from Alexander Baumgarten’s ‘sensory knowledge’ via Immanuel Kant’s ‘aesthetic idea’, Theodor Adorno’s ‘epistemic character’, Gilbert Ryle’s distinction between ‘knowing that’ and ‘knowing how’, the constitutive role of tacit and personal knowledge in Michael Polanyi, and Maurice Merleau Ponty’s focus on bodily knowledge, up to the emphasis in post-structuralism and postanalytic pragmatic philosophy on that which escapes our conceptual access to the world. My point here is that – viewed from a historical perspective – we, with our artistic research programme, are connected to strands of thought in tradition by people who have already done work on formulating the epistemic relevance of art. The challenge is now to combine the truism formulated by Michael Polanyi that ‘we know more than we can tell’ with the insight that – in the words of Stanley Cavell – ‘our relation to the world as a whole ... is not one of knowing’.³

In our times, non-conceptual knowledge is studied as embodied and enacted cognition in post-Heideggerian phenomenology, in philosophy of mind, and in cognitive science. Artistic researchers are advised to connect to these research domains, in order to find insights and perspectives that might help them better understand what place their research occupies within the whole of academic research. Artistic researchers connect art and understanding, and in so doing they enrich academia with embodied and enacted perspectives on who we are and what our relationship is to the world and to other people. In the words of the philosopher and cognitive scientist Alva Noë, ‘The work of art,

like that of philosophy, is the reorganization of ourselves. And this reorganization, this work, aims also at understanding.\(^4\)

The second point I want to make concerns methodology. As I have pointed out, artistic research takes place in and through practice, in and through playing and making. Artistic researchers thereby additionally make use of a wide variety of research methods and techniques whose provenance lies in social science, humanities or technological research. Depending on the art form and discipline, the research topic, the medium and the envisaged outcomes, these methods and techniques may include ethnographic research (for example field work or participant observation), survey research, interview techniques or other social science approaches, as well as historical, hermeneutic or culture-critical modes of investigation. Other artist-researchers may use laboratory-like experiments and subject their inquiries to the empirical cycle of hypothesis testing. Without saying that anything goes, one might observe and defend a ‘methodological pluralism’ in artistic research.

That said, a distinctive mark of the work of artistic researchers is the constitutive role of material practices and things in their way of working. In this quality, artistic research aligns itself with what is known as the ‘practice turn’ in the sciences and humanities. The practice turn is manifest in, and is studied in, contemporary philosophy of science, for instance in the historical epistemology of Hans-Jörg Rheinberger; in science and technology studies (STS), as in the actor-network theory (of Latour and others); in cultural and performance studies; and in what is now called ‘new materialism’. The point of saying this is, again, to show that we are not alone, and that we have not only historical but also contemporary allies in academia – allies in research fields and programmes which, like artistic research, foreground the importance and agency of practice in a methodological sense. In this context it is worth mentioning that – during the last joint conference of the Society for Social Studies of Science (4S) and the European Association for the Study of Science and Technology (EASST), in Barcelona in 2016 – the programme track that attracted the most interest (and papers) was the one entitled STS and Artistic Research.\(^5\)


\(^5\) Together with my colleagues Peter Peters and Trevor Pinch, I will publish an edited volume about that meeting of research domains in the spring of 2018.
Another distinctive feature of artistic research – and this is the third point I want to highlight – is that the primary outcome of the investigation is *art*. In the context of degree programmes, and in response to the demands of funding schemes, one may expect such outcomes to be contextualised and framed by a discursive account – that is, a verbal account – of the research, addressing research questions, methods, processes and a discussion of the research findings. The core of the research outcome, however, is the concrete material practices it delivers – new artefacts, compositions, performances, installations, interventions – however abstract those material practices in contemporary art may be. Now one should not forget that the outcome of the research is not the research itself. Even the documentation of the research outcome – varying from audio or video registrations of performances to exhibition catalogues and so-called ‘artist-books’ – does not suffice as an account of the research. Additional work has to be done to articulate and communicate the research, to show that it involves ‘a process of investigation leading to new insights, effectively shared’.

Well, here is an issue that is central to the current debate about artistic research. How can we understand, and how should we approach, in this context the relationship between art practice and writing? Often that relationship is felt to be one of friction, opposition or paradox. Writing gives an explicit verbal account of the implicit knowledge and understanding embodied and enacted in artistic practices and products; at the same time, art may escape or go beyond what can be expressed by words, and it may even resist academic conventions of accountability. As I have noted, a ‘written element’ is almost always required in the context of higher education, as well as by funding agencies. As a consequence, the artist-researcher in that context often feels cornered, having to simultaneously meet opposing demands.

However, a fact often bypassed in the debate on art practice and writing is that *writing itself is a practice*. Giving linguistic expression to one’s research is work that demands as much dedication and commitment as creative work does. Moreover, writing is not just practice, but it is creative work itself, a constructive process that enables the emergence of the new and the unforeseen. Every writer has that experience of accessing new ground while trying to formulate conjectures.

