Re-situating Performance Within The Ambiguous, The Liminal, And The Threshold: Performance Practice Understood Through Theories Of Embodiment

Franziska Schroeder

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Thesis Supervisors: Professor Peter Nelson and Professor Richard Coyne

“For questioning is the piety of thought”
(Heidegger 1953)

DECLARATION

I hereby declare that this thesis has been composed entirely by myself.
The thesis has not been submitted for any other degree or professional qualification to this or any other institution.

Franziska Schroeder, July 2006

ABSTRACT

This thesis investigates performance as an embodied practice. It draws on theories of embodiment, which act as a catalyst for thinking about performance, and thus provide an interdisciplinary framework for conceptualising the body in performance.

I explore a discourse that situates performance itself within the liminal, as an in-between condition, as something that does not fit in. I reflect on performances, ranging from music to cosmetic surgery, and I highlight the in-between conditions and the marginalised space that in my view posits performance as multivalent, multifaceted and full of potential. This line of enquiry is informed by my view of the body as a site of change, discord and ambiguity; what one can refer to as the threshold condition, or what Victor Turner calls the "state of betwixt and between" (Turner, 1982, p.17). I take the body as a starting point for this discussion, as I consider the body as a vanguard to providing a different view to the majority of current music and performance writings. I subscribe to the view that the multi-faceted and, at times, highly controversial debate that has been applied to the body, has not been equivalently explored in the discussion of performance.

My background as a music performer who works extensively with new technologies leads me to examine predominantly performance environments that use such technologies. I thus draw on examples from laptop performances and from my work as designer and musician of various performative environments. Other ideas in this thesis are informed by the ways in which I engage with an instrument, prepare for, and think about a performance, as well as from being a listener to somebody else's performance.

A body of writings from various other disciplines forms the backbone to my investigation. I believe that these writings draw attention to essential facets of performance activities and provide different ways of conceptualising performance that I argue are currently under-explored in current music and performance texts.

LIST OF OWN PERFORMANCE WORKS DISCUSSED

IKAS. 1982. For solo saxophone by Hans-Joachim Hespos.

MUSIC FOR SAXOPHONE AND COMPUTER. 1997. For alto sax and electronics by Cort Lippe.

XMESS. 2004. Christmas Collective Laptop Improvisation. SARC, Belfast.

SONIC CONSTRUCTS. 2004. Interactive Lego Installation, (a l a u t project).

A-SYNK. 2005. For Percussion, Saxophone, Live-electronics and Internet Audio Chat, (a l a u t project).

LIST OF PUBLISHED WORKS

The following papers have been and published during my doctoral studies research since 2002:

1) **Schroeder, F., Guest Editor. (2006),** Contemporary Music Review, Volume 25:1/2: *Bodily Instruments and Instrumental Bodies: critical views on the relation of body and instrument in technologically informed performance environments*, Editorial, pp.1-6, Routledge.

Also included in the volume: my paper entitled *The Voice as Transcursive Inscriber: The relation of body and instrument understood through the workings of a machine*, pp.131-138.

2) **Schroeder, F. and Rebelo, P. (2006),** *Wearable Music in Engaging Technologies*: Springer international journal AI & Society: The Journal of Human-Centred Systems, Journal no. 146. ISSN: 0951-5666 (print version) and ISSN: 1435-5655 (electronic version). Springer London. Available: www.springer.com/146 [January 2006].

Previously published in the 2005 Proceedings of the Wearable Futures Conference, University of Wales, Newport/UK

3) **Rebelo, P. and Schroeder, F. (2006),** *Performing the Order: The Messiness of Play:* Performance Research Journal 'Made to Order'; Vol. 11, issue 1, Taylor & Francis Ltd 2006. Available: www.performance-research.net [June 2006].

4) **Schroeder, F. (2005),** *The Deleuze-ian/Guattarian Performance: performancing at n-1 dimensions:* Body, Space & Technology Journal, Volume 8, Brunel University – 2005; ISSN 1470-9120. Available: http://people.brunel.ac.uk/bst/vol05/index.html [January 2006].

Also published in the 2005 Proceedings of the International Computer Music Conference (ICMC), Barcelona, Spain, pp.559-62.

5) **Schroeder, F. (2005),** *The Touching of the Touch – performance as itching and scratching a quasi-incestuous object*:
Extensions: The Online Journal for Embodied Technology, Vol.2 (2005): Mediated Bodies: Locating Corporeality in a Pixilated World. Available: www.wac.ucla.edu/extensionsjournal [January 2006].

6) **Schroeder, F. (2004),** *The Old, The New and the New Old – A Conceptual Approach Towards Performing the Changing Body*: originally at the New Forms Festival, International Festival of Media Arts, Vancouver, BC, Canada
www.newformsfestival.com.

Revived version, December 2005 in Hz, Fylkingen's net journal.
Available: www.hz-journal.org [January 2006].

7) Schroeder, F., Rebelo, P. and Nelson, P. (2004), *Oscillation: Work for Saxophonist, 3D Animation and Real-time Sound Processing Controlled by Motion Capture Data*:
Proceedings of the AISB 2004 Convention, COST287-ConGAS Symposium on Gesture Interfaces for Multimedia Systems (GIMS), pp.64-69. In: "The Society for the Study of Artificial Intelligence and the Simulation of Behaviour"; ISBN 1 902956 37 4.
Available: www.leeds.ac.uk/aisb/gims [January 2006].

Also published in the 2004 Proceedings of the International Conference on Music and Gesture, University of East Anglia, Norwich, UK.

8) Schroeder, F., (2002), *Improv* by (l a u t) on Dice3" – CD of the "Dice Project",
Available: http://ishtar.cdemusic.org/dice3.html [January 2006].

ACKNOWLEDGMENTS - THOUGHTS AND THANKS

I admit, with a certain relief, that this is the work of somebody who has *not* reached what Deleuze and Guattari call the "moment of grace between life and death, in which all parts of the machine come together to send into the future a feature that cuts across all ages…"; a "point of nonstyle" which is achieved mainly with old age in which the mind is finally able to overcome its own limits (D&G 1994, pp.1-2).

In this light, I am glad to know that there exist limits in this work; limits that I am not as yet able to overcome, that will be inscribed into this work until my "moment of grace between life and death" has arrived. Then, I may have the will to rethink and revisit this work. In the meantime, I can only choose the ingredients that I deem adequate at this point in time; and you, the reader, will hopefully create your own culinary delicacy out of what I have laid out.

I close this introduction with a quote by Michel Foucault whose thoughts have been influential on this work, and who may link the act of writing to the act of performing when he says that it is about losing yourself, and about,

> "preparing - with a rather shaky hand - a labyrinth into which I can venture, in which I can move my discourse, opening up underground passages, forcing it to go far from itself, finding overhangs that reduce and deform its itinerary, in which I can lose myself and appear at last to eyes that I will never have to meet again. I am no doubt not the only one who writes in order to have no face. Do not ask who I am and do not ask me to remain the same: leave it to our bureaucrats and our police to see that our papers are in order. At least spare us their morality when we write" (Foucault 1972, Introduction).

Whether I have written this thesis in order to have no face or body I am not sure, but I certainly have written it in order not to remain the same.

My greatest admiration goes to the person who has constantly inspired me not to stay the same, who has given me intellectual stimulation whenever I reached a dry patch on this journey, and whose encouraging words gave me the final impulse to conclude this work, Pedro.

I am immensely indebted to my two supervisors, Professor Peter Nelson and Professor Richard Coyne, who have guided this work throughout and who have provided continuous intellectual stimulation.

Somebody who deserves a special kiss is my son Lukas who, in order for me to do this work, has given up time with me.

Special thanks to John Bowers who, on various occasions, made me realise that the fly trapped inside the glass bottle was still whizzing around and bumping against a lot of constraints, and who showed me that the only way forward was to let the fly escape. Fly fly!

