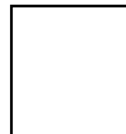
ROBERT GORDON UNIVERSITY ABERDEEN

This publication is made freely available under ________ open access.



AUTHOR(S):

TITLE:

YEAR:

Publisher citation:

OpenAIR citation:

Publisher copyright statement:

This is the ______________________ version of a work originally published by ______________________________ (ISBN ___________________; eISBN ___________________; ISSN __________).

OpenAIR takedown statement:

Section 6 of the "Repository policy for OpenAIR @ RGU" (available from http://www.rgu.ac.uk/staff-and-current-students/library/library-policies/repository-policies) provides guidance on the criteria under which RGU will consider withdrawing material from OpenAIR. If you believe that this item is subject to any of these criteria, or for any other reason should not be held on OpenAIR, then please contact openair-help@rgu.ac.uk with the details of the item and the nature of your complaint.

This publication is distributed under a CC ___________ license.

____

The Artistic Turn: a manifesto

Kathleen Coessens

Darla Crispin

Anne Douglas

Abstract

The Artistic Turn: a manifesto

Despite innovative developments in research in-and-through the arts in the past decade, the emergent field of artistic research remains controversial, and is accepted with varying degrees of enthusiasm in academic institutions. It is our contention that the challenges and opportunities presented by this burgeoning discipline may be better understood by re-emphasising the centrality of the artist. Through a study of the interrelationship between artistic fields and theories of knowledge, and through some consciously metaphorical readings, we examine the contexts within which artistic research has developed. Using this information as a means of interrogating both scientific and artistic research paradigms, and case studies concerning specific artist-researchers, the case is set out for a fresh paradigm – an 'artistic turn'. The aim is to create a field of meaning that may illuminate the most promising, though correspondingly problematic, aspects of artistic research: the essential ineffability of artistic creativity, and the consequent insufficiency of verbal and written accounts – something which inevitably impacts upon the text presented here. Accordingly, the discourse articulated in this volume does not propose definitive approaches, but charts a constellation of ideas that outlines the new discipline and points to its manifold and open-ended possibilities.

Key words:

Artistic research, practice-based research, deterritorialization, tacit knowledge

The Artistic Turn: a manifesto

Contents

Title page i
Abstract and key words ii
Table of Contents iii

Preface: The Artistic Turn 1

Chapter 1: Why art matters XX

Artists on the turn xx
'The eye of the needle' or 'journeying forth' xx
Art: multiple journeys, multiple forms xx
The concept of play xx

Chapter 2: Artistic Research and scientific method: two cultures? XX

Chapter 3: Deterritorialize the research space XX

Knowledge, research spaces and art xx
The map and the tracing xx
Deterritorialization xx

Chapter 4: The ship sailing out XX

The metaphor of the ship xx
The artist's compass? Points in journeying forth xx
The lessons of experience as a base for knowledge xx
The interconnection of artistic practice and research xx
Some afterthoughts xx

Chapter 5: Vulnerability and doubt XX

The artist as hero xx
Between beauty and truth xx
The Performer and the Objective/Subjective Problem xx
Why perform?(could this not be a subtitle?) Xx

The expectations of … the artist and the audience
Public acceptance, extending the limits of the world(could this not be a subtitle?)
Artistic research and the artist's vulnerability (could this not be a subtitle?)

Chapter 6: Why artistic research matters XX

Artists and society xx
Art and the 'Knowledge Society' xx
Contemporary developments in education xx
Artistic Research in the Knowledge Society xx
A MANIFESTO for the artist-researcher xx

Acknowledgements XX

Bibliography XX

Personalia XX

Colophon XX

The Artistic Turn

Preface by Jeremy Cox

This book is a self-proclaimed manifesto – a position statement and a call for certain actions. As such, it is consciously situated within the context of the developments and debates that surround the phenomenon of artistic research as we approach the end of the first decade of the twenty-first century. As Fellows of a research centre founded in 2008 for the furtherance of the ideas and practices of artistic research — the Orpheus Research Centre in Music (ORCiM) — its authors are part of one of an innovative breed of research communities which are now beginning to spring up with the aim of nurturing and consolidating artistic research activity and thereby helping it to flourish. Such centres tend to have a dual function, both facilitating actual examples of artistic research and, at a meta-level, attempting to define and refine the paradigms of this still relatively new brand of recognised research activity. At ORCiM, these functions are seen as closely complementary: practice evolves within a supportive conceptual framework but it reciprocally feeds data back into the matrix of thinking about artistic research, thereby enriching and nourishing the philosophical debate.

But if this is, in a real sense, a topical volume, inseparable from its chronological and cultural location, it is also imbued with important long-range perspectives. Its authors show how the current debates, whilst taking a particular and novel form, are by no means without precedent. The 'turn' for which they call is, in certain important respects, a *re*turn and, as so often, we find that Aristotle had profoundly instructive things to say on the subject (although he would not have recognised either the expression 'artistic research' or the particular slant of thought which it represents).

As the authors tell us, the dichotomy between theory and practice, the boundary between which is the battleground for many of the hostile engagements about artistic research, represents a modern elision, and impoverishment, of what, for Aristotle, was the triumvirate of theory, practice and creativity. For Aristotle and his contemporaries, doing and making were qualitatively different, even though much doing involves making, and very little making is possible without an element of doing. The difference, though, largely lost to us in our modern culture, is crucial – and especially so to the debate on artistic research. Doing, without the enriching component of making, is largely utilitarian, often repetitious and frequently banal; making, on the contrary, is engrossing, dynamic and often its own reward, whatever usefulness its products may also possess. In making, we move from nothing to something; from the speculative to the determined; from the unknown (or only partially known) to the known.

This last aspect is central to the themes of this book, in that it underlines the fact that every act of creation results in an expansion of knowledge. The trajectory of the creative act is therefore essentially that of research. To create requires some intimation of what it is that will be created; this intimation springs in part from collective, prior experience but also requires some personal, intuitive spark to prime the act of stepping beyond that prior knowledge; the act of creation itself is intrinsically an act of 'proving' – of testing out the intimations and speculations (in research, we would call them hypotheses) and determining how they stand up under rigorous scrutiny in the world of 'real', made things; finally, the object or event created carries the results (the research data) of this proving encoded within it. Every product of creation, artistic or otherwise, therefore bears the proud, but invisible, imprint upon it: *quod erat demonstrandum*.

Whilst there will inevitably be shades of opinion concerning the above, few would dispute its fundamental validity. But the difficulty arises in the final clause. It is the invisibility – we would probably prefer to call it the 'tacitness' or 'embeddedness' – of the knowledge encoded in creation that causes problems and divides opinion. If there is some new knowledge there, the rational, verbally-oriented world insists, then surely it must be possible to say what it is: to define it, analyze it and demonstrate its reliable and replicable presence. In the terms that this challenge is posed, the proponents of tacit knowledge have no satisfactory response – indeed, they cannot, by definition. To give verbal articulation to tacit knowledge is to make it no longer tacit. By stretching language to its limits, and moving outside the traditional vocabulary of research discourse, we may perhaps succeed in winning a few border skirmishes along the frontier between the explicit and the tacit, but what we put into words will always be less than what we are trying to describe.

It is this that leads the authors of this manifesto to call for an 'artistic turn', by analogy with the previous cardinal 'turns' in philosophy, perhaps most notably — and most sensitively for debates about tacit knowledge — the 'linguistic turn' executed by philosophers in the twentieth century. Rather than respond to the question of defining the embedded knowledge that arises through creation in the terms in which it is posed, this new turn requires a re-framing of the reference points of the question itself.

To achieve this is no small task. The territory of research is densely colonised; vested interests, whether individual or institutional, conscious or unconscious, carry a natural resistance to new settlers. If the first phase of this manifests itself in exclusion, the second, that of enforced assimilation, is no less dangerous for all that it may appear superficially more tolerant. Artistic research is currently at this second stage. Its presence is accepted, although often grudgingly, but it is under pressure to show its gratitude for this recognition by conforming to the dominant ideologies, criteria and methodologies of research culture. As long as it behaves itself, it is now allowed a modest place – decidedly 'below the salt' in terms of funding – at the research table.

The Artistic Turn spells out the dangers of this situation, as well as relating something of the narrative concerning how artistic research came to be in this position. In Chapter Two, the authors discuss the respective characteristics of scientific and artistic research and argue that, as well as crucial differences, there are important underlying parallels and compatibilities. Both types of research have their own legitimacy and, say the authors, can learn from one another. Their goal is to find new ways of bringing the practices together.

Recognizing the scale of the challenge, the authors proclaim in their third chapter the need for a 'deterritorialization' of the research space. The turn of thinking which they advocate is based upon a belief that artistic researchers are not, and do not wish to be, newly incoming settlers on the overcrowded, built-up areas of traditional research. Their natural habitats lie elsewhere and should not therefore compete for space with the existing research community. However, it is important that their terrains, too, are recognised as joined to the research continents – not islands, but, in the words of the poet John Donne, 'part of the main'.

In Chapter Four, the geographical metaphor is pushed further still: perhaps the natural domain of artist researchers is not terrestrial at all. At home, like seafarers, in an environment that is dynamic, volatile and metamorphic, artistic researchers are like the navigator-explorers of the research world, steeped in knowledge, lore and experience which is hermetic to their own community and, when recounted to their land-dwelling 'traditional' research colleagues, can seem like fishermen's tall-stories. The authors use case studies of artists who have brought back such mariners' tales to illustrate how enriching these can be of our understand of the artistic process. But, as they show, the

paradox of expressing the inexpressible still persists in these accounts.

For, as Chapter Five demonstrates, there are dimensions to art and artistic research which lie beyond the uniformly clarifying illuminations of rational research enquiry. Art, like the Moon that appears as a symbol in so much of it, has its dark side — a component of its literal and of its emotively emblematic nature that is essential and ineradicable. Just as the artist must often wrestle with demons and embrace vulnerability as part of going about his or her work, so the artistic researcher must be similarly immersed in his or her practice, risking, at a minimum, the loss of objectivity and potentially undergoing a high level of personal exposure with its attendant emotional toll. This, of course, would appear to be at odds with one of the most fundamental tenets of research practice, the disengagement of the researcher from the object of his or her research. Artistic research must be rigorous, but it cannot be simultaneously objective and artistically engaged. Yet another turn is required, a fundamental re-appraisal of the role and legitimacy of the interposed sensibilities of the researcher and one which perceives them as validating the research, rather than compromising it.

But why should any of this matter, other than perhaps to artists working in academe and anxious for the next tranche of project funding? The authors believe that it matters because art itself matters, and when something matters it is natural that we should want to understand it as fully, as richly and in as many ways – both verbal and non-verbal – as possible. In a circular architecture which mirrors the turn of their title, they construct their manifesto from a first chapter which examines the meaning and importance of art itself to a sixth which explores these same attributes in artistic research. Despite all the problems and challenges which they uncover along the way, the authors' final stance is optimistic as to what this new discipline can bring to art, artist and society in general.

[Leave page blank for insertion of image.]

Chapter 1. Why art matters

Solang du Selbstgeworfnes fängst, ist alles
Geschicklichkeit und läßlicher Gewinn -;
erst wenn du plötzlich Fänger wirst des Balles,
den eine ewige Mit-Spielerin
dir zuwarf, deiner Mitte, in genau
gekonntem Schwung, in einem jener Bögen
aus Gottes großem Brücken-Bau:
erst dann ist Fangen-Können ein Vermögen, -
nicht deines, einer Welt.

Rainer Maria Rilke, *Die Gedichte,* 2009, p. 683.[1]

The question 'Why does art matter?' is difficult, if not impossible, to answer. For at least two thousand years, philosophers and writers have tried, with only limited success. It is a question which falls under broader and even more fundamental questions: 'Why does life matter?' and 'Why do humans matter?' Moreover, there are so many art forms and art media, so many different approaches, so many fields and such a wealth of implied participants, actors and spectators that this multiplicity of fields, art forms and agents gives rise to a whole raft of sub-questions, which serve only to underline the immensity of the task.

What does music tell us that painting may be inadequate to convey – and vice versa? What does dance offer us, as opposed to writings? How do the poetics of theatre and those of sculpture differ? How can we compare sound and sight, movement and word, gesture and representation? Should we look at art from the point of view of play or from an aesthetic approach; from the perspective of the process or the finished object; considering its beauty or its truth (insofar as these are separable)? Should we consider the artwork's cultural or its personal aspects; its representational or its transformational power; its economic or its ethical value? Do we need to inquire into its past, its origins or into its present and, possibly, its future? Should we take as our reference point society or the individual, the artist or the spectator, the individual or the group? Moreover, how do we take into account alterations of time and context and the shifts in focus that follow worldview and

---

[1] Catch only what you've thrown yourself, all is
mere skill and little gain;
but when you're suddenly the catcher of a ball
thrown by an eternal partner
with accurate and measured swing
towards you, to your centre, in an arch
from the great bridgebuilding of God:
why catching then becomes a power-
not yours, a world's

Rainer Maria Rilke (as translated in Gadamer 2006, p.v)

culture? At the same time, how can we hope to do justice to the all-pervading presence of art in all its diversity and in all times and places, and to the inherent 'humanness' that it proclaims in all its different manifestations?

As authors writing a book on *The Artistic Turn*, we feel compelled to engage in these reflections. As human beings, we feel profoundly committed to defend art’s existence; as artists, we are embedded in the artistic experience; as thinkers, we feel driven to understand better this phenomenon which so fascinates us. Do we have to offer a justification for art? We do not believe so, but we enjoy reflecting freely on art as an innate part of the human condition. Do we have to justify giving the label ‘research’ to aspects of this reflection? Almost certainly, but we believe that the term ‘artistic research’ has now become established as a fixture of our vocabulary concerning art and ideas and needs to be accepted and engaged with in a considered manner. Such a development, we believe, represents an important paradigm shift and one that justifies the notion of an ‘Artistic Turn’.

But how should we position ourselves as artists within research without losing or compromising the nature of art in the process? Where should we look for our terms of reference about artistic research — internally, within art itself, or externally, in relation to other paradigms of knowledge, including knowledge 'in the world' as it is lived? The very notion of artistic research challenges our culture, which is used to defining research by outcomes that can be transferred reliably to other contexts. Conventions of research associated with outcomes separate conceptualization from action, creating a hierarchy in which method serves the questions. The process is focused by, and on, the end goals. In contrast, the artist's act of creation draws ideas and action together within a single moment, event or artefact.

In *The Artistic Turn*, we are seeking to respond to the 'accurate and measured swing' of a new ball pitched from a much greater distance than the ‘throwing arm’ of a single artist and his or her work whose incoming trajectory carries the energy to re-shape both the artistic and the research landscape. Its impact releases new forms of power: power to re-politicize artists and their work within cultures of shared knowledge; and power to find within art itself the means of transferring emphasis from commodity and ownership to process — a transformation that will affect not only the arts themselves but also society more widely.

Artists on the turn

Since the second part of the twentieth century, Western academia has gone through a series of intellectual 'turns'. In the 1960s and 70s, the linguistic turn implied a rethinking of language and its subjective and objective relations to the world. Philosophers decided to talk about language, considering language as a tool, based on convention and use, in the development and pursuit of social practices (Rorty 1992). The linguistic turn stressed the primordial role of language and discourse in the constitution of societies. The following decade was dominated by a cultural turn, emphasizing agency and subjectivity and considering culture and identity as important in the new political-economic order. It meant the rejection of deterministic models of society and a stress on self-reflection; what we are and what we desire became pressing theoretical and political problems (Friedland & Mohr 2004, p. 3).

Each of these 'turns' constituted a paradigm shift in the intellectual and educational debates, rooted in accelerating political, economic and social transformations, and having a further impact on politics and society. A paradigm shift, in Kuhnian terminology, means that new vocabularies, fresh assumptions, different explanations and interpretations replace and reconfigure the older forms of

looking at the world, and that these differences become accepted by the prevailing interpreting — scientific — community. As such, paradigm shifts lead to nothing less than changes in worldview. The need for new or changed paradigms follows from a recognition of the empirical, theoretical, methodological, epistemic and ontological limits of existing intellectual frameworks and their relation to the world (Friedland & Mohr 2004, p. 6). It would therefore seem that 'intellectual turns' are reflections, and the consequent academic outcomes, of broad societal changes that are themselves prompted by technological, political, economical and/or cultural shifts. All these 'turns' originate in societal developments, but are nourished and eventually executed within the intellectual society in which they are first crystallised into articulated debate.

Before expanding on what the artistic turn and its surrounding context might imply, let us start from the basics: the signification of the word 'turn'. To turn something means, in the first sense, to move it, or cause it to move, so that it ends up in a different position in relation to its surroundings from its previous position, without losing the original axis or point around which it is moving. In a second sense, it refers to a way of becoming through a change in nature, state, form, or colour — e.g. 'she turned pale'. But, thirdly, if you 'turn to' something, you become involved with or have recourse to something. The noun 'turn', also adds to these definitions the idea of a development or change in circumstances, as well as the idea of an opportunity or obligation to do something that comes successively to each of a number — e.g. 'now it's your turn'.

The meaning of both the verb and the noun has changed little over the years and the etymological roots go back to the Greek *tornos,* a 'lathe, tool for drawing circles'. This itself originated in the Proto-Indo-European base *ter*, meaning 'to rub, rub by turning, turn, twist', but is also present in the old Sanskrit *turah*, meaning 'wounded, hurt' as well as 'overpower, hurry' (Harper 2001). These definitions offer us some important senses of the word 'turn' upon which to reflect in the context of an artistic turn. Firstly, 'a turn' or 'to turn' always implies an action, something that happens; it is a dynamic move, an involvement or development that, secondly, refers to a base, a point or axis, around which to move and, thirdly, implies a change that has some effect on the outer world — whether the woundedness and hurt of the Sanskrit *turah* or the more creative wounds inscribed into wood on a lathe by which the 'turner', a thirteenth century Anglo-Norman word, fashions objects out of raw timber (Hoad 1996). The meaning of turn is also linked to the word 'revolution', from the Latin *volvere* (to turn) and 're' meaning 'again' or 'around', 'back to'.

Where the 'cultural turn' marked a shift from politics and economics to meaning and culture, the 'artistic turn' denotes a shift in the processes by which culture comes into being as experience, and through experience as understanding. The cultural turn was not a displacement of the importance of politics and economics, nor of meaning and culture, but rather a means of re-forging interconnections in ways that carried a different emphasis. The cultural turn allowed for the emergence of difference, of multiple identities. In the same way, the artistic turn is not a displacement of difference or of the possibility of multiple identities. But it does place emphasis differently, seeking to go beneath language and interpretation, accessing the complexity and contradiction of specific experience.

Arguably, the artistic turn takes understanding further and deeper towards the singularity of human beings, towards a revaluing of the individual, artistic and specific experience in a growing 'knowledge society'. The artistic turn, in this sense, implies a profound questioning of the place of the artist and his or her practice in contemporary society. This is an issue to which we shall return in the final chapter. Places are human-made, forged in human experience, embodiment and interpretations, and backed by tradition and culture. Places are also malleable and have no clear boundaries. They can be mapped by different interpretations or tools, seen as transitional projects,

relevant for the 'frames of reference that orient individuals' conduct' (Giddens 1993, p. xv). The places that the artistic turn seeks to investigate and to illuminate are those of artistic practices and their inherent knowledge. ‘Places’ always imply a certain viewpoint; here, the point of view is that of the artist. The artistic turn, by delineating such places, by reclaiming a role in understanding knowledge, is essential in rebalancing ways in which knowledge is produced in culture. The paradigm shift is important, as artistic practices are part of broader changing cultural and social practices. Chapters Three and Four will map this territory in greater detail.

So, what about these broader cultural and social practices? Recent shifts in the prevalent Western society include emphasis upon the leisure economy, technologically sustained globalisation and the knowledge society (Castells 1996, 1997, 1998). Whereas the beginning of the twentieth century was preoccupied with industrial labour, basic education and the division of tasks, the beginning of the twenty-first century is characterised by information exchange and knowledge as an economic and a leisure value:

> A knowledge society or knowledge-based society exists if knowledge-dependent operations pervade the structures and symbolic reproduction of a society to such an extent that the handling of information, symbolic analysis and expert systems have primacy over other reproduction factors. (Willke 1998, p. 162)

The private and the public merge in the quest for knowledge as an economic good as well as a valuable way of occupying leisure time. We will not elaborate here the full consequences of these societal developments — as already stated, that will be part of the sixth and final chapter — but we will define the contours.

The quest for knowledge in all fields, whether theoretical or practical, whether dealing with processes, events, or activities, also pervades the domain of artistic practice. Moreover, those practices which are linked to artistic manifestations involve a search for knowledge as well as enhancing the quality of leisure time. We should stress that the search for knowledge and increasing leisure time are not entirely independent categories, but merge in human action. The traditional divisions between the categories of work and leisure have blurred our understanding of leisure. 'Working', 'creating' and 'acting freely' are different, but not contradictory, articulations of the development of human culture. The *homo faber*, the creating human being — who superseded the *homo labor* because inventions, knowledge and creation made it possible to be more freed from 'life-necessary' labour (Arendt 1958) — enjoys the process of 'making', since he has more time to invest in creating, fashioning, understanding and thus enhancing culture and knowledge We all participate in the concept of *homo faber*, whether in our work or in our leisure time, as actors, as spectators or combining both roles. We seek knowledge when we read a book, attend a concert or go to a gallery. It seems obvious then, that a societal demand for knowledge about artistic practices – and for some intimation of the more arcane knowledge that lies within them — has been the outcome of these developments.

The possibility for artists to engage with research, and as researchers, has emerged recently through developments in Europe, North America and, increasingly, worldwide. It has come about by way of the transformation of research infrastructures and of funded opportunities for the arts within the academic arena. On the one hand, the emergence of artistic research as a new way of investigating knowledge can be explained simply as a bureaucratic development. Music conservatoires and schools of art and design have elected to become part of the higher education sector, whether independently, as part of universities, or closely allied with them. They have become proactive and, to an extent, obliged to think through and negotiate their terms of reference for research. New infrastructures have created an unprecedented opportunity for artists and designers to contribute

their skills, methods and insights within inter- and multi-disciplinary teams of researchers, and to undertake doctoral training. On the other hand, these developments have also become the subject of much debate within the higher education and professional arts sectors. It is not straightforward to articulate what this new opportunity for research means for practices in the arts or how these areas might envisage their contribution to a shared research culture beyond the arts. New research, even as it begins to gain a foothold, challenges the assumptions of old beliefs. It creates fear that takes many forms.

'The eye of the needle 'or 'journeying forth'

First, there is the fear in the minds of artists that artistic endeavour and critical thought may become instrumentalized, co-opted for a purpose other than art in ways that are reductive and fall short of the true meaning of art in society. Artists fear the subordination of art to the logic of the economic realm — and we can, indeed, acknowledge that much contemporary art has become a commodity par excellence. This economical logic could increasingly, and with the help of institutionalization, tighten its grip on artistic practice, instrumentalizing art production, controlling art processes and creativity, merging artistic outcome and economic goals and, last but not least, invading and regulating the life of artists (Kleindienst 2008). Artistic awards supported by corporations and the sponsoring of artists and competitions have for some time been part of this economic logic — although not necessarily negatively for those artists who benefit most directly — and all these developments sharpen the urge for some counterbalancing ethical and social responsibility towards art.

Next, there is the fear that a thinking culture which insists on rigorous analysis, might interfere with the skill and open-endedness, the pre-noetic, deeply intuitive and intensely felt quality of experience that constitutes an artistic performance. This is the fear that lurks within some artists who believe that research is reductive of artistic creativity. It is the fear of academic or scientific logic, of the categorisation, generalisation, verbalisation and reduction of art and its practices into scientific parameters, variables and concepts. What about the open-endedness and the multiple significations which characterise the endeavour of artistic practices; what about its capacity to deconstruct and reconstruct the world and its material in idiosyncratic, non-iterative ways? Can research truly encompass the richness of artistic experiences? This is an issue which will be addressed in more detail in Chapter Two.

The composer, Emmanuel Nuñes, has criticized the tendency to generalize concepts such as 'creativity' in the lay world, merging all kinds of creativity. He argues that such an approach is over-used and ultimately 'impoverishing' (Nuñes 2009). He is also critical of the way that musical creativity is analyzed by the neuro- and cognitive sciences, cutting artistic action into pieces and reducing it to biology, to processes of neurons, far from the holistic artistic personal practice. In his view, both approaches provide 'blurred speculations' about a process that, conversely, carries for the artist very precise processes of judgement and choice. Artistic creativity *is* methodical, but in its own artistic way (Nuñes 2009). It is highly rigorous but its rigour takes different forms from that of science. Scientific method is purposefully divisive in separating out into different tasks the raising of questions, the contextualising of those questions in terms of their relevance, the selection of methods suitable to the presumed answers, the analysis of data and the presentation of findings. By saying that composition is a constant process of contextualisation, Nuñes is reinforcing the synchronicity of all these processes as one form of activity in which he is aware of making choices, working between his conscious and unconscious states of mind. This tendency toward synthesis, and away from division, informs his criticism of the neurosciences and their separation of the

conscious and the unconscious.

Could these fears be somewhat allayed through openness to the artistic research done by the artist, with the artist being in control of the research questions, deciding the delineation of the subject, defining the source and target domains, all from an artist's point of view? The question still remains: on the basis of which skills and knowledge, and through which assumptions, would the artist execute such research? Indeed, what motivates an artist to do research? What is the role of artistic imagination and skill in research? How can artistic research be articulated appropriately? What kind of apprenticeship, academic training and advice might best serve the needs of an artist researcher? And might he or she not still fall prey to an over-reliance upon inappropriate academic and scientific logic? We shall return to all of these questions in the chapters which follow.

Even if the artist accepts scientific paradigms, another fear arises from this: the fear of confused identities. Once an artist becomes a researcher, he or she is no longer permitted to be solely an artist. Can he or she be a true artist at the same time as doing intensive research? And, on the other hand, if the artist is really an artist, can he or she be a 'good' researcher? This fear is partly inculcated from opinions outside artistic practice. For example, a young Italian pianist[2], after telling other people that he was taking part in the ORCIM[3] research group on artistic research, was, to his astonishment, asked: 'And are you still a performing pianist?' The question was both a vexing and a telling one, implying he could not be both a researcher and an artist, and that, by choosing one identity, he would lose the other. But the fear also arises internally. A New-Zealand visual artist[4] creating ecologically inspired multi-sensory video performances in order to obtain a Masters degree had to write a thesis on her own research process. She reported, in a personal communication, that this experience was damaging to her artistic practice. The research process, and the disciplined reflection this demanded, slowed down her own trajectory, interrupting her spontaneous and complex ways of creating. She felt the imposed process to be an invasive, alien way of doing research about a complex artistic quest into creation. After all, the quest itself already existed, independently of the formal research, although it was not verbalized and articulated.

Finally, there is also the fear within established cultures of knowledge about the nature of art itself. It is a fear provoked by art's capacity to produce something from nothing. Art imitates the shape of all things in the world. Art, of itself, does not necessarily seek amelioration. It can lead to happiness; it can also lead to ruin. Fear of these qualities — which relate to the inherent freedom of art — drove Plato to denounce art and drive it from the city as knowledge based in deceit and cunning. For Plato, such ambiguity as is inherent to art should have no place in civil society (Agamben 1999). This fear places art within the sphere of awe: art holds the promise of extreme pleasure, but diverts us from real purpose. In order to pass the island of the Sirens, Odysseus blocked the ears of his rowers with wax so that they would not be lured by the power and beauty of their song — significantly, though, he had strapped himself to the mast of the Odyssey so that, safe in the knowledge that he could not break free from the safety of the ship, he could at least savour the experience of their dangerously beguiling art.

These fears are fears of reduction and of non-comprehension, or miscomprehension, of the complexity of artistic practice and its manifestations and relations with the outer world, both by artists and by broader society. They emerge at the crossroads of the personal and the professional, the private and the public, the body and the soul, the familiar and the alien; they have to do with the tension between rules and the freedom of being in the world, between the need to participate in

[2] Alessandro Cervino, preparing his doctorate at the Orpheus Institute in Ghent.
[3] Orpheus Research Centre in Music.
[4] Raewyn Turner.

society whilst satisfying the self. Above all, they face us with the challenge of coping with being embedded in the complexity of life.

In contemplating the possibility of artistic research, are we in danger of attempting the impossible i.e. attempting to get through the 'eye of the needle' of science — or at least of an assumed and mythologized version of science? By using this expression, we are referring here to the disciplining gateway of rigorously structured, shared procedures that enable a hypothesis in science to become thesis. Will we similarly be forced to funnel artistic endeavour through the restrictive confines of social, economic and political expectations? Should we translate our practices into an uncongenial language? And what might we betray by translating it — as the Italian goes *'traduttore tradittore',* meaning that every translation is a betrayal? Are these irrational fears, or important considerations?

Such fears are, to an extent, substantiated in the false starts and self-conscious attempts at 'legitimised' doctoral and post-doctoral artistic research that the new discipline has witnessed. Methods borrowed from other disciplines are too frequently clumsily applied to artistic creativity. They fail to create real insight; at worst, they reduce the arts to what is demonstrable, while apparently successfully ticking the boxes of orthodox protocols with regard to research questions, literature review, data gathering and analysis. Such attempts force the arts through the eye of the needle of conventional science — or, as previously stated, a hardened, assumed and mythologized version of science — leading to results that are frequently trivial. So, should we retreat, considering artistic research as an interesting, but overly complex project, and revert to the traditional hidden territory of artistic practice? And should we cede the responsibility to scientists to try to discover the hidden trajectories behind artistic manifestations?

For some arts institutions, research cultures that appeared to embrace change have reverted to the safety of the past and to the traditions of archival practices as properly 'researchable', turning their backs on the challenges and opportunities of research by artists. For others, the 'researchable' issues of contemporary practice are given over to the sciences or social sciences as having 'reliable' methods of inquiry to address the 'messiness' of human experience. But why should we look so negatively at the opportunity to bring to the fore our artistic trajectories, our profound and personal quests? Despite its failures, artistic research seems to persist and to resist, so, to some extent, it is resilient. There may be pragmatic, political reasons for this persistence. As art colleges and music and theatre conservatoires become part of universities, artists who teach need to address the university's core activities i.e. the furthering of knowledge through research and its transfer into teaching and learning. But there are also more profound reasons. For some artistic communities and institutions, the idea of art being explained without artists, 'music without musicians', remains deeply problematic. How else do we gain access to the experience of artistic creativity other than through artists? They battle against the odds for recognition, often resorting to mercurial ways of shifting identity to keep going.

Although familiar, institutionally-driven motives and responses can fall short of what might constitute deeper motivations and understandings for artistic research. But let us consider what is involved. Institutions confront the Herculean task of forging a new research realm, embedding young scholars in a broader research context, inquiring into scientific skills, while sustaining the authentic, inherently personal ways of becoming an artist. Art, in this sense becomes challenging within a culture that defines research as a systematic, reasoned procedure — the raising of questions that seek out answers; analysis through creating an objectifying distance between the researcher and the phenomenon that is being researched — even when that phenomenon is itself a process through time. How might artistic creativity and the artistic imagination inform research differently? Artist researchers will have to counter the pressure both within the arts and from outside to conform to

known academic traditions. The kinds of questions that they need to raise and address do not necessarily fit these traditions. Nonetheless for their work to be recognised as research, they need to negotiate its validity in relation to other research disciplines that are themselves undergoing change.

Artistic research, in presenting a different set of research perspectives, definitely needs an alternative metaphor from that of 'the eye of the needle' to help us formulate the way ahead. According to the Merriam Webster dictionary, a ‘search’ is an act of trying to find something, by looking or otherwise seeking carefully and thoroughly, in an effort to find or discover something; 'research' is, in the first place, a careful or diligent search, in the second, an investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws. Research here is clearly directed at 'scientific' research, implying theories. These definitions of the words 'search' and 'research' do not satisfy a possible description of what might be the research or search pathways of the artist struggling in his or her activities. So let us look at possible search pathways of artists in-and-through their practice by considering three specific examples.

One artist spends years of his creative life developing canvases by dripping, dribbling, throwing, splashing, hurling and cycling through paint in ways that trace the physical movements of his body. Day after day, and canvas after canvas, in the privacy of his studio, the artist judges how large a particular canvas should/could be, how dense the marks on its surface should/could become. He works on the floor, and not on the wall. He deploys his whole body and its extended movements, not just his eye, hand and mind. His paintings become a metaphor of the tension we experience between order and chaos, explored through the traces left by our passage.

Jackson Pollock's work arguably constitutes an example of such artistic research. Read across a body of work, his approach opens up a different set of possibilities from the conventions of pictorial space that preceded him. The new knowledge is the work itself, the research resides in his practice and in its realization in the form of completed works. All reflection remains embodied, hidden in the acts of the artist. The critic or historian may extend and elucidate this new knowledge, but he does not generate it. The critic may signpost Pollock's work for others to enjoy, but it is the body of work itself, the instinctive recognition of its new powers of expression, that impacts on the sensibilities of art-lovers and the creative approaches of artists who follow.

A second artist explores the articulation and transmission of his or her practices beyond the studio, practice room or concert hall. On the one hand, this artist, like Pollock, engages in the searching process by acting and simultaneously judging the progression of the artwork, solving problems ad hoc, searching for new paths of creating on an individual basis. On the other hand, the artist addresses other artists and audiences or spectators, giving them the perceptual/conceptual means to become more aware of the world around them through knowledge of an entire art form and its processes i.e. going beyond the individual experience of single works. This artist reflects consciously on ways of creating and transmitting these reflections and interests in teaching/learning, public/individual relationships. The artist feels free to go back and forth between different art manifestations, whether part of his or her own activities or examples from other artists, in a pedagogical or relational context. This kind of activity is often to be found in music conservatories, art departments, the educational programmes of museums, galleries, performing art spaces and in the public sphere itself, in which the arts focus experiences operating more or less flexibly across a range of outcomes.

A third artist, like the second, also chooses to articulate his or her understanding of pictorial space or musical composition or the relationship of art to ecology. However, besides the artwork and

pedagogical tactics, this artist articulates a 'second' manifestation that is separate from the discrete artwork. His or her research questions and trajectories take form in a conscious and reflective way, resulting in another output. Often, as in 'conventional' research, these trajectories start with research questions, arising from an artistic problem, an artistic-related philosophical question, or a science-related problem in the art practice. The second manifestation of creative thinking, first considered as a tool for, and reflection on, the artist's own artwork, can then become a shared tool for others, helping them to understand and learn about this specific artistic practice. In instrumental music teaching, this is a very rich field of work, since its flexible nature and range is helpful to those working with any art that exists in 'real time'.

Indeed, in some cases, the artistic research manifestation can become an art manifestation. This is evident in the ways in which artists choose to 'curate' or manage the knowledge of their work within the public sphere, such as Murray Perahia's use of Schenkerian analysis to inform himself and others about performances of Classical music, John Eliot Gardiner's J.S. Bach centenary 'Cantata Pilgrimage' in which all Bach's surviving church cantatas were performed on the appointed feast day and all within a single year, or the emergence of the West-Eastern Divan Orchestra, founded by Daniel Barenboim and Edward Said — a project 'against ignorance' rather than 'for peace'.

Unlike Jackson Pollock, Paul Klee chose to trace his thinking process meticulously within an artistic manifestation — his sketchbook — that is distinctive from his artworks, but at the same time can be considered as an artwork in its own right. John Cage, too, developed his ideas about musical composition in philosophical ways, written down in aesthetically structured texts, which are both extremely valuable verbal counterparts to his compositions and new compositions in themselves. All of these examples demonstrate ways in which the activities of the second manifestation might possess a particular communicative potential, since they tend to combine high level pedagogical and artistic aspirations, *or* since they tend to combine high level artistic aspirations with the development and communication of new thinking that extends beyond idiosyncratic, individual modes of production. These insights, in turn, change the ways in which the artistic community and communities beyond think, from that point onwards, about artistic endeavour. Sometimes the changes are small and subtle; at other times, they are radical.

These three different approaches to artistic creativity offer a concise view of the complex field of artistic research activity. In each case, there is an element of searching and, one could argue, researching present; the artist investigates his or her own practices, materials and sources in order to reach new significations, forms and compositions. How he or she investigates them is variable, however, ranging from embodied, tacit approaches to highly reflective considerations that may be manifested in a variety of ways — as texts, as approaches to artist/public relations and event structures, as annotations to existing forms of knowledge such as scores and as visual/textual analyses. The research can be more or less reflective, more or less systematic, more or less articulated, but is inherent in each artistic practice. *Can we say the same of the dog/monkey who paints?*

Even though these examples cannot account for the whole field of artistic practice and its inherent research, they offer a summarising overview of what artistic research already is, and can be. The examples of Klee and Pollock, from the 1920s and 1950 respectively, predate the bureaucratization of research cultures. Neither artist forced himself through the eye of the needle of science; their searches sprang from a different source of energy altogether, from an inner drive for clarity by the artist, an inner need to understand the work in process and its relations to context, and to articulate that understanding, one way or another, in public. In the experiences of Klee and Pollock, neither artist objectifies the world that he is exploring. They both become part of that world's development

and transformation by acting within it. They are bound in specific ways by limits of skill, specific interest, tolerance in the reception of their work and in what the world triggers in them.

Drawing on these two examples, artistic research can be defined as knowledge of the process of creativity, not its outcomes. It offers an account of the search trajectories in artistic practices, not a real explanation and certainly not a 'prediction' of where they will lead. The outcomes do not necessarily take the form of transferable knowledge that can be reliably applied on each occasion and in the same way. Instead, the results present themselves as possibilities, individualistic rather than generalizable. As such they offer an example of artistic research *avant la lettre*, before institutionalization, before the advent of the knowledge society. And they offer us some interesting signposts.