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Furthermore – and even more important, I would say – while writing can be seen as a form of practice, the same is true in reverse: in the context of artistic research, *practice is a form of writing*. It is a non-propositional form of writing, to be sure, yet material practices and products in artistic research not only embody knowledge and understanding, but – as agents in a methodological sense – they are also the vehicles by which that knowledge and understanding is produced and conveyed. Here practice is making a case, a claim; this makes it a discursive practice that comprises (paradoxically perhaps?) non-discursive, that is, non-propositional, material.

I must credit my colleague Michael Schwab of the *Journal for Artistic Research* and of the Royal College of Art in London for coining the term ‘exposition’ for this form of writing. Exposing practice as research amounts to assembling material – images, sounds, texts, artefacts – which together make a case, a claim, whereby the balance between words and other articulations may vary. One of the tasks we now have to set ourselves is to rethink what ‘discursivity’ means, what reasoning is, once we have accepted that material practices and things in our field of inquiry are not only constitutive in a methodological sense, but that they also count as a valid expression of the inquiry.⁷

Let us agree that reasoning through art is a cutting-edge form of academic research. Artistic research is not equivalent to academic research, it is one of its front lines. In another way, however, there is still a discrepancy between artistic research and academia, or better: a deficiency of artistic research within academia. This involves an imbalance between what research methods and theories we take on or appropriate from other disciplines and research programmes, and what we have to offer to the rest of higher education and research. One often sees artistic research projects and PhD submissions in which methods and techniques are used that derive from other areas, such as the social sciences or the humanities. There is nothing wrong with that, if it is done appropriately. But since the focus of artistic research is on practice, and since the knowledge and understanding it provides is ‘exposed’ through practice, it is now time for us to highlight our distinctiveness within, and to, the rest of academia. It is time to offer and advocate our understanding of ‘discursivity’, of reasoning through art. It is time to

advertise the methodological relevance of material practices and things. It is time to show to our colleagues in academia that there are innovative rich-media ways to document, publish, disseminate and evaluate research outcomes. At the same time, it is important to realise that we are not alone in academia. The times when we had to profile artistic research in opposition to disciplines such as art history and musicology have passed. It is now time not just to affirm our place in the university but also to join forces with others to rethink academia.

If we take up the themes I have addressed, and if we attest to the fact that we are not alone in academia, then I can now sketch the contours of a work programme for this professorship in Theory of Research in the Arts.

The basis of the ACPA programme is the research by its academic staff and the doctoral work of its PhD students – research by composers, performers, visual artists and designers, and in the near future possibly also theatre makers, choreographers and other artists. But given the methodological pluralism I referred to earlier, and the affinities with our allies in academia, it is imperative that this professorship connect to, or strengthen, the bond with other research programmes at Leiden University and beyond.

There are already natural connections with fields such as art history and musicology, and I look forward to further collaboration in education and research with LUCAS, the Leiden University Centre for Arts in Society. At present we are working together to create a double-degree bachelors programme for students at the Royal Academy of Art in The Hague. And the recent creation of the chair in Auditory Culture, occupied by my colleague Marcel Cobussen, may be an occasion to create a double-degree programme for students at the Royal Conservatoire and to reintroduce music studies at Leiden University for the first time since 1988, when its musicology department was disbanded following Professor Jan van der Veen’s valedictory lecture.

But beyond these more or less natural connections with art studies in Leiden, I see prospects of linking the field of artistic research with insights from philosophy, which, after all, we shall now be cohabiting with. And I do not just mean insights from the domain of aesthetics, but also, and perhaps above all, insights into how – beyond the analytic-continental divide – phenomenology and philosophy of the mind could help us

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8 This is what we have tried to do in establishing the *Journal for Artistic Research* and its associated Research Catalogue. [http://jar-online.net](http://jar-online.net), [http://researchcatalogue.net](http://researchcatalogue.net)
gain understandings of artistic preconceptual cognitive dealings with the world.

Opportunities also exist here for connecting our type of research to insights from cognitive psychology, where embodied cognition and ‘thinking by doing’ are important research focuses. Practice-based research by artists might just prove to offer exemplary instances of how knowledge and understandings are articulated in things and how they are generated through practices.

Artistic research is an emergent field in academia. As a ‘science in action’ (to use a term from Latour), it could be a rewarding object for STS, for science and technology studies. Much STS research at present is ‘after-the-fact’ research, if I may say so. It attempts to reconstruct and understand the dynamics of scientific and technological developments, and in so doing it also focuses increasingly on the dynamics of social and cultural phenomena. Artistic research presents STS scholars with an opportunity, as it were, to ‘catch red-handed’ a field of research that is just taking concrete shape and to subject it to critical examination. And artistic researchers can derive benefit from the insights that STS has developed. In the words of Helga Nowotny, former president of the European Research Council, ‘Researchers in the arts are ... well advised – and invited – to delve into the burgeoning STS literature. There they will find much that appeals to them intuitively, but also much that allows them to “make sense” of their own artistic practices.’