A big thank to Vianna Renaud who painstakingly read through the entire work, giving the thesis the final caressing and punctuative touch.

And finally, when I open the door of the refrigerator and when in the process of looking for some nourishment I mentally click the Apple + F key, or when a fly lands on my laptop's screen and I instantly move the cursor towards it in order to "click it off", I know that the virtual and the actual are starting to fuse, and that means - It is time to go.

Franziska Schroeder, July 2006

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CHAPTER I

1.1. INTRODUCTION

This thesis will examine the nature and practice of performance, particularly from the standpoint of my own work as a practitioner of Music. In considering performance environments of the last 20 years, the work is concerned with the meanings and practices of performances, while it fuses cultural analysis and interpretation with theoretical discourses. In particular, the work provokes enquiries by turning towards writings that do not explicitly deal with performance issues. The thesis therefore aims to contribute to the discourse of performance from a different angle. It will, however, become clear that these particular writings have been chosen since I believe that they treat performance as ubiquitous in language and human affairs [see (Austin 1962) for the idea of "performative utterances" in language].

I will begin by outlining my approach to writing this thesis, and I have specifically not entitled this section "methodology", as this work is very much informed by a stance that is sceptical of method[1]. Informed by my reading of Billig, I understand a methodology to mean the presentation of rules of procedures about certain matters and their analysis. Billig emphasises that the idea behind methodological rules is that they are impersonal in order for two different researchers to be able to arrive at identical conclusions for the same problem. This also implies that individual bias is eliminated from the process of investigation. In this way, "methodology attempts to standardize the practice of the social sciences and to eliminate quirkiness" (in Seale 2004, p.14). However, traditional scholarship very much makes use of such individual quirkiness and assumes a breadth and depth of knowledge as well as the making of "connections between seemingly disparate phenomena" (Ibid). Thus, the scholar *expects* to encounter discrepancies in meaning, which may in fact be the beginning of a new search for different texts and provoke further reading. According to Billig, this way of working and thinking is "not to follow a preset programme, laid down in advance by a methodologist, but to gather up clues which can nudge the search one way or another" (in Seale 2004, p.15). This type of approach in which the scholar cannot hide behind a methodological procedure, an approach that is open to mistakes and the idiosyncracies of the particular case, aligns with my approach in this work.

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[1] Hans Georg Gadamer's work "Truth and Method" (1989) for example highlights the limits of scientific method. Gadamer investigates the nature and conditions of understanding meaning and argues that the true meaning of language rises above the limits of methodological reasoning. Similarly, Paul Feyerabend argues for an "anarchistic" approach to methodology. He does not believe that the history of science consists of purely facts and conclusions drawn from those. Feyerabend states that it "also contains ideas, interpretations of facts, problems created by conflicting interpretations, mistakes, and so on." (in Seale 2004, p.196). He says that to "those who look at the rich material provided by history, and who are not intent on impoverishing it in order to please their lower instincts, their craving for intellectual security in the form of clarity, precision, 'objectivity', 'truth', it will become clear there is only *one* principle that can be defended under *all* circumstances and in *all* stages of human development. It is the principle: *anything goes* (in Seale 2004, p.198).

It is worth noting that the following enquiry contrasts with other performance discourses, in particular with those found in music analysis or music aesthetics. This thesis abstains from offering insights into structural aspects of a work of music, or from the discussion of concepts such as beauty or value. Rather, I propose an alternative to performative discourses, which are defined by dogmatic positivism and scientism, and thus my enquiry aims, through a critically theoretical approach, towards possibilities; that is, possibilities of meanings and actions. One could say that this thesis aligns with Theodor Adorno who, in "Aesthetic Theory" (Adorno 1997), declares concepts such as beauty to be inadequate and who posits the theorem of the inexistence of a philosophical first principle. Thus, my writing, by turning towards notions of the threshold[2] and the ambiguous, attempts to put issues of value or aesthetic judgement to one side and instead favours states of uncertainty and 'noise'.

I stress that, although at the basis of the ensuing discussion lie concepts of various philosophical writers, this is not a writing of a philosophical nature. Neither is it a writing in pursuit of a unique critical perspective or a universally valid theory, but rather a rigorous discourse that offers novel alternatives and creative possibilities; one that operates across a range of possible practical perspectives and proposes various combinations of interpretive stances. One could say that my discourse is situated at the intersection of what Jürgen Habermas calls the domain of "practical" knowledge, that is the understanding of meaning rather than causality, and the domain of "emancipatory", that is self-reflectory knowledge, rather than in the domain of "instrumental" or work knowledge, which is a knowledge governed by technical rules and founded upon empirical investigation (after Tinning 1992: in Bohman 2005).

This thesis develops an account of practical knowledge as taken from the point of view of a practising performer and should not be understood as a commitment to any particular theory. It is an attempt at bringing about cross-perspectival insights, as much as an encouragement towards a more rhizomatic practice of thinking (Deleuze 1988) in and about performances. On the one hand, I serve as a reflective participant in the practice of performance, whilst on the other I highlight multiple pragmatic perspectives that are woven into a theoretical framework. I understand this thesis as a commitment towards performance practice, in which a theoretical framework is employed in order to gain a better understanding of performative perspectives. Such commitment towards cross-perspectival insights implies that I have taken some theories as a starting point for my discussion in the expectancy that my understanding, and in particular my appropriation of these writings into a new context, will advance my own thinking and understanding of performance practice. In this way, I see these theories as interpretations to the extent that they open up new possibilities of action. In particular, (mis)understandings between fields present me with potential for a transfer of knowledge, and artists often use ideas of other disciplines to suit their own thinking and working processes. Examples of this are the visual artist who uses mathematical models, such as the golden section number to inform his work, or the architect that looks towards the tropism models of biology, or the composer whose graphic score is inspired by a PET (positron emission tomography) or fMRI (functional magnetic resonance imaging) scan of a schizophrenic brain, or indeed by the works of the architect or the visual artist.

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[2] The threshold derives from the Old English words "þrescold, þærscwold, þerxold = "doorsill, point of entering". In continental philosophy the threshold is associated with a boundary space, in which hybrid and uncertain conditions reign. The threshold is seen as a creative place, something situated at "the position between polar opposites", at the edge condition. As Coyne suggests, "[i]t is often at the boundary between countries, where culture, language, and cuisine mingle, producing rich hybrids, or exaggerations of difference" (Coyne 2005, p.4).

I take great pleasure in forming, fabricating, creating and adapting concepts according to chosen writers' ideas in order to put them into the context of a performance situation. Perhaps my mixing of critical theories and practical performance knowledge leads to what Jacques Attali calls "theoretical indiscipline" (Attali 1985, p.5). In that way, I make use of certain concepts and ideas of specific thinkers that inform, and maybe deform, my way of thinking about performance. It will become clear that I do not look at things 'straight', but more akin to what Coyne refers to as "sideways" (Coyne 2005, p.11); that is looking in an unusual fashion and by ways of questioning conventional frameworks.

I do not intend to ground the concept of performance on one specific thinker's view. Rather, I am in the company of those who de-form, de-fabricate, re-create, and re-adapt the chosen concepts and I push some of the thinkers' ideas into different directions, applying them in a way that suits my thinking about performance[3]. This thesis, by looking at particularities rather than generalities, is therefore a rigorous attempt at reinventing notions of performance as set in motion by certain thinkers.

1.1.1. Ways of Thinking – The Kneading of Dough

In this work, the reader will see that I examine performance environments and reflect upon performance activities of the last 20 years by testing the implications of the writings of thinkers such as Henri Bergson (1896/1991), Martin Heidegger (1985, 1993), Antonin Artaud (1976a, 1976b, 1977), Maurice Merleau-Ponty (1962/1999, 1963), and Gilles

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[3] The architect Bernard Tschumi similarly finds his starting point for architecture in 'distortion'; in the parts "where limits are perverted, and prohibitions are *transgressed*." (Tschumi 1994, p.91).