In the world of the knowledge economy and formal research cultures in the arts, this inner necessity of artistic research needs to be balanced with the external pressures of accountability and recognition that generate their own sets of expectations and pressures. In music conservatoires, for example, practitioners fall into the middle of the three cases outlined above, usually combining a career in which art is presented without commentary, i.e. in a concert situation, with teaching roles in which verbal accounts, which are often rich in metaphorical imagery, are offered to the student to inspire creativity. This kind of artist only rarely ventures into the kinds of rigorous research normally associated with doctoral study. Indeed, one of the problems with the current artist/pedagogue model is that it clashes with increasingly prevalent institutional edicts demanding that teaching staff become holders of doctoral degrees. Artists in this middle category respond in different ways to the challenge — either remaining firmly ensconced as artists teaching within an atelier or master class or becoming conversant with the languages and the mind-set of formal research and learning how to present what they do within the terms of reference of artistic research.

Let us search for a new metaphor to replace the narrow rigidity implied in artistic research representing an attempt to push artistic endeavour through the ‘eye of the needle’ of science. Let us imagine artistic creativity as a kind of ‘journeying forth’ into a world that is in flux, unpredictable and constantly forming and re-forming itself. The artistic process, in this metaphor, mirrors the very world through which it undertakes this journey, imitating it as it probes it in ways that are affectively tuned to their subject-matter, rather than objectively distanced from it. After introducing the metaphor in the following section, we shall return to it, giving it a specifically nautical slant, in Chapter Four.

Art: multiple journeys, multiple forms

> Art can work to stimulate questions about the social world, with its lacks, its deficiencies, its possibilities. As individuals experience the work through and by means of their own lived worlds, the realities they discover may well provide new vantage points on the intersubjective world, the world they share with others; the enrichment of the 'I' may become an overcoming of silence and a quest for tomorrow for what is not yet.
>
> Maxine Greene, *Towards wide-awakeness*, 1977, p. 181.

In *Philosophy of the Arts*, Gordon Graham, echoing Kant, asks the question:

> Since the world contains beauty without any creative activity on the part of human beings, what

> does art add? If we already have beautiful things, why do we need beautiful representations? Why is it not sufficient for us to uncover and conserve the beauty that is to be found in the natural world? (Graham 2005, p. 22)

The answer lies in the human condition as 'humanly' engaged in the world.

From a philosophical-political point of view, the philosopher Hannah Arendt describes this human condition as the possibility of creating something new in the world, by way of what she terms ‘natality and plurality’ (Arendt 1973, p. 465; 1958, p. 177). Human birth carries the capacity for novel actions, contains the potential of engaging, creating and intervening in the world. Human birth, says Merleau-Ponty, has the power to change the space: where a new child enters, the whole room, even the walls and the cupboard change (Merleau-Ponty 1945). The necessary precondition for the realization of this potential to create, to invent and to intervene in the world, is plurality, the presence of other humans in the world, the presence of human culture. Indeed, how would the world be, without the other? Without a social heritage, without a social stock of knowledge and skills, and without relatives and friends who share with us their meanings and experiences, would we not have to start each generation from scratch, again and again? Without the presence of the other, writes Gilles Deleuze, the structure of the world would only contain the brute opposition of sun and earth, the unbearable light and the terrifying darkness. There would be no smooth transitions in the world nor any sweet resemblances and continuity (Deleuze 1969, pp. 355-6). Individual human practices, inventions and interventions can only take place where cultural and social practices exist.

Emile Durkheim, analyzing primitive religions and diverse worldviews, postulated the social origins of language and concept categories (1960). All societies construct ways to understand the world and to regulate their social interactions within it. Collective representations develop as the product of an immense cooperation over time and space: individuals are embedded in the social representations and categorizations of their communities by way of ongoing social interactions, rituals, materials and symbolizations. The concepts of time and space are socially constructed, but refer objectively to the presence, experience and understanding of nature. These experiences, when socially embedded, have resulted in the categorization that divides everything between the profane and the sacred, the former concerning ordinary, easily understandable events and elements of life, the latter referring to superior, mighty, more complex or extreme aspects of nature and life. By way of social organization, categorizations, rules and ritual practices, societies have tried to control these events.

This has meant not only a control of nature ‘out there’, and the way in which it casts its influence upon humans, but also a control over the constitution and organization of the group. Originally embedded in a religious context of prohibition, obligations and constraints, the rituals and categorizations that split life into sacred and profane were powerful tools for societal coherence as well as for deepening knowledge of nature and the world. Social representations, originating in religious worldviews and expressed by way of collective ritual representations, also contained recreative and aesthetic aspects. Progressively, inside the religiously-oriented rituals, there developed free creations and forms of entertainment which led to art, play, creation and specific festive happenings. The ceremonies became mixtures of the religious and entertainment elements, moments in which a whole community could engage and share deep feeling and commitment (Schechner 2003).

These social organizational aspects enhanced tradition and a shared worldview, as well as providing moments of catharsis and exceptional experiences. As such, social representations, including social customs and symbolic thought, as well as the materials and tools implied in societal organization, could be transmitted over generations. Societies developed virtual — symbolic — and material

tools. These were both sustained and preserved by the transmitted social stock of knowledge and also changed through additions brought about in the interaction between environment and community. This interaction, combining the social and the environmental in intervention and invention, is a dominant aspect of human societies — and of the human condition:

> Our technologies mirror our societies. They reproduce and embody the complex interplay of professional, technical, economic and political factors. (…) The processes that shape our technologies go right to the heart of the way in which we live and organize our societies. (…) There is no real way of distinguishing between a world of engineering on the one hand and a world of the social on the other. (Bijker & Law, 1997, pp. 3-4)

There is another aspect of the human condition that needs to be stressed. The medium for each human being, the intrinsic essence of the natality and plurality of mankind, the access to individual and cultural practices, is the human body itself in all its richness of making, thinking, moving, feeling, interacting and creating. Michel Serres describes this condition in *Variations sur le corps,* by asking rhetorical questions concerning the embodied capacities of the human being. Which species contains clowns, poets, acrobats, scientists and pianists? Which species can live on the North Pole as well as on the equator, live in huts, tents, igloos, or on boats? He answers 'few, only some mosquitoes accompany the human being, as well as bacteria' (Serres 1999, p. 50). Which animal can lay claim to such a pool of variations in language, gesture, creation, imagination and attitude, sustained by so diverse a range of techniques, skills, masteries and mimesis? Indeed, only the human being can. From ordinary to extreme situations, from youth to old age, from prehistory to modernity, from work to play, from the private to the public realm, creativity is the natural realm of humans. And he adds:

> The transformations of the human being, in fact, sometimes take unexpected forms that genetics did probably not anticipate: I could have been a pianist, practising scales all day, but see how I am a watchmaker, repairing small wheels. (Serres 1999, p. 72[5])

Moreover, it is by way of the human body as a medium between the world and art that humans can be the bearers of creativity and creation: 'The body makes a body and the body makes a world. It creates the subject, it creates the object.' (Serres 1999, p. 155). The body is the point where world and perception, thought and action meet; it is the point of connection between individual activity and the manifold endeavours of society, between the I and the us, the I and the others (Schatzki 2001, p. 8). Thus, the I in its interaction with, and response to, the world, originates intervention and invention. Idiosyncratic and never homogenous (identical), but homologous (resembling) and capable of imitation and habit, the human body is the medium, the bearer of the necessary tools for coping with the social world, adding and inventing individual practices inside the broad framework of cultural practices. The human condition implies an active commitment to the world, initially concerned with the sustaining of life and bound to the condition of labour, but, by linking shared understanding and meaning with growing leisure time, developing towards complex transformations of the material of the world. Coupled with the need for understanding and the creation of semiotic systems, the human being has intervened symbolically and materially, creating real and virtual worlds of artefacts.

Without tracing in detail the part and place of art in this short — and rather incomplete — account of the human condition, this summary shows that art and its practices emerged as inherent to, and a constituent part of, the human condition. As such, art is a part, as well as an outcome, of cultural and individual practices, interacting with diverse environments and tracing trajectories that draw on tradition and culture as well as developing, modifying or countering, often in idiosyncratic ways, existing practices and spaces.

---

[5] All Michel Serres' texts appear in our own translations.

Artistic practice presents itself as a meaningful activity that contributes to the community; it is a deeply human social practice, present in all human societies and linked to social rituals and social representations. As a cultural practice, art has a social and cultural value, which includes the aesthetic, but is not limited to it: other purposes, religious, private, public or commercial, have directed and sustained the development of art (Kieran 2005, p. 98). But it also exhibits the value of intervening, inventing new ways, and/or negotiating or contesting old ways and habitual assumptions. The artist often functions at the crossroads of tradition and new technology, of the cultural acceptable and personal rebellion.

Durkheim noted societies' need for the distinction between the profane and the sacred, between the 'banal' and the 'extreme', referring to a human search for shared, deeper processes of signification, for intense situations. The human being encounters these not only in deep existential experiences — birth and death — but also in man-made objects and manifestations, called art. The process of secularization has now moved the sacred from religiously-embedded experiences more and more towards artistic settings such as museums, art galleries and performances. A confrontation with art stimulates and challenges our habitual perceptions. When encountering an artwork, the profane suddenly takes on a sacred aspect: it is no longer the pure object or manifestation we encounter — as it is in-and-for itself — but our experience of it. Something matters behind, beyond the matter, an additional or unknown depth to the material world that we ourselves, as human perceptual and interpreting beings, add. A process of signification comes to the foreground, a process that reaches out across the frame, the form and the content of the representation.

The concept of play

Play is a recurrent notion in art discourse that begins to articulate the dynamic of what might exist beyond the frame. External approaches to art are usually dominated by the aesthetic and representational appeal of art (Gadamer 1986, p. 19). These approaches omit the art-making aspect, the free exercising of creative activity and imagination. So, let us return to Graham's question: 'Since the world contains beauty without any creative activity on the part of human beings, what does art add?' Gadamer answers that it is because of 'the anthropological basis of our experience of art':

> In any encounter with art, it is not the particular, but rather the totality of the experienceable world, man's ontological place in it, and above all his finitude before that which transcends him, that is brought to experience. (Gadamer 1986, p. 32-33)

The artist historian turned artist, Allan Kaprow, responds in the same sense:

> But when it is clear that the most modern of the arts are engaged in imitations of a world continuously imitating itself, art can be taken as no more than an instance of the greater scheme, not as a primary source. (Kaprow 2003, p. 112)

The answers of both authors, Kaprow and Gadamer, come near to our idea of art as an intrinsic expression and instantiation of the human condition. Both consider art as bridging or emerging out of life and play, world and imagination, action and thought.

Kaprow proposes that art is 'life like'. Earthworks may duplicate the actions of ploughing; experimental noise music may reproduce the sound of radio static. Indeed, the idea that art imitates life was already present in Aristotle's thought. Kaprow revisits the idea that it is precisely in imitating the world that we learn to exist within it. In this sense, the focus of art is not to 'beat

nature at its own game' by emulating its appearance or its beauty. Instead, through imitation, we re-enact nature in its processes, thereby enabling us to grasp the world in its 'manner of operation'. Rituals emerge out of observations of natural processes such as the way that the seasons change — spring to summer, autumn to winter. Rituals thus imitate nature's cycles. In nature, insects and animals 'imitate' the colours and patterns of their surroundings to trick their predators.

However, imitation never quite matches with what already exists. The relationship is metaphorical. The pumping heart has come to define the circulatory system of the city (and the concept of the heart as a pump had to await the invention of such machines in the external world – before, it was conceived metaphorically as a furnace). Visions of heaven and hell articulate the process of government in the Middle Ages. We speak of cities living and dying. Something new is produced in the process of generating these conceptions. We build on, and work with, what the world affords, but by dint of our capacity to create, something new emerges from this encounter. Artworks imitate other artworks which, in turn, imitate life — Sam Taylor Wood's *Still Life* of 2001 imitates a still life from 18th century painter Jean-Baptiste-Siméon Chardin — and, by imitating, subtly varies and enriches what already exists. Similarly, by imitating and initiating something new, art 'plays' with the inherent constraints of life. In the film *ZOO*, Peter Greenaway plays with, and imitates, the rotting processes of life and death, considering these in the film as experiments, although through the film itself they become part of an artwork. In this case, a representation of the ubiquitous impermanence of life by being located in an artwork, becomes itself fixed and 'permanent' in artistic representation.

> Art work, a sort of moral paradigm for an exhausted work ethic, is converting into play. As a four-letter word in a society given to games, 'play' does what all dirty words do: it strips bare the myth of culture by its artists, even. (Kaprow 2003, p.126)

Kaprow emphasizes the inventive, instructive, participatory and transformative aspects of play. Play is part of the way systems in nature 'work' — at the same time, we usually contrast play with work. We talk about the play of waves or a play on words, referring to aspects of experience that operate outside the utilitarian confines of ends and means. But play always starts in the midst of the constraints of its initial conditions; it cannot escape these conditions, or divert these with an 'as if'. These conditions are dependent on the 'players', on what they play and on the attributes that the play necessitates.

Play develops its own set of rules and character, its own internal patterning. There are goals and there are rules, and these may call for skill or expertise to be exhibited within the context of play (Graham 2005). The rules do not serve ulterior end goals but define the space of play. The player's role is to order and shape the movement of the game itself. The game becomes established, becomes a play that can be replayed, because the rules are known, because the players are 'skilled' in the game through playing it, because the initial conditions and constraints can be repeated or recreated — even though the outcome is still left free. In that sense, play becomes a Wittgensteinian game, an activity that is only understandable, meaningful in its 'use', through 'playing'. The player needs to know the rules just as the musician needs to know music and the artist the principles of pictorial form. However there is more to play than abiding by rules. Play is dependent upon move and counter-move, though not necessarily in the form of another human being's response. The cat plays in response to a ball of string, the artist with the work as it emerges. Play is thus realized in action, in the 'use' of play.

Like Kaprow, Gadamer (2006) proposes free creative activity as a fundamental characteristic of art: play offers the link between aesthetic appreciation and art making, between audience and artist. But there is yet more to the link between imitation, play and art. The condition of play is to be totally

and knowingly immersed in the process itself, in the to and fro of action and response — in that sense it is literally 'affective'. Correspondingly, the work of art's state of being is not as 'object' but as experience. This experience should be without strain, absorbing the player/artist as a form of relaxation within its structure. The child engaged in play is self-absorbed in receiving what the game presents. The artist, in contrast, is in some sense engaged in an act of bringing something new into existence. Moreover, art as play, art as imitation, as imaginary but performed activity, projects expectations of life and augments possible experiences:

> The divergence between fictionality and truth spares us pain and suffering we would have to expect in the real world. We realize some of the benefits of hard experience without having to undergo it. (Walton 1990, p. 68)

Art as play thus participates in a dynamic process of activity, immersion and participation in the imaginative, cognitive and affective realms.

The two constructs — imitation and play — are challenging to a world tied to the idea of 'work' as 'progress', tied to an economic value- and outcome-driven motivation, tied to an ontology of objects and consumption. Indeed, the idea of play is often subverted by the lucrative ‘personal development’ industry, in which the apparently laudable elements of play, its call to timelessness, relaxation and even flow-states, are subverted in order to maintain the viability of a workforce overworked in terms of production, but starved of the true promise of ‘play’. Imitation and play not only indicate, but claim, the presence and continuous (re-)creation of a 'transformational' space, necessarily situated in the midst of conflicts, contradictions, danger, distortion, desperation but also of reconciliation, promise, expectation and commitment. Does not art, therefore, offer the possibility of recognising the 'broken middle', the ‘breaks between universal, particular, singular, in individuals and institutions’, as the philosopher Gillian Rose states (Rose 1992, p. xii)? The acceptance of the 'broken middle' implies recognising the impoverishment of considering the world through dualities:

> All dualistic relations to 'the other', to 'the world' are attempts to quieten and deny the broken middle, the third term which arises out of misrecognition of desire, of work, of my and your self-relation mediated by the self-relation of the other. (Rose 1996, p. 75)

As Kant realised, the subject must bring together ontology and reflexivity to generate existential meaning. As such, the subject must invest itself in the object, thereby transgressing the duality between subjectivity and objectivity (Lash 1999, p. 221). Art as praxis, as well as a situated inter-subjectivity, can offer a medium, a ground, a middle way for freedom, reflexivity and existential meaning. Play — and thus art — is indeed in the middle, between beginning and end, between birth and death. Like a transformational force, it goes beyond dualisms, beyond contradictory experiences, beyond even the destruction of dualisms, inspiring the renewal of praxis again and again, and with it, our embodied understanding of being human. Searching for the middle, even the ‘broken middle’, is fundamental to the attempt of different individuals to ‘confront themselves and each other as particular and as universal’ a movement which

> …yields the dynamics always at stake in any comprehension of diremption — the articulation and reconfiguration of activity and passivity, norm and cognition, morality and heteronomy (Rose 1992, p. 303)

This middle is a space, without true location, with shifting boundaries.

In addressing the artistic turn, we are proposing that art does indeed matter because it takes as its central point of interest a focusing of attention inwards to the dynamic of what is happening within *process* — a process inherent and intrinsic to the human condition. Writing in the early 70s, Kaprow

suggested that, as artists, we have lost the real sense of what art-as-process is, and what it means. In experiencing institutionalized forms of art-making within galleries and museums, he detected entropy brought about because artists were absorbed by the same pursuit of material success and power as everyone else. Art had, in some sense, lost its capacity to imitate life through play and had instead become consumed into its processes.

Could it be that artistic research is responding to a similar crisis of entropy? In such a situation, the artist is faced with two choices. On the one hand, he or she can become extremely serious about art as a social, cultural, political and economic process, purposefully engaging with areas of knowledge that rigorously inform art's manner of operation. On the other, they can rupture this continuum by adopting different creative tactics.

These creative tactics can be personal ways of inserting or proposing one's artistic practice to the world, or of engaging others in one's own processes. Thus, Allen Kaprow invented 'happenings' and 'environments' as moments of spontaneous creativity that focused or 'framed' life:

> Charity
>
> buying piles of old clothes
>
> washing them
> in all-night laundromats
>
> giving them back
> to used-clothing stores
>
> Activity, A.K., Berkeley Unified School District, March 7, 1969, (Kaprow 2003, p. 122)

Kaprow countered the fixation of the artist as 'artist' by suggesting that each artist should re-educate himself, become an 'un-artist', and rediscover how everyday life is more 'artlike' than art. Kaprow's 'unartist' would have to eventually re-negotiate a position back into the art world. To do so successfully would result in a different power relation with respect to cultural institutions. Kaprow thus seems to be advocating a search for 'the broken middle', exhorting the artist to tread this space and open its experiences.

Does Kaprow provide us with clues to the artistic turn and the related question of artistic research? Might it be possible to imagine that in developing research, artists are also in some sense positioning themselves as 'un-artists' i.e. outside the institutionalized definitions of what being an artist means? And does this simply re-express the same set of choices — of working with the knowledge of other scientific disciplines to understand and inform the situation of the artist, or of creating modes of working that rupture, or at least radically shift expectations that have become institutionally inscribed? It may be that it is the destiny of artistic research to operate between these polarities, drawing in, and on, existing knowledge while also breaking the mould tactically. As such, artist researchers will have to take up a confident stance between the polarities of their experiences of research and practice, staking their claim to the 'broken middle' of their engagement both within and beyond activity. In the next chapter, we shall probe more closely the respective natures of scientific and artistic research, as well as the features which they share - and which may provide common ground for the development of the paradigms of the artistic turn.

[Leave page blank for insertion of image].

Chapter 2. Artistic Research and scientific method: two cultures?

A conquest of abundance

> Arguments about reality have an 'existential' component: we regard those things as real which play an important role in the kind of life we prefer. (…) Again it is not possible to draw a clear and lasting line between the 'objective' and the allegedly 'subjective' ingredients of the process of knowledge acquisition and of knowledge itself.
> … Thinking and speaking a language, we continuously adapt to the situations we encounter and we change our ideas accordingly.
>
> Feyerabend, *Conquest of Abundance. A Tale of Abstraction versus the Richness of Being,* 1999, p. 71 & 78.

As proponents of the artistic turn, we are interested in developing a research culture from the position of the practising artist. To negotiate credible grounds for this culture, there is a need to understand both art and science, each in its own terms, and to find new ways of bringing the practices together. Both areas have qualities in common; both have reciprocal needs, the one of the other. What might the would-be artist-researcher learn from sciences that have research traditions stretching back over the last three centuries? What might the scientist learn from artists and their equally rich history of tradition and innovation in the sphere of creative construction? There are creative scientists, just as there are artists who apply their creativity with a high degree of methodological rigour. But our search for a viable research culture for the arts goes deeper than broad references to 'creativity'. Despite the narrow 'eye of the needle' of science's methodological constraints, discussed in Chapter One; despite critiques of science in terms of its ideological claims for dominance; and despite the fact that science itself is more fragmented and diversified than ever, we cannot but be interested in its 'method' as a starting point for our enquiry. Understanding scientific method philosophically, appreciating its positioning in existing forms of knowledge and connection to what we believe can be known, forms a critical basis for negotiating an artistic research culture that will have credibility and appropriateness.

What do we know about scientific research? What do we know about art? Both practices, while they have their own professional or intellectual 'territories' (of which we shall have more to say in Chapter Three) sit on a continuum with the broad range of ordinary human capacities. Everybody can 'draw', or can 'make music', at his or her personal level of ability, and the impulse to engage in such activities in some form or another is pretty-well universal. Similarly, everybody can 'do research' in the sense that, when they encounter life situations which pose questions requiring some kind of systematic process of enquiry or testing to resolve them, they can respond on some level to this challenge. The basic capacities underlying these faculties of drawing, music-making or problem-solving do not, of course, imply that everybody is 'an artist'

or ‘a scientist'. But these basic capacities can tell us something about the origins of human endeavour in the different domains.

Conquest of Abundance – A Tale of Abstraction versus the Richness of Being, is the last book written by the controversial philosopher of science, Paul Feyerabend (1999). It is an unfinished manuscript in three versions. The title refers to the tension between the abundance of the world which we inhabit and the rationalising tendencies of the human — Western and scientific — search for 'reality' and comprehension. It implies the simplification or reduction of phenomena and processes which we undertake in our encounters with them. The positive aspect of this approach is the way that it permits the discovery of relations, features, processes, laws whose knowledge enhances human life. But there is a negative aspect, in that the phenomena are transformed in this conquest, on the one hand abstracted in thought and, on the other, actively changed through experimentation and, as such, removed from their embeddedness in the world’s abundance. The progress of scientific ideas clarifies but leaves behind a certain richness of experience, of variety and idiosyncrasy.

Is this conclusion only applicable to scientific practice? Does not every kind of human comprehension cut into the abundance of the world, retrieving only partial truths and changing what was to be comprehended by the very act of its being understood?

> There is no escape: understanding a subject means transforming it, lifting it out of a natural habitat and inserting it into a model or a theory or a poetic account of it. (Feyerabend 1999, p. 12)

Indeed, we can only understand the world from the perspective of our natures as embodied, perceptual and cognitive beings of a special kind: thinking the world through human transformational practices and translations which originate in our specific way of experiencing the world. Our inquiring approach towards the world is intrinsically linked to our embodied being and cultural embeddedness. Human endeavour, human understanding and humans’ articulations of these change the world and, by doing so, exclude much of the abundance and richness of experience that it holds:

> any language (…) is a conspiracy against experience in the sense of being a collective attempt to simplify and arrange experience into manageable parcels …To exercise a language regularly on some area of experience or activity (…) overlays the field after a time with a certain structure; the structure is that implied by the categories, the lexical and grammatical components of the language. (Baxandall 1971, p. 44, p. 47)

This applies to any kind of human interaction with the world, be it scientific, artistic or simply mundane: all these activities function in a broadly similar way; they contain patterns, they ‘press’ the practitioners ‘to conform’ and, in this way, they mould their thought, their perception, their actions, and their discriminative abilities (Feyerabend 1999, p. 28). The moulds and shapes formed by human practices are discernible in our buildings, our artworks, our scientific theories. It follows from this that no human view, whether scientific, artistic or everyday, can escape human and social conventions:

> There are established ways of viewing animals, people, mountains, houses — they constitute the reality the artist sets out to explore; and there are equally familiar ways of viewing artworks (knowledge of artistic conventions included)

> — they determine what people experience when confronted with a statue, or a panel painting, or a fresco. (Feyerabend, 1999, p. 103)

Are science and art then so different? Both domains shape culture in their own ways. They originate in the same world and their respective manipulations, transformations and conquests partake of our same human nature. Their source domains are therefore equivalent. Both have to start from the constraints of the world and the constraints of the human being; both have to cope with cultural context and prevailing conventions. Their transformational models and interactions are similar, the heuristic processes are richly evident in both of them. Their deconstruction of the raw material of the world is similar.

But the reconstruction processes and objectives of scientific and artistic practice *are* different. Their target domains point to different worlds. In the case of science the goal of the endeavour is limited by the constraints of real-world situations; in the case of art this goal is limited only by the constraints of human imagination. This implies that the horizon of possible significations in art is much more open-ended than in science. The scientist James Maxwell, in trying to work creatively towards a scientific explanation for electromagnetism, needed, in his final theory, to contend with the real-world processes of what happens in an electromagnetic event. Deconstruction and fragmentation of matter and processes in science is allowed as long as it is aimed at a reality, a 'truthful' end-reconstruction. The creative and innovative thought-experiments that Maxwell — and other scientists — have used for discovering the ‘right’ theory are valuable auxiliary tools for reasoning. However, they are no more than tools, and secondary ones at that, even though the thought models which they generate are often very creative. While they may be rich in metaphorical or analogy-based suggestivity, they stand or fall on their consistency with the scientific results (Nersessian 2008). By way of contrast, the visual artist Duchamp, simply by re-inscribing a commonplace urinal in an art-context, invested the material with entirely new signification. Metaphor and analogy, in a situation such as this, are not secondary or intermediate — mere means by which the process is advanced — but its end, its very *raison d’être*. Where science determines certain ways in which we work with the physical material world, an artwork has the capability to let us escape these conditions in our imagination, or to add something new and unconstrained to our experience that may then give enabling form to further experiences.

Science could be looked at as the most profound realisation, and most radical enterprise, of our ultimately unrealisable striving for the 'conquest of abundance': ‘We know fragments; a complete account, a full enumeration is beyond our abilities.’ (Feyerabend 1999, p. 48). But this same human limitation also points, paradoxically, to the fragile position of science. As Albert Einstein noted, scientists start from a ‘labyrinth of sense impressions’, retrieving from it ‘mentally, and arbitrarily, certain re-occurring complexes of sense impressions’ (Einstein 1954, p. 291). Moreover, a second fragility of science is embedded in our cultural ways of being: Western scientific ideas, like any modes of thought, are susceptible to our constantly developing worldviews and our periodic transformation of them into fresh worldviews. Thomas Kuhn showed how dominant paradigms, vocabularies and theories shape science for certain periods of time, but how revolutions in science, originating in profound reflections and doubts that arise from time to time inside scientific communities, lead to new and different paradigms.

Science is sometimes criticised as a Modernist delusion, stuck in false ideas of objectivity while continuing to insist upon its dominion over the variety of possible interpretations of the world. Scientists themselves defend their practices by referring to science's ability to predict, to its capacity to explain phenomena and processes in robust ways, both theoretically and through experimentation, as well as to the success of its results. But a third element of the fragility of science lurks around the corner: its fragmentation into so many subdivisions.

> there is no simple "scientific" map of reality — or if there were, it would be much too complicated and unwieldy to be grasped or used by anyone. But there are many different maps of reality, from a variety of scientific viewpoints. (Ziman 1980, p. 19)

Instead of finding a unified way of explaining itself scientifically, the world has acquired a whole raft of explanations — geographical, chemical, physical, mathematical, etc — not all of them necessarily mutually compatible. Even inside one scientific domain, different theories cannot be fully unified, as with Newtonian physics and quantum theory which offer very different models of how matter behaves, but which both seem to be required to describe the full range of phenomena from the atomic, via the scale of the everyday, to the cosmic.

Is science then powerful or fragile, to be admired or to be despised? As we have seen, for some, it is a dominant, powerful but an arrogantly-imposed view of the world; for others it is a way of understanding and making sense of the world whose methods are largely reflected in the nature of that very world; from a third standpoint it is a socially sustained — and constructed — approach whose 'objectivity' is therefore something of a cultural fiction (Cutter 2003).

Let us now introduce artistic research.

A last scion in the family of research?

> What we (…) call a work of art is basically nothing but a product of general nature …Humans are only the vessels which receive what 'general nature' wants to express.
>
> Anton von Webern, *Wege zur neuen Musik,* 1960, p. 10 fn.

Artistic research is the latest (the last?) scion in the family of knowledge in Western society, a descendant that is currently in a frank phase of growth through trial and error[6]. This process is taking place under the critical scrutiny of the 'hundred eyes of Argus', but at the same time there are those who cherish it and wish to see it prosper. Such support comes as much from public policy as from academic circles and scientific research groups. But the scion has yet to prove itself!

Research in art-and-about art is not new: it has existed as far back as humans can remember and faint echoes of even its prehistory come down to us in resonances stirred by images such as those on the walls of the Lascaux caves. On the individual

[6] Part of these ideas have been published in a short version in Coessens 2009.

level, research in art has always been an integral part of human activity, although often concealed within an implicit, personal and largely unexpressed part of the artist's own process of creativity. On the collective level, research about art has been part of human society ever since human beings had the capacity to evaluate and criticise human artefacts. Such research is part of the social and cultural view which we take when evaluating each specific society and its artefacts. It is embedded within politics, ethics, history and the social coherence of a given group.

In the twentieth century, while artistic research has begun to come into its own as a recognised brand of research, it has done so alongside growing specialisations in different, more traditionally research-oriented disciplines and sub-disciplines such as musicology, philosophy of art, art criticism and the sciences of art. These disciplines also consider art and the artist as their domain of expertise. This means that aesthetic problems have been treated within research from a philosophical, contextual or historical/analytical standpoint, creating new theories and explanatory links. However, none of these disciplines has addressed art from the point of view of artistic practice — the 'inside' view — and therefore all of them have left out important aspects of artistic experience. In the first place, this is because they consider the artist, not as a possible researcher, but as a research subject. Secondly, since the artist's hidden creative processes seem inaccessible to scientific research and discourse, including as they do idiosyncrasy, temperament and the imagination, these aspects of artistic creativity have been deemed to defy precise analysis and therefore to escape scientific discourse.

So, while expertise and research on-and-in art did exist, these were directed towards art as an external phenomenon. Artistic practice itself was not seen as having a legitimate place from the point of view of an academic specialisation. Academic study of art neglected the singular and the idiosyncratic in favour of the supposedly universal; it neglected the artistic process for art theory, it neglected agency and creation for description and analysis; it dealt not with the implicit, non-discursive, but with the explicit and discursive, not with experiential, but with methodological claims. Its practices, languages and discourses seem to us, as artist-researchers, unhelpfully different from those of art itself. Are these disciplines and the art they analyse truly part of the same world? Or should we consider their specialist jargon as a kind of language game *à la* Wittgenstein, meaning that whoever wants to play the game needs to know the rules? Insofar as it does not strictly obey such rules in either direction — either the rules of artistic practice or the rules of science — artistic research is thus doubly incapacitated; it is at a disadvantage when discussed in formal research contexts, while those aspects which it may borrow from scientific method only serve to make it less accessible for the artist. Those who have had access to education *both* as artists *and* as researchers have been — and remain — rare.

Recent high-level debate in education — both in academic circles and among policy-makers — has attempted to bridge this cultural, methodological and linguistic gap. Over the last twenty years, tentative approaches have been made to cope with the diversity of artistic endeavour and creation. For example, Christopher Frayling, in his 1993 *Research in Art and Design*, proposed 'research into art', 'research for art' and 'research through art' as the three domains of research covering the broad field of artistic endeavour. This trinity of categories offers a possible classification framework which, although it is not the only one, has been widely used within the discourse on

research in art (e.g. Borgdorff 2005).

The first of Frayling's domains, research *into* art, may be focussed upon the artefact, upon the creation process or upon the artwork's place and significance within an artistic movement. It looks at art from a critical, theoretical point of view and offers a framework or description of the evolution of art and its tendencies. This approach is already present in the established academic curricula in the arts and humanities, and in the philosophy of art. Researchers in this domain are theoretically skilled and have an academic education. Their research is aimed at academically educated connoisseurs or other researchers. There is scope, within this research, for the artist to enter the domain and to reflect on his or her own practice — publicly and explicitly — from the perspective of a researcher. However, there remains the problem of how the artist is to acquire appropriate research training and background knowledge of the relevant disciplines.

The second domain, research *for* art, aims to offer tools and insights for the benefit of the practice of art itself. Possible outcomes from this domain include scientific analyses, new technological tools and improvements in the vocabulary that supports the discourse about artistic creation. This research addresses an artistic audience, or at least an artistically educated audience. Here too, the research has remained until now in the hands of the scientist who is skilled in theory as well as technology. Possible openings for the artist to enter this domain might include addressing new technologies in their application. The output generated by the artist in this way, because it arises out of direct practical experience, could be of value for further research for the arts.

Finally, the most recent, and without doubt also the most controversial, approach is research carried out within the arts themselves, often named 'research *through* art', in which the object of research is the artist's own art or artistic process. In this domain, the artist and his or her artistic processes are involved in a dual capacity: both as the agent of the research and as its subject and object.

This analysis of the three possible forms that artistic research might take creates a taxonomical schema of approaches out of what, in reality, is a fluid matrix of different and challenging ways of conceiving the field. It superimposes theory upon practice and therefore, for all its attractive classificatory clarity, is in danger of engendering quasi-scientific research silos which address exclusively art-historical, art-theoretical or art-technological issues. The categories are easily legitimized because of their apparent alliances to existing forms of research. This in turn obviates the real and pressing need to think through the implications for art, and for research, of the emergence of artistic research. Arguably, the radical critical thinking required should not result either in an act of colonizing or being colonized by existing cultures of research. Instead, it should consist of understanding the potential or otherwise to open up new fields, or even new research paradigms.

So the question remains — do these new possibilities and debates really diffuse the tensions between the prevailing scientific research, as carried out by scientists, and the recent claims of artists to practise and articulate research? There still remain significant issues in artistic research concerning how to formulate research questions in such a way that they will lead to new insights into artistic practice and beyond while being appropriately supported by method. How, indeed, can artistic research lay

claim to a scientific background and basis over which it frequently has no mastery, which it rarely encounters and which is so different from the experiences of singularity and idiosyncrasy that are fundamental to art? There is a great deal of work to be done to answer such questions, and to understand the precise value and contribution of the artist's research to the sum total of human knowledge.

How should we deal with this impasse? Might we look at the origins of the arts/sciences dichotomy for some more insight? The current problematic situation does, after all, have a background, a philosophico-scientific and historical context. The gap between science and the arts is not new, and the debate — or should we say controversy — concerning artistic research seems to repeat an old tension, albeit with new contours, as part and parcel of the processes of rationalisation, and of a progressively disenchanted worldview, in the twentieth century.

In 1959, Sir Charles Snow wrote a startling book *The Two Cultures and the Scientific Revolution* in which he highlighted one of the biggest problems in the development of the sciences: the gap between art and science; the gap between intellectuals in the sciences and humanities and even between those in the social — human — sciences and the hard sciences. Snow considered the division and incommunicability between these groups as leading to a growing, and reciprocal, neglect. Forty years later, the historical facts show that his premonitions were not without truth, nor were they without consequences. Indeed, the problem was painfully repeated with the Sokal affair in 1996.

Alan Sokal, an American physicist, felt that the social sciences had appropriated the discourse of the natural sciences without considering their underlying foundation, theory and method. To prove his concerns, he wrote a fake article in which he used pseudo-scientific jargon to dress up a supposedly postmodern thesis and sent it to a social science journal. It was accepted for publication and Sokal publicly revealed his hidden agenda. The scandal precipitated the 'science wars' between the 'two cultures', a war in which natural scientists accused the social scientists of intellectual deceit in the form of using the vocabulary and apparent methods of scientific discourse without their offering any genuine foundation to what was being discussed (Ashman & Baringer 2001; Bricmont & Sokal 1999). This affair not only confirmed the old schism, but pointed to a second philosophico-scientific problem: discourse and method are not the same — or to put it in Wittgensteinian terms, you can pretend to play a game, but without knowledge of the rules, the game will remain void and you will eventually fall short as a player (Wittgenstein 1953).

The tension or gap between art and science could actually be even more fundamental than this, even deeper than we can imagine: it comes down to our human understanding of, and acting in, the world. In *Actual Minds, Possible Worlds,* Jerome Bruner describes two ways of coping with the world and with knowledge (1986). The human being experiences and interprets the world in the first place in a narrative way, in which personal narrative and one's own interpretation offer a structure but, above all, a coherence and meaning in the world. Human beings also want to classify, schematise, and analyse: this is what Bruner calls the paradigmatic approach to the world. This offers scientific facts and consistency. Narrative and paradigmatic approaches offer different, but not necessarily exclusive ways of coping in the world. The one aims at continuity and experiential truth, focusing on the world in movement,

in process so to speak. The other focuses upon deduction, supported by formal and empirical proof, and entails a fixing of the world at a particular moment in time. In both narrative and paradigmatic approaches, the knowledge that has been constructed shapes how we then act in the world.

Let us test this observation by means of an example. Goethe, as scientist and poet, developed his own theory of colour in response a degree of scepticism about Newton's colour theory, which claimed that colours are contained in colourless light and arise through refraction in a prism. Rather than imposing this theoretical statement onto experience, of seeing colour as refraction, Goethe sought to allow light and colour to reveal themselves to his imagination. He set up an orderly but easily repeatable set of experiments that continue to be used to this day. These experiments privilege the researcher's direct experience of the phenomenon of light. Goethe discovered that colour was intimately related to the transitions of light to dark (Seamon 2005). What is interesting about his approach is its positioning in relation to the way that we characterise science and art. If science is the recognition of what is objectively the case, and art a subjective realisation of an abstraction into an intelligible form, then Goethe's approach acknowledges both – and, in a sense, neither.