Our research team now has contacts with CWTS, the Centre for Science and Technology Studies at Leiden University, with particular regard to evaluating ‘non-traditional research outcomes’ and the ways in which such outcomes can be documented and communicated. With an international consortium we are currently preparing a grant application to Horizon 2020, the European Union research and innovation programme, with a specific focus on the documentation and evaluation of artistic research. CWTS is one of our potential consortium partners.

In artistic research, the non-traditional research outcomes are ideally documented and communicated in what are known as rich-media or enhanced-media publications. Here, too, we do not stand alone. Data representation or data visualisation is already common practice in areas such as ethnographic research and visual anthropology, and also in archaeological research, medical research and information science. It is important to join them and to share ‘our’ experience in this area of digital scholarship with others.

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inside and outside Leiden University. Clearly this does not merely involve the dressing up or jazzing up of publications; epistemological and methodological issues are also integral to this. After all, doesn’t our conception of discursivity become expanded when we encounter the arguments partly in the material products and practices that underpin the research?

ACPA is therefore closely engaged in the ongoing development of the Research Catalogue, an international open-access rich-media database for artistic research. A growing number of peer-reviewed academic journals now build on the infrastructure that the Research Catalogue offers, among them the *Journal of Sonic Studies* and the *Journal for Artistic Research*, both of which have strong connections to our institute at Leiden University. These may well serve other research programmes in Leiden as examples of how to document and publish research that goes beyond text. I will be happy to discuss this with my colleagues from the different institutes of the university.

Mijnheer de Rector Magnificus, zeer gewaardeerde toehoorders,

In the late 1970s, I had the privilege of attending lectures on medieval philosophy by Professor Bertus de Rijk in this very Academy Building. In one such lecture he discussed what is known as the problem of universals. The debate over universals, which extends back to the time of Plato and Aristotle, concerns the status of general concepts, or ‘universals’. What do terms like ‘horse’ or ‘artist’ refer to? Does there exist such a thing as ‘the quintessential horse’ or ‘the quintessential artist’?

In the history of philosophy, the so-called ‘realists’ claim that general concepts like these definitely refer to things that exist in reality, whereas the ‘nominalists’ merely recognise the existence of concrete entities (‘this horse’ or ‘that artist’). Professor de Rijk – who, besides being a professor and a member of the Upper Chamber of the Dutch Parliament for the social-democratic party, also turned out to be a stage actor – then went dancing through the lecture hall while shouting *flatus vocis, flatus vocis!* Such general concepts were nothing more than an emission of sounds, *flatus vocis*, a puff of wind, which lacked any corresponding objective reality.

The relationship between words and things, between language and reality, has haunted philosophy in various guises up to the present day, though some may think the problem has been overcome by this or that doctrine. I am not suggesting that artistic research has
anything substantial to offer to that tradition, but perhaps our thoughts and interests should not be focused on the problem of reference and representation – or on disputing reference and representation, for that matter. Perhaps we should not ask what words and concepts actually do or do not denote, but should ask instead how things speak to us. The philosopher of science Hans Jörg Rheinberger has given a short and neat description of what those ‘epistemic things’ (as he calls them) are: ‘They have a materiality that must be apprehended specifically in each specific case. They are capricious [that is, they are unpredictable]. They resist conceptual capture. And finally, they must always leave something to be desired.’\textsuperscript{10} Artistic research seeks to address, and to articulate, the epistemic abundancy and indeterminacy of art, in the knowledge that something will always be left to long for.

I would like to thank the Executive Boards of Leiden University and the University of the Arts The Hague, the Faculty Board of the Leiden Humanities Faculty, as well as the many, many others who have contributed to the creation of this professorship. I owe special thanks to my former PhD supervisors, Frans de Ruiter and Kitty Zijlmans, and to my partners-in-crime at ACPA, Janneke Wesseling, Marcel Cobussen, Lonneke Regter and the office staff. Together we are part of an exciting and rewarding endeavour. As Professor of Theory of Research in the Arts, and as Academic Director of ACPA, I look forward to continued collaboration with my colleagues in Leiden in the Faculty of Humanities and beyond, as well as with my colleagues at the Royal Conservatoire and the Royal Academy of Art in The Hague.

En Hans en Barbara, op het moment dat er te weinig tijd en ruimte meer is om – zoals wij dat noemen – over de ‘dingen des levens’ te praten, hoop ik en weet ik dat jullie mij tot de orde zullen roepen. Binnenkort laat ik jullie graag het voormalig herbarium zien van waaruit ik de komende tijd de kunsten, het kunstonderwijs en het onderzoek in de kunsten mag dienen.

Ik heb gezegd.