Deleuze (1988). I consider these writers and their ways of thinking about human beings essential for contributing to the discourse of performance. It is for this reason that they will form the backbone to my enquiry.

I want to point out that the conceptual approach for this thesis was also informed by Lakoff and Johnson's writings and their proposal for an alternative discourse. Lakoff and Johnson in their lucid writing on metaphor (Lakoff, Johnson 1980) criticise what they refer to as the myth of "objectivism" and "subjectivism", and instead emphasise the fact that both views live off each other, that each defines itself in opposition to the other, and argue that both views miss the way humans understand the world by *interacting* with it. Thus, they argue that the objectivist should see that there is no absolute or neutral conceptual system, as "understanding, and therefore truth, is necessarily relative to our cultural conceptual systems" (Lakoff, Johnson 1980, p.194): that in grasping the world, there always exists some kind of imaginative understanding in which things are understood in terms of other things. Lakoff and Johnson argue that the subjectivist, on the other hand, misses the idea that "even our most imaginative understanding is given in terms of a conceptual system" (Lakoff, Johnson 1980, p.194)[4]. In short, they reject the idea of two choices of understanding, and offer what they call a third choice; that of an *experientialist account* of understanding, therefore one that seeks to disperse altogether with that language. Lakoff and Johnson show that imagination involves seeing one thing in terms of another, what they call metaphorical thought, and argue that rationality by its very nature is always imaginative. The *experientialist account* proposes the use of metaphor, which is seen as pervasive in language as well as in thought and action. To Lakoff and Johnson, "our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" (Lakoff, Johnson 1980, p.3).

In this thesis, I retain Lakoff and Johnson's point that humans understand the world by *interacting* with it. I focus on the encounter of mismatches, struggles and resistances that occur in a human's interaction with the world. This is a similar process to looking towards the non-linear phenomena that accompany the act of translating words into other languages; a process exhibiting phenomena such as unpredictability, failure and non-linearity.

In this way, I investigate performances that in my view celebrate a threshold space, that turn towards difference and divergence. Being a firm believer in Henri Bergson's philosophy of the in-between, of the intermediate, or of what he calls the "extensive" (Bergson 1896/1991, p.245), I will not *distinguish* different types of performances or performance discourses, and thus establish clean-cut oppositions. However, in showing possible openings for discussing performances of different kinds, openings that are unconstrained from a direct placement within an established discourse, I hope to detach from the confined views of performance discourses, in particular in the discourses of music.

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[4] Other writers, such as Merleau-Ponty in his major work "Phenomenology of Perception" (1962/1999) and Leonard Meyer in "Music and Emotion" (1956) have also criticised these two positions and their inherent dualist nature.

I understand my writing as what Michel Serres calls, in approving of Deleuze's metaphor of the 'fold' (Deleuze 1992), "the kneading of dough" (Connor 2004b). My writing is a folding over of the dough, a re-working of plain flour (the linear conception that particularly pervade the understanding of the body in performance), in which the mixing-in of thoughts by the aforementioned thinkers forms a vital part of the kneading process. All these writers, by reflecting on the body, on human behaviour, on thoughts and feelings, also reveal something about performance. The aim of this kneading process, as Connor puts it, is,

> "… to blend together the joined and the disjoined, breadth and depth, the virtue of oil's smooth spread and the density of pulverised substance. In kneading, one repeatedly folds the outer skin of the substance inwards, until it is as it were crammed with surface tension, full of its outside. The action of kneading makes the material alive because it invests it with energy... Time has been folded into it along with work and air, and so, having undergone a transition from an in-itself to a for-itself, it has a future. Dough is quickened mass: not amorphous, but incipient of shape, not slack but charged" (Connor 2004b).

In this light, my investigation acknowledges the process latent in any research: it is a *process*, not the delineation of a result, just as the kneading of the dough is a process; one that invests material with energy, which only takes place as long as it is continuously folded over, continuously kneaded. This continuous care and attention is what the dough needs in order to stay alive.

1.1.2. The Body as a Forerunner

In this work, I will consider performance as an embodied practice, since most performances use the body as a referent, even in its absence. Thus, I will commence with an investigation into the place or the role of the body, rather than by describing or analysing a performative environment. Jacques Attali (1985) highlights the importance of the body in performance when suggesting that music making is "related to the idea of the assumption of differences, of the rediscovery and blossoming of the body" (Attali 1985, p.142). Attali says that,

> "Music […], has always had but one subject – the body, which it offers a complete journey through pleasure, with a beginning and an end. A great musical work is always a model of amorous relations, a model of relations with the other, of eternally recommenceable exaltation and appeasement, an exceptional figure of represented or repeated sexual relations" (Attali 1985, p.143).

Thus I will take the body as a starting point from which to investigate performance environments, especially since I see the body as holding the position of a forerunner in the past and present debate of human understanding. My approach sides with Jonathan Sawday's view of the patterns for human ways of thinking about the world as being derived from the human body, in particular by means of its dissection (Sawday 1995).

I believe that the understanding of the body has been transformed immensely in a debate in which the body has been subjected to many differing views: from the rationalist view of the philosopher René Descartes, to that of the body as being connected to the mind, as seen by the French philosopher Henri Bergson, to that of the phenomenological body that extends beyond itself to include the interpersonal and social world of self and other. In this line of thought, I consider the body as a forerunner to providing a different view to current writings on music and performance. I present the view that the multi-faceted and, at times, highly controversial debate that has been applied to the body, has not been equivalently explored in the discussion of performance.

It will become clear that the different ways in which various writers consider the body are essential to my argument. These writers offer potential for exploring different ways of conceptualising performance. In particular, the writers are selected on the basis of important contributions with a view to *their* treatment of the body. I turn to thinkers, such as René Descartes, because his views on the body and mind existing as separate substances sparked a big debate in the history of human knowledge. I draw on Henri Bergson as he is important in contributing to the debate of the human body; not only since subsequent writers and thinkers, such as Deleuze, have been influenced by Bergson's way of thinking, but also because his ideas of the body are influential. Furthermore, Bergson's system of thought provides a rich platform for situating performances into a threshold space; a space of hybridity and uncertainty, of difference and demarcation, since Bergson offers a philosophy of the 'in-between'. Bergson seems to abstain from clean-cut opposition; rather, he reveals the opportunity for situating performance outside the standard performance discourse; something this thesis sets out to do. I draw on the writings and life of the French writer Antonin Artaud, as he makes me think about the body in different ways; ways that posit the body as parasitic. In particular, the life of Artaud highlights the body's potential for failure and breakdown; something that I consider of great importance when thinking of performance situations. From the possibility of attacking and assaulting the body I will be led to the idea of a body that can be incised into; that can be re-shaped and re-designed. Therefore, I consider the body's boundary line - the skin, which leads me to the writings of Michel Serres and Steven Connor. Finally, the urge for humans to redesign themselves in what may be sometimes bizarre or strange ways will lead to conceiving of the body in much more schizophrenic ways, in which the body is the target of violent acts. Thus, I draw on the writings of Deleuze and Guattari and their body without organs, which I see as a literature that pushes one towards the rhizomatic thinking that this thesis sets out to explore in the context of performance environments.