In developing knowledge, the human being is neither an exclusively passive receiver who simply re-arranges what already exists, nor a solitary, isolated creator who brings something entirely new into existence. Rather, he or she represents a blend of the two in which a degree of uniqueness arises from the proportions in which the blend is created. Thus, for example, the artist as researcher develops characteristic, individual and – in the true spirit of research — original ways of drawing together and synthesising his or her observations of phenomena from a world that embraces both objective and subjective forms of knowing but also transcends these categories. Goethe's work, of course, predates the linguistic turn that privileged language and articulation over observation and phenomena. He viewed the world 'in motion', reporting on the doings of 'the miraculous spirit of life that everywhere throbs and works' (Emerson, in Sepper 2005, p. 207) and offered a third possibility that is neither exactly paradigmatic nor exactly narrative-based but draws on both simultaneously.

Method between science and the world[7]

> It is highly important that people should have a realistic understanding of the (…) limits of the scientific enterprise so as to prevent inflated and unrealistic expectations, and thus to avoid the backlash of reproach, recrimination, and alienation to which the disappointment of such unreasonable expectations could all too easily lead.
>
> Nicholas Rescher, *The limits of science,* 1999, p. 1.

The paradigmatic way of interpreting and exploring the world has acquired an important place in society. Science and scientific endeavour are cornerstones of our

[7] The basic ideas of this part of the text have been first developed in Van Bendegem & Coessens 2006.

culture. In their application, science and technology have become overwhelming in their influence upon the way that we live. What characterises a scientific approach?

1. *isolation*: the subject or object of the study is normally isolated within a laboratory to reduce the number of intervening factors
2. *control*: a science laboratory is an ideal environment for optimum control, making replication of the conditions of the experiment possible
3. *the exclusion of the observer* to obtain the highest possible standards of objectivity and accuracy in the experimental process
4. *analysis and formulation*: if the subject of the study is too complex, it is divided into smaller units studied separately and then formulated into a whole.

These four components offer a horizontal axis of scientific method. A second, vertical axis articulates the different phases of the methodical process:

1. observation, data gathering, and description of the phenomena under investigation;
2. the setting up of a model of explanation by formulating a research question and hypothesis that anticipates the answer
3. an experimental process with the aim of testing the hypothesis;
4. an evaluative and controlling phase in which the results are tested both against the original hypothesis and the research subject. Should the hypothesis be accepted, rejected or corrected? Is the process analysable and repeatable by other scientists?

Scientific method is the process whereby scientists, working concurrently and over time, investigate and acquire knowledge with the aim of obtaining a clear and precise representation of the world in ways that translate back to the world and shape its manner of operation. But such a process, like any act of translation, adds ‘noise’. The world is neither the mirror image of science, nor science of the world! So called 'interfering' factors constitute real world events. Scientific facts are not visible as such. They are inextricably interwoven with factors dependent upon how we experience situations.

Firstly, experience itself cannot be isolated, controlled or divided into clearly distinguishable units that can be reformulated further down the line in an unequivocal way. Secondly, scientific explanation is linked to specialisation. Certain events can be explained in a relatively simple way, others require very complex theories. For example, when we consider an object falling, we point to the law of gravity — which itself only seems straightforward thanks to Newton’s flash of insight and his elegantly simple formulation of gravitational laws. When we analyse a subject such as the behaviour of tides, the scientific explanation required is considerably more complex — Galileo himself, after many years of inquiry into this subject, proposed a theory which turned out to be false. Thirdly, and linked to this point, science describes only parts and pieces of the world which in the experienced world are seamless, indivisible. Let us return to the example of the law of gravity. The only relevant factor to science in the case of an object falling is the mass of the object. Other factors — whether it is a human being, an animal or an inanimate object that falls, its form, its material, its age — are inconsequential. This, of course, is far from the case for the object in question!

What happens if we consider science from a perspective of the world and culture as we experience them? The first thing we note is that science itself is part — but only part — of this experienced world, part of the 'narrative' of human life. Recent developments in the form of new theories, and alterations to earlier scientific method and practices, point to the fact that the sciences, too, are subject to changing practices and understandings over time and across cultures. If, some centuries ago, the world was exclusively interpreted by scientists following the theory of classical mechanics, today they have added theories of relativity and chaos. Where mechanics constructed a partial or schematic truth, relativity and chaos theories take account of the world in movement, including the movement of the researcher. It is a kinetic/ kinaesthetic account. Moreover, science is subservient to language and other social practices, as it can only be expressed in these semiotic systems which, in turn, are themselves subject to change (Collier 1997). Scientists, particularly those in the area of ecology, are becoming increasingly aware that science is a man-made system of representation that considers nature essentially insofar as it is meaningful to, and useful for, humans. They are also increasingly aware that science is the result of the dialectics between a particular social practice — that of the scientists — and nature, and that science structures particular investigatory habits at the expense of others. These in turn determine what can or cannot be seen. To return to the Newton/Goethe example, the dispersion of light through a prism was not just a way of viewing light as a phenomenon but became a basic technique that routinely led to future experimentation, ultimately making possible ever more sophisticated tools, based on the same principles, such as the spectroscope and the laser. These are now common tools in terms of the way in which we inhabit the contemporary world (Sepper 2005).

What happens when science turns its focus upon the human being, when scientists become curious about the experiential, when the paradigmatic/measurable gets mixed with the narrative/experiential?

Anthropology, history, sciences of art, economy, sociology, psychology, all have different historical roots and different developments. At the outset, these new sciences strove to copy the existing model of the natural sciences. Adolph Quetelet (1853) consciously invented notions of '*physique social*', social physics, with the intention of applying scientific patterns of reasoning and method to social phenomena. This method of inquiry offered some success in demonstrating human physiology and human societies could be measured beyond height, width, weight, skin colour, fingerprints, age. Measurement could be applied to social class, mobility, wages, leisure activities, access to medical facilities and so on. Once data are accumulated, mathematics can intervene, and indeed it has intervened in the development of statistics and statistical reasoning as important tools for understanding humans and their behaviour. Is there really anything wrong with the broad use and application of this successful method in the realm of human beings? The following considerations will point to some of the problems and show that the nearer the scientist approaches human beings in relation to their environments, processes and experiences of living in the world, the more difficult it becomes to apply the horizontal and vertical principles of scientific endeavour, of isolation, control and exclusion, outlined earlier.

Several problems rise to the surface if we look more carefully at the intersection between the scientific method and its possible applications in the human world. The

researcher may try to maintain a detached, external position, but since this implies externality to the entire human realm it implies his or her adopting a 'godlike' stance, whose dangers are self-evident. The question of objectivity, in this special case, becomes an ethical question of the researcher attempting to position him- or herself outside our shared human experience and, by implication, outside any considerations of responsibility or empathy.

Another point is the 'intactness' of the subject of research. Each human being is a whole, unique entity. How can we engage the principle of the generalisable when the research seeks to draw out personal opinion or individual experience? In surveys and questionnaires, opinions and their recurrence are treated like any other data - counted, amassed into statistically viable quantities and applied in situations that are divorced from their originating context and viewpoint. However 'smart' the techniques deployed in analysis, superimposing the opinion of one individual on another successively until they become blurred and generalised way cannot help but seem a somewhat strange activity. The scientist is potentially placed in an uncomfortable, if not delicate, position: could it not be argued that he or she is misleading people in the name of an objectivity that is, in reality, spurious (Stengers 1997)?

Notwithstanding these misgivings, the task of the human or social scientist is still to find stable patterns and laws. Scientists expect to find such patterns even in animate masses — cells, simple organisms, bacteria, complex multi-cellular creatures such as humans and even human groups in society. It is true that numerous cases in the social sciences have offered significant success comparable to those in the ‘pure’ sciences and that, as those cases prove, it is not unfruitful to import scientific method and rigour into the examination of social phenomena. But the problem of translating such scientific results back to the world and to society — for example, as pointers towards future human behaviour — has often proven to be problematic.

In summary, in human subjects, conditions cannot be controlled because complexity or extraneous interventions are a condition of human society. It becomes quite an 'art' — and here we are consciously using the word 'art' in the sense of 'ars' or 'techne' as opposed to 'pure' knowledge (science) — to find out when such intervening factors may fundamentally influence results and when not. For example: inside the security and isolation of the laboratory, human beings can remember, on average, seven items. Bank account numbers of eight digits are difficult to memorise. Can we necessarily deduce from this that the same results will apply in real life? Or, to take another example: how might we measure degrees of collaboration between people? What factors need to be taken into account — ego, qualities of relationship, etc?

Even more problematic is the idea that complex systems can be divided into smaller units, studied separately and the results then be reformulated into some complete form of knowledge. Take the commonplace argument of the modern world as a 'global village': can you subdivide it easily into parts? Everybody is a member of society. Even if we limit ourselves to Flanders as an example, can we deduce the 'modal Fleming' statistically by way of representative samples? What did Quetelet mean with his *homme moyen* or average human being that raised such criticism in 19th century? The average biometrically 'normal' human being does not exist, other than as a statistical construct. And in any case, as we have seen, social groups are difficult to access statistically and each interpretation necessitates alternative descriptions of the

whole and a reduction of the complexity.

Nevertheless, we hold on to these scientific principles, playing them out in daily living. Supposing I go to the supermarket to purchase goods: each of these is itemised and priced within a monetary economy based on the principles of scarcity; I have problems finding a parking space despite the efforts of sociology to analyse and influence urban traffic and mobility; I become agitated and a social psychologist, as an onlooker, explains why I have become aggressive. At the supermarket, I make purchases. Sometimes these are very considered; the political sciences might explain the impact of values, ideology and world view on my behaviour in these instances. At other times I buy on an irrational basis: I want cookies which remind me of my childhood and a psychologist onlooker could analyse such fixations and feed the results back to the supermarket, who might in turn draw me back with ever more attractive possibilities. I get annoyed at the long queues at the checkout (back to the social psychologist and my frustration, as well as mobility studies). In addition to these factors, biology intervenes in terms of my survival, eating habits and digestion, mathematics with reference to my bill, physics concerning the weight and transport of the goods, and so on.

Clearly, there is a problem: human life seems to have become divided up by science into ‘chunks’ or quanta of activity. Yet, in reality, all of these events which form the experience of ‘my visit to the supermarket’ function as a blended narrative of my existence. Moreover, in this example we have not even considered the problem of the complexity of subdivisions of the various sciences called into play. Scientists probably would defend this by referring to the historical development of science, but this does not alleviate its contingent character.

So there we are: we have mountains of scientific knowledge and we have more or less forgotten how we should apply and integrate it into our life experiences. Or perhaps we might formulate this differently: we have the continuum of our lives, upon which we can superimpose a patchwork of scientific segments. We cannot deny that all these sciences have offered important contributions towards our understanding of human beings and the world, but we are left with the question of how this multiplicity and difference can be integrated into one whole.

Back to our scion

This story of the evolution of science and scientific method offers an interesting preamble to, and preparation for, the more pressing question concerning artistic research: what might this all mean for the human being who also happens to be an artist? What knowledge is developed through art? How can we define artistic research, comparing it to other research? How can we develop, describe, analyse artistic research? What, in any case, does ‘re-search' *tout court* mean?

Paul Ricoeur in conversation (Valdes 1991) suggests that scientific truth is rooted in three values — consensus, conformity and verification. In fact he retraces the trajectory we developed before, but then adds some reflections on artistic research. He considers the process of knowledge development as being structured through method. Method enables another researcher to retrace a given research path and accept or

refute its findings. In other words, it is an explicit process that ensures reliability through creating the potential for findings to be tested. For a hypothesis to be accepted as new scientific truth, the whole expert scientific community must be convinced: they must reach a consensus about the matter or theory in question; they then operate in conformity with it until such time as new knowledge may forward that refutes the previous construction and that has itself survived a similarly rigorous testing process. Within the same discussion, Ricoeur compares the principles of consensus, conformity and verification to those of practice and belief in the art world. Artists work in inductive and intuitive ways as individuals. Although it can be argued that method exists in art, and can be adopted for repeatable ends, its application is more often directed towards the development of new knowledge, with its attendant potential for endless variability, and not towards the application of existing knowledge and testing of its reliability. To give an example, we might wish to probe the method for constructing a Cubist or Pointillist painting in order to understand how the work was made, but not because it is a reliable, generalised method for making an artwork. Similarly, copying in the Renaissance was deemed to be the seat of innovation, precisely because it lent itself to the project of generating endless fresh possibilities by fully understanding what had gone before. Or, to give an example from music, the method developed by Schoenberg of composing by ordering and manipulating the twelve chromatic tones of the octave gave composers of the next generation a tool which they applied to all music's parameters — duration, dynamic, attack, etc — pursuing aesthetic ends, and generating musical sound-worlds, which were unimagined at the point of formulation of the twelve-tone system. Verifiable and replicable methods, insofar as they exist in art, therefore address different ends from the scientific objective of establishing consensus and conformity.

Let us examine these principles — with a deliberately playful slant — through examples of artistic research projects.

Recovering Imagination: four artistic research projects

Research

> ***taking a question***
> *figuring out a possible answer*
> *drawing a line from answer to question*
> *applying method*
> *analysing results*
> *writing*
> *disseminating*

Art

> ***taking a sheet of paper***
> *making a mark*
> *moving off with a line*
> *interacting with other forms, other lines*
> *revealing the experience*
>
> *a new question arises*

The sequences of action, and their respective qualities within these two 'poetic'

scores[8], offer us possible ways of thinking about the relationship of art to research. Academic research traditions frame research in the mode of the first score — science structures questions and proposes answers through hypotheses that can be proved or disproved through reliable method — a line is drawn, 'in reverse' as it were, from answer to question; knowing in advance where one wishes to end enables one to plot the experimental trajectory with a degree of certainty and precision. Artistic practice is evoked in the second score as an open ended exploratory process in which the goal, or end-point, is uncertain and even illusory – the process is never-ending, the artwork only ever contingently declared 'finished' by the artist. Artistic research oscillates between these two modes. On the one hand, artist researchers welcome the qualities that formal research is capable of producing in terms of structure, rigor and even constraints. On the other, they seek to be true to artistic creativity and its wide-eyed, experiential way of being in the world. Successfully riding the tension between these two modes is challenging.

As Paul Klee noted, we are born 'unasked into a world of variety' and for better or worse, must find our way through it. Was this not the same observation Feyerabend made with his *Conquest of Abundance* (1999)? Does Klee as an artist find his way fundamentally differently from Feyerabend as a scientist?

In the following examples all four artist-researchers have addressed questions that interested/challenged them as artists. They developed these questions through formal, doctoral research. All four could have addressed their research in a more conventional 'scientific' way, deploying existing research methods. Had they done so, their results would have been considerably different. What is characteristically 'unscientific' *but also* 'un-artistic' about their common approach is their taking of these research questions into their individual artistic practices and then noting through rigorous observation, documentation and analysis the kinds of shifts and transformations that, as artists, they were having to make in their own assumptions of how they worked. All four moved beyond the 'naturalness' of just making art to a consciousness (perhaps even a self-consciousness) of experience that could inform issues that went beyond their own idiosyncrasies as artists. In some sense their approaches demonstrate simultaneously an 'unlearning' of science and an 'unlearning' of art. We are back, once again, to the disabling, but paradoxically empowering, realm of the 'broken middle', introduced in Chapter One.

Patricia Cain: The Experience of Drawing as Thinking[9]

Patricia Cain set out to explore drawing as a form of learning. She chose to position herself as a practitioner and learner at the heart of her research into drawing. Existing studies on creativity in learning, such as those of David Galbraith in the field of creative writing, were social-science based; Galbraith's approach, for example, uses control groups, exposes one group to certain techniques of creating new work and not the other. The results are then compared and models are constructed from the findings (Galbraith 1999).

[8] These 'poetic' scores draw in form on the scores of Allan Kaprow (2003) explored in Chapters 1 and 3. They draw in content on the ideas of Paul Klee (1953).

[9] (unpublished doctoral thesis) - University of Glasgow: Glasgow School of Art, 2007.

Cain approached two other artists who use drawing vigorously in their practice, Richard Talbot and Oliver Zwink. She conducted a series of one-to-one interviews with these artists about their creative processes. At this point, she could also have followed a more art-historical route. She realised that she was not necessarily getting closer to what she might learn from these processes beyond what the artists could describe in words. As an artist herself, she felt she needed to internalise their methods.

She then borrowed a work from each artist and copied it. As the process of copying became more vigorous, Cain developed increasing awareness of her own experience of learning. She experimented with different ways of developing this learning, while retaining copying as the core activity. She identified discrete stages in the decision-making processes of the artist More importantly, she became conscious not only of what each artist was contributing to her understanding of drawing as a process, but also of the nature of drawing itself as an experience in time and in movement in which the making of one line calls for the making of the next. She noted these stages and observations in a diary/sketchbook through a set of small drawings with annotations. She has since begun to take the insights slowly into her own artistic creativity.

Cain supported her theoretical position through recent work in biology developed by Francisco Varela and Humberto Maturana. They had observed how organisms grow and develop learning in response to movement in their environments through concepts such as 'autopoesis' and 'enaction', which explain how organisms internalise the world as they move through it. Organisms develop through movement and interraction in the world.

Cain draws out something important about the difference between the way an artist and a scientist approach research. She worked within from overarching goal or hunch that drawing was a process of learning i.e. a bigger phenomenon in the world than the idiosyncrasies of her own artistic work. She evolved a method to explore the validity of her hunch, building each stage of work painstakingly from the previous one. Her own subjectivity became increasingly important to the process— not as a spur to individualistic creation in the form of a new artwork, but as a tool for exploring more intensely, more deeply the phenomenon at hand. Her research approach is one that was made, consciously constructed, not previously known and simply applied. Her creative practice during the project was given over, so to speak, to furthering her inquiry into drawing as learning. It was – and, because of the after-effect of the project, still is - positioned differently from that of an artist who sets out simply to make artwork through drawing.

A version of the score above could reflect this specificity:

drawing as thinking…

taking drawing
taking learning
asking Talbot and Zwinck how they learn through their drawing
drawing their drawings
drawing to learn
writing
exhibiting
disseminating

Heather Delday: A critical investigation of the relationship between visual artist and audience in remote rural contexts[10]

Heather Delday conducted her research in the context of a much larger funded research project - *On the Edge 2001-4* - investigating contemporary visual art practice in relation to remote rural contexts (Douglas & Fremantle 2005). Delday's studentship could have taken a social-science route of finding out who worked in remote rural areas, what kind of work they did, why artists chose to live in such locales, etc. She could have set up a comparative methodology between urban and rural artistic approaches, forms of distribution and audience engagement. Instead, she positioned herself as an artist talking to, and working alongside, other artists. She tested new approaches by making her own artworks as a series of interventions, working with groups of individuals situated in remote rural places.

She focused on the nature of the relationship of people to one another in remote communities. 'Close' became a metaphor, a rhetorical device, that resonated with her life-experience of being born on the island of Wyre, in Orkney, and then living and working as a bilingual publisher on Lewis, Western Isles. She generated an alternative practice through this metaphor that had/has relevance beyond remote rural contexts . She created spaces within the workplace in which her participants, frequently medical practitioners such as geneticists, hospital staff, temporarily left their normal working routines and together explored aspects of their experiences in a sensory way, enabling them to become aware of the kinds of metaphors and qualities of human engagement that informed their practices of care.

These interventions grew in subtlety and insight through drawing upon De Certeau's articulation of the practice of everyday life. Delday constructed and evaluated a thinking tool - a matrix that brought together three inter-related values defined by De Certeau - from which artistic practice situated in a specific place might be considered and negotiated. The *aesthetic* may be defined as the intricacies of giving form to experience, the *ethical* as enabling individuals to share a freedom to think, speak or act differently, and the *polemical* as forming, expressing and enacting a view or position.

Delday shares some of the qualities of research of Cain, placing her own emergent practice at the heart of the enquiry. The concept of 'close' skilfully demarcated the possibility of intersubjective ways of working as an artist from the more common constructions of artist/audience: relations that focus the individual artist and his or her product in relation to a group that is unknown, homogeneous and largely passively receiving. ‘Close’ acted as a kind of proposition from which to explore a radically different artistic approach in response to specific place. Again Delday experimented with ways of understanding by making work in an incremental cycle of (syn)thesis and analysis, rather than hypothesis, experimentation and formulation. Like Cain she does not assume that the artist is a passive receptor of the way things are, of knowledge applied, but a creator of knowledge that emerges from intense experience in and of the world.

Her version of the score might appear as follows:

[10] (unpublished doctoral thesis) Robert Gordon University: Grays School of Art, 2006.

taking a 'place' …

taking waiting
working with staff and their everyday
sharing experience
giving voice to feelings
improvising
writing
exhibiting
disseminating

Rashdi Yan Ibrahim: A Methodology for Fine Art Formulation applied to Investment Casting Moulds[11]

Rashdi Ibrahim set out to examine a technical aspect of lost-wax casting. He had observed that cuttlefish bone, which was plentiful and cheap in his home country of Malaysia, had significant reproductive qualities. He was curious to find out whether cuttlefish bone in powder form, deployed in large moulds, could become a viable substitute for expensive imported grogs. This was apparently a straight forward piece of technological research.

The material scientist on the supervisory team could have easily solved the problem through the methods of his discipline, but results derived in an engineering laboratory would have to be translated back from specialist to lay forms of communicating the process - i.e. from the specialist language of the scientist to the lay application in practice by the artist or craftsperson. What the artist required in exact terms could be lost in translation. Over time, and with the support of the supervisory team, Ibrahim developed a method of drawing derived from rigorous observation of the experimental process at different crucial stages of mixing and setting, firing and pouring the metal. The artists needed to understand both what worked and why. Ibrahim developed his drawing technique to the point of being able to respond directly and specifically to a set of ingredients by drawing out representative cross sections at each stage in the casting process. His responses became immediate and performative. He could not only communicate how the materials responded to each other but also why they responded in the way that they did. His research communicated to artists in ways that artists understand and thinking strategies which they deploy naturally, while also drawing on the reliable, rigorously derived results of the scientist.
His version of the score might appear as follows:

taking material, recognising its properties, testing these properties in a new context

working with scientists
working with new materials
cataloguing
drawing for artists
writing for artists
working 'well' with new materials
working quickly and performatively
working with artistry and rigour
disseminating

[11] (unpublished doctoral thesis) Edinburgh College of Art, 2001.

Peter Swinnen: 'La Chute de la maison Usher' - music for the silent movie by Jean Epstein (1928) for full Orchestra[12]

Peter Swinnen was invited by the National Orchestra of Belgium to create a symphonic composition for Jean Epstein's film 'La Chute de la maison Usher'. This task offered him the opportunity to synthesize all his previously-acquired skills and knowledges into one coherent artistic creation — and to engage in a doctoral research process. His first education, in the Second Viennese School of composition, had been followed by a growing interest in algorithmic composition techniques in the 1990s. A collaboration since 2003 with mathematicians of the VUB (University of Brussels) enabled him to develop his skills in formal grammar, cellular automata and generative algorithms. The invitation allowed him to draw on various domains of art and science. He was interested in the translatability of the features of one medium into another: from literature to film, from film to music.

He first analysed in detail the storyboard — sequences, scenes, characters, tempo, themes, symbolisation — and the literary and musical context behind the movie: novels by Edgar Allan Poe and music scores and handbooks on (piano) film music. Following these analyses, he divided the movie into six thematic parts, containing different scenes and shots, with their precise time measurements. He inserted this storyboard into a stochastic process, using different computer algorithms, searching for a harmonic rhythm that could be used as a formal grammar — somewhat inspired by the traditions of cluster patterns in Ligeti and the shifting patterns of Steve Reich. The fundamental musical materials were decided by funnelling down the sound of chosen natural processes into notes and chords — e.g. volcanic eruptions, earthquakes — by way of computer processes. These then would coincide with the point of view of the camera and not with the shots or characters. Swinnen continually redirected the computer processes, entering new parameters, linking shot-durations and introducing compositional features like growing dissonances, and random choices. By rules and directions, following his own artistic choices and the constraints of the movie, he created a 'metrical-sentence-maker', a 'melodic-sentence-maker', a 'cluster-sentence-maker' and a 'shifting-pattern-maker'.

These interactions in the stochastic processes of the computer program constituted further inputs of Swinnen's own artistic choices and freedom. This offered a condensed score, which he could then compare with what he had in mind by way of a synthesizer. He then proceeded towards the orchestration and the final touches. Feeling some inconsistencies between the music and the scenes of the end of the movie, he decided to rework this part and ended up doing so a number of times, altering the inputs into the computer and forcing the stochastic processes to obtain what were, for him, satisfying results.

The outcome of the project was a presentation of the film accompanied by a live performance of the score by the National Orchestra of Belgium, in addition to the logbooks of the storyboard and movie analysis, the score, computer analyses, condensed score and a logbook of the whole research process.

Swinnen's version of the score might appear as follows:

---

[12] (unpublished doctoral thesis) Conservatory of Brussels and Vrije Universiteit Brussel, 2009.

from literature to film; from film to music

taking the visual material, inquiring into context
reflecting on the musical context
inviting nature's sounds
interacting with computers and algorithms
preparing programs for sound, rhythm, chords
testing the results
re-adjusting
performing, documenting and disseminating

In these four examples, each project was framed as a question. This question underlay a broad overarching goal, but was rarely expressible initially as a methodically-soluble problem. Other questions, clearer and more mechanical in nature, emerged during the progress of the project itself and provided some kind of reciprocal and responsive relationship between means and ends, an inner regulation of action within the overarching framework. The questions of these artists grew and developed in response to movement through their environments; their artistic research developed through movement and interraction in the world.

These case studies, and their processes of 'organic' questioning, also raise meta-questions about artistic research. What can be 'generalised' from these examples? What can be 'transferred' in terms of knowledge? What, within them, constitutes 'new knowledge'? What could the deep experience of one individual in relation to one drawing say about all drawing? What is the relevance of one, new, fragile experimental approach to art-making in a specific place such as remote rural Scotland to the general and the common — and, still more so, to the giant, commercial powerbase of global contemporary urban art?

Implicit in these questions is a tendency to view knowledge as object, something that can be abstracted from its specific context, generalised and applied elsewhere. What happens when attention is focused inwards to the dynamic of what is happening within the artist's process as the central point of interest?

Sarat Maharaj, in discussing method in visual-art knowledge production, warns us against oversimplistic assumptions about scientific method. We should neither lump together as 'science' all the complex activities, disciplines and domains that make up the sciences; nor should we assume that knowledge in science is an outcome of deduction alone. 'We might do better to keep matters open, perhaps with a feel for the hodgepodge of methods, even muddle, that attends the lab workbench' (Maharaj 2009, p. 2). He cites the writings of Duchamp on the *Large Glass* project (1915-21) along with David Hockney's work on optical schemas, *Secret Knowledge* (1990), as examples of seemingly logically-derived structural principles of art-making that, on closer examination, reveal how the artist in the handling of the work generates endless variations. He critiques the implicit metaphors at work in 'knowledge production' as a terminology that

> smacks of factories, surpassed industrial modes, heavy metal sites and plants, the assembly line's mechanical regime — standardising components at odds with the vagaries of art practice. (Maharaj 2009, p. 2)

Instead, Maharaj draws on Agamben's idea of 'whatever ' — imagining this like the human face, capable of constant change — whose liveliness and vivacity are brought about by singularity and uniqueness that cannot be generalised.

Maharaj does not dismiss the possibility of research by means of the visual (or, by implication, the musical) but he suggests that its realisation may be ad hoc, improvised and chaotic,

> as a straggle of self organising educative-creative events and conjunctures, each springing up afresh from scratch, as it were, for whatever art research project. (Maharaj 2009, p. 3)

Open-ended Methodology as a quality of artistic research

These observations point to the fact that artistic research could experience the same problem of fragmentation as conventional science. But perhaps there is a way in which the artist-as-researcher may succeed in articulating the limits of a research project and narrative, clarify the research rules, open up his or her knowledge and expertise towards scientific and philosophical debate, and still not lose the singularity of a specific artistic trajectory.

From a methodological point of view, and drawing on the examples above, we might offer some concepts that could help the trajectory of artistic research to define further its relations and possible interactions with other forms of research. The three concepts developed here do not exhaust the potential of this domain but offer a tentative beginning. First, artistic research should stress its ecological situatedness, its relation to the specific context. Whether this is articulated in terms of the intellectual framework, the medium or the material, it is of added value, as opposed to nuisance value, in the research. Secondly, artistic research should stimulate a form of self-reflection that is a characteristic of modernity and which, through reflexive emancipation, can open up new possibilities for subject/object relations in research. Thirdly both positions could, together, lead to research that combines art-critical and art-analytical points of view, moving towards forms of interpretation that are 'semiotically conscient'.

Developing these three tracks will point, on the one hand, to the inherent difference and authenticity of artistic research and its need to claim a proper territory and discourse and, on the other, to the added value of a synthetic tendency that draws together existing, but fragmented, domains of research.

Artistic research as ecologically situated research

As already mentioned, the ideal setting for certain areas of research in the natural sciences is the laboratory because variables can be controlled there. However, scientists, as well as their research objects and subjects, are socially, culturally, geographically and historically situated. This includes the setting within a laboratory. Moreover, when this 'situatedness' is artificially removed, the 'clean' results which ensue can appear to be void and inapplicable in a normal world that is full of 'noise' or complexity, limiting the applicability of scientific results.

Curiously, recent research into artificial intelligence has shown that robots can interpret their world better when they are 'situated' in an environment and when they can learn from experience in this environment, offering an alternative to centralised forms of programming (Clark 1997). These findings point to hitherto unexpected strengths in employing situated, adapted criteria that derive from, and can be applied to, real-life situations — or at least do not detract from the complexity and richness of these situations — as opposed to universal, static criteria,. It is difficult to confirm that such artificial intelligence models come closer to reflecting human complexity than the previous purely central deductive approaches, since they remain primitive and limited compared to humans' creative and inquiring ways of being. But this development offers us an important, and growing, insight: the situatedness of every inquiring being, how it acts, moves and interacts with its environment, is essential to the development of its understanding.

Transferring this to artists and their research, we would claim that recognition of the integrity of the real situation and respect for both subject and object are necessary preconditions for reaching reliable results. The artistic researcher cannot act in the disengaged, sequestered no man's land of some metaphorical 'artistic laboratory'; he or she has an embodied, perceptual and cognitive commitment to the exterior world. Artistic creativity is, by definition, situated in relation to a complex set of factors, including the material processes and formal properties of an artform, the contexts in which its artworks are disseminated and received, the history of its canon, and so on. By extension, artistic research and the artistic researcher are correspondingly situated.

What is situatedness? Authors on situatedness often use William J. Clancey's definition: 'Where you are when you do what you do matters' (Clancey 1997). When we articulate this definition, we find three distinct aspects of situatedness. 'Where you are when…' refers to a spatio-temporal location; a particular instance of context, a position in an environment, in the agent's own world - an *umwelt*; '…when you do what you do' refers to the possibility of action, of activity that can be embodied as well as cognitive; '…matters', means that there is an important relation between both elements which causes an effect or outcome that is differently experienced and expressed depending on the variability of the individual's movement through time and space, and in relation to context.

We can differentiate three aspects of situatedness: ecological situatedness, epistemic situatedness and social situatedness. Ecological situatedness refers to the ecological, physical and perceptual embeddedness of the action — and actor — in the specific context of research: each interaction between an actor and an environment is mediated by way of perceptual, embodied and/or ecological characteristics. It partakes in the complex exchange and influence of the biological and material ecology, both of the actor and of the environment — what is afforded, what is created, what is responded, what is taken. A kind of ecological synergy can take place. Epistemic situatedness refers to the knowledge exchange between the actor and the environment. Here we should take into account the tacit, as well as explicit, aspects of knowledge, the focus of attention as well as the background. Often know-how and know-that will interfere. Finally, social situatedness refers to inter-human exchange, communication and memory. Each of these is temporally, historically and spatially defined.

Take for, example, the activity involved in interpreting a Beethoven sonata. In the first place, the musician is situated in the knowledge context of the prevalent ways of interpreting Classical music and the background knowledge surrounding not only the sonatas of Beethoven, but also the 'knowing how' to play i.e. the epistemic. Secondly, the musician has to perform bodily — in movement, making the right movements — as well as perceptually — reading and listening. He or she has to engage in a profound interaction with the musical instrument and respond to its possibilities as well as those of the surrounding environment: its luminosity, its acoustic properties, whether it is a concert hall or a studio. As such, he or she is always ecologically situated. Thirdly, the sonatas of Beethoven and the musician performing one particular example of these are both embedded in a social context of human agency. This can be the public, the critics, other musicians, other composers or can take the form of broader interactions between music and society — in other words social situatedness. The artist has to find the right interaction and equilibrium between these three forms of situatedness, continuously adapting to their changing interplay. Each interaction between the artist/actor/musician and his or her environment will contain aspects of all three forms, but one of them is often dominant.

It is easy to see some resemblance at this point between artistic research and intercultural, sociological and anthropological research. Particularly in the arts, the practices and methods of social anthropology and ethnographic studies emerge as near relatives of what an artistic research culture might look like. Like these socially and culturally dependent domains of research, artistic research needs what Clifford Geertz calls *'thick description'* (1973): the context of research should be described clearly, with attention to all its aspects, so that a reader, always an 'outsider' with regard to the specific situatedness of the artist researcher and his or her subject of research, can grasp artistic action and endeavour in its particular and idiosyncratic context. Situatedness is simultaneously a powerful shaper of the research subject of artistic research and a powerful influence upon how an artwork develops. The subject matter of artistic research is indeed embedded in a broad but particular situation with many factors, influences and backgrounds. This particular situatedness has a strong hold on the delineation of the topic, sources and research-material as well as on the method and implementation of the research. Artistic research thus should develop artistic heuristics using methodologies of transverse connections and mixed models. These need to be tested in, and adapted to, each research environment and according to each particular research topic.

The concept of 'mixed models' has recently gained importance in the sciences too, both in the pure sciences and in social science: it means that research does not adhere exclusively to one method, but makes use of different, complementary models (Tashakkori & Teddlie 2003). As such, qualitative and quantitative methods, analytical and synthetic models can be combined. Artistic research could follow this line of thinking: questioning and analysing the interesting ways in which mixed models are implemented in different social and human sciences and developing its own tools. This will be possible only if the artistic researcher is willing to acquire knowledge and understanding of these methods and to maintain their scientific context while striving for a particular incorporation and interpretation of them in his or her own research context.

Method in artistic research will necessarily take hybrid forms, but so will the material

of such research, reflecting their different origins and linking this to the different aspects of situatedness discussed above — ecological, epistemic and social. And artistic research will, of course, draw from artistic sources, from research literature as well as from artistic processes and practices. Artistic research material could include the artefact, score or interpretation, pedagogical issues, the process of creation, the historical context, comparison with other interpretations or similar creations and study of the relationship between the artistic manifestation and its reception. Careful incorporation of these different source materials, comparison with similar research, engagement in critical thinking, making transverse interconnections and consciously applying feedback and control of the results will offer new outcomes and points of view in artistic research. By coupling its own organisation, direction and choice of the instruments of research with a background knowledge and critical assessment of what happens in other domains of research, artistic research can aspire to developing its own profile and methodology.

The artist as a meta-modern researcher

> Modernity has transformed us into reflexive beings of a very complex kind, capable to analyse the complexity of our very own society. Opening the possibility of reflexivity, of questioning practices and experiences that before were either unquestionable or not to be questioned: this is what the poor offender did, offering us a reflexive attitude towards our time, our practices, our research, our-selves, in short, it generated a capacity for self- reflexion. (Coessens & Van Bendegem, 2007, pp. 74-75)

Today we can talk about meta-research, because we have learned to talk about research and research methods. Artistic research should reflect in artistic ways on its own research and learn from the research of its near neighbours. As Jean Paul Van Bendegem, Dean of the Faculty of Arts at the University of Brussels said in a speech:

> It is thanks to the sociologists of science that we have acquired a better view on the global functioning of the scientific disciplines, of the subtle interplay of political, scientific, ideological and philosophical elements that drive forward research or destroy it. This is complemented in a sublime way by what happens in the exact sciences. In the meantime a lot of these words have become fashionable, but remain intrinsically important: deterministic chaos, dissipative behaviour of systems, the emergence of complex systems out of simple structures, (…) have become useful tools for understanding the complexity of our society. They offer us better insights into detecting the right signals which announce societal upheavals and into evaluating possible strategies of interaction.

Anthony Giddens, in *Modernity and Self-Identity* (1997), stresses the possibility of reflexivity, for the researcher and for human beings more generally. Reflexivity is a quality acquired through the process of emancipation that is embedded in modernity. It allows us, again and again, to re-evaluate insights and adapt them in the light of new developments.

Donald Schön (1983) introduced the idea of the 'reflective practitioner'. The reflective practitioner is the researcher who approaches his or her own topic of research, the trajectory of that research as well as subsequent choices arising out of the research with equal interest and endeavour. Practising with reflection is thinking ‘inside’ one’s actions. It means establishing a dialogue between ‘I’ and ‘myself’ in which the

subjective can be observed as if it were objective. The researcher posits him- or herself simultaneously as 'actor' and as 'spectator', in the words of Hannah Arendt and, as such, can judge and re-adjust his or her own actions (Arendt 1971). The artistic researcher as reflective practitioner becomes a participatory observer of her or his own research practice and artistic practice.