There is potential for developing a discourse of performance that is informed by the views to which the body has already been subjected. Such approach can only enrich the current discourse on music and performance that often conceive of the body in linear ways, and that tend to see the body - I am thinking particularly of technologically-informed performance environments - as something in need of "translation". I use the term "translation" here in the sense of something that is "carried over" [from the Latin *translatus*: the past participle of *transferre* meaning "to bring over, to carry over" (Harper 2001)]. Translation implies the idea of an original that becomes carried over; an original word that becomes translated into another language for example. The characteristic trait is that of transferral, of a unidirectional *" from – to"* move. However, any person who has ever attempted to speak a foreign language knows that translating a word into another language is never straightforward, and that a word hardly ever has a one-to-one corresponding meaning in the other language. Translating a word into another language and being understood by the native speaker depends on a variety of factors. First and foremost, the translation process is culture- and context- dependent. The translation of words into another language is also characterised by errors and mistakes that are often embarrassing for the learning speaker while amusing for the native listener. This potential for making mistakes is what turns many people shy and embarrassed when having to speak a foreign language. In this line of thinking, speaking a foreign language should not be thought of as "problematic", or something that must aim for the "avoidance of failure"[5]. In the end, a problematic object in fact can provoke “the exercise of all our powers”, as McMahon suggests (McMahon 2005, p.47), which means that mismatches and failures are invaluable to one’s learning process. Donna Haraway’s cyborg politics that favours noise and advocates pollution also questions the idea of a perfect communication, of the existence of “one code that translates all meaning perfectly, the central dogma of phallogocentrism” (Haraway 1991, p.176). Haraway argues not for “a common language, but [for] a powerful infidel heteroglossia” (1991, p.181).

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[5] Some of the early works of computer music were conceived according to "problems" and their "solutions". Hiller and Isaacson's (1958) work on the ILLIAC computer is an example of this, where a string quartet is created by a computer, in which the computer adheres to the "generate-and-test problem-solving approach" (Lopez de Mantaras, Ramon, Arcos 2002).

Thinking of the body as the original word with a specific meaning that can be “carried over” onto another system, masks opportunities for making errors and for encountering struggles and resistance. This is what keeps one motivated to acquire new languages, and can also shape new languages. I therefore abstain from any linear conception and treatment of the body. Hence, a performance work that translates a rising arm movement into rising pitch patterns (see for example the work by Sparacino, Pentland, et al. 1998[6]), or that dissects the body *in order to* translate it or to transfer it one-dimensionally *onto* a particular system for the control of specific parameters[7], does not align with my thinking. [Elsewhere, I have questioned these kinds of mapping strategies that are often used in digital media environments (Schroeder, et al. 2004)].

Similarly, I eschew the view that conceives of the body as one that extends *into*, or that is in need of merging *with* a specific technology, such as a musical instrument for example. The idea of a performer merging and reconciling with his instrument comes to mind. Sayings such as “you are your instrument” represent this idea of translating the body *onto* the technology [a book by the same name (Lieberman, Butchart 1995) indicates the trend towards reconciliation with one’s instrument].

By commencing this investigation from the point of view of the body, questions about performance and performance environments thus become more akin to:

What is a performance in which the body and the mind are seen as two distinct substances? A question encouraged by the dualistic view of René Descartes. Or what sort of performance displays the body as central to the world? A discussion sparked off by Maurice Merleau-Ponty. Or what kind of performance features an assaulted body? An enquiry initiated by the writings and the life of French poet and artist Antonin Artaud. Or what does it mean to perform with a body conceptualised as a machine? A question Gilles Deleuze urges me to consider.

By asking those types of questions I approach performance activities from the point of view of a specific body; be it one subjected to assault, one that is seen as central to the world, a body intervened into, or a body opened up. Conceiving of the body more as something that is ambiguous and liminal[8], or as Warr puts it, as "a shifting interface between subjectivity and the world, a seemingly solid reality that is nevertheless a flux of viscera, time, consciousness and space" (Warr 2000), allows me to reflect on performance environments in more diverse ways.

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[6] In this dance performance a higher note is played when the dancer’s hands are above her head, and a lower one when the hands move downwards.

[7] Miranda’s brain cap or Musical Braincap (Miranda 2003), in which the neural activity of the brain is recorded in order to control sound processing software, or in order to affect the dynamics of an instrument, treats the body in this way. Here, the body becomes the brain (in Johnson 2003). Miranda refers to it as the “brain soloist” project; this is a body that can be analysed and measured, and can then be carried over onto something else, onto sound in this case.

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[8] The concept of liminality stems from the investigations by anthropologist Victor Turner, and describes the in-between condition of a person in a rite of passage. It describes the position of ambiguity; of things that do not fit in (Turner 1987).

1.1.3. Why Write?

Music and its performance are articulated in their own medium. Should a performer leave the writing to others? I argue that performance should not be seen as a separate entity, but that it exists, so Peter Kivy notes, “as part of a musical institution imbued deeply and throughout with a conceptual, verbal structure” (1995, p.78). Roland Barthes considers music similarly, not only as a “system of signs”, but as a field of signifying signs (1985/1975, p.308).

The vast body of literature expressing thoughts on performance supports this. Indeed, performers, musicians, musicologist, even philosophers and designers - the list is not exclusive - all write about performance.

If performance, then, is not cut off from our conceptual lives, and thus asks to be verbalised, one may ask why another thesis on this topic? The large number of texts that deal with performance in some way or another surely cover a lot of ground already. The literature on performance gestures for instance, in itself a large field, examines performers’ movements and postures, as these movements are seen as intimately connected with musical expression [(Cadoz, Wanderley 2001) is a good collection of contemporary essays on the topic of gesture. The original classification of gesture, which a great body of today’s research draws on, was presented by Ekman & Friesen (Ekman, Friesen 1969), based on Efron’s theories of gesture, originally presented in 1941 (Efron 1941)]. Further, the gesture field looks at the tactile feedback involved in playing musical instruments; particularly in order to develop mapping strategies for new computer interfaces or novel virtual musical instruments (for mapping issues see Hunt, Kirk 2001). The classification of a performer’s movements (Cadoz, Wanderley 2001) gains particular importance in the design of human-machine performance systems as the analyses of humans’ movements and their categorisation is often used as the basis for such developments.

The gesture research field, although I will not dissect any particular idea from it in this thesis, initially informed my thinking about performance as it shows a concern for the body. This includes its physical importance, its surface (the skin’s properties become investigated for the development of haptic interfaces), body awareness, the body’s circumference (often investigated for the design of interactive movement systems), as well as the body’s potential for being expressive. [Laban’s “Theory of effort” (Laban, Lawrence 1947) is often used for this strand of research that looks into the expressive powers of a dancer’s movement]. What is essential for me is to see the body more according to Roland Barthes, “as an inscriber and not just transmitter, simple receiver" (1977, p.149). I understand the body as a complex entity with many facets worth investigating.

Some researchers in the gesture field carry out such investigation, which is open to multifaceted views. These researchers draw for example on linguistic theories since these theories expose issues to do with communication and language. Hence, it will become apparent that the type of research that crosses into different disciplines aligns with my approach in this thesis. The work by Iazzetta (2001), who draws on semioticians, such as Charles Sanders Peirce and the philosopher Roland Barthes deserves particular attention.

Other writings posit performance as closely linked to emotion; that is as an activity loaded with 'intrinsic layers of meaning' tied to concepts of personality and sensibility. This theme is exposed in the writings of Antonio Camurri and his collaborators. In particular, Camurri uses the concept of KANSEI to analyse movements of dancers[9] (Camurri, et al. 1997; Camurri, Coglio, et al. 1997; Camurri, Hashimoto, et al. 1999). A slightly different approach to music performance and emotion is taken by a branch of research that investigates the effects of a specific type of music on a person's emotional state. In this field the assumption prevails that certain musical characteristics, such as the mode or the tempo of a work, induce certain emotions in the listener. For example, the emotional effect of a piece that is played in a major key and at a fast tempo is said to be cheerful, whereas a slow piece in a minor key may be found to be dreamful or sensitive (Vink 2001)[10].

Yet another body of works focuses on technical aspects, investigating system designs for performance interaction, synthesis and sound production (Rowe 2001, Winkler 1998), while Perry Cook outlines some guiding principles for the design of Computer Music Controllers (Cook 2001). It will become clear that my concern in this thesis is not based on purely technical or practical aspects, although all thought processes are informed by my work as a practising performer.

Performance issues are further dealt with in educational guides that cover practical topics from performance preparation, listening, recording, to performance anxiety (Rink 2002). Performance is often elucidated through case studies that examine the role of the body in playing a musical instrument [Jane Davidson is a good example for this type of discussion, (Davidson 2001, 2002)].

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[9] In the mid- to late 1990s the concept of KANSEI Information Processing (KIP) was often employed, in particular in the field of music gesture and gesture recognition. The focus is on modeling expressive gesture in human movements, and on how expressiveness can benefit the design of interactive systems. KANSEI is a branch of Information Processing Technology from Japan that loosely refers to emotion, but more so to the way in which a message is transferred from one person to another. KANSEI, rather than referring to the human ability to process information logically, is a way of personalising the manner in which a message is transferred. There is KANSEI in every action that a human performs. It is a way of personalising one's message (Camurri, Hashimoto, et al. 1999).

[10] Such subjectively experienced states of emotional arousal are often scientifically proven to show their "validity", as in the example of measuring the famous conductor Herbert von Karajan's heart rate, while he was conducting Beethoven's Leonore, Overture No. 3 Op. 72a. Karajan's heart rate during conducting was compared to his heart rate while flying a sports aircraft. It was shown that during conducting his heart rate achieved close to 150 beats per minute, while only 115 beats per minute during his flying activity. The passages showing the maximum heart rate had been singled out by the conductor beforehand as the one that most profoundly touched him (Vink 2001).

A further type of performance literature looks at the concept of performance from specific angles, such as Simon Frith's investigation into performance and pop culture, in particular the effects of the media (Frith 1996, chapter 10), or Philip Auslander's elaboration on how mediatised culture affects the "liveness" of performance (Auslander 1999). Both Frith and Auslander consider a wide variety of performance genres, such as theatre, rock music, TV shows, as well as movies, dance and performance art.

The body of literature on performance is undoubtedly vast. The fairly recent collection of key texts on performance in the four-volume book edited by Philip Auslander (2003) is indicative of this growing field and underlines the increasing importance of the concept of performance itself. Music performance specifically has been subjected to a variety of viewpoints. The sociology of music for instance examines music as a social force and describes it in terms of people and how they,

> "compose their bodies, how they conduct themselves, how they experience the passage of time, how they feel - in terms of energy and emotion - about themselves, about others, and about situations" (DeNora 2000, p.17).

DeNora, an important researcher in this field, understands music as a "technology of self" (DeNora 2000, p.47), which means that the medium of music becomes appropriated as a resource to self-regulate psychological, physiological and emotional states; as providing organising properties for various embodied experiences[11].

And one can even argue that performance, even if predominantly in indirect ways, is elucidated by music analysts and music theorists. The area of contemporary music analysis needs expanding upon here, as it is of particular interest to me since it points into the direction that I will pursue in this thesis. I believe that the field of contemporary music analysis is one of the first to make a convincing attempt of transferring literary-critical terms into a music discussion. Thus, in this type of literature what is often referred to as the 'formalist' position of music analysts [as provided by Heinrich Schenker (1868-1935), Nicolas Ruwet (1932 – 2001)[12] or Jean-Jacques Nattiez (1945-)] becomes re-considered by means of drawing on an inter-disciplinary literary discourse. The publication "How We Got

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[11] In her book "Music in everyday life" DeNora shows how music can serve a person in controlling his life (DeNora 2000). DeNora interviews a variety of people in order to establish their preferences for a particular type of music when in a state of stress, when wanting to relax, or when needing to motivate themselves. She also gives the example of different types of music used on air planes, and shows how the music differs according to different situations: slow, low pitched music for the boarding of the plane and uplifting music for take off (DeNora 2000, p.11).

[12] Ruwet is seen to be a significant figure in musical analysis. His claim to objectivity by breaking a work of music into small parts from which he gains his understanding can be read in analogy to the analyses provided by H. Schenker (Agawu 1996).

Into Analysis and How to Get Out" (Kerman 1980) particularly criticises these formalist positions. Kerman argues that the formalist's type of music analysis ignores the cultural context of a work, in particular things such as affect and expression[13]. At the basis of the formalist approach to music analysis lie the views that a work of music, or a performance thereof, can be understood and explained by means of specific analytical tools. In short, the works are to be objectively analysed. The Schenkerian approach for the analysis of tonal music constitutes such a tool[14].

Although I do not attempt to give an overview of the music analysis movement, it is worth noting that what formed as an anti-formalist movement and named itself the "new musicology" (Rosand 1995) extensively draws on a variety of critical approaches by embracing gender theory, cultural criticism, semiotics, etc. (Rosand 1995). This new anti-foundationalist and anti-essentialist movement is what Lawrence Kramer refers to as "The Musicology of the Future" (Kramer 1992). According to Kramer, it advocates theories that,

> "emphazise the constructedness, both linguistic and ideological, of all human identities and institutions. They insist on the relativity of all knowledge to the disciplines - not just the conceptual presuppositions but the material, discursive, and social practices - that produce and circulate knowledge. While often disagreeing with each other, poststructuralists, neopragmatists, feminists, psychoanalytic theorists, critical social theorists, multiculturalists and others have been changing the very framework within which disagreement can meaningfully occur." (Kramer 1992, p.5).

One can see, then, that the trend in this particular discipline, especially of the last twenty years, is to consider music analysis more dynamically. By highlighting what Agawu poignantly describes as "the foundational instability of our terms, the contingency of our analyses, and the fragility of our conceptual constructs" (Agawu 1996), the writings in this field urge one to reconsidering ways in which one writes and thinks about music and about music performance. Examples of the type of analytical enquiry that turn towards a philosophical literature can be found in Clifton (1983), Street (1989), or Snarrenberg (1987)[15].

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[13] Kerman considers the formalist type of work as solely a gathering of facts, or as simply establishing a work's internal relationships (Agawu 1996).

[14] Schenker, Ruwet and Nattiez establish certain rules about the combination of specific units identified in a musical work. This attempt to discover the syntax of a work without reference to any external source positions this enquiry as a kind of musical semiology, later referred to as paradigmatic analysis (Agawu 1996). In Schenker's analysis, a work of music is dissected into linear units (such as neighbour notes) in order to discover a work's inherent layers that may, at first sight, appear hidden. Schenker's analysis in particular has been criticised for reducing a work to its lowest common denominator. It is however still being used (even if in altered forms), in order to understand how tension in a work of music is created. For an introduction to Schenkerian Analysis see (Forte and Gilbert 1983) and (Agawu 1996). The main criticism that a paradigmatic analysis approach to music attracts is that the work is viewed in analysable categories independent of the person experiencing them; thus music is understood to be consisting of elements that have inherent properties independent of any beings.

[15] Snarrenberg for example tests Derrida's notion of "difference" in an analysis of Brahms's Intermezzo, Op. 118 no. 2. (Agawu 1996).

The dynamic approach of contemporary music analysis questions conceptual and linguistic constructs, and thus stands in contrast to approaches that separate music into structural elements such as harmony and counterpoint, and expressive and emotional content. An example of research that splits a work into categories can be found in the SaxEx system (Arcos, Lopez de Mantaras, and Serra 1997). Here, a score (in the form of MIDI) and a recording of an 'inexpressive' interpretation of a particular musical phrase are used as input in order for the SaxEx system to infer sets of expressive transformations. The 'Case-Based Reasoning' approach employed - CBR is an approach to problem solving used in AI, where similar previously solved problems are used for solving new problems - is based on the assumption that playing a musical phrase is a linear one-way input-output exercise. This bypasses the thought of considering performance as context dependent and as being informed by the specific situation in which it occurs[16].

In contrast, the type of enquiry that contemporary music analysis pursues abstains from considering a work of music in terms of 'categories', or from asking a performer to perform 'inexpressively'. Indeed, the way of thinking provided by this enquiry initiates an entire reflection process of what entails an expression or in-expression in the first place.