Within the Modernist worldview, scientists have also paid attention to another misapprehension, reminding us that knowledge is more than the visible, objective part that is explicit and expressible in language. Karl Polanyi, chemist and philosopher, stresses in his book *Personal Knowledge* (1958) the hidden, implicit and tacit aspects of knowledge. For Polanyi, an act of knowledge is an exchange, a relationship between the personal — the knower — and the universal — the object of knowledge. The universal, or the objective, is what is outside the knower, what he strives to know. Knowledge will never be objective because it can only be apprehended through a personal act. The whole act of knowledge is an act of commitment between the personal and the universal. In one way, it proceeds from the personal to the universal by a heuristic striving; in the other, it returns from the universal to the personal by the possibility of validation and/or verification. As such, Polanyi stresses the inescapable link between scientific research and the position of the researcher:

> For, as human beings, we must inevitably see the universe from a centre lying within ourselves and speak about it in terms of a human language shaped by the exigencies of human intercourse. Any attempt rigorously to eliminate our human perspective from out picture of the world must lead to absurdity. (Polanyi 1958, p. 3)

This does not mean that personal knowledge is to be understood as solely subjective or individual. Indeed, Polanyi *opposes* the personal to the subjective. Whereas the subjective deals with passive feelings, the personal implies an active striving, an intellectual consciousness. Moreover, the personal is closely linked, determined by and implicated in a knowledge context. The knower can voice his insights only within a system of convictions that are logically *a priori*: a framework made of his tacit assent and intellectual passions, his spatio-temporal context and his sharing of an idiom and affiliation with a like-minded community.

Although Polanyi's theory indicates the distinction between the different kinds of knowledge involved, obviously, in any act of formalised knowledge transmission we are dealing with an articulated statement of explicit knowledge arising out of a focal awareness and a clear critical position. But, to use a metaphor not employed by Polanyi but implicit in his theory, this is only the tip of the iceberg. Beneath the explicit knowledge that breaks the surface, there is always a submerged mass of tacit knowledge which remains unarticulated and a-critical, and of which the knower has only a subsidiary awareness.

The artistic researcher acquires his or her own personal knowledge, constructed over time by way of social and cultural, embodied and cognitive experiences, only part of which is immediately expressible. Much knowledge remains out of scope, present in the background of thought and action. Becoming aware of this background knowledge and practice can reveal interesting aspects, and so lead to new and rich research material, even if it also consigns us to constant wrestling with ideas that hover on the brink of crystallisation. Finally, an awareness of, and focus on, personal knowledge and personal patterns of action — both explicit and tacit — as they manifest

themselves in artistic research can offer better insights into the role played by the subjective, developmental and biographical circumstances of the researcher. Artistic practices and their descriptions can, as such, be analysed with hermeneutical, interpretative or content-analytical methods and can be tested against similar research.

Art-critical meta-analysis and semiotic interpretation

Artistically-situated research has a duty to address the imbalance created by the dominance of science, and scientific methodology, in relation to research discourse about art; it is also particularly well placed to do so. To be effective, artistic research needs to be articulated in its own terms, rather than mediated through the more dominant research paradigms of science — although, as we have seen, it can learn from these — and especially from the more recent lessons that science itself is learning. The artist as researcher needs to become empowered to enter into a discourse based on a dialectic between art and science that fully acknowledges the differences between these two domains, as well as their interdependence. The artistic turn is therefore not a displacement of science by art but, rather, an acknowledgement of an essential interrelationship between these two different ways of positioning ourselves in the world — the one goal orientated, focused by identifying and solving problems, based in deductive method, and the other concerned with forming questions, images and experiences through inductive means that take into account the individual in society.

The Kuhnian revolution in science and scientific thinking has brought science somewhat nearer to the arts. On the one hand, sociologists of scientific knowledge have stressed the presence of construction, evolution and other hidden aspects in scientific research and practices, on the other, scientists are increasingly aware of their own situatedness and subjectivity. As a research paradigm, science has a vast tradition, knowledge and array of tools to offer to artistic research — not least the important concept of meta-analysis: thinking and reflecting about its own practice.

Artistic research, then, by taking into account its own particular situatedness and its self-reflectivity, and with the help of the experience of science, can engage in a critical analysis and semiotic interpretation of art as a human-induced process embedded in a broader artistic community and culture. The outcome of artistic research could then be tested in three ways: concerning its '*artistic content',* its '*technical approach'* and its '*historical value'* — or, to put it another way, its content, its form and its function. The value of such research and knowledge will transcend notions of borders between art and science; it will speak to different communities as well as joining together the experienced world and our comprehension of it. Artistic research opens up perspectives, sensibilities and issues to the research community that have not previously been accessible, including the acknowledgement of the ambiguity that lies within experience.

A critical approach towards '*artistic content'* means, firstly, that the research will be valuable for artists and for art; secondly, that the topic of research can stand comparison with preceding artistic research, or that it can itself function as an example for further similar research. The quality of the content implies that the research should offer added value in the domain of art and artistic practice and not just in the expansion of knowledge. As such, the content, the art-based part or subject

of the research, is a prime focus of attention, emphasizing the intrinsic relation of artistic research to the artistic project, creation or manifestation around which it is based.

A critical approach towards '*technical aspects'* means that there will be a discernible clarity to the research trajectory, concerning sources and material, method and process, as well as to the conditions of the research, implying a concise, understandable and scientifically acceptable and formulation, elaboration and expression of its results. The content of the artistic project and the fundamental nature of the inquiry have to be shaped into a form, and be expressed in suitable vocabulary, so that they can be communicated. Artistic research which satisfies this condition will add value to both the artistic and the scientific research communities, offering fresh possibilities in terms of new methodological paths, vocabularies and processes of inquiry.

A critical approach to '*historical value'* refers to the cumulative and comparative aspect of the research: how is this research situated in time concerning its artistic processes, artefacts and manifestations; how does it relate both to the past and to the future; which theoretical and practical insights or applications does it offer or does it borrow and alter? The analysis here focuses both on the possible function of the artistic research *per se* and upon its possible transmission and value for artistic, scientific and cultural ends.

In advocating these three critical approaches, we should never forget the fundamental and unique premise of artistic research: it is interlocked within the artistic practice itself and merges the subject with the object of research. The artist-researcher should be aware of the different and/or complementary impact of both dimensions of his or her artistic research: the art manifestation and the research output. The question remains for the outer world whether, and if so how, the fact of articulating the artistic research process will alter the reception of the artwork. But this remains a matter for further reflection — mainly out of the scope of this book.

The artist as researcher will have to find an equilibrium between context and discourse, between theory and practice, between personal expression and the rigorous nature of research, and between operating on the margins of artistic practice and appropriating the tools and criteria that already exist in science. As a juggling semiotician, the artist-researcher will have to develop from the resources of existing and possible languages his or her own 'parole' or 'speech'. Artistic research will be multiple, at most homologous - resembling other research, but never part of a totally homogeneous research domain. There will be no one 'artistic research', but many mutually complementing artistic researches. It will constantly search for its own way, weighing the methodological tools of the scientist, reflecting over the hermeneutical and reflective interpretations of the philosopher and moved by the commitment of the ethnographer.

This vision of diversity and continual, dynamic flux suggests that artistic research is unlikely ever to have its own stable domain or territory. But rather than seeing this as a handicap, we would regard it as one of its strengths. Indeed, both in its own terms and as part of what it can contribute to the research debate in general, the nomadic hardiness of artistic research is an important attribute. Rather than staking its claim to

part of the existing research territory, artistic research requires, but can also contribute to, a ‘deterritorialization’ of the research space. This concept will be the subject of the following chapter.

page for image

Chapter 3. Deterritorializing the research space: the ways of knowing of art

Knowledge, research spaces and art

> At the bottom of the bottom lies and moves music, a united and turbulent flux and river, the portage and reach of time, at the bottom of the bottom of the bottom the background noise fluctuates. There I throw myself into the world of things that throw themselves into me. Me: brute quarelling. Me: long not. Me: pronoun, when language, finally, gets into the melee, to forget (the only true lie) the combinations and efface the multiplicity of pieces. Me: third person, each, the others, all, that, the world, and the impersonal it of temporal intemperate weather: it rains, it cries, it is wincy … and it complains; it thunders, shouts … music, noise; suddenly, it must; and here I am, ethical, gathered together, up, at work, since dawn.
>
> Michel Serres and William Paulson, *The Troubadour of Knowledge*, 1997, p. 149.

Having examined the space around and between scientific and artistic research paradigms, we now wish to explore the wider space of artistic practice and consider how artistic research may inhabit this, in addition to the more traditional research spaces. One effect of this exploration will be a 'deterritorialization' of a range of spaces which, hitherto, have tended to be more rigidly demarcated and labelled as to ownership. As has been seen repeatedly, artists do not live exclusively in a secluded 'artistic' world. They partake of the world of ideas and embed it idiosyncratically in their practice. How do they construct their space; how do they inquire and search, and how do they manage the interactions between the supposedly discrete territories of art and the world?

It is helpful to begin with a specific case. The contemporary composer, Emmanuel Nuñes, already referred to in Chapter One, embeds his philosophical and scientific reflections on the world in a natural but novel way directly into his own practice. He stresses musical unity within composition as coming about through an 'interiorisation of the close environment' (Nuñes 2009). This suggests both a permeability with the world and a crucial point where exterior influence crosses the membrane of the artistic self. Nuñes also operates within a wider world of influences, by no means all of which appear to come from other artists. Instead, he draws inspiration from Husserl and his understanding of the consciousness of time analysed through sound, or Jean-Jacques Kupiec and his work on the division of cells, in whose work Nuñes 'recognized' his own approach to music. In seeking and finding these resonances in philosophy and science, Nuñes positions himself in a much wider field of play than the 'close environment' of his own music. He lives in a world of expanded possibilities for information exchange through new technology. In Nuñes' artistic research space,

the philosophy of Husserl and other phenomenologists piques his curiosity and sharpens his doubts about cognitive science, its categorisations and the technological and audio-visual innovations of the third millennium. Like many other serious thinkers, he seeks knowledge of, and a relationship with, many schools of thought outside his own discipline. Nuñes' music is embedded in, and emanates from, a richness of thought that merges in and with his personal experience.

The artistic manifestation that constitutes music and its performance abounds with this wealth of allusion and influence. But, for most of the time, and for most listeners, music remains mute about the precise content, articulation and trajectory of its searching and its thought. Other artforms reveal more explicitly the cross-fertilization between art and other domains. For example, in Jean-Luc Godard's *A Bout de Souffle,*

> there are visual, aural or verbal references to Bach, Brahms, Chopin, and Mozart; Renoir, Picasso, and Klee; Shakespeare, Cocteau, William Faulkner, Rilke; the Arc de Triomphe, the Eiffel Tower, Notre Dame de Paris; Humphrey Bogart, Robert Aldrich, Budd Boetticher, "Cahiers du Cinéma"; and doubtless several more I've overlooked. (Mussman 1968, p. 179)

Artworks are outcomes of artists' idiosyncratic trajectories which traverse the world at different points and angles, are touched by the world, and are suffused with these interactions with the world. They contain, but largely conceal from immediate perception, different knowledges, different intuitions and questions. They generally also hide the trajectories and the doubts behind these knowledges. Where, in science, the customary outcome is verifiable, often taking the form of a text that retraces the process whereby understanding was achieved, artistic research is 'demonstrated' or 'finalised' in the art manifestation, the nature of which is different according to the multiple fields and forms of art. The territory of research in art is veiled, and difficult to unveil. Moreover, any knowledge that is uncovered may remain the province of the artists themselves, who are potentially the only ones who can reveal and communicate the insights of their own creative paths to the outer world. Often, moreover, they are reluctant to do so, fearing that to succeed only partially in this task would amount to a total betrayal of the depth and complexity of their genuine artistic impulses.

To claim, or *re*claim, a territory for artistic research, we first should claim and reclaim recognition that there are different ways of knowing, of developing knowledge and new insights to be gained from a greater familiarity with knowledge traditions. For example, our contemporary understanding can be enriched by awareness of Aristotle's reflections and of his categorization of different kinds of knowledge. A categorization is only a conceptual tool, but it can clarify our interpretation and understanding of the world of artistic practice.

Aristotle distinguished between three kinds of knowledge. First, there was the important category of theoretical knowledge, the *theoria* or the *episteme*, which addressed the universal, scientific facts of the world and nature, as well as philosophical wisdom. Secondly, there was the knowledge of acting, of understanding other human beings. This *praxis*, named *phronesis*, was embedded in ethical and political actions. Thirdly, there was the knowledge of how to make particular things, how to create: the *poiesis* of making, a knowledge named *techne.* It contained medicine, navigation and crafts, as well as the arts. These Greek conceptions of knowledge — theoretical, practical and productive — were embedded in their social

ways of life. On the basis of these different social and epistemic stratifications, the Greeks developed different epistemological paradigms: the one grounded in normative conceptions of knowledge and subjectivity, the other linked to dynamic and transformative processes, contingent on situation and purpose, with no well-defined boundaries between subject and object.

The first tradition — concerning primarily theoretical knowledge, but also ethical or practical knowledge — became the most appreciated and inspired the most confidence. Built upon the first two Greek notions of knowledge — theoretical and practical-ethical knowledge — it developed in the Renaissance through the growing institutionalization of knowledge: the production of books, the description of methodologies, curricula and educational systems, disciplines and subdisciplines, their departmental divisions and what we would now call their funding programmes, all privileging the production of a paradigm of knowledge which was undeniably propitious and successful (Atwill 1998, p. 7). This tradition developed into both a more Classical, humanistic and an objective, scientific view of knowledge. The humanist paradigm was committed to reproducing normative bodies of knowledge: to enshrining canons and philosophical truths by way of right order and deliberate action for the Classical part, and to codifying universal objective knowledge and empirical truth for the scientific part. The underlying values driving this were universality, transcendence of time, place and individuals, faith in 'man' as the normative standard of knowledge, and faith in the value of knowledge - as an end in itself, or as directed towards human fulfilment.

In contrast, the tradition of productive knowledge remained in the margins of institutionalization and education, and these alternative, situated instances and conceptions of knowledge were carried on in rather marginal and unarticulated ways. Moreover, productive knowledge even as it relates to the supposedly more lofty and 'spiritual' arts, suffered along with the demotion of aesthetic knowledge to '*gnoseologia inferior*', a science dealing with the lower faculties of experience and contrasted with the '*gnoseologia superior*' of logic. The consideration of a 'contingent, temporal subject that exists only in a situated, discursive exchange' (Atwill 1998, p. 45) thus came to represent a hindrance, an obstacle to a normative, universal body of intellectual knowledge. Moreover, 'productive knowledge' ended up in the economic sphere, removed from academic curricula and, by the nineteenth century, part of a schooling system aimed at skill, not at creativity or 'knowledge'.

Perspectives on knowledge in the twentieth century revisited the distinction between theory and practice, but largely ignored Aristotle's third category, that of productive, creative knowledge. A theory/practice binary division replaced the theory/practice/creation *tri*chotomy. It absorbed part of the category of productive knowledge, merging making with acting and thus leaving out important subtleties concerning how this third type of knowledge is embedded in creativity. This ignored Aristotle's own warning that: 'the reasoned state of capacity to act is different from the reasoned state of capacity to make' (*Nicomachean Ethics,* in Aristotle 1984, 1140a 3-5). Intellectual society was interested in knowledge, abstract and deductive, as well as in ethical reflection, but not in the processes of making and creating, inductive and contingent. Economic society *was* interested in the techniques, the technology and skills inherent in the concept of *techne*, but without reflecting on the kind of knowledge it represented. The new divide in academia was that between theoretical

knowledge and practical skills.

The notion of *techne* thus lost its inventive, creative, contingent aspect, through commodification and the product-directed processes of modernity, abetted by a loss of interest in it by the gatekeepers of the knowledge communities. It did survive in anthropological and philosophical thinking about the notion of *homo faber*, the human being who makes. We can refer to Henri Bergson who, in *Creative Evolution* (1911), considered the *homo faber* as the human being realising his technological potentialities, or the anthropologist Claude Levi-Strauss, who developed the concept of *homo faber* as the toolmaker, creator and, as such, the developer of culture (1966). Hannah Arendt's more complex concept of *homo faber* implies the creation of an artificial world of 'things' (Arendt 1958). The human being, once leisure time expands, ceases to be an *animal laborans*, an animal of toil, and becomes a creative being, *homo faber*. The 'know-how', *techne*, the practical *savoir-faire* of the *homo faber* leads to the creation of objects and thus originates and perpetuates the durable human-made world (Arendt 1958, p. 94). This *techne*, and its resulting products, offers a medium for the materialization of thought, speech and other acts of the human being. The *homo faber* enables thought and knowledge to be transferable and transmissible by way of artefacts, and thus opens the way to more knowledge. Once created, products have a relative independence and objectivity in relation to their makers, and to humankind in general. However, the durability of artefacts, and the passing on of these artefacts themselves, goes together with the transmission of linked practical knowledge — the 'how' and 'why' of the artefacts — as well as virtual knowledge — the 'know-that'. Arendt's complementary relation between working and thinking, can here be reformulated as a relation between making and knowing, tangible object and virtual knowledge: a 'know-how' which meets a 'know that'.

Some twentieth-century interpretations of knowledge have stressed its multivalency and the different perspectives, acts and modes of acquisition that it may take. These interpretations revisit Aristotle's classifications, providing new insights and merging acting, knowing and making in seemingly infinite combinations. In 1949, Gilbert Ryle stressed the importance of the practice of knowledge, the 'know-how' beneath the 'know-that'. In 1958, Michael Polanyi wrote *Personal Knowledge*, in which he analysed the notion of a tacit knowledge lying behind explicit knowledge. The sociologist Pierre Bourdieu, in *the Logic of Practice*, developed the notion of 'habitus', a socially-acquired, embodied knowledge that offers schemes and structures concerning behaviours and which

> makes it possible to appreciate the meaning of the situation instantly, at a glance, in the heat of the action, and to produce at once the opportune response. (Bourdieu 1990, p. 104)

The knowing how is here sustained by a 'knowing when'.

These discussions demonstrate that knowledge is an evolving notion, dependent on cultural conceptualisation and value. The problem is that the boundaries of knowledge seem to shift, and that knowledge paradigms change with these shifts. What are the different spaces of knowledge? Or should we ask: What are the different values of knowledge? As distinct from subjectivity, it can be approached instrumentally: knowledge as a usable tool or content. Or, it can be approached idealistically: knowledge considered as a virtue, as an end in itself (Atwill 1998, p. 34). But

knowledge actually escapes and transcends all these boundaries. Considered within a contingent, temporal and subjective situation, it needs continuous re-negotiation. It is clear that the knowledge contained in different acts of artistic practice requires attention through these multiple points of view, acknowledging the tacit, as well as the explicit, the embodied as well as the cognitive, the *techne* as well as the *episteme* and *praxis*.

Through the constantly evolving communication technologies of the twenty-first century, we are witnessing the rise of what is referred to as the 'knowledge economy', and with it, the active seeking out of interdisciplinary and multidisciplinary research alliances. These come about, in part, because our developing understanding of certain problems — such as that of climate change — leads us to believe that deep problems are no longer soluble by isolated disciplines. Collaborations also come about through the nature of the 'field of play' itself, its implicit sociability, as well as competitiveness, and the need to negotiate understanding across different positionings.

Significantly, there is another social phenomenon that has recently started to blur the territories of knowledge. Knowledge in society has become increasingly accessible and easy to gather because of new ways of sharing and transmitting it. This generates a new issue: specialists feel increasingly undermined, criticised or even betrayed by the knowledge of the generalist or lay-person, who gathers large quantities of information from multiple sources without having the deep background or the skills to verify or properly evaluate this information. In that sense, a broader deterritorialization of knowledge is currently happening in society.

What this survey has attempted to show, therefore, is that, when fully appreciated, knowledge can be seen to illuminate multiple spaces and occupy different territories, from everyday situations to scientific problems, from intuition to reasoned questioning, from hypothesis to proof, from body to mind, from perception to representation.

The map and the tracing

> Faire la carte, et pas le calque.
> Si la carte s'oppose au calque, c'est qu'elle est tout entière tournée vers une expérimentation en prise sur le réel. (…) La carte est ouverte, elle est connectable dans toutes ses dimensions, démontable, renversable, susceptible de recevoir constamment des modifications. Elle peut être déchirée, renversée, s'adapter à des montages de toute nature, être mise en chantier par un individu, un groupe, une formation sociale. On peut la dessiner sur un mur, la concevoir comme un oeuvre d'art, la construire comme une action politique ou comme une méditation. (…)
> Une carte a des entrées multiples, contrairement au calque qui revient toujours "au même". Une carte est affaire de performance, tandis que le calque renvoie toujours à une 'compétence'.

Gilles Deleuze & Felix Guattari, *Mille Plateaux* 1980, p. 20[13]

Can we describe the contours – provide a cartography for the geography — of knowledge in the realm of the artist and his or her trajectory of research?

In the first chapter, we offered an introductory account of art and its human-specific and culturally important features. Here we will narrow down our investigation towards the place, space or possible 'site' of artistic research, whether as research into art by the artist, or as the artist's reflection on, and/or representation of, his or her own research processes. One way to proceed might be by defining the two notions of 'the artist' and 'research' and then delineating their respective territories. Then we could look at the crossovers and intersections of these two terms. However, every artist reading this knows in advance that this way of looking at artistry and its research processes is doomed to fail. Not only are the notions of artist and research highly charged culturally and territorially, but also their natures seem at first incommensurable and the possible interconnections, therefore, problematic. These incompatibilities may seem strange to some: don't artists belong to the domain of the arts, and research to the domain of science? And don't these domains already have a long tradition of interaction, as was seen in Chapter Two? Indeed, artists have long made recourse to scientific and technological innovations, and many scientists have reflected on their own 'eureka'-like moments of discovery as analogous to flashes of artistic inspiration. But the separation remains: artists are doing, making, creating art, whilst perhaps borrowing some science 'on the side', and are thus essentially contributing to the aesthetic part of culture; scientists are doing, undertaking research, participating in the growth of knowledge, even though this may frequently occur through 'creative' breakthroughs.

When an artist enters the domain of research in the commonly understood sense of this term, it is often with reference to his or her own processes of artistic production. But in such cases, the research and the artistic production are situated in different realms, expressed through different practices and conducted on the basis of different expertise. But the notion of *artistic* research blurs the distinction more profoundly. The questions that drive artistic knowledge differ from those of science but they are still questions that have a wider relevance than practice itself. They create the possibility of new meanings for the term 'research', which may engender different behaviours or research processes, create different kinds of outcomes and, as such, be potentially both helpful and enriching, as the examples in Chapter Two suggest.

If we enter the existing scientific research spaces in a narrow sense then, as was seen in Chapter Two, we are obliged to think of research as generating the kind of knowledge that can be 'deduced' within a process of problem-setting and problem-solving, commonly defined as 'scientific knowledge'. Applied to artistic creativity,

[13] Make a map, not a tracing. (…) What distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real. (…) The map is open and connectable in all its dimensions; it is detachable, reversible, susceptible to constant modification. It can be torn, reversed, adapted to any kind of mounting, reworked by an individual, group, or social formation. It can be drawn on a wall, conceived of as a work of art, constructed as a political action or as a meditation. (…) A map has multiple entryways, as opposed to the tracing, which always comes back 'to the same'. The map has to do with performance, whereas the tracing always involves an alleged 'competence'.

this approach is limited to a small number of aspects and issues. For example, science has an important role in developing reliable acoustics for a new concert hall and, increasingly, in calibrating sound values across families of musical instruments. An epistemic approach to knowledge might also address physiological explanations of the relationship between musical sound and the human body — how the one affects and informs the other. Areas of such enquiry might include how the experience of a certain musical pulse might affect the heart beat, or how certain forms of creativity manifest themselves as activity in the brain. This knowledge is of increasing interest to artists themselves in the production of their work but perhaps more likely to be of central interest to scientists as yet another context in which to study the world through the application of scientific method.

While extremely informative, these deductive approaches concerning research in relation to art are not revelatory of whole areas of experience that artists indisputably 'know' about, and upon which they rely in the making or creating of their work. These areas include diverse domains intrinsically related to the multiple fields and forms of art. A tentative, and far from complete, enumeration of this diversity shows the richness of these knowledges: the shared knowledge that comes from transforming the materials of the world — paper, pencil, paint, etc — into artworks; the shared or canonical knowledge of interpreting a score or script within musical or theatrical performance, and by extension, the knowledge of the kinds of social spaces in which such productions gather meaning — the concert hall, art gallery; the specific artistic knowledges concerning preparatory processes; knowledge of the ways that artistic artefacts and events interact with their surrounding spaces, and their ecological and technological extensions; the embodied and physical knowledge of the bodily interactions involved in making, enacting — and even in experiencing — art. Through generative processes, these kinds of knowledge — knowledge that springs from the diverse experience of making — articulate processes which seek 'new' outcomes and exploratory trajectories, rather than insisting upon the application and replication of reliable processes. Artistic knowledge is embodied in skill and know-how that are intrinsically performative and not merely applied to the performing or creative situation. It is a form of knowledge that enables us to see the world as continuously in the process of formation, and to act accordingly.

Mapping both domains — art and science — is far from straightforward. Moreover, not only *what* we map, but *how* we map things is important. As Deleuze and Guattari write in *A Thousand Plateaus* (1987, 1980), there are different ways to structure our description of the world of knowledge and experience. The first one is well known in Western thought, representing knowledge of the world as an orderly tree-structure: everything is systematically organized following the rules of hierarchy, similitude, genealogy and tradition. The tree-structure offers a vertical arrangement, providing rapid insight and comprehension. Places and trajectories, systems of knowledge, social organizations and human activities are classified in coherent structures, into which new elements can be integrated where necessary. This is the way that science proceeds much of the time: reconstructing long trajectories, the great stories or *grands récits* criticised by poststructuralist thinkers such as Jean-François Lyotard, which emphasise hierarchies and leave out chaos, the small unexpected chances and disturbances of the equally important *petites histoires* (Lyotard 1979). The structure, the coherence, the relations and repetitions of such interpretations have helped us to understand and gain clarity, but the price to pay for this has been submission to their

bureaucratic, controlling, centralized and imitative aspects.

Deleuze and Guattari remind us that these organized structures do not account for existing transverse interactions, multiple relationships and complexities. Processes in the world are more chaotic, less static, and less disciplined and structured than is implied by the *grands récits*: they contain traces of contingency and heterogeneity, unpredictable and unexpected events. These myriad interconnections, possible deviations and multiple entries can be represented as 'rhizomatic', resembling the forest of underground crisscross lateral shoots and adventitious roots of the rhizome. Rhizomatic structures offer the possibility of transverse relations between heteroclite lines: ‘the rhizome proceeds by way of variation, expansion, conquest, capture, prick’ (Deleuze & Guattari, 1980, p. 32[14]). The rhizome is characterized by multiple entries and exits, by innumerable connections and lines of flight, by jumps and discontinuity. In a rhizomatic structure, everything is somewhere in the centre, there is no starting point and no ending point. All connections can be disassembled, reversed, changed: ‘moving, from the centre, through the centre, entering and leaving, and never beginning nor finishing.’ (Deleuze & Guattari 1980, p. 36). Referring to the quotation at the head of this section, it is the map, with its multiple entries and exits, its numerous referential and relative positions of the 'here' and the 'there' — as opposed to the specific route-guide whose instructions are already traced, predefined and constraining — which offers a form that allows for these heteroclite experiences.

In what follows we will offer a rhizomatic interpretation of the contours and content of artistic research. By rethinking traditional distinctions, forsaking the route-guide for the map, we will engage in a critically reflective attempt to unravel the space of, and for, artistic research, eventually discovering a possible *terra incognita*.

Deterritorialization

> Un enfant dans le noir, saisi par la peur, se rassure en chantonnant. Il marche, s'arrête au gré de sa chanson. Perdu, il s’abrite comme il peut, ou s’oriente tant bien que mal avec sa petite chanson. Celle-ci est comme l'esquisse d'un centre stable et calme, stabilisant et calmant, au sein du chaos. Il se peut que l’enfant saute en même temps qu’il chante, il accélère ou ralentit son allure; mais c’est déjà la chanson qui est elle-même un saut: elle saute du chaos à un début d’ordre dans le chaos, elle risque de se disloquer à chaque instant.
> (…)
> Tantôt, le chaos est un immense trou noir, et l’on s’efforce d’y fixer un point fragile comme centre. Tantôt l'on organise autour du point une "allure" (plutôt qu'une forme) calme et stable: le trou noir est devenu un chez-soi.
> Tantôt on greffe une échappée sur cette allure, hors du trou noir. (…) on entrouvre le cercle, on l'ouvre, on laisse entrer quelqu'un, on appelle quelqu'un, ou bien l'on va soi-même au-dehors, on s'élance. (…) on risque une improvisation. Mais improviser, c'est rejoindre le Monde ou se confondre avec lui.

[14] All citations in English of Deleuze and Guattari 1980 are in our translations

Gilles Deleuze & Felix Guattari, *Mille Plateaux* 1980, pp. 382-383[15]

A rhizomatic description of the domains of art and research implies dismantling the frontiers, opening the territories and deterritorializing space from the side of the arts, as well as from the side of scientific research. By borrowing the notions of territory and deterritorialization from Deleuze and Guattari (1980, 1987), we acknowledge the complexity of both realms, as all territories and their centres are shifting and dynamic. The idea of the artistic turn implies an explicit experience and recognition of these shifts.

Deterritorialization, for Deleuze and Guattari, means a process that takes the territory away from some previously existing entity, opening the frontiers and enabling otherness and difference. To deterritorialize is to free-up existing fixed relations, exposing oneself to new forms, to transformation. It is not a real escape, but more a departure — sometimes violent — from a given territory (Deleuze & Guattari 1987, p. 508). The child in the quotation at the head of this section makes explicit the process of deterritorialization. She first experiences chaos and strangeness. By way of her repetitive song or *ritornel*[16], she exorcises these experiences in three steps. The first step includes a reaction to the feeling of loss and chaos. The child will try to create a centre, a territory, an equilibrium, a home. This precarious equilibrium, this order or centre — the child's own discovery — is not clearly delineated. It implies, secondly, the creation of a fragile and uncertain place, the organization of a limited space. Stability and instability merge, and the child, sustained by her ritornel, finally moves from this centre, opens the borders, escapes from herself. She improvises and leaves the protected space, not to enter chaos but to join the outer world, to find new spaces, to create other places that may have some connection with the home. This last step implies the experience of deterritorialization, of leaving the territory, opening borders, engaging in new ways, new modes, new forms, and new contents.

The spatial metaphors of territory and deterritorialization are useful for describing the shifting movements between the arts and research, as both are subject to such processes of deterritorialization. We shall now consider the territory of art and look at its often rhizomatic way of moving and expressing itself in the broader territorial areas of science, culture and politics. Roughly speaking, the territory of the artist can be circumscribed by the following elements: the artist, the artistic practice and its relations with a context, and the artistic manifestation — whether artefact, performance or intervention. Indeed, if we want to address artistic research at all, we have to account in the first place for the artist, his or her artistic practice and the context of its manifestation. None of them exists without the other; none of them can

[15] A child in the dark, gripped with fear, comforts herself by singing. She walks and halts to her song. Lost, she takes shelter or orients herself with her little song as best she can. The song is like a rough sketch of a calming and stabilizing, calm and stable, centre in the heart of chaos. Perhaps the child skips as she sings, hastens or slows her pace. But the song itself is already a skip: it jumps from chaos to the beginnings of order in chaos and is in danger of falling apart at any moment. (…) sometimes, the chaos is like an immense black hole, in which one tries to fix a fragile point as a centre. (…) Sometimes one organises around that point a calm and stable 'pace' (rather than a form): the black hole has become a home. Finally, one grafts an escape on this pace, out of the black hole. (…) One opens the circle somewhat, opens it all the way, lets someone in, calls someone, or else goes out oneself, launches forth (…), hazards an improvisation. But to improvise is to join with the world, or meld with it.

[16] A ritornel in music means a refrain, a repeated theme, line or number of lines.

exist in total isolation: artistry is primarily defined by the interrelationship between these three 'parameters'.

An artist is an artist because she or he creates, or performs, ‘works’ of art. Moreover, the use of the verb 'creates' in the preceding sentence means that both the artist and the artwork are located in a practice: they participate — the one as subject, the other as object or process — in profound mental and embodied activity whose ultimate goal is the manifestation of the artwork. This can take different forms - from interventions in the public sphere, as scores, as live performances, as concepts and as objects. The frontiers of the territory of the artist are somewhat blurred by its immersion in, and linkages with, other territories. Each of these nodal points — artist, process and manifestation — imply broader spaces of activity, interrelationships and dynamic processes. The triangle of artistry exists inside a conflation of emotive, aesthetic, epistemic, ecological and socio-political spaces.

Art often emerges as an emotive expression or as the result of a deep experience of the artist. Artists often dwell in, or seek out, spaces of emotion. Their working towards the art manifestation claims their whole attention, their whole being, their feelings and their thoughts. The origins of the emotions drawn upon can be internal or external. Picasso did not directly seek out influences from the outer world, but death and destruction in Guernica in April 1937 thrust such influences upon him in an almost violent way. Some days after the bombing, he began the deeply emotional and difficult process that resulted in the emotionally-charged sketches and the final artwork which continues to move spectators today. *Guernica* is a cry, a painted cry, and each of the preceding sketches shows and embodies remnants of deep feelings of his horror and pain. Picasso wrote:

> The Spanish struggle is the fight of reaction against the people, against freedom. My whole life as an artist has been nothing more than a continuous struggle against reaction and the death of art. How could anybody think for a moment that I could be in agreement with reaction and death? (…) In the panel on which I am working which I shall call Guernica, and in all my recent works of art, I clearly express my abhorrence of the military caste which has sunk Spain in an ocean of pain and death…(Picasso, in Protter 1997, p. 205)

The space of emotions inhabited by the artist furnishes the experiences which are periodically funnelled down into an art manifestation. This, once finished, will, in its turn, trigger or open corresponding domains of feeling into which the spectator or audience-member enters. *Guernica* not only offers a space for emotion, but is at the same time immersed in the troubling socio-political space of the Spanish pre-war period under the dictatorial regime of Franco. A more recent incident shows the wider social-political implications of *Guernica*. A tapestry rendition of the work, placed outside the United Nations Security Council in 1976, was covered up with a blue curtain prior to the United Nations speech by then U.S. Secretary of State Colin Powell in 2003, in which he argued in favour of the invasion of Iraq. The curtain hid *Guernica* from cameras as reporters waited to question Powell and others when they exited the U.N. Security Council.

The aesthetic concerns and preferences of the artist, as well as prevailing cultural aesthetic values and social-political issues, will not only influence the form and content of the art manifestation; they will also confront the artist during his or her

practice, imposing hesitations, choices and decisions. The aesthetic space often merges with contextual constraints or possibilities, as well as with the epistemic space. Artistic practice is characterized by interactive exchanges and mutual influences between the artist and a range of factors: the surrounding ideological and material conditions; the wants and needs of his or her audience; and broader cultural expectations and meanings. It is a dynamic process emerging out of the encounter between human beings and nature, between the social and the biological, the symbolic and the material, situated at the crossroads of individual and cultural practices.

The exhibition and transmission of art is part of the formation of a society and its culture. It enhances dialogue, creates enchantment, channels the emotive and cathartic. It may create a sense of community and cohesion. It may also raise difficult questions. In an important sense, artists are part of a shared process by which meaning in community comes to be created and recreated. But at the same time, the trajectory of the complex experimental, material, individual and social processes through which artistic creation occurs, remains implicit and obscure. The knowledge and expertise of the artist, the multiple entries and exits of her or his practice, remain hidden under the veil of the myth of creativity, with its notions of 'artist as hero' or 'artist as alien' and its popular discourses on the 'magical' powers of creation. The art manifestation offers only the outcome, all that has led up to it taking the form of a merely subliminal encounter. Showing, sharing, making accessible and transmitting an art manifestation makes art 'happen', makes the art fully 'art', and enables it to be recognized as such by the broader world but, in the process, detracts attention from its generative forces and their narrative.

But what of artistic research? Is it different from practice and its embodied knowledge? If so how is it different and why is it necessary or desirable?

The artwork does not reflect the long artistic process leading towards it. How, indeed, can the artistic outcome acknowledge these hidden dynamics? It cannot. This is the entry point, and the important role, for artistic research. Artistic research resides in the recording, expression and transmission of the artist's research trajectory: his or her knowledge, wanderings, and doubts concerning exploration and experimentation. It is only through the artist that certain new insights into otherwise tacit and implicit knowledge can be gleaned and only through the artist/researcher remaining an artist while pursuing these insights that he or she will be able to enrich the existing inquiries carried out by scientific researchers.

It is interesting to note moments in the history of the arts when artists themselves have undertaken forms of inquiry which can be distinguished from their 'works' and which have functioned as important insights into the making of these works. At such moments, artists have dealt with their motivation in relation to artistic creativity and, sometimes, even addressed the dilemma of a failed work or the disjuncture between the artist and their relations and positioning within a particular cultural context. What was the trajectory of Goethe in developing insights into colour and its relationship to light as a piece of analysis that extended well beyond the making of a piece of work? Why did Cage analyse musical compositions of his contemporaries and of the canonical composers of the past in relation to indeterminacy? What do Bernstein's series of lectures offer, starting with the materiality of the piano through to the construction of harmony and melody and into atonality via the linguistics of

Chomsky? Why did Klee start with a dot and move off from that dot into a line within a process that articulates in a new way the principles of pictorial image making? All these inquiries extend well beyond the making of discrete pieces of work and cannot be explained by artistic creativity per se.

Not all artists choose to channel their energy and experience in ways that move shared knowledge forward in a formal, concretely articulated manner. However, those who do can help us to understand the interplay of different ideas from disparate knowledge areas in art. Their endeavours can lead to new perspectives, and they offer us often idiosyncratic, but correspondingly inspiring, explanations for what goes on in and behind their art. From the point of view of the artist, engaging in discourse of this kind means a destabilizing movement, out of his or her centre of artistic creation, towards the realm of research. It means not only wresting tangible insights from the wandering, searching viewpoint of the artist in his or her creative process, but also a movement of 're-'search, of re-immersing oneself in the processes of searching and finding, trying out and experimenting, rather than being content, once the artwork is achieved and declared ‘complete’, to move on and jettison the processes that brought it into being and the consequences of its existence.