Before returning to my question of why I write another text on performance, I want to highlight that as musicians turn to philosophical concepts, philosophers also turn to music. The French philosophers Gilles Deleuze and Félix Guattari posit the musical refrain as territorial [music's problem is the refrain, they argue, (Deleuze & Guattari 1988, p.301)], and turn to the music of Pierre Boulez to elaborate their rhizomatic thoughts. The French philosopher Maurice Merleau-Ponty uses the performer and her instrument as an example to argue a human's embodied position in the world, and philosopher Peter Kivy draws on performance practice and claims to have constructed what he calls a "philosophy" of the historical performance movement (Kivy 1995). Kivy's work is indeed rare in that it assumes philosophical enquiries into performance issues. I see Kivy as an important figure and contributor to the field of writing about performance as he is one of the few to initiate a philosophical debate on performance. His investigation of what constitutes authenticity in a performance evidently restricts him to discuss repertoire of the past - the majority of his examples being drawn from the works by Händel, Bach, Beethoven or Mozart.

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[16] To underline my argument that performance should always be considered as context dependent, take the example of a person close to drowning: A CBR approach would provide a solution for avoidance of drowning by arguing that if one has once been close to drowning and managed to survive by swimming steadily to the shore, the approach is to use swimming steadily the next time that one comes close to drowning. Now, the fact that there may not be a shore close this time, or that the low temperature of the water may make it impossible to swim steadily, or that indeed a shark lurking nearby may not allow one to move very much at all, is not taken into account by the CBR approach. I believe that the contextual information (the shore, the water temperature, or the shark) needs to be considered in a performance and when developing systems that emulate performing activities.

I return to my initial question, why write something in a field that seems already well covered? Perhaps I should rephrase the question and ask what else is there to contribute in a field so well covered? I think I have already staked out some possible territories that the field of music analysis has started to tackle.

I am interested in the type of interdisciplinary thinking that music analysts have started to provide and although some philosophers have delved into the field of performance (Kivy being an example)[17], the literature of performers probing into a type of literature that is not obviously, and at first sight, about performance practice and practical performance concerns, is sparse[18].

David Sudnow is an exception to this case. In "Ways of the Hand" (Sudnow 1978) he outlines a possible interdisciplinary thinking in performing jazz on the piano. Sudnow, a classically trained pianist, provides a phenomenological account of the work of his hands that are 'taught' to improvise jazz on the piano. By observing professional jazz players Sudnow discovers that there exists a certain body idiom, or as he says the ways of the hands of the musician (hence, the title of the book). In short, a performer's bodily experience predominates in the learning process more so than the analysis or theoretical identification of a style of playing.

Sudnow's book is very much what he calls a 'production account' describing the learning process of a specific skill. This process is immensely influenced and shaped by the phenomenological writings of French philosopher Maurice Merleau-Ponty. In this line of philosophical thinking, Sudnow suggests that his hands, arms and shoulders "have almost perfect pitch" (Sudnow 1978, p.63), or that by developing a specific sensation of the body, he is able to "sing jazz with [his] fingers" (Sudnow 1978, p.77). Sudnow's writing on performance, then, is filled with phenomenological insights, such as gaining an understanding of the movements of his hands, rather than understanding how to understand their movements. To him, ultimately, playing is an embodied act in which the hands achieve "a finely integrated aiming for places, giving soundedness to keys by reference to a wayful series of moves" (Sudnow 1978, p.72). Although it can be argued that Sudnow provides a practical description of the learning process of a particular music skill acquisition, he does so in a language and a system of thought that is not usually identified with that of performers. Sudnow looks towards other disciplines, here the phenomenology of Merleau-Ponty, and expresses the very practical thing that performance is, in terms that not only differ from the often practical language of performance texts, but that also change one’s ways of thinking about performance which in turn provide one with a different vocabulary of verbalising performance activities. Sudnow’s first edition of the book appeared close to thirty years ago and in view of the fact that new texts on performance appear every day, the performance literature in Sudnow’s spirit, the type of performance texts that look towards the body of critical theory, has been negligibly small.

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[17] It is worth noting that Kivy points to a lack of a philosophical literature that investigates performance issues, in particular a lack of literature that deals with historically authentic performances (Kivy 1995).

[18] Other disciplines, such as architecture are not shy in drawing on sources outside their own discipline, as can be seen in the architectural literature that draws on hermeneutics, philology or critical theory. Indeed in most medieval universities the "quadrivium" (the four art subjects taught) comprised arithmetic, music, geometry, and astronomy.

1.1.4. Overview

Although I will focus on performances of contemporary music, since those are closest to my experiences as a performer of saxophone and improviser working with live-electronics, the scope of performances considered in this thesis extends from music to cosmetic surgery. Predominantly I will consider performances in technologically mediated environments even if they do not primarily use sounds as a way of communicating performative content. I will elaborate on some laptop performances staged by the Sonic Arts Research Centre in Belfast during 2004-2005, and I will draw on my work as a musician and designer of various performative environments, such as the interactive Lego installation "Sonic Constructs" (2004) and the performance environment "A-Synk" (2005). These are discussed in Chapter II. Other discussions in this thesis are derived from my experiences of preparing for a performance and critically reflecting on my performing activities; in Chapter II for example in which, triggered by the writings of the French philosopher Maurice Merleau-Ponty, I propose the creation of a performative layer to the body for participating in a performance. And again, other discussions are derived from engaging with my instrument (see Chapter III, 3.3.), from preparing a work of music (see Chapter IV, 4.2.), or from simply being a listener in a performance (see Chapter II, 2.6.).

My use of theoretical writings in discussing those performance situations is not aimed at pursuing a philosophical discourse. Rather, these writings serve as a framework for what I understand as practice-led research[19]. This theoretical framework allows me to develop a discourse that highlights a range of combinations of interpretive stances.

While the performances I discuss are of a very diverse nature, the body in all of these performances exposes certain threshold conditions, which in turn allow me to conceive of the body as somehow ambiguous and liminal. It must become clear that I apprehend the body as multi-faceted and non-linear, as dependent on contextual information, and that I argue for the idea that the encounter of mismatches, failure and resistances that characterise a human's interaction with the world are of great importance when thinking of performance environments. I believe that taking this type of critical approach to discussing performances ultimately aids me in moving beyond technical, idiosyncratic or practical ways of describing performance situations; ways that I am setting out to challenge.

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[19] There is a growing concern with the definition of 'practice-led research' as laid out by funding organizations, such as the AHRC (2005). The term 'practice-led' is used by Gray who describes it as a mode of research that is "initiated in practice, where the questions, problems and challenges are identified and formed by the needs of practice and practitioners" (Gray 1996, p.3).

1.2. PERFORMANCE MEANING

It will become transparent that I understand performance as an expansive term that does not solely embrace *one* specific definition. However, when inquiring into the concept of performance, it is difficult to abstain from starting from some basic definitions and specific meanings. This poses the question of meaning. What do we mean when speaking of performance? So, in the first instance the term performance may possibly bring to mind something more vague, such as an action executed by a person for the purpose of entertainment. If thinking of performance in terms of entertainment, one also must include performers such as the comedian, the circus performer, the juggler, the busker, the street performer and the acrobat. But also, one thinks of performance carried out by an actor, a dancer, or an opera singer. And would it be wrong to include magicians, mime artists, puppeteers, storytellers, or stunt men and women as performers? And outside of the field of the arts, one can refer to the act of the dentist as a performance in the same way that a game of football may constitute a performative act.

It becomes evident that the term performance includes a large variety of acts and people, and one can say that all those performers have in common that their act is a ‘staged’ activity (not necessarily meaning that it occurs on a stage), in which a person does something particularly skilled in the presence of people listening or watching. Admittedly, this is a very basic way of looking at what a performance may mean, in particular when considering the changes that new technologies have introduced into the performance discourse. The idea of performance as a particular skilled activity executed by a person in a particular place certainly calls for expansion, especially with view to the fact that a lot of performances embrace other than the traditional performance locations of the theatre stage or the concert hall. In performances that use new technologies, the performance may not even be located in a physical space anymore, nor may there be a visualisable performer that carries out the action, nor a stage for the performance. Performances that take place in virtual media environments in which physical presences tend to be transported into a different kind of physicality, into an avatar for instance, will have to lead one to thoroughly reconsider the concept of performance. Some authors have even suggested viewing the performer in terms of “data”. Sheila A. Malone in her article “The New Performer” suggests something along those lines when saying that “[t]he performer is virtual” (Malone 2000), and Phil Archer even considers software as a type of performer (Archer 2004, p.8).

Whether a laptop computer emitting sounds without the presence of human agency constitutes a performance may be debatable. However, it can be argued that for a sounding laptop computer to be considered a performance, a specific performative environment is required, one that a performer has to conceive of. In contrast, a laptop computer situated in a student laboratory that happens to be playing sounds may, by some, not be considered performative[20]. This example shows that, apart from the presence of an intentional design, the contextual information is always important when enquiring into what constitutes a performance. I want to suggest that the term performance is as widely and loosely understood as the term ‘cosmetic surgery’, depending on who uses it in what framework. Is one thinking of silicon implants, the more frequent ‘nose job’, the facial lift, or accident recovery cosmetic invention, and who is doing what to whom and for what purpose? However, more than this, a performance is not only contextually but also culturally dependent, meaning that there exists one fitting idea to one particular culture and performance activity at one point in time.

One can see that the concept of performance has gained an increasing importance in a number of disciplines as varied as cultural studies, anthropology, sociology, linguistics and art history. I approach the concept from the field of music performance and want to stress that this enquiry into the meaning of performance abstains from presenting a ‘definite’ guideline as to what a performance is. Rather, I look at various aspects that accompany the idea of a performance. In this process, it will become apparent that performance does not simply mean one thing or another. In order to further the understanding of what a performance can entail and to highlight the expansiveness of the term, I deem it inappropriate and impossible to present universal definitions of the performance concept.

Jacques Derrida argues this impossibility of an original meaning at length in “Of Grammatology” (Derrida 1974) where he establishes the science of grammatology and shows how language operates by exposing the sign and the idea of the whole in a sense as arbitrary. He argues that one must accept the interplay between writing and speech and the idea that neither is more important to the development of language. Thus, the concept of a thing, the signified [*signifié*] is always tied up with the sound-image, or the signifier [*signifiant*]. In this way, Derrida argues against the theory of logocentrism, that he attributes to Ferdinand Saussure, which asserts that writing is exterior to speech and speech exterior to thought. Derrida’s interest lies in the play of difference between speech and writing, establishing the idea of différance as the “hinge” between speech and writing.

This means that I accept the impossibility of a ‘definite’ meaning of the concept of performance. My endeavour at finding possible meanings of the performance term are derived from encountering certain points of indecision; points where meaning becomes contradictory or ambiguous. However, since according to Derrida, this is an important and unavoidable passage in the act of interpretation, of what Derrida calls an “aporia”, or a state of puzzlement, possible ways of understanding the performance concept must develop out of these encounters with indecision.

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[20] Stan Godlovitch refers to such scenario in which no direct performative causation exists as ”a distinctive synthetic form of art-making” (Godlovitch 1998, p. 97), as “art of remote control” (1998, p.99).

I will commence with some existing definitions of performance that enable me to derive meaning and to gain understanding through facing the unavoidable passages in the process of interpretation. One such existing definition reveals performance as a,

> “focused concentration in which action and awareness merge and ego disappears, immersed in an activity in which the performer feels in complete control, knows exactly what to do, and is concerned with no goals other than the execution of the activity itself” (Graver 2000, p.53).

Another definition stresses the physical aspect in performance where, according to Graver, a performance involves “a mastery and execution of specific bodily skills” (Graver 2000, p.53).

Is performance therefore about a performer who *masters* certain skills? Is it about *control* and *execution* of an activity? As terms such as activity, control, and mastery suggest a strong emphasis on physical skills, I will content myself for now to see performance as something in which somebody executes an action. Often, one of the more spontaneous ways of thinking about a performance tends to be in terms of the physical action that accompanies the performance act. Indeed, according to basic dictionary definition, performance means precisely that: “an act or action”, and to perform implies “to act”, or “to bring about”, “to execute a function” (Dictionary 1960).

The performing act, then, fundamentally implicates the presence of bodies of some kind, which means that it can be an act of somebody handling an instrument on stage, of somebody reciting a monologue, of somebody drawing a picture, or even of somebody performing with a tool, such as the dentist with her drill. All those activities imply a physical act or action. Although the concept of performance as being a physical action executed by somebody involving the body is a basic one, a variety of performance practices display a strong fixation with such physicality, with the body as an ‘acting’ entity.

1.2.1. Physico-follia

The works of acrobats, gymnasts, contortionists and clowns gives particular insight. There exists a long tradition of American and English clowns, in particular the English group of acrobats, the Hanlon-Lees, who staged their buffoonery in the 1860s. In the Hanlon-Lees‘ spectacles the body is the tool for executing onstage decapitations or slamming humans through pianos. In one of their works entitled “Soirée in Black Tie”, a crazed pianist plummets into a piano and then comes, with his head first, crashing out of the frame.

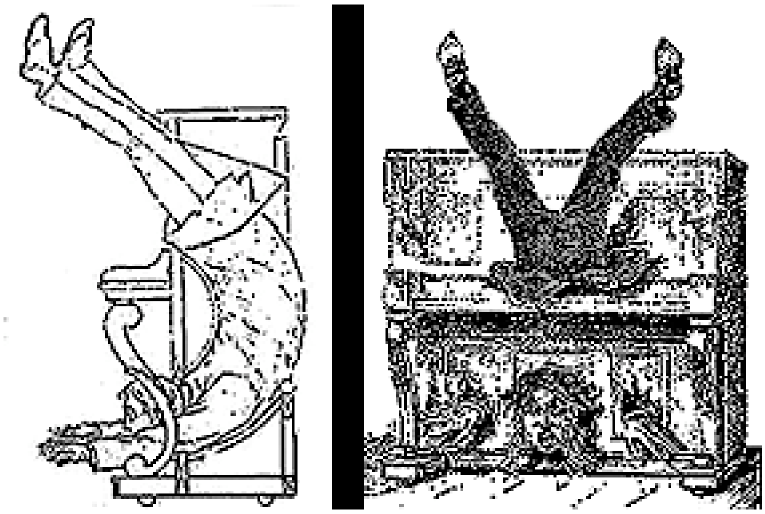

FIGURE 1: THE PIANO-DIVE FROM THE HANLONS' “SOIRÉE IN BLACK TIE|”
WWW.HANLON-LEES.COM
[NOVEMBER 2005]

One of the Hanlon-Lees’ most popular performances was their ‘perilous ladder’, in which some of the acrobats performed stunts on top of a ladder which was balanced by one of the Hanlon-Lees’ brothers. They performed this stunt in 1865 in Cincinnati where one of the brothers fell and sustained serious head injuries. He lost his sanity after this accident and, three years later in 1868, intentionally dived headfirst into an iron stovepipe. He smashed his skull and died instantly (Towsen 1976).

The ‘acting’ body, or the body in action, takes on an even more prominent position at the beginning of the 20th century when the avant-garde attempts to incorporate all human activity into their vision of an all-inclusive spectacle. In 1902 the French anarchist Alfred Jarry expressed his idea of such performances as the “*spectacles plastiques”*:

> “Perfection of muscles, nerves, training, skills, craft, technique, …bare-knuckle fights, …skating, car-driving, …an operation performed by a great surgeon, …a drunkard expert in tipples, an explorer who has eaten human flesh…the Pope’s funeral” (Jarry 1902).