All art is, in itself, already engaged in continuous deterritorialization, in the sense that Deleuze and Guattari use this term. Artistic activity is intrinsically a 'becoming': it entails movement and the dynamism of change; it is a continuous production of unique events, each participating in its own continuity. Moreover, it operates as a line of flight, starting from a secure centre, but freeing itself from what was before, following a path of change and innovation, encountering the other — be it space, symbol, idea, or person. These processes imply the creative potential of an assemblage, embedding elements of the broader environment in new, and different patterns. As Deleuze and Guattari write: ‘deterritorialization can be physical, mental or spiritual’ (Deleuze a.o. 1994, p. 68). Like the child with her sung ritornel, the artist has to overcome his or her hesitations, to realize and materialize his or her wanderings, feelings, expectations and reflections, thereby opening his or her own centre, leaving that territory and entering other realms. He or she proceeds through, and beyond, personal territory. In the process, ‘the land ceases to be land, tending to become simply ground (sol) or support’ (Hallward 2006, p. 96). We could call this 'artistic deterritorialization' a necessary way of behaving and becoming an artist, of engaging in the process that leads towards artistic assemblages, manifestations and artefacts. Artists are well familiar with these wanderings, these journeys away from home, in which their territory is always shifting, the centre never totally fixed. The artist’s territory is not a static, sedentary place but ‘a malleable site of passage' (Parr 2005, p. 275).

The reader may wonder why we refer again and again to the artist's activity in order to define and to describe artistic research. This is because the specificity of artistic research lies in its being intrinsically interwoven with the artistic processes and activity which it explores. A primary rule in artistic research is never to forget the origin of such research, namely the artist's experience and creative act in the world. Artistic research means research in which the artist is the agent and in which the processes of creation are the focus and object of the research.

However, artistic research is not fully explained by the motivation simply to make a

piece of work. It articulates a moment when the experience of making demands some kind of re-examination, reappraisal or renewal. Research catalyzes those moments in which artistic creativity is perhaps de-stabilised by its context, by major shifts in the canon, by newly-available technologies or by the evolution of know-how within the field. Examples of this might include the (re)-emergence and visual power of pictorial perspective in the Renaissance, leading to Alberti's *De Pictura*, or the potential of digital technologies for generating new forms of visualisation and music-making - and for reinventing the relationship of the audience to author - leading to fundamentally different ways of making art. The emergence of indeterminate scores might also constitute such a shift. Developed by composers such as John Cage, Earle Brown and Morton Feldman, these scores were intended to be enacted within a 'do it yourself' aesthetic, giving presence to the everyday, the absurd, the simple and even the banal. They critiqued the increased commercialism of the arts in the USA in the 1960s. They were brought to Europe in a challenge to the Darmstadt aesthetic, and have remained active embodiments of the critiques which they initially articulated, despite the paradoxical reification as quasi-canonical artworks which they have undergone. Whilst these shifts may be made within the work itself by individuals on the threshold of transition — as in the works of Giotto which pre-figure, but do not yet fully articulate Renaissance naturalism — they can also trigger the development of profound articulations, identifiable as research outputs, which unpack in discursive, reflective language the thinking that they embody. Image and text may thus function symbiotically. Although it is important not to attach research purely to notions of the avant-garde, it is important to note the correspondences between the impulse towards artistic research and the kinds of advances in knowledge brought about within the arts through conscious, organised and public acts of critical reflection and articulation, accompanying phases of dynamic, and even convulsive, innovation.

Artistic research, then, implies a new kind of deterritorialization for the artist: a destabilizing movement away from his or her being involved, in a relatively routine manner, in the process, the search for and the realization of each new creative assemblage. Over and above the customary dynamics of this movement through the artistic space, it demands a striking out towards different territories, colonized by different expertises. It urges artists to reflect on their own processes, to merge the practices of their artistry with new domains. It is difficult work, implying not only a recovery of the world of practice, but also a translation or an interpretation/re-interpretation of it. It also necessitates a 're'-construction of artistic experience, action and thought, in a communicable form, and is as much of the 'experience past' as of the 'experience present' (Williams 1983, pp. 126-129).

The 'experience past' is the knowledge gleaned from past events, actions and thoughts, through observation and reflection; the 'experience present' is the state of conscious awareness that includes affective as well as cognitive states. If the experience past is predominantly reflective, the experience present is more immediate. They can be looked at as complementary elements of a composite experience, past and present, which embraces both the trajectory of the artist in his or her process, and the impulse to express this trajectory in a form of discourse that reflects the dual aspect of the experience in comprehensible and exchangeable forms. Artistic research is thus practice-led research, but founded on a practice that is very complex, linking body, material and thought together in the creation of unique assemblages of knowledge, feelings and skill and directed towards artefacts and/or performances. The practice of

artistic research offers a kind of meta-practice, a research-practice that reflects on the artist's own artistic practice with all the rigour and focus of the research mentality but from an interior, experientially-informed perspective. In this sense, it offers the possibility of giving concrete expression to experience past and present, of which we receive more subtle intimations through the artist's more normal skill and endeavour. This, in turn, has the capacity to lead to a transformative experience – for the artist him- of herself and for those whose fascination with art prompts them to wish to understand it better.

From the point of view of research, a deterritorialization of the research space also takes place. Not only new knowledge but also new modes of knowledge - and, moreover, new actors - enter the stage of research. The territory of research has never been totally fixed or closed, even if some scientists would like it to be. Novel scientific paradigms, new disciplines and fresh discoveries have shaken the foundations of the empire of scientific research more than once. We considered the question of scientific rules and methods and their problems in Chapter Two. Here, we will simply try to estimate the impact of artistic research on the territory of research as a whole.

What will the specificity of artistic research imply for the broader territory of research? In the first place, the scene of research, centred on academic and scientific communities, will encounter new actors who will have to be considered no longer as objects of study, but as inquiring subjects themselves: the artist and the artist-as-researcher. These two interconnected roles are historically embedded in art without necessarily being inscribed within the kinds of institutional practices that are currently dominant within higher education. Secondly, artistic practice as a field of research will not be the sole territory of the scientific researcher, as in the recent past, but a shared realm, in which different kinds of research can happen: some conducted by scientist-researchers, some by artist-researchers, and some by both working together. Thirdly, the artistic manifestation, artefact, performance or intervention, will no longer be something to be inserted into a social, aesthetic interpretation, led by aesthetic and scientific experts in art, but will be embedded in an authentic artistic discourse of research led by practitioners of art. This means that, fourthly, research cultures will potentially be enriched with new narratives, discourses and modes of knowledge including knowledge of making (*techne*) and knowledge of the value systems that inform making (*phronesis*).

Indeed, we consider the artistic turn and its associated artistic research output to offer the prospect of important enrichments of the existing research domains, opening frontiers and borders of scientific research, and offering new qualities, intrinsic to the nature of art, to research discourse. As remarked earlier, artistic activity is expressed through the conflation of emotive, aesthetic, epistemic, socio-cultural and ecologic environments. The artist is phenomenologically engaged with both material and symbolic elements, within a highly personal, idiosyncratic situation that is itself socio-culturally contextualised. The practice-led research that results from this will also bear the characteristics of this situation. It will offer research a specific quality:

> a quality that finds its thoughts through wandering; it is poetic. It is a kind of enquiry whose next question, whose next step, will reflect upon, but is not solely dependent upon, the last stage of the research. It is peripatetic in that the artist/student moves ceaselessly from the idea, through the process, to the

> practice and back again, at all times subject to the influence of chance discoveries. (Edwards 2006, p. 4)

Considering art practice as peripatetic and wandering is an apt and evocative way to explain the practice-based, experimental and reflective sides of artistic activity. Artistic research translates and transmits different forms of practical knowledge. It can reflect on a personal inscription or intervention in the world, upon a path of searching and experimenting in a unique way that is driven by the process of assembling thought, body and material in a specific ecological context. As such, if truly realised, it will have both aesthetic and cognitive merits, articulating from the point of view of the artist-researcher the changing relationships between artist, artwork, audience and milieu.

In this way, deterritorialization takes place for the artist, as well as for the research space. It is an important metaphor. Artistic research comes about when there is something to be found out that is addressed neither by science nor by expert practice alone. As Deleuze and Guattari explain, deterritorialization always implies a complex process involving at least one foreign element — something outside one's own realm — and a territory that is left behind or reconstituted. In this case, it means de-stabilizing, de-centring the artist from the artwork and its ineffable embodied processes of creativity. It may also arise as a response to destablizations that are triggered elsewhere within culture — shifts of power, imbalances that privilege certain ways of knowing at the expense of others - such as the increased application, rather than development, of science in society, leading to problematic forms of rationalising human experience. On the one hand, artistic research points towards a meta-practice and a meta-discourse of art; on the other, it potentially shifts research practices away from general scientific discoveries towards idiosyncratic, unique artistic processes.

The conflation and concurrence of different deterritorialization processes can engender an enrichment, a becoming, a transformative experience. Different, simultaneous or successively occurring processes of deterritorialization can enrich the various territories as originally constituted, opening the frontiers by way of 'connections' between different, now deterritorialized, flows; deterritorializations can interact to spark new ideas and accelerate others. However, what is termed a 'conjugation' of distinct flows, referring to the different ways in which one process encounters other streams, may end in an incorporation or 'overcoding' of the other, and as such result in a slowing down or even an immobilization (Deleuze & Guattari 1987, p. 220). In this case, a re-territorialisation happens, engulfing in a totalizing way the subtleties and variety of the lines of flight, unifying or dominating their diversity and stopping their possible becoming (Deleuze & Guattari 1980, p. 269). Trying to translate this in terms of art, artistic research and its deterritorialization: while the transformative process could lead to new discoveries and issues, not only creating new research spaces, but also adding and exchanging knowledge, topics and issues to and with other research disciplines — history of art, psychology, cognitive science — artist-researchers could also be overwhelmed by the knowledge and the imposition of these other disciplines. This could imply a loss of their emergent identity in the generalisations and vocabularies of imposed rules and existing domains. They might be pushed into an insignificant corner of research, doomed to oblivion. An equilibrium, a middle way, will be hard to obtain because of the subsuming forces of power and colonization, which can hinder the healthy process of acknowledging

differences and creating dialogue and interaction between research spaces. We are back once again to the difficult stance of the 'broken middle' of artistic research, referred to in Chapter One: refusing the 'either – or'; negating the static, but searching for some centre in the chaos; eschewing specific boundaries, in order to achieve dynamic movement; on the outside without knowing where exactly to go.

Real transformation thus requires the recombination and fresh interrelation of deterritorialized elements in mutually supportive ways (Parr 2005, p. 71). Research in-and-through art and conducted by artists thus offers a dynamics of reciprocity and exchange. The double — or perhaps we should say multiple — movements of deterritorialization that are taking place through the new developments in, and interactions between, science and art, can both accelerate and connect their divergent lines of flight and generate interesting interactions in the world. The prospect of what might be achieved more than outweighs the difficulties and the risks enumerated here. Poised on the brink of this process, the artist researcher is perhaps like the mariner about to embark on a pioneering sea voyage, with all its dangers but also its alluring excitement. This is a metaphor which we shall develop at length in the next chapter.

[Leave page blank for image].

Chapter 4. The ship sailing out: practical navigation and the lure of '*L'Horizon Chimérique*'

> There are limits to what we can conceive of, or make intelligible to ourselves, as a possible general structure of experience. The investigation of these limits, the investigation of the set of ideas which forms the limiting framework of all our thought about the world and experience of the world, is evidently, an important and interesting philosophical undertaking.
>
> Peter F. Strawson, *The Bounds of Sense,* 1966, p. 15.

In the previous chapter, we argued that artistic research involves a deterritorialization of a research culture in the arts that is currently dominated by scientific, epistemic approaches. These approaches sometimes function by applying methodologies from other disciplines that are well established or innovative, but increasingly the arts sector is originating new knowledge and related method within the artistic field itself. While research is not, therefore, a new concept in relation to the arts, the issue of the hegemony of the scientific outlook and the positioning of artistic research within increasingly bureaucratic structures of learning present opportunities and challenges that, in turn, necessitate a constant process of refocusing. Deterritorialization in the form of an artistic turn allows for different objectives to be pursued in relation to knowledge. Understanding the kinds of making engaged in by artists needs to be a process of open-ended exploration, creative and intuitive rather than deductive. The ethics and value systems that underpin such knowledge of making also form part of this new outlook. Making is, by definition, a social, cultural activity insofar as it adds to the sum total of artefacts events and experiences in the world, even though the actual creation process involved may be solitary and veiled. This chapter attempts a partial lifting of this veil and explores the nature of the creative journey through a mixture of metaphor and case studies.

What motivates those of us within the arts to carry out research as this strange, hybrid activity? How should artistic research be done? How might it be disseminated and to whom? Who benefits? Following the scientific paradigm, it would be desirable, and also practical, to have a unified theory and reliable method that would clarify all the problems of artistic research and artistic research experience. Such a foundation could tell us what to do in order to improve our knowledge of individual artistic experiences and of the broader world in which these artistic experiences happen. If we consider 'foundations', we think about buildings and about how the stabilising of the ground on which they are built permits their construction in an orderly and safe manner and

ensures their integrity and durability. Descartes used an architectural metaphor to suit his own philosophical foundational needs:

> Throughout my writings I have made it clear that my method imitates that of the architect. When an architect wants to build a house which is stable on ground where there is a sandy topsoil over underlying rock, or clay, or some other firm base, he begins by digging out a set of trenches from which he removes the sand, and anything resting on or mixed in with the sand, so that he can lay this foundations on firm soil. (Descartes 1984, 2, p. 366)

Descartes wanted all knowledge to be constructed on a firm base, free from vagueness or doubt, and therefore purged of the elements of feeling, intuition, belief, tacit knowledge and personal experience that cannot be clearly explained, described or deduced from prior clear experiences and knowledge. This became a powerful metaphor that sustained and explained the force of scientific progress, notwithstanding the fact that, even in science, scientists have come to doubt the apparent solidities of *a priori* knowledge.

Otto Neurath, a twentieth century philosopher and sociologist, argued that even hard science is not, nor can it be, based on solid ground. He described scientific research using the metaphor of a ship: 'We are like sailors who must rebuild their ship on the open sea, never able to dismantle it in dry-dock and to reconstruct it there out of the best materials.' (Neurath 1959, p. 201). If researchers want to understand the ship, how it works, how they can repair it, they

> must rebuild plank by plank while staying afloat in it. (…) Our boat stays afloat because at each alteration we keep the bulk of it intact as a going concern. (Quine 1960, pp. 3-4)

This metaphor was used by philosophers of science to point out the inherent situatedness of science, its linkage to the existing practices and experiences of the scientist and the scientific community. Scientists build, one after the other, on existing theories and experiments, contributing their own, new research findings, which nevertheless remain intrinsically part of the whole and can only find validity through working together, like the parts of an engine (Thagard & Beam 2004, p. 509).

If Neurath's metaphor feels apt for scientific research, it does so to an even greater extent in relation to artistic research. Much of this chapter will be devoted to exploring the possibilities for clarifying and conceptualizing artistic research that are provided by the metaphor of the ship in all its different connotations. As hinted in the chapter title, some of these are to do with practical matters — how to move around the artistic space in a purposeful and effective manner — while others address the tantalising horizon line — '*L'horizon Chimérique*' of the poet, Jean de la Ville de Mirmont whose poems Gabriel Fauré set as his very last song cycle. Despite being unattainable (or, perhaps, because of that) this illusory horizon line exerts a mesmerising influence over the traveller, whether seafarer or artist.

In general terms, three thematic areas offered by the metaphor will be discussed: shifting points of reference; the precedence of experience and its idiosyncratic knowledge; and the broad realm of artistic practice and research. Finally, we will examine some artists who have operated in the vanguard of their art, and learn of their

own ‘voyages out’.

The metaphor of the ship

now is a ship

which captain am
sails out of sleep

steering for dream

E.E. Cummings, *Complete Poems 1904-1962,* 1994, p. 781.

Let us first consider the ship sailing out as a metaphor for artistic research, as well as for the process of artistic creativity itself. The image of the ship embarking on its journey epitomises a purposeful trajectory towards an experience yet to come which is as yet unknown and may be uncharted. Even where there is a chart, the maritime equivalent of a map, this informs but does not determine the journey's precise texture. In any case, the reliability of charts is more fluid than that of land maps owing to the fact that they must reflect a range of tidal states and the features which they plot are subject to far more rapid and significant change than those on land – itself a telling metaphor for artist flux and innovation. Our ship moves towards an open horizon, held in tension on the water between the elements - the sea and the sky.

All knowledge and all explanations are the result of ongoing, incessant, dynamic experiences; artistic knowledge foregrounds those experiences as intrinsic to it, rather than as simply the means to an end. Like the ship on the sea, the artist is always on a journey, always somewhere 'in practice', in movement, transforming matter so that it ‘matters'. So it is with his or her research trajectory: every search for a definitive reference point is in vain because the reference points themselves are moving, both in the case of the ship, and in that of the artistic practices. The unique conditions of life at sea - unique in each time-space context and unique to each journey - require a special set of practices and expressions peculiar to seafarers. Likewise, in making art, the outcome is rarely known; nonetheless, we organise space, time and medium, creating its possibility and using a range of skills and techniques specific to our art.

To follow a trajectory at sea, the ship has to aim obliquely, contending with wind and currents, as well as with the curvature of the earth. Sailing, like flying, does not happen in straight lines - even a supposedly constant compass bearing is, in fact, a spiral round the planet. So, a ship must make progress by working with the time-based movements of currents that are affected by larger movements such as developing weather systems and the phases of the moon. In the same way, artistic research practices are subject to a broad array of forces, sometimes difficult to trace - oblique forces which may sustain or constrain but, in either case, inform the passage of the artistic development.

Sailing is a practice in which action takes precedence over theory or method since it is through this practice that the vessel must continue to make headway. The imaginary projection of the journey and its various possible, perhaps even open-ended, goals are

embedded in practical operations. The horizon promises possibilities whose realization is constrained by the conditions of the ship. Artistic inventions and interventions are likewise constrained by the preconditions of artistic practice and its location in society, rather than being determined by some kind of superior theoretical or methodological arbiter. Such expertise provides an important foundation for organising and explaining the contexts of practical action, but it is never its justification. There may be no need for justifying the artistic practice *per se* in artistic research, but if the trajectories of artistic practice and its research are to be mediated and shared in new ways, there may be a need for explanation, or at least for agreeable encounters and fascinating interactions, between artists and artist-researchers and between both of these and non-artists,. In this regard, the artist must be aware of a different horizon - that of the public expectation that is generated as part of the process of creation - and of the ways that modes of expression, genres and situations colour the view of those who experience artworks (Jauss 1982).

Seen in a broader perspective, many ‘seaworthy’ examples of artistic practice and research have already, and over some considerable time, been dispersed across the cultural oceans, creating a diversity of situations and ways of acting that are still linked to the preconditions of the vessels that carried them. This diversity can be viewed either horizontally or vertically. From the first perspective, we may say that there are like a myriad of ships sailing on different seas, each containing a different approach, intervention or invention and each with its crew’s eyes fixed on its own particular horizon of possibilities and expectation. Each fresh artistic practice and manifestation contributes to this diversity as it transforms different materials, using the varied techniques and languages of creativity proper to its specialism, whether sound-based arts, the performing arts, image-based arts or new media.

But we can also view our metaphor vertically: each ship is laden with a particular cargo of knowledge and practices, gathered over the years and across generations and stocked in its hold, recorded in the ship's logbooks, or encoded in the tacit knowledge exchanged between sailors and between the captain and seamen. In this respect, a Tea Clipper represents and encodes vastly different knowledges and practices from a modern Container Ship, although their fundamental purpose – moving around the globe, in the most efficient way for a given context, commodities that are of value to society – is the same. Similarly, older forms of artistic research have existed *avant la lettre* for centuries - in pedagogy, in bourgeois salons or in artistic groups. As society evolves towards an 'information' or 'knowledge' society by way of globalization, institutionalization, broad participation in different life-styles and virtual communication, it expects artistic practice to be inscribed in, and to explain itself by way of, these new approaches.

Ships can encounter treacherous waters:

> The Port of Ness …, is at the point where the weight of the Atlantic meets the waters of the Minch; a narrow place in which to cram the width of the Atlantic. There's a real force…in both tide and eddy … and it can be hard to leave the harbour even with a good wind behind you: the boat can be stopped by the swell of a wave. (Ian Stephen of Stornaway, coastguardsman, sgoth niseach skipper, and poet, *Northwards* June 2009)(REF FOR BIBLIOG?)

The difficult, laborious, even hazardous side of artistic research, that which involves

toil, doubt and possible failure, also demonstrates the need to correct any error, internal or external, as part of the journeying process. This aspect of continuous adjustment is ceaseless, and requires vigilance and an imagination that goes beyond what is visible up to the horizon line. What are the reference points, the coordinates, of the artist in such hostile waters? Is there some kind of compass from which he or she can deduce the 'True North' of their artistic quest?

The artist's compass? Points in journeying forth

Of course, there is no single external instrument or tool through which artists can achieve this orientation. Different points of view emerge according to the different artistic media and practices utilised. Nevertheless, where certain notable artistic individuals have raised a corner of the mythic veil surrounding artist endeavour in candid interviews or texts, there are interesting common themes which emerge. The excerpts that follow necessarily fall short of providing a full account of the richness of ways in which artists chart their way through the oceanic vastness of their chosen calling, but they do provide some insight into the commonalities of their searching, as well as pointing to the unique qualities of every artist. Later, we shall discuss some of these artists more fully but, for now, let them speak for themselves:

On direction finding:

James Marriott, Founder Director of Platform London

> I would tend to look at it in this way: it is not so much leading as direction-finding. By that I mean, if we think about, a wheel turns – you know. I think about two things: first of all that the wheel turns constantly and it just repeats itself; it is moving around – a cycle of whatever you want to call it, seasons or days or livelihoods – in a sense it is going nowhere, but going around. But, at the same time, if the wheel turns, then it moves across a landscape. There are two things happening at the same time. The first – the question of the wheel turning, does not necessarily … Well, it requires imagination because it requires the imagination of perseverance – of, "How do we just carry on doing the same thing and keeping our souls together?" But the other one, which is the question of, where is it going, requires the imagination of direction finding.
> (Douglas & Fremantle, 2009, p. 25)

On understanding:

The artist/researcher Jan Fabre

> You know, the reason I create is, because probably I do not understand well the outside world. Because I'm curious to understand the outside world, I'm researching and creating, asking questions and sometimes giving to myself answers. (Fabre 2009)

The film director Jean-Luc Godard

> Intelligence is to understand before affirming. It means that when confronted with an idea, one seeks to go beyond it… To find its limits, to find its opposite… (…) the essence of the paradox is, in the face of what seems a perfectly self-evident idea, to look for the opposite. (Godard 1975, p. 87)

On feeling, but not knowing:

The dancer and choreographer Merce Cunningham

> In looking for movement, I would look for something I didn't know about rather than something I did know about. Now when you find something you don't know about or don't know how to do, you have to find a way to do it, like a child stumbling and trying to walk, or a little colt getting up. You find that you have this awkward thing which is often interesting, and I would think, ' Oh, I must practice that. There's something there I don't know about, some kind of life.' (Cunningham & Lesschaeve 1985, p. 40)

On information:

Jan Fabre

> I think that our biggest enemy is the superabundance of information and that, because of it, people take no time to enter into communication with the artwork or the artist. In our society, everything has to be quick and has to be immediately self-evident and nothing may be difficult. (Fabre, in de Greef and Hoet 1993, p. 64)

On belief:

The writer Jorge Luis Borges

> The central fact of my life has been the existence of words and the possibility of weaving those words into poetry.
>
> What does being a writer mean to me? It means simply being true to my imagination. When I write something, I think of it not as being factually true (the mere fact is a web of circumstances and accidents), but as being true to something deeper. When I write a story, I write it because somehow I believe in it -- not as one believes in mere history, but rather as one believes in a dream or an idea. (Borges 2000, p. 100)

On responsibility:

The composer John Cage

> When a com-poser feels a responsibility to make, rather than accept, he e-liminates from the area of possibility all those events that do not suggest the at that point in time vogue of profund-ity. For he takes himself seriously, wishes to be considered great, and he thereby diminishes his love and in-creases his fear and concern about what people will think. (…) He must do it better, more impressively, more beautifully, etc. than anybody else. And what precisely, does this, this beautiful profound object, this masterpiece, have to do with Life? It has to do with Life: that it is separate from it. (Cage 1939/1978, p 130)

On the ephemeral:

Merce Cunningham

> You have to love dancing to stick to it. It gives you nothing back, no manuscripts to store away, no paintings to show on walls and maybe hang in museums, no poems to be printed and sold, nothing but that single fleeting moment when you feel alive. It is not for unsteady souls. (Cunningham 2009)

The visual artist researcher, Trish Cain

> Only by investigating the issue through drawing have I been able to make visible the emergent aspects of my own thinking as I draw. (Cain 2007)

On freedom:

John Cage, talking about Morton Feldman

> Artists talk a lot about freedom. So, recalling the expression 'free as a bird', Morton Feldman went to a park one day and spent some time watching our feathered friends? When he came back, he said, 'You know? They're not free: they're fighting over bits of food.' (Cage 1939/1978, p 265)

On verbalisation:

The film director Jean Luc Godard:

> Words and images intermingle constantly. (…) Why are there so many signs everywhere so that I end up wondering what language is about, signs with so many different meanings, that reality becomes obscure when it should stand out clearly from what is imaginary? (Godard 1975, pp. 153-155)

> But where to begin? But where to begin with what?… We could say that the limits of language are the limits of the world… that the limits of my language are the limits of my world. And in that respect, I limit the world, I decide its boundaries (Godard in Monaco 1976, p. 183)

The performance artist, Suzanne Lacy

> As feminists we were concerned with relationships, first and foremost. We launched many collaborative practices. As feminists, concerned with political issues that happened to women regardless of their culture, it was natural for us to reach out to different communities. We began to site works in public in ways that seemed intuitive in the beginning. We made aesthetic decisions that were also intuitive. Even within my own practice, I would say, "Ah! Making it safe! Sorry, that became community practice. Three weeks in May (1997), interesting; that one made it into art." But I don't think we ever managed to articulate what those aesthetics consisted of; maybe the painters did, but not performance artists. We did talk a lot about ethics and politics though. (Douglas 2007)

John Cage

> It is difficult to talk when you have something to say precisely because of the words which keep making us say in the way which the words need to stick to and not in the Way which we need for living. (Cage 1939/1978, p. 129)

Merce Cunningham

> Yes, it's difficult to talk about dance. It's not so much intangible as evanescent. I

> compare ideas on dance, and dance itself, to water. (…) Everyone knows what water is or what dance is, but this very fluidity makes them intangible. (Cunningham 1985, p. 27)

> [my book Changes: Notes on Choreography] was just notes on dances, which were never complete notes since they were sometimes sketches, sometimes indications of steps, sometimes fairly full instructions about the dance; or they were simply line drawings that I'd made to give me an indication of what the movement was to be? There were photographs of course in it, and the writings were not so much articles as they were notes for lecture demonstrations. (…) the idea was to make a presentation that was comparable in a way to some of the dances I make. In the book where the dances are simple, the pages about them are simple, and not overlaid necessarily. Where the dances themselves are complex then things are overlaid and it is in that sense that it was comparable to the dance. (Cunningham 1985, p. 29)

The performance artist, Allan Kaprow

> Art work, a sort of moral paradigm for an exhausted work ethic, is converting into play. As a four-letter word in a society given to games, 'play' does what all dirty words do: it strips bare the myth of culture by its artists, even. (Kaprow 2003, p. 126)

On solitude:

Jan Fabre

> On ne s'Habitue pas à l'art:
> Le monde est DESESPEREE, Etant donné que L'on ne peut changer Le Monde.
>
> DANS un Monde ou tout est dû au Hasard, L'artiste dispose tout au Plus d'une CHANCE, de remporter une VICTOIRE sur la chance?
>
> CHAQUE ARTIST/ANIMAL
> seul avec lui-même, comme un MARIN naufragé.
>
> (Fabre, in Van den Dries 2004, p. 262)[17].

Fabre’s image of the shipwrecked mariner points up the dangers, as well as the solitude, of the artistic experience. However, experience also provides the invaluable lessons, the ways in which we convert former encounters with rocks and shoals into knowledge that will make our future passages more secure.

The lessons of experience as a base for knowledge

> …method in art research is more often a question of shaping,
> reshaping, risking, generating, looping, observing, collecting,
> adapting, picking, examining, re-examining, digging, excavating,

[17] Fabre wrote and rewrote this text multiple times with his own blood.

giving up, memorizing, forgetting, repressing, provoking, destroying, destructing, breaking, adjusting, listening, tuning, experimenting, copying, imitating, noticing, playing, sampling, recycling, repeating, repeating again and again and again and again - and of testing different combinations of these actions.

Aslaug Nyrnes, *Lighting from the Side: Rhetoric and Artistic Research,* 2006, p. 19.

Experience includes dreams, insanity, illness, death, labour, war, confusion, ambiguity, lies and error…. Experience includes what men do and suffer, what they strive for, love, believe and endure, and also how men act and are acted upon, the ways in which they do and suffer, desire and enjoy, see, believe, imagine — in short, processes of experiencing. 'Experience' denotes the planted field, the sowed seeds, the reaped harvests, the changes of night and day, spring and autumn (…); it also denotes the one who plants and reaps, who works and rejoices, hopes, fears, plans ….

John Dewey, *Experience and Nature,* 1925, p. 10; 1965, p. 8.

In all human culture, there is continuity between semiotic processes — by which we mean processes of signification — and human-embodied resources. This continuity aims at the integration of organisms with environments (Thibault 2004, p. 7). We could assert that this process reaches its deepest and most sophisticated realisation in the arts and in artistic endeavour. But before considering further the experiential side of artistic practice and research, we will describe what human experience implies, as we consider artistic experience as contiguous with broader human experience. The human being is involved in-and-with the world: we are fundamentally 'experiencing beings', engaged in a continuous and dynamic process that results in experience[18]. But what is experience? The Merriam Webster dictionary offers the following definitions:

> 1 a: direct observation of or participation in events as a basis of knowledge b: the fact or state of having been affected by or gained knowledge through direct observation or participation
>
> 2 a: practical knowledge, skill, or practice derived from direct observation of or participation in events or in a particular activity b: the length of such participation 'has 10 years' experience in the job'
>
> 3 a: the conscious events that make up an individual life b: the events that make up the conscious past of a community or nation or humankind generally

[18] Only Vasilyuk (1991) and Gendlin (1962) use the concept 'experiencing' consistently. Other authors use 'experience' as a concept including as well 'experiencing' in the sense of an activity or process, as 'experience' in the sense of the result of that process. In this paper, 'experience' will be used in its strict sense, but it should be borne in mind that in quotations from authors such as Dewey, Alexander or Strawson, it carries the broader meaning and may thus refer to 'experiencing'. See Kathleen Coessens (2003)

4: something personally encountered, undergone, or lived through

5: the act or process of directly perceiving events or reality.

These definitions offer us three interesting aspects: firstly, experience implies some kind of involvement, some participation and action in an event; secondly, experience is linked to, and adds, some kind of knowledge and know-how; and thirdly, it is dynamic and process-like, happening over time. Moreover, the word can be used both as a noun and as a verb.

When looking at the word's etymological roots we find even more fruitful connotations. The word 'experience' exists in different European languages besides English: e.g. in French, Italian, Portuguese, Spanish… All originate from the Latin verb *ex-periri*, meaning 'to try out, attempt to'. *Periri* as a verb originated in the noun *periculum* signifying 'try-out', but also 'risk' or 'danger'. The prefix *ex* refers to a movement, moving out of a location or place. With the prefix *ex, ex-periri* refers then to 'moving out of risk, trying to get out of danger'.

The Dutch and German languages use other words: *ervaren* and *erfahren*, but interestingly, the words are founded on equivalent assumptions. Here also, we find a composition of two words: *er* and *varen* or *fahren*. The prefix *er* has some variants, which probably originated from the same etymon: *daar* (also present in English 'there'), *oor* and *oer* (the English 'or ' as in origin), and also *her* (the English 'here'). All these variants refer to some determination of orientation, location or time. In the IndoGerman root, the prefix *er* refers not only to a spatial-temporal situation, but also to the underlying process or dynamics of moving quickly (Pokorny 1969, p. 337; Mesotten 1996, p. 50). This original meaning is today present in words as the English ' to err', the French *errer* and the German *irren*. The other part of the word *varen* or *Fahren* originates in the Gothic *faran* meaning 'travelling, moving on'. The word *fara* (without 'r') means 'danger, ambush'. And indeed, this meaning of the Gothic *faran* is present in the Dutch and German word for danger: *gevaar* and *Gefähr*. Moreover, *faran* found also its descendant in the Dutch *varen*, which means 'sailing' — and thus brings us back to our metaphor of the ship. Returning to the English 'experience', we only have to explain the ending 'ence' which is used for when words imply some kind of action, process, situation or quality — which adds again to the dynamic aspect of the notion.

In summary, both the words 'experience' and '*Erfahren'* refer to processes and acts in risky or dangerous situations and 'try-outs'; as nouns, they connote a quality, condition or state that is the effect of these attempts, dangerous acts or risks; as verbs, they also include also the aspect of travelling, of moving from here to there, running risks, encountering dangers, just like the sailors on 'the ship sailing out'.

The complex meaning of 'experience' is thus rooted in the struggle and interaction between the human being and his or her environment. The human being responds to the world and acts within the world in multi-modal ways, realising continuous transactions between inner and outer environments. Experiencing[19] is indeed the inescapable activity of 'being involved in and by the world'. Experiencing, as

[19] The notion of experiencing has been developed deeply in Coessens 2003.

Merleau-Ponty says, is always ‘experiencing the world’ or ‘experiencing life’:

> L’expérience – c’est-à-dire l’ouverture à notre monde de fait (…) le fait que nous sommes au monde (…) notre expérience est l’expérience d’un monde. (Merleau-Ponty 1945, p. 256)

This ‘being involved’ is a fundamental necessity from a biological point of view: we can only survive by interacting with the world. As a fundamental human condition of life, experiencing is active and uninterrupted, from birth to death:

> Experience occurs continuously, because the interaction of live creature and environing conditions is involved in the very process of living. (Dewey 1958/34, p. 35)

What is the nature of the relationship between art and experience?

Experience and art are both active explorations of, and response to, the ambiguities of the world: ’interactions between the organic, habitual, and social structures the individual inherits from the past, his openness to the world, and the world itself.’ (Alexander 1987, p. 32). The interaction with the world involves the natural environment, with its facts and laws, as well as the human environment with its symbolic and epistemic systems. The result of ‘experiencing’ is experience, the outcome of an active process, carrying a degree of durability. Each experience, as an instantaneous snapshot of experiencing, adds something to subsequent acts of experiencing and contributes to the next experience: ‘Wholly independent of desire or intent, every experience lives on in further experiences.’ (Dewey 1938, pp. 27-8).

The emergence of ‘experience’ out of ‘experiencing’ thus promotes further exploration of the world, whilst at the same time, and paradoxically, leading to further closure of the possibilities of exploring the world. Experiencing implies, on the one hand, the continuous delimitation, confirmation or frustration of the human being’s projects, of his possibilities and capacities in relation to the world. As such, it generates expectations as well as prejudices. On the other hand, it can also lead to the opening of previously unsolicited capacities and of new paths for the human being’s original flexibility. In this respect the broad horizon of possible expectations — acquired by the accumulation of previous experiences — serves as a map upon which to situate new experiences, without needing repeatedly to explore all the original possibilities, with their inherent difficulties and risks.

The durability of experience points to a reflexive component: experience influences all further ‘involvement in and with the world’ by influencing the human being’s own body, perceptions and actions. At the same time, it transforms the environing world and makes other possibilities accessible. There is a continuous interaction between these transformations: our experience changes the world, but it changes us, too. And because nobody and no body is identical, experience can never be fully passed on as skill or knowledge. No definitive manual or instruction book exists; every human being is unique and each experiencing is unique. Nor is it only its uniqueness which makes it difficult to express or explain. As we already mentioned, experiencing starts as the original and primitive encounter with the world and, as such, contains elements of the ineffable. Consequently, every act, every reflection, every verbalization can only occur within — and/or after — a more original and primitive experiencing.

Experiencing is the ground for every interpretation, exploration or articulation of oneself and of the world.

Experiencing as the phenomenon of ‘being involved in-and-with the world’ is multivalent. Dewey describes experience:

> (it) has a range of possible ways of encountering the world, extending from the highly indeterminate, unlocalized feelings we have to the highly articulate symbolic manipulations of cognitive experience. (Alexander 1987, p. 169)

At its most fundamental, we experience feeling as something immediate, pre-noetic, embodied but vague and undefined. This 'feeling' offers the possibility of acting in, and responding to, the world since it makes possible a first discernment of the world:

> feeling is a quality of life-forms marked by complexly mobile and discriminating responses (…). It is a name for the coming to existence of those ultimate differences in affairs which mark them off from one another and give them discreteness. (Dewey 1958, pp. 258/266-7)

This pre-verbal and pre-reflective experience is sensed as lived significance, as impressions of meaning that are mediated by the body in its interactions and transactions with the environment. Every meaning or sense which humans give to the world starts from this indiscernible feeling, then transcends it and becomes 'sense'.

‘Sense’, for Dewey, is possible only if the world is consequently and inherently accepted as meaningful:

> The qualities of situation in which organisms and surrounding conditions interact, when discriminated, make sense. Sense is distinct from feeling, for it has a recognized reference; it is the qualitative characteristic of something, not just a submerged unidentified quality or tone. (…) The meaning of the whole situation as apprehended is sense. (Dewey 1925, p. 260)

The feelings and emotions, at first pre-noetic and pre-conceptual, then ‘have and (…) make sense, record and prophesy.’ (Dewey 1925, p. 258). Further on, these experiences can be totally articulated by means of signs and symbols and become signification, the other extreme of the continuum:

> Sense is also different from signification. The latter involves use of a quality as a sign or index of something else, as the red of a light signifies danger. (Dewey 1925, p. 260)

The mediation and articulation of previous implicit and immediate meaning — feeling— reorients the meaning of the experience in a future-oriented and personally-valuable process, in a context of sign systems:

> Experience is as much cognitive as sensory. It includes everything a bat or a new born baby can feel, and everything a great mathematician can experience in thinking. (Strawson 1994, p. 4)

This voyage into experience, its relationship with feeling and sense making as well as its iterative character, urges us to rethink the relations between experiences in themselves and their possible explanations, interpretations or translations. It urges us to reflect upon artistic practice and its related experiential research as a re-enactment

of living through a profound and exciting interaction with, and transaction in, the world: with matter and with ideas that are primarily nonverbal. The experience is enclosed in the act itself and can be disclosed only partially and with laborious effort. As Emmanuel Nuñes, has related:

> One cannot compose the idea of composing, especially if you are a composer. On the contrary, one can deepen his own idea of composing through composing. Only composing can get you more and more acquainted with your idea of composing. Furthermore, only composing can lead to an unutterable connection of your idea (ideal) of composing with your entire existence (in all its kinds of aspects) as a human being. (Nuñes 2009)

The language of composing, the practice of composing, in short, the composing experience itself can only be fully and originally experienced in the composing activity: ’the act of composing seen as its ultimate synchronization with the idea of composing.’ (Nuñes 2009).

Artists take the paradox of experience to its limits. As all human beings, only more so, they aim at an integration of organism and environment by way of interactions and transactions with, and in, the world. Their re-orienting of matter, ideas, bodies, places and symbols finds expression not just in their lived experience but also in their artworks. Artistic integration, transaction and transformation are primarily nonverbal, non-explanatory. They originate in the human faculties of synaesthetic perception, non-linguistic conceptual thinking, reasoning, motor-sensory and kinaesthetic exploration; they draw upon memory, different forms of consciousness and the artist’s encounters with the outside world — its matter, events, bodies, places and symbols. From this diversity of inputs and resources, they are funnelled down by the artist into an art manifestation by way of a long and highly personalized process. The art manifestation itself enters the public arena with a dramatic, 'Here I am' gesture and, by showing itself, supersedes all previous signification. It may hint at its originating impulses in aspects of its manifestation but it does not show directly how it came into being. We cannot read directly from the artwork the processes whereby some movement or practice disclosed possibilities to the artist who then, in the double movement of artistic invention, first decontextualized the matter and its prevailing significations, then recontextualized it into something new and different, creating new signification. Partly embedded in feeling, partly in sense and signification, the experience of the manifestation can never fully disclose the processes or the dynamics of the artistic practice behind and beyond it.

As such, the paradox of how we experience art in general implies the even more acute paradox of how we articulate this experience in artistic research. As Nuñes describes clearly:

> I come then to a paradox: if I am not a musician, how shall I talk about his act of creation without obscurantism, without abstruseness? If I am an *acting* musician, how shall I accept my contingent dissertation about an undefined act of creation, knowing that I will omit inevitably the very main dimensions of my conceptual and artisanal doing of my *musical act*? (Nuñes 2009)

This is the paradox at the core of artistic research! Insofar as its research nature obliges it to view the artwork through the lens of science, it can never really account for the deep experience and research trajectory of the artist. It can simply describe the context, offer some biographical details, extracting the art manifestation from its

experiential conception and inserting it in a social aesthetic movement. Enacted by the artist, it is a re-search in the true sense of the word: re-inquiring, repeating, and rehearsing the acts of the artistic process. But its overt statements, by definition, cannot articulate the unutterable, and thereby necessarily omit some of the most crucial dimensions of the artistic act.

What, then, should we expect from artistic research done by the artist? We expect much, but we should not forget the paradox of artistic experience itself. Why blame artists for not explaining their research trajectory in verbal terms? Why blame artists for avoiding using scientific and methodological vocabulary? If they are artists, they are searchers too, but in their own medium, searching and disclosing new possibilities of, and interactions between, matter, process and idea. As they reflect upon, and reconsider, this search, they can be regarded as researchers too, but researchers of another kind: researchers lacking words, researchers without general theories, rules or accepted solutions, but instead, reflecting or remembering the exciting, novel and idiosyncratic actions and experiences of artistic processes, which never can be homogenous or equal, but at most homologous or similar. Such researchers can offer us original ideas, new pathways, new insights in and about their own experiences in a largely undiscovered world. The paradox is that the most significant of these ideas and insights are not offered in the verbal domain and therefore require of us an act of intuition not dissimilar to that required in the artistic process itself.

Artistic research demands a reintegration of the artistic trajectory with the artistic manifestation, a more explicit dialogue between the research process and the end-product, outcome or performance. It implies a re-evaluation of the different pathways, crossings, and dead-ends that are part of artistic endeavour, a reflection on the different forms of imaginary projections and the different conditions of artistic practice that have led to the art manifestation. As Paul Carter writes: ‘invention embodies a distinct way of knowing the world’ (Carter 2007, p. 16). It will offer us experiential knowledge situated within the matrix of artistic practice.

Where should the artist-researcher start? Although words cannot tell the whole story, perhaps we can learn from precedents within the arts themselves how they may be used to make a useful beginning. There is a significant body of thinking that about art that is articulated and represented by artists themselves, and in ways that are clearly distinctive from the production of discrete artworks. Cage's exploration of composition that is indeterminate with respect to the performance is but one example. These representations have often taken the form of text and image, and are often structured in a variety of conventional and unconventional forms, but they are nonetheless clear in their purpose. They form a means by which artists have striven to understand what it is that is crucial for them to grasp in furthering their work. Individual artists’ answers to such questioning might identify shifts in the technologies of making, shifts in the cultural relevance of a particular approach, or the influence of political questions which, whilst external to art, might nevertheless impinge upon the artistic trajectories. Unlike art criticism, this body of thinking focuses upon the creative process more than upon its product or outcome. In some sense, these representations draw back the curtain of artistic creativity in a process of (re)searching or reflecting, and in a manner that can go some way towards revealing what is normally hidden within the public rituals of engagement with artworks.

The interconnection of artistic practice and research

There is commonality among the diverse forms of critical reflection engaged in by artists for whom the creative process itself is endlessly fascinating. These artists frequently problematize the relationship between making art as a personal experience and doing so in a specific context of public communication. They draw out a 'field of play'.

The dimension of play in artistic creation was already highlighted in Chapter One; the word 'play' here is very important as a way of describing the generative, novel and speculative element of the artist's work. The composer John Cage wrote in the following terms about play:

> And what is the purpose of writing music? One is, of course not dealing with purposes but dealing with sounds. Or the answer must take the form of paradox: a purposeful purposelessness or a purposeless play. This play, however, is an affirmation of life — not an attempt to bring order out of chaos nor to suggest improvements in creation, but simply a way of waking up the very life we're living, which is so excellent once one gets one's mind and one's desires out of its way and lets it act of its own accord. (Cage 1939/1978, p. 12)

'*Field* of play' clearly signals that this endeavour has boundaries. It also refers to the relationships and intersections between prior knowledge — artistic, cultural and scientific — cultural context and the individual and his capabilities. The encounter of an individual with the challenge of making work within this matrix of interrelationships reveals questions that go beyond the subjective but are experienced subjectively.

The case studies which we shall now present illustrate some of the interactions described above. They may be summarised as follows:

- Leonard Bernstein reveals the fundamental organising principles of music across tonal and atonal forms of music making, rediscovering music as a medium of almost inexhaustible variability.

- Glenn Gould redefines the possibilities of the recording studio as a domain for constructing musical forms and developing a new sub-genre within the radio documentary.

- John Cage composes written texts, presented in graphically startling ways, which both embody and prompt a deep questioning of music in particular, and art in general.

- Paul Klee uses drawing to depict the world in dynamic movement.

- Jan Fabre experiments with place, science and embodied movement, trying to bring them together in performances which result from the experiences of the limits of the body.

- Helen Mayer and Newton Harrison target our knowledge of soil, forests,

climate, and settlement showing how metaphor can constrain or develop our ability to imagine relations in the environment differently.

- Allan Kaprow develops scores, happenings and events which re-enact nature and its processes with a view to helping us to grasp the world, not just its external appearance or image.

All of these artists draw on prior artistic knowledge, knowledge of cultural context and self-knowledge rooted in skill, experience and capability. The first of these - prior artistic knowledge - is in part a matter of knowledge of the artistic canon within one's particular medium. It may also refer more narrowly to the practices that surround a particular artist within his or her immediate situation. Both interpretations of the phrase acknowledge a place in which 'the world is humanly constituted through language and custom' (Gadamer 2006) as well as a set of material principles that underpin acts of making.

While every artist embodies these kinds of interconnections within their work, specific reflections on process are additional to normal practice in these examples, often appearing when the artist can no longer make the same assumptions as have served them in their work up to that point. In what follows, we reveal how these artists develop new insights through novel articulations that are part of their artistic trajectory in a 'research process'. These insights demarcate a new threshold for our understanding of art in general.

Leonard Bernstein and Glenn Gould: performance or experiment?

A composer and pianist who is at the height of his career chooses to spend time in jazz clubs in downtown New York. Meanwhile he cannot get as excited as he feels he should about the work of his contemporaries, the people whom one would assume are his peers. He struggles with questions about what interests him and what he should be interested in, with what excites him as an artist and what doesn't. He shares that struggle through lectures and writing.

Another pianist, whom the first knows well, makes a conscious decision to reject the public concert life which he has come to abhor, in favour of solitary creativity and experimentation within the recording studio.

In his Harvard Lecture series, *The Unanswered Question* Leonard Bernstein acknowledges the impact of social and cultural change manifest within music in the shift from tonal to atonal composition (1976). His analysis comes to terms with a seismic shift in 'taste' and 'judgement' which (as is slowly revealed) the composer himself, as an established musical figure, finds unnerving. One senses a compelling need within this artist to recreate his understanding of music making within a new narrative. He formulates this narrative in public to a third audience of mainly younger composers and musicians.

Bernstein starts with the materiality of the piano and the originating or 'ur' sound of the human voice making its first sound in the primal impulse to establish communication. Working with Noam Chomsky's analysis of language, Bernstein effectively rediscovers music as a language of infinite variability that over time

evolves through the playful interventions of its creators and performers. He traces relationships between individual sounds and their relative values as whole and half tones, moving from the simple through greater levels of complexity of musical relationship - harmony, melody – and edging towards the rupture brought about by atonality. Bernstein comes to acknowledge, and also to transcend, his deep anxiety - his preference as a serious composer for 'popular' jazz, often above the serious music of 'high' Modernism in the 1950s and ‘60s.

Arguably Bernstein’s quest constitutes a piece of artistic research. What is interesting is the quality of the various relationships between private experience, personal response and its public representation. The artist is articulating the deep impact of social change on music in general - an impact that is structural and irreversible, changing the way that music is composed from that moment on. At the same time, he does so from within his own experience, reflecting on the changes to his own creativity. He thinks through this change and its implications carefully, shifting between a deeply felt sense of the artist as individual and of music as a shared phenomenon.

This aspect of shifting within the artist’s psyche is often fraught with difficulty. It is instructive to consider Bernstein as artist-researcher alongside another musician whose life-project merits the same artist-researcher status: Glenn Gould. As reclusive as Bernstein was gregarious, Gould, nevertheless, embodied a similar kind of questioning, experimental attitude, using the rapidly evolving technologies of the 1960s, ‘70s and ‘80s to carry out his artistic innovations in near-solitude, yet in the centre of the cultural public sphere. Gould claimed and redefined the recording studio as a creative laboratory, eventually shunning the concert stage at the age of thirty-one, in favour of what he regarded as this freer, more congenial space. His prolific output as a recording artist was matched by his stream of writings. Furthermore, he developed an innovative form of radio documentary, applying the contrapuntal models of J.S. Bach to human speech, culminating in *The Solitude Trilogy*, three explorations of human isolation.

A difficult, even infamous, collaboration by Bernstein and Gould, prior to the latter’s retirement from public performances, demonstrates one of the primary difficulties with artistic research which takes place in ‘real time’: its outcomes are open to the scrutiny of a public that is likely to favour possibly restrictive considerations of tradition and precedent over any interest in the work ‘as experiment’. In other words, the success of the project, from the public’s perspective, primarily stands or falls upon aesthetic, not experimentally informative, criteria. The collaboration in question was Gould’s 1962 performance of Johannes Brahms’ *D minor Piano Concerto* with the New York Philharmonic, under the baton of Bernstein. Bernstein’s account of their rehearsal for the event demonstrates the problems clearly:

> I was really amazed how slow it was. And he played the first movement, almost all of it, in six [beats per measure], so that the second movement, the adagio which is also in six-four time, sounded like a continuation of the first movement. That was one of his big points, you see, that the quarter-note remains consistent throughout and holds this whole huge thing together. And I said, ‘of course, you’re exaggerating. You’re not really going to do it this way. You’re just showing me what you’ve found with these mathematical relationships between one movement and another.’ And he said, ‘No, this is the way we’ll play it.’ And

I said, ‘All right’. (Bernstein, in Friedrich 1990, pp. 102-103)

At this point, Gould was firm in his attention to the artistic experiment, but Bernstein was clearly conflicted. On the one hand, the account demonstrates his empathy with Gould’s need to experiment; on the other, Bernstein was bound into the presentation of the resulting material in the public sphere, willing to undertake the experiment, but unconvinced that it would be a success in artistic terms. Ironically, his gifts as a speaker, leading to his work in communication, in ‘knowledge transfer’, meant that he had to give a verbal introduction prior to the performance and, in doing, so, he dissociated himself somewhat from the performance that he was about embark upon with Gould. The subsequent scandal surrounding this event, and the harsh evaluations of the conduct of both men by the press, demonstrate the hazardous side of the performing artist’s ‘sailing out’. The artistic researcher is vulnerable and, like the mariner, knows at every embarkation that, as he traverses his chosen medium, he must contend with elements that have the power to capsize him,

Paul Klee: the world starting from a line — and vice versa

‘The artist is human; himself nature; part of nature within natural space’ (Klee 1953). The artist starts with a point, a mark, a dot, a place, a moment in time. He moves off from the point into space and into time. ‘The line, on a walk, moves freely without a goal’. There is a sense of direction but the pathway is indeterminate. As the line moves, it encounters other forms that also move. By interacting, new forms emerge.

The point locates other points in space and joins them through the shortest possible route. Two points joining create a line. Three points make a plane, four points a plane of a different shape. The shapes become endlessly variable.

A straight line joining many points together can be viewed in another way - subdivisions that mark intervals between one space and another. Intervals can be varied. More possibilities arise.

Lines and planes exist in time as well as space. The world offers resistance, gravity, multiple directions, multiple perspectives. Experience is of constant movement and potential chaos. How might we deal with the rich possibilities that bombard our experience.

If we look, we can notice that train tracks appear to recede to a vanishing point. The tight rope walker holds their balance on the slightest of threads. We construct horizons. These help us achieve equilibrium between unequal parts. The line helps us to move through space safely and creatively.

We stand despite all possibilities to fall. We also move dynamically, exerting more energy going upstairs, moving through water, working with gravity not against it.

The appearance of things in the world is a direct consequence of their capacity to move - the spinning top, an arrow exactly proportioned to reach its target. Both effectively harness gravity either centripedally and centrifugally. The chromatic scale of music and colour as sources of energy that are infinite, capable of unending self transformation between the polarities of black to white.

In these ways we can re-imagine our connection to nature rather than making nature our object, our resource.

Paul Klee spent a life time analysing pictorial space. The analysis was developed and, subsequently, posthumously collated in the two Notebooks - *The Thinking Eye* and the *Nature of Natures*. The principles were summarised in the *Pedagogical Sketchbook* of 1925 and essay *On Modern Art* of 1924. The catalyst for creating this analysis was Klee's teaching post at the Bauhaus in 1920-1931.

Artists, like everyone else, are born 'unasked into the world of variety' (Klee 1975) and must find their way for better or worse. The artist is someone whose will is subjected to the kind of knowledge of the world that comes from dwelling in it. In the introduction to the *Pedagogical Sketchbook*, Sybil Moholy Nagy observes Klee's empathy with the created world, his attention for small things and their relationships. Klee's feeling for nature is a leitmotif running throughout his life. He was always searching for the principles that lie behind and beyond the appearance of nature:

> for the artist, communication with nature remains the most essential condition. The artist is human; himself nature; part of nature within natural space. (Sybil Moholy Nagy in Klee 1925, p.7)

Klee takes the world apart into its components and reinvents it by putting it back together within the rules of a different grammar. His approach to drawing is analytical rather than mimetic.

> Quality for him was the ultimate product of the individual's unrepeatable and unique experience; one achieves it by descending into the depths and by progressively clarifying the secret springs of one's actions, the myths and recollections lurking in the unconscious which strongly influence consciousness and action. (Giulio Carlo Argan in Spiller 1961, p. 16)

In the essay *On Modern Art* (1924), Klee articulates the tension between observation and analysis *and* between these and the expectations of art. He explains how the grammar of the visual does not duplicate appearance but, rather, surprises us with new visions. The formal tools - of line, tonality and colour - that artists share are the means of generating a different view.

Within the visual, Klee identifies the materials of pictorial space as line, tonality and colour. Line is measurement. Tonality is measurement with weight. Colour comprises of quality, weight and measurement together. At this point, his analysis becomes quite formal, if not technical. Line most obviously/literally pertains to drawing. It is an art of omission. One could equally argue that tone and colour also pertain to drawing. By extension, drawing can be an organised/choreographed movement through space/time - or even an improvised, gestural movement through space and time. Suddenly we are brought back into the realm of our core questions: 'Where does drawing begin and end? What is its role in articulating an aesthetic?'

With Klee, it begins by making a mark, and ends in the cosmos. Klee provides very basic, almost childlike building blocks - the point and the line from which to move into the world and its place within the universe. This is an utterly different approach

from the norm in art making - the canonical approach, based in a high level of skills and a priori knowledge.

By working with these properties/dimensions/tools of pictorial space, the artist puts together a new order. As such, the evolving line of his art remembers his philosophical points of view and encounters anew the world. In Klee, the act of drawing reveals and generates new experiences. It is a means of making an aesthetic entry into the world (point to the birth of a line), of then constantly negotiating a balance with that world (individual to horizon; individual to metaphorical 'horizons' which are dimensions of the social, the political, the cultural). Is drawing also the consciousness with which we move through the world and establish the means not to fall (the repetitive strokes of the swimmer keeping the swimmer on the water's edge)? Is it a reflection back on those movements in the construction of some kind of visual re-presentation? What is the connection between the two and how does it inform the problematic of the artist's re-search?

> The world of qualities which opens out the more one descends into the unconscious depths, is not the world of forms already dead and established, but the world of nascent form, of formation, of *Gestaltung;* it is the world of unending organic relations which are born of real encounters and are measured by the effective strength which each image develops in its particular condition of space and time. (Giulio Carlo Argan in Spiller 1961, p16)

Applying the research principle of 'an original contribution to knowledge' to the work of Paul Klee, what emerges is a profound re-ordering of the relationship between the artist, the natural world and cultural modes of representation as a quality of that world. Whereas most of academic art (in the West) draws from a broad set of general principles of absolute beauty and conventional canons e.g. in relation to colour, Klee reacts with astonishing directness and simplicity to the processes by which we come to know. The quality of this encounter as an open-ended process of discovery and inscription is important. If empathy may be viewed as an encounter and effort to reach out to the external world, to that which is alien to oneself, then Klee provides us with processes and values to structure this encounter playfully, exploring its infinite possibilities through gestures that extend the body and mind into its surrounding space.

Jan Fabre: the laboratory of the performer's body

Jan Fabre is a versatile and quite controversial artist, a choreographer, performer, visual artist, writer and director. His artistic work is continuously interfused with research, and with linkages with other arts; in personal inquiries which are worked upon, reworked, deconstructed and reconstructed as they progress towards artistic manifestations. His techniques and methods, as well as his research trajectories, are neither independently written down, nor wholly verbalised. They are disseminated via other media, by way of training workshops and through his artistic-research space, his laboratory, which is open to inquiring visitors and researchers, whom he accepts as passive participants in the whole process of making.

The realisation of an independent research space, the creation of the *Troubleyn*

laboratorium in 2007 in Antwerp, shows the engagement of this artist with research trajectories, knowledges and techniques. It is a — real and virtual — research space: ‘This is a sovereign place to be able to complete an artistically mental process’, Fabre explains. ‘Young scientists and artists who, just like me, do research on the body and on language, can work here without any form of competitive spirit.’ (Fabre 2009). In this spatial embodiment of artistic research — his laboratory *is* a real building — different approaches to research are launched.: the *Troubleyn laboratorium* is a rehearsal space in which bodily work is experienced in its practice, its limits and its possibilities; it is a place for creation by young artists, considered as a 'dynamic theatre laboratorium' where artists can try out, interact and experiment; it is a laboratory space in which artists and researchers can meet and debate; and, finally, it is a place open to teaching and workshops in which specific techniques are launched and developed. The laboratory is dedicated to spatially-articulated artistic-research interactions and interventions.

Fabre’s projects are long-term endeavours, originating in his own thoughts, drawn sketches, and small texts, as well as drawing upon his own lectures to scientists and writers, in which he reveals a passion for entomology and biology and a deep cultural knowledge. The production space resembles both stage and laboratory. Fabre considers his actors and dancers as ‘experimental rabbits’, placed in an encounter with his personal artistic, cultural and scientific knowledge. However, rather than adhering to his own pre-planned intentions, he begins each session with some open improvisations or assignments, offering his actors and dancers a freedom to experiment — a freedom which he hopes will escape the conventions of their artistic education and unravel the profound and instinctive energy of the body. Not only is the resultant material submitted to deep inquiry, but also to the exploration of ‘the other’, the limits of the body in practice, and the mind in concentration. Fabre searches for the raw, the aggressive, the instinctive and the uncivilised aspects of the body — which makes his representations sometimes 'crude' and, possibly, 'repulsive' — while, at the same time, surrounding these experiments with scientific and cultural knowledge, with artefacts and stories, attempting a strange connection of humanity and inhumanity.

As in scientific research, the element of repetition within Fabre’s work is essential. Repetition refers to 'visually structured visible time'; it reveals the hidden structures of the body and enables inquiries into the processes of exhaustion, and into the limits of body and instinct — 'to repeat is to try out and to leave behind', it is 'exformation' (Fabre, in Van Den Dries 2004, p. 72). He works meticulously, with a critical view of his own trajectory: ’I think as a poet and work as an accountant. Making a lot of quasi scientific daily notitions during the work process. I inquire, measure and question.’ (Fabre, in Van Den Dries 2004, p. 270). To facilitate the research processes and the reflections of the dancers and actors, Fabre places at their disposal materials linked to the project: literature, theatre, movies, scientific works, and music. His collaborators are also invited to contribute ideas and materials which they find interesting. These materials can become part of the experimental input, new starting points which might involve the addition to the mixture of new material, or the inclusion new people. Fabre invites his performing collaborators to participate continuously in this process. In that sense, his explorations and experimentations recall the processes of scientists and alchemists in the Renaissance, searching for surprise, challenging limits, trying out new ideas repeatedly.

Transformation is another of Fabre's basic work principles: transformation of the body, of space, of time and rhythm. Transformation is present in exploration and imagination, and in the thinking of-and-by the body. In this view, motivations behind actions are neither psychologically nor socially depencent: they come from experimentation with the body – '*le corps'* as well as *'le cœur a ses raisons*'. Fabre believes in a body that is far from the false images of the media:

> The body is represented so painfully makable. The body of a man or woman in commerce today: it doesn't smell anymore, doesn't bleed, it is always athletic, it is perfect. But such we are not. I can tell just by looking at you, you don't have a perfect body, we just are not perfect. And if I stand near to you, then I can smell you, but that is not bad. The smell of a human being is not bad. (…) We have that vulnerable body, with blood, urine, sperm, menses. There is nothing wrong with it. (Fabre 2008)

Fabre looks for the expression of the invisible: 'science too posits hypotheses about what is not visible, for example, about black holes.' (Fabre, in Van Den Dries 2004, p. 90). Fabre acts like a scientist in his testing, verification and refinement of performance hypotheses which require detailed direction, rehearsal, and the dissection of movements, processes, and acts. Each day, the processes he initiates are rehearsed, with small variations — 'we travel, we progress, we build up.' (Fabre, in Van Den Dries 2004, p. 96). As a scientist, he moves in a realm that is not immediately connected to society, even if it resonates within society:

> There are neither theoretical nor practical wisdoms to recuperate from my presentations which could serve as a source for political movements. Fabreïsme or Rimbaudisme as a societal movement could not exist. (Fabre, in de Greef and Hoet 1993, p. 81)

As a scientist might do, he persuades himself of this, clearly claiming an independent space for his art, but recognizing that he and his acts are part of society:

> My performances have their own reality. But in that reality there is a 'presence' that consciously or unconsciously offers information to the spectator about how I think about society. My representations contain a certain kind of ideal. (Fabre, in de Greef and Hoet 1993, p. 81)

Helen Mayer and Newton Harrison: the encounter between art and ecology

She is a lecturer in English and he is an artist, trained in painting and classical sculpture. She reads a book, Rachel Carson's *Silent Spring*, about the impact of pesticides on the environment and, over a period, the issue of the human relation with the natural begins to dominate their conversations. The unsustainable relationship of humanity to the other forms of life of the planet becomes the focus of a lifetime partnership, making art and challenging our assumptions. They view human relations with nature as profoundly interconnected, as intersubjective and co-dependent cultural behaviours.

Since the early seventies the Harrisons have focused as artists on ways of opening up our imaginations to issues of climate change, addressing the ambiguity that has emerged in human relations to climate change of knowing, but not acting on that knowledge or acting differently. They seek to open up

> figurative and literal grounds for thinking about alternatives that are broader and more proactive than those that rely primarily on market forces, technological "fixes", and top-down or bureaucratic planning. (Harrison and Harrison 2008, p. 2)

Their work depends on research (as science) but is also itself research (as a search for different ways of configuring life). Their journeys in making the work are told in the work, as well as in lectures and interactions, so that other people can learn not only the 'what', but also the 'how' and, most importantly, the 'why'.

The Harrisons' method is to 'listen' carefully for the images or icons that are habitually used in relation to the particular set of circumstances of a project. They note how these shape the ways in which we move and respond through particular forms of action. They look for the kinds of dysfunctional metaphors that may be at work, posing alternatives that are intend to lead to new qualities of action. For example, in one project concerned with flood control, instead of articulating this idea through imprisoning water via dykes and channels, they proposed to recast flood control as a freeing and spreading of water, giving the flood, so to speak, back to the river, but within a new locale above the city. By doing so they equally acknowledged the health of the river and the health of the city. They would describe this imaginative shift as a 'flipping metaphor' which acts so as to create new icons and images as a means of challenging entrenched beliefs and practices.

The Harrisons research context by developing knowledge of the specific factors that have shaped the built environment of the project site. They establish a 'field of play', defining the geographical boundaries that also act as an imaginary means of containing the consequences of thought and action. Their projects are frequently couched within metaphor - *Greenhouse Britain* 2006-8, *A vision for the Green Heart of Holland* (1994-5), *Future Garden Part 1: The endangered Meadows of Europe* 1994-8), *Serpentine Lattice*, California 1993, *Casting a Green Net*, Northern England (1994). These metaphors *draw* attention in a new direction.

The Harrisons' work leads to intentional and unintentional consequences, which they term 'conversational drift'. This implies an interest in keeping the imaginary line of movement going beyond the discrete parcel of time given to a project, after which it moves beyond their control. In responding to an invitation by the Cultural Council of South Holland to advise them on the proposed development of 600,000 new houses for the centre of Holland, the Harrisons recognised the cultural significance of Holland's 'Green Heart'– the area of farming encircled by its major cities of Amsterdam, Rotterdam, Utrecht, Den Haag, Delft. They developed a proposal that focused on the 'Green Heart' as an icon that, in turn, articulated a set of principles and limitations. The proposal was warmly welcomed, and then abandoned with a change of government. After five years the proposal was revisited on the initiative of the Ministry of Agriculture, Environment and Forestry. Newton Harrison takes up the story:

> We found out that what they had done is – and this is a stunning thing – they had dismantled our icon… but they had accepted the working principles: that major cities will be separated by parkland, their way. The ecosystems will be made continuous, but in their way. Their way was not to make a biodiversity ring, but to widen the rivers, and in so doing, make long continuous bands …We found that we were really successful in a new way. We started to design our work

> differently… we made it (the icon) so that it was able to be recreated, redesigned and dismantled and put together again. (Douglas & Fremantle 2007, p. 6)

What the Harrisons promote through their work is not the traditional artists' autonomy, but the ability for every individual touched by the work to think about their environment, in the process, perhaps, participating in the work's *conversational drift*.

Allan Kaprow: the score and everyday experience

As seen in Chapter One, Allan Kaprow articulated 'play' as a core principle of his life's project of educating 'the unartist'. Within his writings on the Education of the Unartist, Part II, Kaprow closely aligns play with the idea of imitation. Kaprow's work is situated within an overarching framework or goal. He wanted to address the entropy within institutionalised forms of art in museum and gallery practices. These had arguably become grounded in 1960s and '70s America as an exchange of objects or commercial commodities.

For Kaprow, we re-enact nature and its processes through imitation, enabling us to grasp the world in its 'manner of operation' (Kaprow 2003) - in movement - not in its appearance or image. It is precisely in imitating the world that we learn how to exist within it. Rituals imitate nature's cycles, emerging out of our observations over time of natural processes such as the way that the seasons change - spring to summer, autumn to winter. Rituals arguably have led to the development of social institutions and forms of organisation. Kaprow developed these ideas in art by way of scores, happenings, events and environments that 'framed' a sense of the poetry in everyday life. Some were performed and some remained conceptual. By imitating life, artists would and could recover their creativity because imitation never quite fits with what already exists. Something new is produced in the process.

Let us look at an actual Kaprow score:

> *Calendar*
>
> planting a square of turf
> amid grass like it
>
> planting another
> amid grass a little less green
>
> planting four more squares
> in places progressively drier
>
> planting a square of dry turf
> amid grass like it
>
> planting another
> amid grass a little less dry
>
> planting four more squares
> in places progressively greener
>
> Activity, A.K., California, Institute of the Arts, November 2, 1971, (Kaprow 2003, p. 120)

A calendar is an example of how we parcel time into discrete parts that sit in a quantifiable, proportional relation to each other - a day is 24 hours, 7 days make a week, 4 weeks make a month, and 12 months make a year. This equal, sequential, regular rhythm is not the way we actually experience time. It is an imposition upon time, a way of chopping time up into manageable, organising elements. In Kaprow's score, '*Calendar*' as a metaphor is an organising element creating a regular rhythm or beat.

Within this even rhythm, another metric is added as a spatial element through an everyday action of 'planting a square of turf''. The use of the form of the verb ‘planting', rather than the perhaps more usual imperative ‘plant’ evokes the possibility of an action by imagining it in the present, fluid and ongoing. 'Planting' is not an instruction or a directive to plant; the action is already in motion.

The numbers of squares increase — one green square of turf, then four more in places that are 'progressively' drier — a new, contrasting environment is under construction. Mid-score the progression flips, while retaining the same proportional relation, 'planting four more squares in places progressively greener'. The reader completes in his or her own imagination the return to the original state of green.

Scores exist through time as well as in the space of their materiality as instructions, whether verbal or symbolic, inscribed on the page. The score lives in our imagination as a poetic concept, not a literal action. Within this score of Kaprow’s, time is simultaneously 'chopped up' and fluid, stable and in transformation. He has executed a number of poetic tricks to get round the coding of time, playing time both as metric and as a dynamic that is imaginatively developed and followed.

Here we begin to see the complexity of the way in which the artistic imagination works: the way it exploits the implications of being present, but also of getting beyond the naturalness of just doing to examining experience, deconstructing and reconstructing it differently. Viewed as a 'contribution to knowledge', the relevance of Kaprow’s score lies in what we make of it as an encounter between maker and audience. The score is a form that allows the world to move through us, rather than being an object of knowledge through which we move, in relation to other objects in the world.

In these ways, Kaprow is not so far removed from the way any other kind of researcher might work: with hypothesis, observation, experimental modelling, extrapolation, knowledge transfer and so on.
These scores are part of a body of work - arguably a method - that Kaprow developed by which artists could 'unlearn' the institutionalised version of art. As part of this method he inverted the relationship between the artist and life. He hypothesised that artists looked to and framed aspects of life, arguing that life itself was more 'artlike than art'. These propositions were based on contemporary observations: the arrestingly bizarre form of the lunar module mooncraft was better than sculpture of the time; the haunting exchanges between Houston and the Apollo 11 astronauts was better than contemporary poetry; and, the literally otherwordly sounds of space travel better than the electronic music of concert halls.

Kaprow also presents something quite different and distinctive in his approach. Analysis of the score *Calendar* reveals how metrical time, arguably our society's dominant strategic notion of time, is subverted to reveal its opposite - a dynamic experience of time that is fluid and differently paced through the intervention of human imagination and related action. This tension between the metric - control through measurement- and the dynamic - control through the creative imagination - seems to be key to informing what is distinctive about the artist's approach through, and by means of, the imagination. Music, like poetry, works with this temporal dimension, giving it pace, rendering combinations of sounds in affective rather than utilitarian ways. Dance works in a similar way and the quality of line within a drawing, likewise. These art forms move beyond the naturalness of the movement itself, creating both a consciousness of experience and also an imaginative representation of what experience feels like. Imagination enters into experience as a conscious presence. It invests experience with a crucial affective charge. For example, a pianist suggests - 'Play this passage and imagine that you are crushing strawberries beneath your fingers'.[20] The quality of sound that emerges is different.

Artists are therefore close to scientists in their endeavour. Both imitate the world through modelling and through play, but in different ways. Increasingly some artists engage directly in the public sphere through processes in the world. They have 'unlearned' the immobilising effects of the object world, working consciously with the kinds of improvisations that we unconsciously engage in as part of our everyday experience.

Some afterthoughts

We began this chapter with Descartes and the certainty of knowledge. The metaphor of the building of a ship created an image of the robust construction of scientific knowledge, moving incrementally forwards and outwards from existing theories and the experiences of previous scientists. Transposed to artistic research, this metaphor evolved into a journey. The artist was seen as always 'in practice', always 'en route', held in a dynamic flux between degrees of constraint and those of freedom.

The metaphor of the ship has helped us to think of the situation of the artist and artist-researcher who, like a sailor, looks at the open horizon and projects his thoughts and aspirations towards it, but in the execution of his craft, remains on the ship, in his element aboard the moving, dynamic territory of invention, intervention and creation which it represents. The artist navigates between tradition and originality but, like the mariner explaining his experiences out at sea to the land-dweller, must struggle to mediate and elucidate the meaning of his or her journey to a broader community.

The examples given in this chapter of research developed by artists reveal a deep preoccupation, if not obsession, with 'making' as the cornerstone of the artistic creative process - how it works, where it succeeds and fails and why, what might be learned by the artists themselves and by those to whom they try to communicate this understanding. It is arguably this urge to develop critical insight concerning making as a bringing forth into existence that is the core impetus for artistic research and the

[20] Vassilis Varvaresos, at a meeting of the Orpheus Research Centre in Music, October 2009.

source of its wider relevance.

However, a supplementary question arises that is crucially important to current developments in formalising practice-led and artistic research cultures within bureaucratic systems in conservatoires and universities across Europe and the US. To what extent, in our burgeoning activity under the now increasingly institutionalized label of artistic research are we really learning from these artistic precedents, where the research component arose from an inner compulsion, rather than the imperatives of what, in its way, is becoming a new academic orthodoxy? Nuñes opened his presentation at the Orpheus Institute in April 2009 with the following appropriately cautionary words: 'I have not come to demonstrate anything. You will not see a single power point slide or fragment of recorded music. I invite you to think with me.'

Sharing with, thinking with, is part of the very essence of art-making. Nuñes spoke of his experience as a composer in terms of a permanent contextualisation of process. He doubted that anyone would develop a better knowledge of his music simply through his discoursing about his act of creation — 'alone, the assertion "act of creation" seems to me quite doubtful' (Nuñes 2009). Nuñes' combination of scepticism about research and articulacy in expressing his process of composition is noteworthy.

Yet, most artists must increasingly engage with a formalized research culture in the arts that manifests itself in doctoral study and supervision, research grant applications and research or government funded research projects. With this infrastructure comes increased pressure to conform to accepted models of research in science and the humanities as a means of negotiating an arts-based research culture. This preoccupation will be the subject of the final chapter; but before re-entering this institutional, and more broadly contextual space, we need to dwell further on a particular aspect of the solitary journey of creation by which the artist brings artworks into being.

We have already discussed the need for subjectivity to be tolerated within the frame of reference of artistic research. While such subjectivity remains largely optimistic and positivistic, the threat which it poses to the integrity of the research may seem relatively slight. But artists must use their sensitive, subjective selves in ways that embrace danger and the pushing to extremes. They must allow vulnerability into their creative and performative acts, along with a passionate engagement which may be dark and pessimistic just as easily as bright and full of exhilaration. Where does the research approach sit in relation to such darker or more fragile aspects of the creative psyche? Chapter Five seeks to answer this question.

image

Chapter 5. Doubts and Vulnerability

> The theme of 'the artist' had to relate to another, subjectivity (...) The way to deal with the problem of 'subjectivity', that shocking business of being preoccupied with the tiny individual who is at the same time caught up in such an explosion of terrible and marvellous possibilities, is to see him as a microcosm and in this way to break through the personal, the subjective, making the personal general, as indeed life always does, transforming a private experience (...) into something much larger: growing up is after all only the understanding that one's unique and incredible experience is what everyone shares.
>
> Doris Lessing, *The Golden Notebook*, 1989, Preface, pp. 12-13.

The artist as a hero

The place and importance given by a culture to creative, original and aesthetic acts, points to the great expectations such a culture has about its artists. An audience expects from art 'that it be art', that it should exceed in some sense the everyday experience, the usual perceptions, and the limits of reality. This is despite the fact that art always remains embedded in prevailing social perceptions of what can be considered to be art, which, in turn, depend upon diverse social-cultural contexts. Artistic manifestations have an important place and function in society, offering a possible means of constructing identity, of negotiating internal strivings and external prescriptions and of channelling frustration and rebellion.

The artist's relationship with what can be known is quite distinctive. It is not based on hypothesis, the truth of which is *de*duced by moving from the general to the particular. Nor is truth inducted from a body of experience by moving from the particular to the general. Through art, singular, concrete experience can constitute and make sense of a whole context from a particular perspective. For example, Foucault's articulation of the *Panopticon* refers simultaneously to Bentham's actual blue print of the modern prison of 1791 as well as an articulation of power in ideal form. The 'knowable' in and through art concerns itself with developing the potential within particular experiences to hold in tension within the same field other areas of experience while each retains its specificity. Bentham's blueprint allows the observer to observe without the prisoners being aware that they are watched. This potential is transposed into a representation of a particular figuration of power. It moves from the particular (in a building) to the general (in a penal system).

This quality of relationship to what is knowable means that the artist – and, by extension, the artist-researcher can never become subsumed within generalisation without losing the point of art and its relationship to knowledge. Their work is to hold in juxtaposition specific moments of experience with other specific moments so that the one shows itself beside the other and produces ‘a new ontological context’ (Agamben 2002).

In the passage that opened this chapter, Doris Lessing suggests that the very particular and private can, in some sense, reveal what is common to all experience. The shift from the one state to the other is a process of transformation, the realisation of something that, in the particular, exists only as a potential but that, once drawn in relation to the world, becomes extra-ordinary.

> the problem of 'subjectivity', that shocking business of being preoccupied with the tiny individual who is at the same time caught up in such an explosion of terrible and marvellous possibilities, is to see him as a microcosm and in this way to break through the personal, the subjective, making the personal general. (Lessing 1989, p. 19)

Lessing evokes the power of art to simultaneously ‘be’ while also ‘seeming to be’. It is in this transposition that the vulnerability of the artist and the artist-researcher is situated.

Unlike the scientist, the artist is not able to lay claim to supposedly stable and truthful relations between signifier, signified and referent. The artist moves in a realm of shifting meanings, imaginings and interpretations: on the one hand, exploring new possibilities and suggesting new subjectivities; on the other, ambiguously constrained — as well as sustained — by social, political and historical contexts and attitudes. Artistic endeavour is embedded in situation and interrelationships, confronted with power and vulnerability rather than with rules and information. It takes place in exchanges between the subject and the world, interrogating both the social and the natural worlds, intertwining the human condition with transcendence, reality with the imaginary — or should we say with 'illusion'? The weight resting on the shoulders of the artist is therefore high and the expectations can be extreme. The artist must, in some sense, project the illusion of being a physical, intellectual, aesthetic and embodied hero. Schooled in virtuosity, catapulted into stardom, and considered as a role model, he or she is not permitted to fail because failure might mean forfeiting, in the eyes of the public, the right to be an artist.

But who *is* this artist, this performer, this maker, this producer of manifestations, this person, now admired, now criticised; sometimes deceiving us through their artfulness, at others fulfilling all our hopes through their artistry? Is this artist to be regarded as superhuman, or rather as personifying ‘humanity’, both in its fragility and in its fleeting transcendence of this fragility through individual acts of heroism? The answer must surely be that the artist, as a human being, reflects and illuminates humanity. Artists create in solitude as well as being sought out by a public, but are compelled to leave this realm of anonymity if they are to make creative exchanges ‘in the world’. The artist is a human being who has to strive to meet the demands of his or her own aspirations, the aspirations of his or her art *and* the aspirations of the public. He or she

is a person torn between subjective and socially-determined trajectories, between art creation and art perception, between object and signification.

Throughout history, the relationship between the artist and his or her work and the artist and his or her public have both revealed something of a dynamic oscillation between contrasting extremes. Total immersion in the creative act has the power to take the artist to a threshold of bliss, as in the myth of Pygmalion, or beyond the limits of sanity, as with Van Gogh. Similarly, at times the spectator or consumer of art is the tune-calling patron – although, in the guise of the 'man of taste' his all-consuming interest in the development of new art can lead him to ruin. At other times, the artist's perspective emerges as the stronger, enabling greater levels of autonomy and power to be invested in the artist in relation to the spectator. This, in turn, may encourage greater levels of artistic experimentation that are characterised more by bad than good taste. Tracey Emin's exposure of intimate aspects of her private life in public might be seen as an example of such a tendency. As the spectator's role becomes more passive, viewed as an unwanted intruder into the artist's territory, so Agamben argues, does art have less of a place in the spiritual life of the spectator. The artist himself becomes an eccentric within his own world of art making (Agamben 1999).

The mythic tradition of the artist as a (fallen) hero can be traced back to the Greeks in the character of the demi-god, Prometheus. Greek deities wielded their supernatural powers while thinking and behaving like humans. They were thus an outward projection both of what it is to be human and of the yearning for transcendence that is part of the human condition itself. Prometheus' name comes from *prometheia*, meaning 'forethought', and he was associated with the powers of art and technology. The Greek myth runs that Prometheus stole fire from Zeus to offer it to humans. He was punished for this act of sympathy towards mankind by being bound to a rock. An eagle consumed his liver during the day, only to have it grow back at night to be eaten again the next day in an endless cycle of suffering. In Hesiod's works, Prometheus, gifted with all crafts, is characterized as dishonest and a cheat, while Aeschylus considers him to be a tragic hero.

The artist, in a similarly godlike way, must survive all catastrophes and endure the daily ravages of the eagle of his or her own self-doubt. However, the artist is not a god, but a human being, since:

> Gods are not fair, nor courageous, nor liberal, nor moderate, because they do not live in a world where contracts have to be signed, dangers have to be defied, sums of money have to be distributed or desire has to be tempered. Gods do not live in a world of relation, adventure, need … (Aubenque 1963, p. 65)[21]

Other than in the colloquial sense applied, for example, to the most extravagantly adulated pop musicians, the artist never acquires the status of a god, his or her fate being instead that of an earthbound hero, a defender, protector, and guardian. The notion of 'the artist as a hero' has numerous connotations. For Leonardo, it represented all that was gracious and glorious about the artist, while Balzac turned the heroic battle of the artist into a tragic tale of failure — and was followed in this by numerous

[21] The translation is our own.

others, including Zola, Henry James, Cézanne and Picasso (Barolsky 2007, p. 122).

> The glory of the artist from Ovid to Dante, from Dante to Michelangelo, from Michelangelo to Balzac, is here transformed into the story of defeat—a plot that still echoes in all the recent claims of the death of the artist, the end of art history, or the failure of modernism. (Barolsky 2007, p. 122)

The myth of the 'artist as a hero' is not dead but remains embedded in our imaginations as the embodiment of transgression and wonderment, of a surprising identity that awakes unexpected resources within us: the 'artist as a hero' personifies how humans, at their most fully realised, could act, look, express, reveal, develop and discover. The artist's manifestations offer glimpses into the experience of being human. They hold up a mirror to humanness — its good and its bad sides — and penetrate what is normally hidden behind the reflective plate glass of human society, creating fictions in reality, virtual identities in a scene, poetry in sounds and quality in shapes. The artistic gesture opens an inner world of undreamed dreams, of unrealised events, of unspoken sentences, of unimagined shapes, forms, content and colours, and of unprecedented connections.

The Greeks had two other mythical figures who complete the picture of what art and invention meant for them: Apollo and Dionysus. These were contrasting deities: Apollo was the god of good and fine arts, the inventor of music, sculpture and poems, the originator of the contemplative arts and of art objects; Dionysus was the god of artistic extravagance, of innovative and exuberant creation and action. The arts were thus divided: on one side, stood the arts as fixed in some aesthetic medium — sculpture, language, architecture, poetry — on the other, ranged the arts in full process, as dynamic performance — dance, music, drama.

For the Greeks, creation and art were enormously important, but the artist had a dubious status. As we have noted in Chapter One, Plato, in the *Republic*, condemns rigorously the poet-artist whose 'representations definitely harm the minds of their audiences, unless they're inoculated against them by knowing their real nature.' (Plato 2007, p. 421)(no bibliographical reference). As such he rejects all the works of Homer, censoring art on basis of its un-truthfulness. He explains the relation between art and the world with a story of the bed: the first bed is made by god, the second is made by the carpenter, the third is made by the painter.

What the artist creates is but a shadow of the real world, cheatingly eliciting the audience's admiration and belief, persuading them of possibly false ideas. The artist is thus believed by Plato to be a person of undoubted skill, but in need of control because this skill can lead to dangerous outcomes. Beauty and aesthetic approval can only exist within an ethically acceptable and controlled artistry — controlled by others, whether philosophers or statesmen, in relation to 'truth'. Whilst our modern attitudes to the artist have changed radically from this stance — at least, to outward appearance — something of the underlying vulnerability which it induces remains, and this constitutes the first of four species of artistic vulnerability which we shall proceed to discuss.

Still with Plato, a second problem and source of vulnerability for the artist emerges: the problematic relation between representation and the real world, between 'beauty' and 'truth', between epistemology and ontology. This issue, in its Platonic articulation, prefigures the more modern framing of the problem as one of the responsibility of the artist in the world. Artists are often caught up in the complex discourses concerning the aesthetic character of art, needing to understand terminologies concerning aesthetic values, but often trying to remain apart from these. The proverbial equating of 'beauty' with 'truth' is of little use to the artist outside the context of a specific artwork; indeed, the artist may develop a deliberate strategy of reading against this historical behest as part of the process of creation. Furthermore, the affective character of art, its power to 'move' us, might be an important consideration, but this is also elusive, resistant to scrutiny. Given this, we may attempt to describe artworks in more neutral ways, but such collections of observations still tempt our propensity to make judgments, to resort to the kinds of criticism that too quickly close down creative possibility. Finally, all of these concerns are at work both within and upon the artist, whose manifestations appear in the public sphere.

A third problem, related to that of artistic responsibility, appears still later in Western culture. Before the 18th century, creation was the property of higher powers. The concepts of creation and creator referred to the divine, supernatural contribution of a god or godlike being having power over humans and other worldly beings. But what of autonomous creativity? Were humans not also creative? Of course they were, but in the Middle Ages, they were considered small and insignificant beside the Creator and the awe-inspiring cathedrals built to his glory — even though these selfsame insignificant humans were the architects and builders of such monuments. As Augustine wrote, '*creatura non potest creare*' — he who is created cannot create. Human beings might be skilled in craftsmanship or good artisans; they could even have inspiration and good ideas, but these originated in higher, divine powers. Artists, actors, musicians and authors remained unknown and anonymous. Most of the time, authorship did not exist: painters did not sign their work; inventors did not apply for patents; virtually our entire knowledge of the main composers of the earliest notated polyphonic music is built upon the slender foundation of their nicknames — 'Leoninus' and 'Perotinus' — appearing in four lines of anonymous doggerel.

The role of the mere performer was not taken into account at all; performers were nothing more than translators or interpreters of authorial texts, divinely inspired. Artistry was an obvious, and essentially unremarkable, part of cultural processes or practices and, as such, was unexamined. Cultures invented techniques, regulated relational patterns and created artistic manifestations. The result was a cultural treasure in which many anonymous people participated. Legends, stories, myths were its literary realisations; frescos, drawings, mosaics were its visual artistic manifestations; cathedrals, castles, pyramids were its architectural creations; and liturgies in the service and praise of the deity were its principal preserved music, most music-making being sustained by oral traditions in which no one individual's contribution left its mark for posterity. All these artistic creations sprang from cultures in which the anonymous human being, as represented in countless individuals, was the 'leading actor'.

With the Enlightenment, religious belief became refashioned to more human proportions and began to recognise the legitimacy of personal exploration. New worldviews emerged in which dogmatism could be questioned. The philosophical and political writings of figures such as Voltaire, Montesquieu and Descartes dared to question prevalent social norms and rules. In the creative realm, artists developed more self-awareness, and a stronger sense of their roles and functions. The emancipation of the creative individual grew to become one of the principal themes of Romanticism and completely superseded previous notions of the artist as anonymous, subordinate human being, or even retained functionary. Individual creativity acquired attendant concerns with self-expression and personal authenticity, linked to assumptions that the artist was privy to a higher personal aesthetic experience than that of normal human beings. In this way, the artist as hero was born.

This new consciousness soon revealed its shadowy, darker side within artworks. Fear of, as well as fascination with, the creating individual, and foreboding as to the increasing powers of the individual are the main themes of Mary Shelley's *Frankenstein*. Dr. Frankenstein desires to control and shape the world through his own powers, aspiring to the ‘Promethean fire’ of creation itself:

> The world was to me a secret which I desired to divine. Curiosity, earnest research to learn the hidden laws of nature, gladness akin to rapture, as they were unfolded to me, are amongst the earliest sensations I can remember. (Shelley 1987/1818, p. 81)

Frankenstein is a chilling and revelatory conflation of the scientist and the artist, the first because he wants to discover the hidden laws of the world, the second because he accepts no limits, no constraints concerning his own goals:

> ...soon my mind was filled with one thought, one conception, one purpose. So much has be done, exclaimed the soul of Frankenstein — more, far more, will I achieve; treading in the steps already marked. I will pioneer a new way, explore unknown powers and unfold to the world the deepest mysteries of creation. (Shelley 1987/1818, p. 92)

But the effects of the creative attempts of humankind are unpredictable, and in the case of Frankenstein, they became a nightmare: ‘but now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart’. (Shelley 1987/1818, p.101). Dr. Frankenstein fails to acknowledge a third vulnerability of the artist: the contrast between personal responsibility and power when the artistic manifestation is unveiled to the world and the audience. The monster that he unleashes upon the world is this failure manifested; in actuality, it represents the dark aspects of his own being. His penance is his inescapable enchainment to this ‘other’, as pursued and pursuer, until their mutual dance of destruction ends in death and immolation.

Early studies on creativity and creative artists in the nineteenth century — such as that carried out by Galton in 1869 — analyse the notion of genius as the property of individuals whose original and innovative behaviour is often associated with a tormented, personality and history, out of which is generated ‘something’ new, original and aesthetically-charged. From this perspective, the created object, the

artwork, becomes a measure of the artist's creativity. The artist, like Goethe's young Werther, can be creative in how he lives his life, and not solely insofar as he continues to create. From this was born the notion of canonical artists and their art: specific art manifestations become part of a heroically-conceived history of art and recognised as 'works of genius'. Correspondingly, art critics become powerful arbiters of the process of canon formation while, more recently, members of the media have become the gatekeepers of how artistic manifestations are facilitated and disseminated, and even how they are appreciated by the public. With the rise of cultural canons, and of the potent voices of criticism, a fourth and final dimension to the vulnerability of the artist emerged: that of dependency upon external judgement and public acceptance, with all its associated, and often hidden, gatekeepers.

The four species of vulnerability outlined above may be viewed as weak points within the artist's armour but, perhaps more productively, as four dangerous chasms or difficult crossings which the successful artist must repeatedly negotiate: artistic object versus artistic process, representation versus truth, responsibility versus power, subjective expression versus external judgement. They reminds us that the artist is a person torn between art creation and art perception, between object and signification, between the 'I' and the world.

Who creates these chasms? How does the artist negotiate them? We will reflect on these themes by examining particular artistic situations. While, in the first chapter, we stressed the aspect of 'play', here we will consider the 'interplay' of artistry between different parameters, agents and social representations. The playfulness of art is always an 'inter-playfulness', as every art manifestation 'manifests' itself as 'interlocked' between the creative process which led to its emergence and ecological circumstances of its reception or perception. A double interplay emerges from the art process as a whole, one that develops between the artist and the art manifestation and between the art manifestation and the audience. Artistic vulnerability is therefore not only an artistic issue, but also a social issue, inviting multiple readings and interpretations, interlocked between the personal and the cultural, the expressive and the reception-based. But, as the example of Shelley's *Frankenstein* has shown, this interplay can have serious ramifications.

Between beauty and truth: the Search for Transcendence and the World of Illusions

An examination which focuses upon musical performance illustrates the idea of interplay, and both reveals and contextualises the vulnerabilities discussed above. For performers involved in mainstream concert life in the tradition of Western Art Music, the artistic act as presented in the public sphere has remained remarkably unchanged since its underlying paradigms became established in the nineteenth century. Key to these paradigms, and in contradistinction to earlier concert- or opera-going traditions, is the notion that the artistic act is witnessed in more-or-less silent, rapt attentiveness by an audience that holds its emotional responses in check until, following signals that the boundaries of the 'frame' of performance have been exited, they can be released. The musician, whether solitary, performing in a small ensemble or

contributing to a larger one, proceeds onto a public platform of some kind, observed and heard by an audience that sits – or stands (and this usually depending upon economic circumstances) — and attempts to communicate a 'whole and entire' conception of the musical work.

There are many ways that this can be done, and artists of a more experimental bent have attempted to interrogate this 'frame of the performance' experience through such processes as enabling audience participation, speaking to audiences, using the recording studio as a creative space and making public the creative collaborations between performer and composer. But the basic paradigm of the 'concert' has changed little; what is beginning to change, however, is the questioning consciousness with which performers themselves enter into that experience. This is an important part of how research in-and-through musical practice has been developing as a discipline and, as previous chapters in this volume have explored, questions posed through the experience of the artist can revivify aspects of all our questioning.

However, there is a set of dark and difficult questions to explore as well, and no account of the artist's experience would be complete without reference to these. Any attempt at candid exploration of these questions requires courage. It demands that we question our attachment to what Theodor W. Adorno called 'phantasmagoria', and engage instead in a search for 'truth content', for the imprint of the 'real' upon the materials of artworks (Adorno 1981, pp. 85-96). This aim may be laudable, but it also opens up for scrutiny the ideological battlefield between music scholars and practitioners, one of the sources of doubt and vulnerability. While doubt may be an important driver for developing a sense of inquiry and recognising the open-ended nature of many questions, it can also have a devastating impact upon certain performers. This contributes to the powerful myth-making surrounding the musician that has gradually coalesced into a grand narrative of the inspired/demonically-possessed virtuoso. This narrative can empower, but which can also be a trap, as our opening discussion of myth has demonstrated.

But let us backtrack for a moment: why is Adorno's thinking about art in general of such potential importance to scholars and artists? First of all, Adorno is interested in how art speaks to us, in its 'epistemic character' (*Erkenntnischarakter*), and how, through this, art can be revelatory about social reality. For Adorno, the non-conceptual aesthetic content of art is, therefore, the only thing capable of keeping alive the hope for a better world – the broken dream of utopia and promise of humanism.

In Adorno's view, musical material and musical form are inextricably fused through dialectical processes of mediation (*Vermittlung*). In a work that is conceived with historical integrity, the material conveys a sense of its historical origins; in a sense, it is pre-formed within the crucible of its own history. The principal difficulty, which relates to form, is that of creating integrated works out of material that inevitably reflects cultural disintegration. In addition, there is an underlying agenda which seeks to preserve the material from commodification (*Verdinglichung*) or at least to generate a sensitivity to the objectifying nature of the culture industry. This is important because, for art that fulfils Adorno's criteria for historical integrity, such commodification is a serious threat. The concept of 'naming' or 'labelling' (perhaps

more appropriately, 'branding' in the twenty-first century context) is an acquisitive and grasping one that robs the material of its historical vitality and generates a language of illusions. For Adorno, the utopian totality which the culture industry seeks to promote is a terrible illusion, a grand lie; the only truthful conception of totality is of a fractured and alienated society. Those charged with trying to understand this are left to survey the ruins.

So, in music, the truth lies in the manner in which the musical fragments trace a social totality of disintegration (*Logik des Zerfalls*). The inaccessible nature of much 'modern music' illustrates all too well the problematic nature of this situation since the implication is that the 'new' music must assimilate within its sounds and structure a sense of societal fragmentation that will, in turn, render it refractory to that society. In so doing, the music generates its own resistance to commodification, and is thus more freely expressive of its own 'truth content'. This means that the moment of reception thus becomes charged with the potential for vehement resistance to the work, the 'rage of Caliban' looking into the glass.

In understanding Adorno's stance, we need to take into account the relationship he traces between reification and commodification. Adorno's conception of reification, the turning of an object into a thing, its historical objectification, is shaded and intricate. By contrast, commodification might be summarised as the introduction of these 'things' into the world of exchange. The move from reification to commodification is then presented as an ethical slippery slope. With some exceptions, performance to Adorno generally represents a false world of pseudo-wholeness, and this is an unethical deception in its concealment of modes of production – its phantasmagoria. He finds redemption not in completeness, but in the fissures within a work, and in the fragmentary remnants of artistic and ideological life-projects which they represent — the spaces between the ruins.

For performers of modern music, this has profound ramifications for their music-making. The repertoire exaggerates the problems. In essence, the performer must grapple with the irremediable impossibility of performing repertoire in an entirely historically responsible way, since a 'falsely' whole performance could be seen as a kind of moral defeat. This realisation does not come without the cost of a certain amount of pain or *angst*. However, the angst itself *matters*, and it should bear analysis. Perhaps both performance and scholarship have, until recently at least, had vested interests in keeping this performative aporia concealed. But this vulnerability is actually at the core of many questions about music making, so it is fitting that contemporary musical thinkers should ask us to open this hidden world:

> Music's cryptographic sublimity is a contributing force in the clandestine mysticism that appears as a bystander in musical hermeneutics, just as music's ineffability is what allows musical hermeneutics to exist. Music is ineffable in allowing multiple potential meanings and demanding none in particular, above all in its material form as real music, the social event that has carnal effects. The state engendered by real music, the drastic state, is unintellectual and common, familiar in performers and music lovers and annoying nonmusicologists, and it has value. When we cannot stare such embarrassing possibilities in the face and find some sympathy for them, when we deny that certain events or states are

> impenetrable to gnostic habits, hence make them invisible and inaudible, we are vulnerable. (Abbate 2004, p. 534)

Adorno's collaboration with Max Horkheimer generated *Dialetic of Enlightenment*, in which we are reminded that '*Alle Verdinglichung ist ein Vergessen*.'[22] (Horkheimer& Adorno 1947, p. 230). This gives us a clue that musical scores themselves are against memory. The score, in Adorno's view, may have a superiority to performance, yet scores themselves are full of lacunae. Another of Adorno's collaborators, Walter Benjamin, might have said that to perform a work repeatedly – to replicate it – is to rob it of its aura, something that he did not regard as negative, but as potentially instructive. It is by way of the score as rigidified object 'in space' that the work as fluid process emerges 'in time' through interpretation. In considering performance, we could also refer back to Adorno's idea that reification is a condition of *Mündigkeit* (which he defines as 'coming of age'). This actually takes us back to his work with Horkheimer, which produced the first analysis of the idea of 'culture industry'. Musical scores, vehicles for *Mündigkeit*, encode this historical phenomenon in a remarkable way. The emergence of artistic research may, in turn, be a 'coming of age' if this involves multivalent approaches, uniting peformance with hermeneutics in seach of a new kind of 'passionate metaphysics' (Abbate 2004, p. 514).

The Performer and the Objective/Subjective Problem

> Secret of interpretation: controlling oneself, yet not making music against oneself. One's own impulse must live on even in its negation. This is precisely where the performer's strength lies.
>
> Theodor Adorno, *Towards a Theory of Musical Reproduction,* 2006, p. 127.

Artistic researchers, and those who work with them, need to develop a reasoned approach to the emotive aspects of this dilemma. The synthesis involves an understanding of personal narratives, but we need to go beyond reading these within the carapace of the phantasmagorical. This is difficult, and can lead to a retreat into the mastery of surfaces. For performers, there can be something contradictory in the willing confrontation with the emotional and mental challenges, and even the physical rigours, of musical training on the one hand, and the development of a necessary and apparently 'easy and transcendent' technical mastery on the other. Indeed, this contradiction can make an over-emphasis on the latter very enticing. Can we remain present in the brief moment between the experience of difficulty and our flinching away from it — whether that flinching away involves physical distancing, or rationalisations, denial and concealment? What might we find in that gap? Schopenhauer wrote:

> We complain of the darkness in which we live out our lives: we do not understand the nature of existence in general; we especially do not know the relation of our own self to the rest of existence... But the truth of the matter is, I

[22] 'All reification is a forgetting' as translated by Edmund Jephcott in Horkheimer & Adorno1947, p. 230.

> fear, that all we complain of not knowing is not known to anyone, indeed is probably as such unknowable, i.e. not capable of being conceived. (Schopenhauer 1970, p. 25)

This précis of what we might call the 'dark side' of tacit knowledge provides us with both disillusionment and hope. Though we cannot reach the essence, the totality of things, in Schopenhauer's view, we can be vouchsafed glimpses through our experience of art. Those glimpses, those tiny rays of illumination, for Schopenhauer at least, are part of redemption; indeed, his view would be that without such pain, human transcendence from mere slavery to the Will would not be possible. His is a pessimistic world view, but enlightening to those of us seeking to understand tacit knowledge. Some of the transformative glimpses of these frail utopias in music occur where musical performance and speculative philosophy meet in the Being and Doing of the artist.

Why perform?(subtitle:11 points?)

> The great big gap between what a performance is to people inside and what it is to people outside conditions all the thinking about performance.
>
> Richard Schechner, *Performance Theory,* 2003, p. 300.

One line of questioning might be to consider the origin of the musical impulse: Why do some individuals want to perform music? This can be explained, in part, through a need to embody — literally to become — that which is heard, to BE the music. It is a visceral, deeply-felt, sense of needing to become at one with the sound-world of the musical object. This is NOT the same as the need to understand the score, since the latter does not imply a need to merge with the musical object, but almost the reverse: to be able to study the object from a distance. Developing either of these approaches to a high level of sophistication requires an enormous amount of effort over a period of years; yet each field exacts from its participants a kind of virtuosity, without which either enterprise might be labelled a failure. The virtuosity of the individual involved in the musical sciences pertains to achievement within written and spoken language, and/or within the manipulation of analytical systems which employ written symbols and signs. That of the performer involves execution; 'doing' is what matters. As we have seen in Chapter Two, however, these contrasting kinds of subjective experience — the one detached, the other engaged — can create divergent and highly territorialised research spaces.

Consider the process of musical study. When a practicing musician and a scholar talk of 'reading the score', they are probably not speaking of the same process. A practitioner will usually set the score up and play through what he or she reads as well as they can on the first attempt. The ability to do this is, of course, far from consistent amongst musicians, since some cannot make the immediate kinetic connection between print and action, and others do not read music at all. A scholar may also read music in this way, but is just as likely to study the score in silence, or through

‘listening’ to the realisation played out in his or her inner ear and mind. Whatever the case, the experience of the music as a set of real and intricate acoustic perturbations delivered in ‘real time’ is, ostensibly, one of the key elements that distinguishes performance from other areas of musical inquiry. This creates an enormous perceptual and experiential gulf between the disciplines.

Music is not only inscribed into a score; to be fully-experienced, it has to be performed which entails its being inscribed into the body of the performer. In that sense, the relation between score and performance can be reconsidered as the relation between extended inscription and embodied inscription. Music, when fully-realised in performance, is embodied, gesturally memorized, spatially present in its bodily inscription and ‘outed’ in the particular performance. The embodied inscription is not materialized, but part of the experience of the performer, involving memory and anticipation, reflexivity and dynamism. Art manifestations are expressed, experienced or understood by way of bodily inscription. Artistic performances — dance, music, drama — unveil part of this embodiment while, in visual art, the artist's body has retired from the art object — leaving only traces. Each performance is homologous, but never homogenous, with every other performance, since time, place and performer change. The performance itself remains ephemeral, unless recorded by technological devices.

The study of live performance does not involve just ‘music’, but also the imperfect beings making that music. One of the ironies of performance is that, in the conventional concert-hall version at least, at the precise moment of endeavouring to communicate some kind of artistic outcome, the performance must conceal much of what brought the performance into being in the first place. A creditable performance belies the remorseless regimen of practice within the years of the musician’s ‘novitiate’ upon which is built the edifice of a professional-standard rendition; it conceals the hours, days and months taken to prepare the interpretation of a specific work for a public concert. For those who must memorise, it also effaces awareness of the existence of the written score — unless memory fails, in which case, the spectre of the score looms up mercilessly in its mythical but unforgiving perfection.

So, for artists, the artistic manifestation is the outcome of a long, hidden process and is only selectively revelatory. The vulnerable artist may be torn between the instinct for self-protection and the quest for perfection, since ‘failure is not an option’. The artist balances on the edge between the private and the public. When the necessary concealment is perfectly executed, live performances appear to happen in a context of direct, unmediated communication with the audience. The performer, in his or her practice, 'embodies' the artwork. The body of the performer is the beating heart of the art, the fine-tuned medium, embedding and conveying the artistic content. The body is the performer him- or herself, opening to us a world of virtuosity and wonderment, aiming to surpass banal expectations, but, at times, painfully vulnerable.

Artistic vulnerability arises within the relation between the artist, the artwork and its underlying tools and materials. The precarious relation between body, material and artistic outcome has to be continuously kept in balance, but a sustained incorporation and embodiment of acquired skill leads to an apparently seamless integration of these

elements. For example, musicians, in a very real sense, physically connect to their instrument: the expert violin player and his violin fuse together in the moment of artistic performance; the duality of human being and instrument is exchanged for the unique experience of one extended subject. The same happens in other arts: the experience of the material, its resistance, its texture, its warmth, and the ineffable way of handling it in the act of creation, merge into one embodied and holistic experience. The fusing together of the bodily capacities of the artist with the material and aesthetic possibilities of the tool, can thus lead to an unexpected qualitative outcome, exceeding the limitations of both the body and the tool, transcending the simple combination of human capacities and material possibilities. But vulnerability threatens, always present in the tension between expectation and realisation, between gesture and material response, between a growing artistic mastery and a failing capacity to articulate it.

Always haunted by physical vulnerability, the artist has to cope with the limits of the body, with illness, ageing and decline. If one finger fails, the pianist collapses; with one bad movement, dancer breaks down. This physical vulnerability is also part of the mind-body interaction: memory can fail, psychomotor circuits can get stuck, and emotions can play havoc with interpretation. But at the same time, the performer's body is the artist's source of power, engaged in the enacted representation of an artwork, and as such, protecting that artwork, limiting the experience of it to what the artist wants to show, hiding possible imperfections, private feelings, the side-effects of bad rehearsal and the slow predations of age. The artist needs to operate in a context of trust in order to offer the spectator uninhibited glimpses of artistic practice. The performer's relation to his or her body urges a relational and dynamic view of the temporality and spatiality of artistic experience; place and trajectory, continuity and discontinuity, focus and background remain in a dialectical but dangerous relation to one another within this world of reception.

If we wish to understand all of this better, we must involve performers themselves. This means, in turn that performers must shoulder some responsibility for reflecting upon the domains of tacit and embodied knowledge in which they work. Their reflections may, or may not, remain implicit — and even invisible — within the artistic outcomes they produce, but their delineation as researchers will differ according to their choices. Disciplines relating to performance need to continue to strive to work beyond their customary ideological horizons, while understanding that factual knowledge is not the same as the numinous ‘knowing’ of performance. And performance also needs to be willing to learn from the world — from other disciplines, other modes of thinking — and not to hide exclusively behind its phantasmagorical screens.

An important aspect of the performing musician’s learning process takes place through repetition. The musician generally undergoes a period as a novice in which the acquisition of increasingly sophisticated physical skills, achieved through repetition of specific materials (scales, chords and so on) becomes a passport to higher levels of achievement in both the physical and artistic realms. Some musicians are able to achieve a fusion of these (indeed, a fortunate few appear to possess this as a specific aspect of their ‘talent’) but many do not, and are trapped in the world of

‘repetition’.

Scholars learn and develop through reflection. In thinking, the scholar-musician may share something of the performer or composer’s experience of numinous creativity, since thought, in its purest essence, is almost as difficult to pin down through written language as is musical experience. However, it is the task of the scholar to develop languages to illuminate this essence; while the performer’s task is NOT to explain through writing or speech but to execute a musical performance. Moreover, the execution itself is not necessarily, or entirely, about exegesis; a fine performance may feel as though it ‘reveals’ a work to us, but far from stripping it thereby of its mysteries, it may actually reinforce its ineffable qualities. The divergence in the experience of the performer and the scholar at the ‘vanishing-point’ of numinosity is thus a locus of fissure, an experiential divide creating a mutually exclusive sense of territory. Once perceived, these boundaries are guarded, often jealously.

We should not be resigned, however, to accepting that the ideological gaps between practising musicians and those who reflect upon music without performing it are unbridgeable. Indeed, there has been a strong post-millennial strand within musicology which questions the fixation on scrutinising scores and recordings — on treating musical works as artefacts, rather than events. In ‘Music – Drastic or Gnostic’, Carolyn Abbate asks us to consider again the primacy of score-based approaches to scholarship, appealing for

> a practice that at its most radical allows an actual live performance (and not a recording, even of a live performance) to become an object of absorption.(Abbate 2004, p. 506)

She goes on to present arguments that could form the basis of a credo for research in-and-through musical practice:

> Musical performance on the whole, however, has been seen, analyzed, and acknowledged, but not always listened to, and if the pleasure given by operatic singing has had a sharp profile, the consolations and disturbances attendant upon musical performance in general have not (...) But there is something about the objective mode that seems to protest too much, bypassing the uncanny qualities that are always waiting nearby in trying to domesticate what remains nonetheless wild. Actual live, unrecorded performances are for the same reason almost universally excluded from performance studies; they, too, remain wild. (Abbate 2004, p. 508)

This is a call for a re-vivification within musicology itself, moving beyond the mid-twentieth century model of academic musical criticism and hermeneutics, an approach which was taken up with great rapidity by the educational establishment, given the relatively straightforward way in which it could be mapped onto scientific paradigms. Within this hermeneutical framework, the study of live musical performance, with its intimidating subjectivity and its worlds of tacit knowledge, was all too easy to leave aside for less hazardous domains:

> Because live performances give us pause, we must consider the exclusions and stratagems entailed in reverting to souvenirs, to musical works in the abstract and their forms or meanings. It is to ask why the academic discourse devoted to

> music, whether hermeneutics' search for musical traces of, say, post-Kantian subjectivity or formalism's search for tonal patterns, is comfortable with the metaphysical and abstract and uninterested in the delivery systems that bring music into ephemeral phenomenal being. Turning towards performance means scrutinizing the clandestine mysticism involved in musical hermeneutics because clandestine mysticism could itself be seen as a reaction to forces in play during musical performance... (Abbate 2004, pp. 513-514)

Abbate proposes that musicology's failure to address performance demonstrates a lack of critical nerve, and that its written languages have been developed precisely so as to provide a carapace against the capricious world of performance and the disquieting emotions it can engender. But despite her eloquence, and the ethical nature of her arguments, we should not necessarily assume that musicology as a discipline will follow her clarion call. She may also under-estimate both the extent to which live performance *can* be pre-determined, and the will of performers, who generally have a strong sense of what they wish to achieve — whether that sense includes transcendent musical communication, or merely focuses upon executing a note-perfect performance in order to advance to the next round of yet another competition.

The expectations of … the artist and the audience

> When I write, I do not think of the reader (because the reader is an imaginary character), and I do not think of myself (perhaps I am an imaginary character also), but I think of what I am trying to convey and I do my best not to spoil it. When I was young, I believed in expression. (…) I wanted to express everything. I thought, for example, that if I needed a sunset I should find the exact word for a sunset — or rather the most surprising metaphor. Now I have come to the conclusion (and this conclusion may sound sad) that I no longer believe in expression: I believe only in allusion? After all, what are words? Words are symbols for shared memories. If I use a word, then you should have some experience of what the word stands for. If not, the word means nothing to you. I think we can only allude; we can only try to make the reader imagine.
>
> Jorge Luis Borges, *This Craft of Verse* 2000, p. 117

The institutions of society tend to attempt to capture and preserve the objects of art. The artistic object refers to something static, to reification, to the transformation of an artistic act into a thing, disregarding the idea of art as process. In that sense it is an ontological fixing: the articulation took place once but, from then on, remains unaltered. The institution of the museum points up this idea in a very sharp sense: we look at art objects as spatially and chronically articulated and objectively describable. We forget that by approaching the art object, the object manifests itself to us and we interact with it in different subjective and objective ways. The artwork as a fixed entity is an illusion, being part of interactions:

> Dialogically, then, all art is interactive — the artwork exists somehow between

> 'object' (in the widest sense) and 'viewer/experiencer', so that an object might exist but its value doesn't, except in that it is viewed and on viewing alters. (Fenemore 2007, p. 38)

The art object itself is pure ontology, without value, as value emerges only in the dialogical interplay that accompanies the art process. Museums preserve, eliminate dynamism, often substituting in its place technical mechanisms to foster ‘interaction’. But the nature of the artwork is imperilled.

The vulnerability of art does not disappear with the advent of new technological means. Much art nowadays exploits and explores new, digital and computerized technology. In doing so, it raises questions about the status of the artist and the status of art:

> In treating it as art we have tended to weigh it down with the burden of conventional art history and art criticism. Even now – and knowing that the use of computing will give rise to developments that are as far from conventional art as computers are from the abacus – is it not too late for us to think of ‘computer art’ as something different from ‘art’? As something that perhaps carries with it parallel aesthetic and emotional charges but having different and more appropriate aims, purposes and cultural baggage. (Lansdown 2002, p. 57)

In a sense, though, art has always been intermeshed with new technologies. Each new material or scientific discovery is reshaped into a human aesthetic project and/or object. Steel manufacture led to the Eiffel tower; printing techniques and the printing press precipitated the freedom of writing; the manufacture of ready-made oil paints in tubes facilitated landscape painting, leading to Impressionism (McIver Lopes 2004, p. 106). Digital art is just a further articulation of art, using new materials, incorporating them, adapting them to the artistic transgression between the real and imaginary, using them to give shape to the virtual and creating the illusion of another world in which to live, and with which to interact. Digital interactivity can be limited to the creation processes of the artist, but can also be opened to the spectator, allowing him or her to be a second artist, engaging in multiple narratives or performative pathways. The spectator can lend his or her interpretational processes to a virtual realm which is superimposed on the real and the imaginary. For the artist, all media can be used in a kind of *bricolage,* mixing gesture, movement, sound, drawing, writing, and images. But, being accessible to all, being part of a broad range of possible *bricolage,* these new technological innovations also bring the status of the artist into question. Once again, the artist has to prove his or her artistic virtuosity and poetic disposition.

There is also a broader dimension to this vulnerability of the artist towards the audience, and it offers one of the survival mechanisms used by artists. Artists, like other people, develop their activities and interests inside society as a whole and thus acquire *habituses* proper to their society. As the artist moves inside an artistic domain or community, with its inherited actions and interpretational patterns, he or she will consciously and unconsciously, and in implicit and explicit ways, absorb these techniques, interpretational styles and particular knowledges. Different schools and currents of art, existing artefacts and performances, different 'masters' and pedagogues will influence the artist's actions and offer a basis for cognitive and motivational structures, kinesthetic and aesthetic patterns, and durable and adapted dispositions,

within the limits of socio-historic conditions. According to the expectations of the artistic milieu and society, the artist will acquire an *artistic habitus* which

> tends to favor experiences likely to reinforce it … to protect itself from crises and critical challenges by providing itself with a milieu to which it is as pre-adapted as possible. (Bourdieu, 1990, p. 61)

The artist internalizes the artistic socialization processes and benefits from their objective potentialities, from the fact that they contain things to do or not to do, to say or not to say, in the face of probable situations.

As a case study, let us consider an artwork which makes notable use of modern technologies and in which the artist makes conscious use of both these and her identity and experiences as a representative of a particular nationality and gender to construct her artistic habitus.

Public acceptance, extending the limits of the world (subtitle: 11points?)

> The angel is that which unceasingly passes through the envelope(s) or container(s), goes from one side to the other, reworking every deadline, changing every decision, thwarting all repetition.
>
> Luce Irigaray *An Ethics of the Sexual Difference* 2004*,* p.15.

Shirin Neshat's *Turbulent* (1998) is a double black-and-white video, simultaneously projected on opposite walls. The opening screens show Latin and English introductions on one side, Arabic and Persian on the other, engaging the spectator immediately with the metaphor of the Tower of Babel and the phenomenon of multiple languages. These tensions, all too present in the world, are artistically 'fine-grained' in the work. The tensions grow, and take deep and disturbing dimensions as one screen reveals a veiled woman, standing with her back to the camera, while the other shows an audience of uniformly dressed men. On the latter screen, a male performer, his back to the audience — facing the camera — starts singing classical Persian songs with a soulful voice. The love song's lyrics are from the thirteenth-century poet Rumi and are religiously inspired. The intensity and passion of the songs seem to encapsulate a whole life, a whole world, including love and suffering. They poignantly draw in the real spectator as well as the audience of men in the video.

The song finishes and the audience applauds, but the singer ignores it and looks at the other side of the wall where the veiled woman stands. His glance offers a sign of hope, of respect, at least from this one man. In contrast, the female singer is dressed in a chador and addresses an empty auditorium. The spectator looks through the eye of the camera at the back and the sides of the woman, never able to unveil her face. She starts to sing, she cries, she utters guttural sounds, coming from her inmost being, pregnant with a sense of injustice, sorrow and suffering. Her song is one wordless and 'world-less' lamentation, her passion is raw and desperate. There is no one to hear it; yet, the whole world hears it. She stands, full of the power of existence. The dualities are poignant: men versus women, face versus back, audience versus empty

auditorium, love song versus lamentation, words versus sounds. The intense music fuses with the images and the spectator becomes a committed witness to this confrontation between world and art.

The creator of this work, Shirin Neshat, is an Iranian visual and video-artist, living in the United States. In Iran, women are forbidden to perform, to sing, in public; they have to abstain from expressing themselves, and are excluded from the public world. Nevertheless, they are powerful in their being women, in their caring and crying, seeking a voice, even without words. They must improvise their freedom and their destiny as women in the limited space of the world that is available to them. The work of Shirin Neshat does not show weak, suppressed women, but rebellious and strong humans, carrying with them their experiences and knowledges, determined to transmit them in some way and to open their boundaries through idiosyncratic means.

> Part of me has always resisted the western clichèd image of Muslim women, depicting them as nothing more than silent victims. My art, without denying 'repression', is a testimony of unspoken female power and the continuing protest in Islamic culture. (Shirin Neshat, 2003)

In the quotation at the head of this section, Luce Irigaray writes about women who persist, who weave life together, just as Penelope repeatedly wove, and then by night unthreaded, her tapestry, while imagining Odysseus' experiences. Artist researchers resemble women in their search for enfranchisement, operating without a fixed territory, going between and bridging worlds, questioning, extending and caring for the world.

Artists cannot be certain of their place in the world, as they strive to open closed gates, move boundaries, search for details in the whole. The same is true for artist-researchers, since they take their artistic identity with them in-and-through their research, leaving some trace of creation, some rebellious act, a shared or engaged artistic, epistemic or emotional passage, both in their artwork and in their research trajectories.

> we are voyagers, discoverers
> of the not-known,
>
> the unrecorded;
> we have no map;
>
> possibly we will reach haven,
> heaven.
>
> (h.d. *tribute to the angels*, 1997, pp. 58-9)

Artistic research and the artist's vulnerability (subtitle: 11 points?)

Without artistic research, the performer remains a cipher to the researcher. An inclusive world, involving deep understanding of live performance in all its guises, must not focus exclusively on the ideal. It must encompass the pianist who has a memory lapse and stops, the quartet that plays out of time because the 'cellist has forgotten to take his beta-blockers', or the trombonist at the back of the orchestra, going slowly deaf. It must ask questions about the training of musicians, about the mysterious and largely unregulated processes that occur within the private studios where one-to-one teaching takes place.

Artistic research offers new possibilities to the artist in society. As we described in preceding chapters, the articulation of this commitment is natural to some artists and not to others. The question of the vulnerability of the artist-researcher uncovers double roles and expectations for the artist, balancing between new objective understandings and hidden subjective and personally situated aspects. It may indeed become a double edged sword: offering new narratives, a space for reflection, revelation, exchange and transmission, but by way of these, also unveiling parts of the normally closely-guarded internal world and processes of artistic practice. Retracing the trajectory of artistic creation can be disturbing, allowing a public glare into a private world; for some artists, it could potentially mean translating their inner doubts and frustrations, the personal inquiries, into a problematized, scrutinized sphere.

The strength of the artist-researcher lies in his or her capacity to reinvent social relations, to create new knowledges, to affect an audience in new ways and to reveal different meanings and intellectual observations. As such, artistic research offers a space for an exchange of subjectivity and objectivity, with each research process being unique, embedded in a specific relation between artist, materials and context. A new narrative, which retraces the artistic processes and doubts, the intellectual wanderings and subjective choices, may reveal the knowledge embodied in the artist and show how this takes a personalised form, and how it becomes multi-faceted and idiosyncratic. Looking at the hidden dimensions behind artistic outcomes will foreground the issues of the body, the relation of artistic knowledge to other knowledges, and its relation to identity.

> The interplay of ideas from disparate areas of knowledge in creative arts research creates conditions for the emergence of new analogies, metaphors and models for understanding objects of inquiry. Hence the capacity of artistic research for illuminating subject matter of both the artistic domain as well as that belonging to other domains and disciplines of knowledge. (Barrett and Bolt 2007, p. 7)

But is there a danger that the artist-researcher him- or herself will become vulnerable to criticism, and controlled by official power structures? Will he or she not be criticised by academic and artistic audiences for intellectual *bricolage*, for browsing in other territories of knowledge and explanation and making impudent incursions across the boundaries of different languages? In the final chapter, we shall examine some of the implications for artistic research as it seeks to establish itself within the prevailing society; some of the consequences of its outputs for that society and some of its potential consequences for the art itself.

image

Chapter 6. Why artistic research matters

In this book, we have explored the nature of the research space that exists for the artist and have discussed a number of possible articulations of the 'cognitive, embodied and aesthetic inquiry' that the artist might make into his or her own domain and practice. In Chapter Two, we considered the divide between art and science, which upon close examination is not as profound as often thought, and proposed an open approach for artistic research, drawing on both traditions as appropriate. We then traversed the unfenced terrain of the potential territories for artistic research in Chapter Three, encountering their richness and openness, but also noting the confusion and the non-linear trajectories of its epistemic, aesthetic, embodied, individual and social aspects. In Chapter Four, we developed further the idea of openness and fluidity through the metaphor of a ship setting out on the ocean of exploration, showing how the artist-researcher might navigate the constraints of his or her practice, the conditions of society and the judgement of academic research, thus opening the way for different research practices. Chapter five ventured into the dark side of the artist and his or her continuous (re-)negotiations within a human world, characterised by the ceaseless quest for meaning and signification and continual negotiations with conditions of vulnerability. In this final chapter, we will begin to place all these ideas into context by considering the wider social implications, the cognitive and aesthetic merits of artists' articulating their own artistic research trajectories, as well as the dangers and pitfalls of the potential institutionalisation of this practice. To facilitate this survey, the history of the relationship between artists and society will be briefly sketched, followed by a set of evaluations concerning the contemporary social situation as it relates to artistic research. Finally, we present an open manifesto for artist-researchers.

Artists and society: from court protection to knowledge-based institutions

> Art, or more broadly, culture, is always implicated, for good or ill, in the operation, manipulation, and legitimation of regnant social orders.
>
> Judith Kapferer, *The State and the Arts,* 2008, p. 5.

> (…) the production of knowledge cannot be divorced from its context. Knowledge networks are a form of power. The contest of ideas and battles to control the terms of policy debate reveal that the utilization of knowledge — indeed, what is considered to be valid knowledge — is a political process.
>
> Diane Stone, *Introduction: global knowledge and advocacy networks,* 2002, p. 9.

In *The State and the Arts*, Judith Kapferer dates the origins of the development of the arts as a collective modern phenomenon to the Renaissance. The situation at the end of the 17th century was one where aristocratic dynasties protected artists but restrained their independence. In the 18th century, this restraint was gradually eroded and eventually overcome, even if contravention of courtly codes was still severely sanctioned, but aristocratic patronage retreated correspondingly (Kapferer 2008, p. 2). The ideals of the Enlightenment and the Age of Revolution opened a rich time for *'hommes de lettres'*, philosophers, scientists and artists, who debated the place and space of culture and the interrelations between ideas, arts and science. However, the public sphere, as a realm for artists and intelligentsia, remained one with limited access, still largely the domain of the wealthy and powerful. This was to change by the end of the 19th century, as artists generally found themselves supported by, but having to appeal to, both a private Maecenas and the guardians of national interest, thus intermingling the private and the public.

Sustained by the fruits of the industrial revolution, as well as by enrichment through colonisation of the world, twentieth-century Europe entered the realm of 'big capital'. A shift from private to public financial support for the arts and culture took place. This shift first occurred at national levels, with the 'national culture' offering a means of showcasing a nation's wealth and reputation and acting as an agency for unity and the preservation of national interests. This, in turn, generated opportunities for a new class of technocrats and entrepreneurs, and for celebrities and ‘stars’ — popular musicians, sport figures, film actors:

> The relation between the state and the arts had been transformed from a discourse on tastes and morality to one of economic rationalism and political collusion. (Kapferer 2008, p. 3)

But this also meant that commodity fetishism entered the aesthetic realm, merging art and capital:

> The association of commercially successful architects and artists with patrons and benefactors is well illustrated by the coterie of financiers, curators, auctioneers, valuers, and dealers engaged in the dissemination of their works. (Kapferer 2008, p. 3)

In late capitalism, art is torn between individualist aesthetic concerns on the one hand, and the pressure of commerce and the culture industry on the other; between 'spaces for contestation and transformation in the interstices of societal orders' (Alain Joxe, in Kapferer 2008, p.6) and the fetishism of culture as market value. The danger is that states not only regulate, but also intervene in the art worlds. As Adorno warned:

> Today manifestations of extreme artistry can be fostered, produced and presented by official institutions; indeed art is dependent on such support if it is to be produced at all and find its way to an audience. Yet at the same time, art demands everything institutional and official. (Adorno 1991, pp. 116-7)

Art and the ‘Knowledge Society’

The relation between the state and the arts has become an ambiguous one, where the two are merged, both in the monetary value and the commodification processes of the market and in the educational concerns of social and cultural transmission. Moreover, political processes, as well as national interests, are shifting towards international interactions and economic arbiters. Knowledge production, consumption and transmission increasingly have their locus in the global economy, where the products enter a decentralized and commodified mode of circulation. Knowledge has become the principal focus of economic and market development in the last decades, leading to talk of a 'knowledge society'.

Is this so-called 'knowledge society' just a fashionable notion, or is it a concept that truly synthesizes crucial socio-cultural developments? It is clear that 'knowledge has always played a role in all human activities and knowledge acquisition and knowledge transfer are among the most distinctive characteristics of mankind' (De Weert 1999, p. 51). Can we then justify the notion of this being the era of the 'knowledge society'? We can, if by this we mean that it is one in which we have seen an unprecedented increase of knowledge in terms of quantity as well as quality, an acceleration of knowledge production, the permeation of all spheres of life by knowledge and the development of knowledge as a key economic factor in the service economy (De Weert 1999). These aspects of a knowledge society were already remarked upon as early as the 1970s by Peter Drucker, Daniel Bell and Alain Touraine. But what exactly should we understand by 'knowledge' in this knowledge society? It is useful to examine the notion of 'knowledge' *tout court*, before reflecting on the impact of technology on knowledge, on knowledge as ‘cultural capital and, finally, on the implications of this for uses of knowledge in educational settings.

Let us first analyse recent shifts in the use of words that sustain, redefine or replace the old notion of 'knowledge', more specifically the noticeable shift from 'knowledge' to 'information' and from 'education' to 'learning'. When authors use the expression 'knowledge society', do they actually mean 'knowledge' or 'information'? The Merriam-Webster Dictionary offers two definitions of 'knowledge:

> 1. the fact or condition of knowing something with familiarity gained through experience or association;
> 2. acquaintance with or understanding of a science, art, or technique.

The primary definition of information is as follows: 'the communication or reception of knowledge or intelligence'. There is a shift from the condition of knowing and the facts of knowledge to the processes of communication, transmission or reception as they are applied to knowledge. Knowledge retains its old connotations of truth, reliability and stability; it is propositional in nature and has a use value. The post-Renaissance image of knowledge had a strong theoretical and disciplined component, aiming at a development of ‘knowers’ and the transmission of knowledge in the form of justified true belief models, mainly carried linguistically, most of the time as propositional information. In contrast, information is not necessarily connected to belief or truth; it is procedural and performative and has an exchange value (Lankshear a.o. 2000, p. 38). There is a tendency to use the terms knowledge and information synonymously, with each concept moving towards the other. Information

is something searched for and explored; it is held in data to be browsed and sifted. 'Knowledge' in the 'information society' has shifted from its participation in a stable order of 'truth', to a form of action, a 'performance epistemology' using rhetorical and normative modes instead of scientific-propositional modes (Lankshear a.o. 2000, pp. 35-6).

The shift from theoretical and disciplinary knowledge to problem-based and performance-related ‘know-how’ is conveyed in the notions of flexible and life-long learning in which 'learning' takes the place of ‘education’. Learning is thus defined as a lifelong process of acquiring knowledge in a context of continuous adaptation and flexible approaches to constantly changing requirements and environments. After ‘education’, ‘learning’ continues in the workplace; it is a dynamic, never-ending process (Garrick & Usher 2000). Knowledge, as contained in the notions of information and learning, has thus entered discourses of flexibility and dynamic performance. It is notable that the ancient Greek taxonomy of different kinds of knowledge — *episteme*, technical knowledge alongside *phronesis*, practical and ethical knowledge, and *techne*, productive and performative knowledge — enters contemporary society in new ways. 'Knowledge' as it is used in different employment sectors is diversified into four flexible components: scientific or technological knowledge — the more 'intellectual' part; market knowledge — knowledge concerning consumption and production; organisational knowledge — concerning networks, collaboration and learning processes; and personal and social skills— concerning communicative and relational abilities (De Weert 1999, p. 61). Art as 'commodified' through its duplication and consumption has already become part of market knowledge, while artistic skills and knowledge have generally remained hidden, accessible only by an educational trajectory and exchanges between insiders. The recent move towards the institutionalisation of research by artists in artistic milieus and education is another way of opening the doors of performance-related ‘know-how’. This contributes another multi-faced aspect to the field: artistic skills — concerning personal artistic trajectories and their interrelatedness with science and other forms of knowledge.

These changing notions of knowledge are driven by technological innovations, growing leisure time, mobility and the globalization of both economy and culture. One of the most pervasive technological innovations is the internet, which has radically altered the notion and expression of knowledge, decentralising its loci, subverting and fragmenting the state and intellectual monopoly on knowledge and vastly expanding the intellectual capital available to the public. On the one hand, it offers a semiotic enrichment of knowledge production, distribution and transmission, using and merging different multimodal bearers — image, text, sound — and encompassing a multitude of subjects now in the reach of a multitude of users. On the other hand, the internet has become a labyrinth of commodified knowledge, interconnected by pre-arranged but heterogeneous links.

This can be considered as a positive move: a new public space, offering new positions of discourse — new language games — renegotiating power relations, offering instantaneous dissemination, exchange and circulation of ideas and knowledge:

> The "magic" and the appeal of the internet is that it is a technology that puts

> cultural acts, symbolizations in all forms, in the hands of all participants; it radically decentralizes the positions of speech, publishing, filmmaking, radio and television broadcasting, in short the apparatuses of cultural production. (Poster, 1995)

However, other voices critique the technologically-mediated realm of the internet and the growing institutionalization and commodification of knowledge as a pervasive 'consumption- and entertainment-driven technoculture', regretting the demise of the public sphere as a place of freedom and contestation, of practices of self-presentation and display and of participatory equality, open questioning and critique, in a context of inclusivity and rationality (Dean 2003, pp. 103-4). Others, like Manuel Castells, take an intermediate position, recognising the problem of domination and control, but at the same time pointing to the new possibilities that arise from re-combining different modes of expression and communication, organizing and mobilizing, as well as connecting and integrating, people of different classes, cultures and origins (Castells 1996, 1997, 1998). Exchanges of knowledge offer possible dialectical spaces, between domination and emancipation and between homogenous and heterogeneous processes. The internet, as such, is an inclusive sphere and can offer information of and access to other media and cultural manifestations — books, concerts, music, art and new artistic formations. Such democratization and diversification dilutes, but is unlikely to entirely supersede, the notion of 'cultural capital'.

How does society fix and reproduce its social practices? Knowledge about the social world is realized by acquiring social representations on the levels of reflection, practice and communication. Society imprints itself on the individual, often imperceptibly, by repeating social practices, responses and experiences, patterns of conduct and lifestyle. Social order imposes itself on the body, and compels it to act in particular way, depending on time, space, circumstances, and the notion of 'the other' (Coessens & Van Bendegem 2008). Habituated, embodied and social practices merge in such a way that it becomes impossible to separate personal bodily practices from social patterns and vice versa. They form a kind of collectively-embodied knowledge of how to behave, how to understand, and how to think about the human world. Part of these socially imprinted structures and schemes can be considered as 'cultural capital'. Especially relevant here are those visible and invisible elements that concern information, education, perception and practices of the cultural world —'subtle modalities in the relationship to culture and language' (Bourdieu 1977, p. 82). The notion of 'capital' means that acquisition and possession of these 'goods' secures a return; they possess a value, are worth the investment. The possession of capital offers a certain prestige, respect, power, and advantage in society; capital also posits the notion of ongoing, profitable exchange. Capital, whether financial or cultural, is not biologically defined or given, nor is it freely accessible to all: it is transmitted and accumulated across generations. Consequently, it is potentially subject to monopolization and unequal distribution, and will thus tend to be unequally transmitted and acquired:

> The value of cultural capital in not only dependent on the field in which it is produced, but also through the institutional and social contexts in which it is received and circulated. (Barrett & Bolt 2007, p. 8)

Cultural capital may be divided into three layers. *Objectified* cultural capital concerns the materialized or objectified form of culture: works of art and cultural goods such as performances, books, music and artefacts. *Institutionalized* cultural capital refers to those recognized elements, often designated by educational qualifications, that grant cultural status: diplomas, prizes, awards and reviews. These are published, commissioned, funded or granted by political and social institutions. The last layer, *embodied* cultural capital, concerns the interiorized or embodied aspects of cultural practices: embodied practices and patterns of thought concerning cultural values and attitudes. Translated to the domain of artistic practice, it refers to the artistic knowledge, creative abilities, interpretations, values and dispositions of individuals and communities that emerge from, and relate to, artistic production and manifestation (Barrett & Bolt 2007, p. 8).

> Embodied cultural capital merges representation and corporeality. It is produced and reproduced by emulation, of people, images and practices; and confers traits signifying the cultural value of their 'owners'. (Hill 2003, p. 165)

Artistic research clearly implies the articulation of embodied cultural capital, of the ‘generative and performative dimensions of making art’ (Barrett & Bolt 2007, p. 8). As such, it expresses and objectifies resources and schemes of appreciation and understanding that can broaden and reposition the relationship between artists and audiences, composers and performers, artists-researchers and scientists. As society now demands its articulation in the public sphere, this embodied cultural capital will partially take on the characteristics of institutionalized cultural capital. On the one hand, this will put the artist-researcher in the difficult position of bidding for funds and grants, and of depending upon the decisions of official power structures. On the other hand, it will offer some power through unveiling aspects of the hitherto concealed side of embodied cultural capital:

> societies (…) seek to produce a new man through a process of 'deculturation' and 'reculturation'.(…) nothing seems more ineffable, more incommunicable, more inimitable, and, therefore, more precious, than the values given body, made body by the transubstantiation achieved by the hidden persuasion of an implicit pedagogy, capable of instilling a whole cosmology, an ethic, a metaphysic, a political philosophy. (Bourdieu 1977, p. 94)

Contemporary developments in education: what place for artists?

A major challenge facing education in the global era is to cope with the discrepancy between traditional educational settings on one hand, and the all-pervading technoculture and globalization on the other: between the local and the global; between inclusion and exclusion; between the aim for 'capability' — aspects of identity and subjectivity — and 'capacity-building' approaches — investment in social human capital (Garrick & Usher 2000). Whereas, until recently, modern education rested on the idea of 'universal welfare rights', on the 'aims, values and ideals of emancipation and social progress' defended as an 'ethical language game', the new era calls for an 'enterprise' of performance and efficiency, directed to 'means and techniques', tackling world competition and facilitated by a 'technicist language game' (Lankshear a.o. 2000, p. 23). Education thus seems to be struggling with two

different, even opposing demands. On the one hand is the demand to continue the democratic project of modernity, in which education is a public and common good, a guarantee for professional satisfaction, a mechanism for emancipation in the work society — constructed around working time and career patterns — but also based on a bureaucratic model of 'unquestioned routines and pre-established goals' (Terren 2002, pp. 164-166). On the other, education is faced with the new requirements of economic performance and productivity and the necessity of lifelong learning, orientated towards a flexible labour market in a context of commodification and diminished civil commitment. It must offer more dynamic models, open to flexibility and discontinuity, transgressing old institutional and knowledge boundaries and open to more action.

Today, knowledge is moving into contexts of application that privilege performative, heterogeneous and transdisciplinary knowledge, while at the same time being increasingly located, produced and consumed in multiple and diverse settings (Gibbons a.o. 1994). Knowledge production is required to be flexible, problem-solving, transient and ready for commodification. This description glorifies human intellectual capital and seems to offer a technology of success (Garrick & Usher 2000). However, knowledge production is running the danger of being associated with knowledge manipulation, with unbridled commodification, with intellectual alienation, and with human subordination and regulation — as a power instrument. To mediate and cope with 'the gap between the traditional academic values of the university and the market values of the knowledge society' (Sadlak & Ratajczak 2004, p. 436), universities have to participate in wide-ranging networking; they have to move into the world, to associate with different institutions and organisations, non-educational as well as educational. Universities need to connect themselves to 'global knowledge networks' to 'advance, share and spread knowledge' as well as to be 'policy focused' (Stone 2002, pp. 1-2).

Because of this action-oriented concept of knowledge, it has to be continuously updated, renewed and restructured. As education plays a very important role in the transmission of knowledge, its curricula also have to follow this continual updating and reorganising. The flexibility of the 'information age' invades all educational settings. The knowledge society thus unsettles education, which is torn between traditional academic cultures and modernising corporate cultures, and plunged into a crisis of institutional values and identity (Marginson 2000, p. 29). However, if education should succeed in coping with this crisis, the knowledge society offers great positive potential for higher education and universities: they stand to benefit from global relationships, complex cultural and research exchanges, and internet education.

Artistic Research in the Knowledge Society: New Opportunities

All this raises an urgent question: what do these new notions of knowledge imply for artistic education and artistic research? Does the knowledge society offer new opportunities for artists? Can research in the arts alter the dominant fetishism of culture as commodity? Consideration of research in the arts necessarily forces the debate and critique concerning artists and art education in the knowledge society into

the public sphere.

We should take care to avoid considering artistic research by the artist as a *conditio sine qua non*; it is a more delicate and complex issue. We earlier defended the point of view that the question of being an artist and an artist-researcher is not an 'either … or', the artist in his or her artistic endeavour always being, in some sense, an artist-researcher. Moreover, the many examples in the preceding chapters show that we cannot ignore that artistic work and identity is influenced by its inherent research trajectories, and vice versa. For those who reflect on their practice and the relevant research processes underlying it, representation of these through carefully constructed articulations can offer new insights, whether cognitive, artistic, aesthetic, or practical. Articulating these trajectories does not change the fact that the artist is an artist, but it can change how he or she shares, and develops further, his or her artistry. In a territorialized environment, being a researcher and being an artist are two different roles. However, in artistic research, one and the same person should be able to occupy them both. Artists have highly specialized knowledge and highly specialized skills, but as a rule these competences remain within the individual artist who possesses them. At best, we experience the products of these competences when we hear a musician’s performances or compositions, or observe and study an artist’s work. Research should be committed to making this enormous treasure of implicit knowledge and skills of artists as explicit as possible, bringing it out into the open so that it may be better understood and, hopefully, used by others. By helping implicit artistic knowledge to become shared and discussed by others, research will be able to contribute to the understanding of art among the wider population and, consequently, to the promotion and development of the arts in general.

This is not an ‘all or nothing’ proposition: not all artists are interested in research as the means of capturing profound moments of change in how art is practised and why - at least not when such research presupposes a verbal articulation of this ‘how’ and ‘why’. Not engaging in these processes does not mean one is any less good or ‘true’ as an artist; on the contrary, some of the greatest artists, as we have seen, have had a horror of explanations, just as others have felt driven to search them out and articulate them. Moreover, artists may feel at one stage of their artistic development the need to articulate the research dimension of their practice, and then either continue building on this knowledge or engage in something entirely new and perhaps less overtly articulated. After all, Alberti continued to paint, Goethe to produce poetry and Klee to produce artworks alongside and beyond their research inquiries. We must bear in mind that, in artistic research, modes of documentation, presentation and dissemination of the research need to retain their multivalent nature, ranging from public performances, recordings, and multimedia presentations to pictorial works, written texts and spoken presentations, for example. In order to be valid as a research outcome, however, they do need to be somehow communicable within peer communities and, ideally, the wider, public sphere. This inevitably creates tensions.

The difficulties that arise, however, may become a part of the ongoing discourse; for example, in *The Art of Interruption,* John Roberts develops his view of the place and space for the art of photography. He stresses the ambiguities of the position of art and the dialectical polarities of its social function and its immanent resistance to

instrumental reason, of its sharing of a cultural space and its proclaiming of the abstract principle of autonomy. Art offers dialogue and communication; yet it critically counters society's values. It is both submerged by theoretical interpretations and immersed in practices; subservient to power relations, yet 'disconnected from them in the name of the 'free-floating signifier' (Roberts 1998, pp. 3-5). As such, Roberts considers art as 'a form of practical knowledge, an inscription of, and an intervention in, a socially divided world.' (Roberts 1998, p. 4). The artist must negotiate the ideological and material conditions under which he or she works alongside his or her own artistic practice, reconciling its inherent cognitive, embodied and aesthetic inquiry with the wants and needs of his or her audience.

One of the dangers of the current trend in institutionalizing research is that of labelling individuals once more: as an artist, and as an artist researcher. It potentially adds another competitive environment within which acceptance and exclusion may operate: that which sees artists aspiring to research roles, as in academic science, and to the kinds of career trajectories with which such roles are associated. Institutionalization of art practices may close doors to some and streamline and homogenize artistic education into a form which suits the demands of academic curricula. To counter these dangers, artists who are interested and motivated to do research should ideally be free to move in and out of institutional research roles according to the urgency and topicality of their inquiry and the state of their art. Institutional opportunity would thus correspond with intellectual and imaginative research quests — offering a way of testing the authenticity of research questions in relation to practice. One of the merits of this form of institutionalization would be to offer artists the tools, support and background for enquiring into their practices. But it would require immense sophistication within the relevant institution, and fiscal and ideological flexibility between institutions and governments, in terms of control.

The institutionalization of this artistic research in the knowledge society develops in diverse ways. Far-reaching reforms on the European level have made the interaction and collaboration between institutions of vocational higher education and universities not only possible but also desirable — not to say advisable and, in some cases compulsory. These links are forged nationally as well as internationally, and occur on many levels: intradisciplinary, interdisciplinary and transdisciplinary. These transformations in the (inter)national research landscape have been solidified by necessary and profound restructurings undertaken in light of the Bologna Declaration, which have themselves taken many forms.

First, there is a growing level of exchange. Academics, academic researchers and scientists whose subject is already art-related or who have a dual education, are recruited by art schools to help develop this new strand of research: to share research skills, to interact with artists or collaborate with them in the generation of new vocabularies. Artists may develop research skills by these encounters with scientists and academic researchers or by themselves following university courses. Different ways of doing artistic research are sustained by grants, projects and relationships between art schools and universities. The institutionalization of the collaboration between universities and schools of higher education offers the opportunity for artists to engage in research projects funded through the academic route, rather than the state

or commercial arts sectors. This means that a research project in the arts can be done for its own sake and can happen outside the public benefit or market-driven spaces.

As the duration of educational study is rationalised and higher education degrees are streamlined, across countries and across educational institutions, not only Bachelor and Master, but also Doctoral degrees become a possibility within disciplines where this was not formerly the case and in institutions that previously did not provide them. In institutional terms, this means that curricula have been reshaped to create Bachelor degrees which may be either professional or academic in focus, followed by generally more academic Masters degrees. The latter has necessitated devising research approaches and activities for what may nevertheless be practically-oriented second-cycle degrees, a process which has met with varying degrees of success. However, the evolution of academically-oriented Masters curricula based on the premise that research has always been a part of artistic studies, and closely linked to artistic practice, is now an established fact. This, in turn, has meant that it was inevitable that the third cycle — the doctorate — would be similarly affected by the educational transformations, and that artistic doctorates, presenting the outcomes of artistic research, would emerge and develop.

This brings us to our second point: by introducing doctoral degrees in the schools of higher education, emphasis is put on the importance of knowledge-based and research-sustained education. A such, the 'doctorate in the arts' has become a new goal, attainable by highly skilled and gifted artists, whether relatively young and just finishing their arts education, or senior artists, interested in these new challenges and wanting to acquire research skills or investigate and articulate their artistic processes. Before, only the most renowned artists could aspire to the title of ‘Doctor’ and this only by becoming *'doctor honoris causa'*, in recognition of their outstanding contributions to a specific field. This was, and still is, a ceremonial degree, awarded by the university on basis of a proposal and selection procedure managed through university committees.

Now, artists may take a doctorate as a qualification, rather than having to wait in the hope that they may be offered it as an honorary award. A doctorate in the arts is granted following favourable evaluation of documented research achievements. The criteria and conditions which artistic research must satisfy to qualify as doctoral research are, in fact, similar to those of other disciplines: the research project must form an original contribution to artistic knowledge, the research process must be documented and communicated, and it must address a specific question and follow a given method. However, the specific perspective of the research activity is the artist’s point of view. Artist-researchers utilize their own artistry as an essential element of the various research stages: the questions at the heart of the project, the process and the output of this research, therefore, also have an essential artistic dimension to them.

Each discipline, whether academic or artistic, that evolves generates a critical capability with respect to itself. Until recently, artists wishing to go beyond an ‘enquiring mind’ (a necessary, albeit insufficient, condition for conducting research) borrowed their tools from research disciplines which deal with the arts — for example, in the case of music, these would be musicology, analysis, criticism, music

history, music philosophy, music sociology, music teaching, etc. The purpose of facilitating artistic research is to emancipate the artistic discipline itself, enhancing critical reflection upon one's own practice and artistic evolution.

The new doctorates in the arts create frameworks that validate 'knowledge-expanding artistic research' conducted by the artists themselves and provide a dedicated forum for the discussion of such contributions which is separate from those of art critics and theory-oriented art scientists. These doctoral degrees reward not only research but also artistic development and the artist's evolution of high level skills in a specific domain. The research findings, although unique in some respects to the project undertaken, can have an impact on performance and other artistic practices in general and therefore transcend personal techniques, skills and knowledge.

The new doctorates in the arts offer the possibility for artists to instigate research questions and enter a doctoral degree curriculum in order to pursue them. This might involve a young, unknown and, as yet, incompletely formed artist, searching for the consolidation of his or her own artistic voice and questioning deep, potentially disturbing, issues concerning his or her young art; or, it might involve an established artist, reflecting upon and articulating his or her own well-established processes but wanting to develop them further, and in a more overtly articulated manner. Often, in the first case, the inquiry is primarily directed towards gaining more experience; in the second, it is more intensively focused upon the expression and interpretation of existing experience.

Not all results of this kind of research can indeed be expressed through words — more often than not a research project's essence can only be demonstrated rather than told. This works both ways: in the same way that music can transmit something that would be hard to explain with words, words can produce insight and knowledge that cannot be comprehended simply through music. This brings to the fore one of the most significant challenges that artistic research must address if it is to evolve into a lasting discipline: the responsive and responsible evolution of new kinds of language as the means to disseminate and articulate appropriately its domains and discoveries. The challenge of this has been evident in our discourse throughout this book. In writing it, we have frequently found ourselves resorting to sentences formed of lengthy strings of related clauses, images and ideas. In analysing why this should be, we have come to the conclusion that, far from being a mere stylistic affectation, it is symptomatic of the very issue we are wrestling with – the paradox of having to use words to describe a practice that, in its most literal sense, is beyond words. It seems as though, where words are inadequate to capture and define the intended meaning in one deft and precise stroke, the strategy of 'peppering the target' with a sequence of phrases connoting similar ideas may perhaps come close to defining in the interstices of these phrases the very thing which none of them, in isolation, is capable of conveying. But this is only one strategy; artistic research needs to develop many more.

The need for an artistic turn has emerged with a degree of urgency, not just because the knowledge of making and theories of making have been long-neglected in favour of more deductive, scientific ways of knowing. It has also emerged as a reaction to the

degree to which modern culture is itself formulated, regimented and rationalised through science in its application, rather than in its invention. Artistic creativity and, by extension, artistic research focus the possibility of infinite variability within acts of representation and interpretation. If research in general is to deal adequately with human society, it needs to embrace those aspects of knowledge production that deal with human subjectivity and relationships, not as phenomena to be deduced and re-harnessed within human control, but open-endedly, as part of a process of creative construction and interpretation that is relative, specific to context and value-driven.

A MANIFESTO for the artist-researcher:

Never forget the origin:

the artist's experience and

creative act in the world

Deterritorialize the research space

to provide room for the artist's experience and

creations in the world

Search for a possible discourse

appropriate to the artist's experience and

creations in the world

Search for the hidden dimensions and different perspectives

of the artist's experience and

creations in the world

TO BE CONTINUED ...

The Artistic Turn

Acknowledgments

Creating this exploration of the potential for the field of artistic research has involved many individuals in a variety of different roles. Our first thanks go to the Director of the Orpheus Institute, Peter Dejans, whose visionary leadership has provided us with the ideal research environment in which to carry out our collaborative work through the conception of ORCiM – the Orpheus Research Centre in Music. Joost Vanmaele skillfully facilitated the work of all the ORCiM researchers through his characteristically gentle manner, combined with an impressive knowledge of the latest source materials. Kathleen Snyers, Heike Vermeire and Joyce Desmet have provided invaluable practical help during all the time we have worked within the Orpheus Institute, and enabled the ORCiM research group to function through their extraordinary efficiency.

It would have been impossible for us to complete this book without the assistance of Dr. Jeremy Cox, formerly Dean and currently Honorary Sabbatical Fellow of the Royal College of Music, London, who both composed the Preface and made a close reading of the chapters for editorial purposes. We are deeply indebted to him.

We have benefited from working with all of our colleagues within ORCiM: Magnus Andersson, Alessandro Cervino, Paulo de Assis, Hubert Eiholzer, Mieko Kanno, Maria Lettberg, Tania Lisboa, Juan Parra, Vassilis Varvaresos and Hendrik Vanden Abeele. We feel very fortunate to have the opportunity to collaborate with such outstandingly creative individuals.

Our individual and collective understanding of artistic research has also been enriched by individual encounters within the many seminars and academies offered by the Orpheus Institute. In this context, we are particularly indebted to the composer, Emmanuel Nuñes, who revealed to us, with great generosity and courage, some aspects of his creative endeavour.

We are grateful for the collaborative flexibility offered by the other institutions in which we have been employed: the Vrije Universiteit Brussel, the Royal College of Music (London) and the Robert Gordon University (Aberdeen).

We thank our families for their patience during the long days and nights of work which allowed this book to come into being.

Kathleen Coessens, Darla Crispin, Anne Douglas

Ghent, Flanders, Summer 2009