Filippo Tomasso Marinetti's view of the variety theatre as a physical comedy combining eccentricity, brutality, and the mechanical grotesque amongst others, exposes the body in a state of physical extreme, which Marinetti named 'body-madness' (physico-follia). His physical comedy referred to the tradition of American and English clowns mentioned above. It is yet another example of the corporeal aspect in those performances. Other performance practices also place an emphasis on the corporeal. In Frank Wedekind's work "Bethel", acrobats, equestrians and cowboys are employed, and Jean Cocteau's 1920s ballet "Le Boeuf sur le toit" casts circus clowns. The work of the two famous clowns, Charlie Chaplin (1889-1977) and Karl Valentin (1882-1948), further elucidates the idea of performance as having a preoccupation with the physical.

FIGURE 2: CHARLIE CHAPLIN
HTTP://IMAGES.GOOGLE.CO.UK
[NOVEMBER 2005]

Valentin's comic play with objects, in which he confronts objects in the most unusual ways, constantly struggling with every prop he encounters, exposes the physicality of his actions that became his trademark and the essential ingredient for his comedy. In the 1922/23 film "Mysterien eines Frisiersalons" (The Mysteries of a Hairdresser's Shop) Valentin is an apprentice hairdresser who accidentally cuts off a client's head when giving him a shave. The physical body is at the centre of the comical-sadistic 'bricolage' performance.

FIGURE 3: KARL VALENTIN
WWW.FILM-ZEIT.DE
[NOVEMBER 2005]

Physical aspects were often added to enhance a particular performance event. For example, the literary gatherings of the modernist avant-garde employed performative elements to augment the presentation of literary texts. In movements such as the “cabaret artistique”[21], the author was expected to inspire and his interpretative imagination formed a great part of the delivery of the text. The pure conveyance of the text was rendered performative by placing the written word amongst songs, puppet plays, recitations, and dance, leading to more of a group entertainment than recital of text (Senelick 2000, p.16).

Even when the Italian futurists, led by Marinetti, started favouring the machine over the human body and supplanted it more and more frequently with reference to machines, a strong physical aspect to the performance remained. A shift from the body’s physical involvement towards exposing the mechanics of the body occurred, bringing to light even more of the bodily aspects, albeit in a mechanised way.

One also continues to speak of a performance even when the performer becomes effaced, as for example in Marinetti’s “Drama of objects”, Il Teatrino dall’ amore (The Toy Theatre of Love, 1915), or in his sketch “Music for Dressing By”, in which objects become the main characters as the piano wears ballet shoes and is groomed by servants. Other works obliterated the actor’s personality such as Apollinaire’s “Les Mamelles Tirésias” (1917), and later Picasso’s “Le Désir attrapé par la queue” (1941). The human being is reduced to robotic status, made into puppets and automata and replaced by objective forms, like in Schlemmer’s “Triadic Ballet” of 1922, or Wassily Kandinsky’s stage design for

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[21] This movement was particularly known through the “Le Chat Noir”, the “world’s first intellectual-artistic-musical-anarchist cabaret” opening its doors in Montmartre in Paris in 1881 (De La Croix de Lafayette).

Mussorgsky's "Pictures at and Exhibition" of 1938 [most examples are derived from (Senelick 2000, pp.15-42)].

Although the body's physical involvement is kept to a minimum, one could say the same of a laptop music performance, or becomes eliminated altogether, one refers to the act or the action as a performance. One reason for this is that even if the performer becomes obliterated, the listener or viewer certainly does not.

1.2.2. Say something

One, then, can conclude that a performance is only understood as such if somebody else is present to observe or notice it. And is it not so that the idea behind a performance is that a person does something to, in front of, or even behind another person; a person that can potentially perceive the act? The execution of a performative action is done for some communicative purpose. One performs in order to 'say' something.

It should be noted that speaking does not necessitate a bodily presence, as virtual networked performances attest to. Here, the performers are present in one particular place, but may not be bodily visualisable to other participants. The performers of the virtual world speak by ways of their absent bodily vocabulary that becomes transferred into the virtual through technological means. The performance, however, carries a communicative intent.

The French philosopher Maurice Merleau-Ponty suggests that in the act of 'speaking', a kind of bodily singing of the world takes place. He says that language "presents or rather [...] *is* the subject's taking up of a position in the world of his meaning" (Merleau-Ponty 1962/1999, p.193). This implies that performance, apart from uttering or making sounds, is coupled with what Merleau-Ponty refers to as the,

> "power of giving significance – that is, both of apprehending and conveying a meaning - by which man transcends himself towards a new form of behaviour, or towards other people, or towards his own thought, through his body and his speech" (Merleau-Ponty 1962/1999, p.194).

This reading exposes performance as implying the expressing of thoughts and the giving of meaning. It posits performance as something social and as a communicative process. Simon Frith in his work "Performing Rites" (1996) describes performance in this way when saying that performance "requires an audience and is dependent, in this sense, on interpretation; it is about meaning" (Frith 1996, p.205).

The initial point of view of performance being a physical act has become broader and now needs to allow for the inclusion of meaning and of a subject expressing his being. One aspect of this voicing of one's being is something particular about the voice as an expression of bodily resonance, since in the process of speaking one also always transmits the vibrations of one's own body. One can say that in speaking all parts of the body are in constant oscillation to the world. Rupert Sheldrake's concept of 'morphic resonance' expresses this well. He suggests that "the form of a system, including its characteristic internal structure and vibration frequencies, becomes *present* to a subsequent system with a similar form". In this way, Sheldrake shows the possibility of reciprocity and connectivity between systems of similar kind. For him,

> "not only does a specific morphogenetic field influence the form of a system,… but also the form of this system influences the morphogenetic field and through it becomes present to subsequent systems" (Sheldrake 1981, p.96).

This means that my voice transmits the vibrations of my body in the same way that an instrument, a system that must become akin to my body in order to do so, transmits the internal structure and vibrations of my body. At the same time, my body can also influence the instrument. Thus, apart from performing one's instrument, one also always performs one's own body. In this reading, performance becomes not only an exchange between several systems of similar kind, but it must also be understood as a very individual and bodily act. Along with such personal offering, there is, as Frith poignantly describes, always some kind of vulnerability on offer: "Performers always face the threat of the ultimate embarrassment: *the performance that doesn't work*" (Frith 1996, p.214).

This threat of embarrassment I locate in a particular situation in life, which, it can be argued, also constitutes a performance in its own right: the giving and receiving of gifts[22]. The giving, and especially the receiving of gifts, is a highly skilled performative action. In receiving a gift, all attention suddenly becomes focused on the receiving person who finds himself abruptly moved into a performative situation. After handing over the gift, the tense moment of unwrapping the present ensues in which the receiver of the gift intuitively has to put on a "good performance" for the revealing moment. Hhe knows he is expected to act surprised and to express appreciation, even if he already owns two of the exact same butter dishes!. A performative response along the lines of, "Oh, you shouldn't have; this will come in really handy; thank you so much", follows. Furthermore, the receiver's performance gestures are measured, even if subconsciously and unintentionally, by the audience, "against their sense of what the performer is like, off stage" as Simon Frith finds (1996, p. 214). I see this as a performance situation that requires immense skill, since in order to avoid embarrassment, and that is not just for oneself; the giver of the present may also become embarrassed depending on one's performance, one's response cannot be too exaggerated and should not be too unassuming. It is a performance of split-second duration in which one's "on-stage" performance is being scrutinised and compared to one's "off-stage" persona, and a judgement by the giver of the gift is passed.

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[22] Various writers have discussed the concept of the gift at length. The essay by anthropologist Marcel Mauss initially sparked those discussions (Mauss 2001).

1.2.3. A Container in Space

A performance such as the gift-giving performance also exposes a kind of circular relation of a subject voicing itself, in which not only the subject itself, but also the other person is affected. Steven Connor, in his extraordinary writing on the voice, puts it this way:

> "If my voice is something that happens, then it is of considerable consequence to whom it happens, which is to say, who hears it. To say that my voice comes from me is also to say that it departs from me. To say that my voice is a production of my being is to say that it belongs to me in the way in which it issues from me. To speak is always to hear myself speaking" (Connor 2000, p.4).

With this in mind, one could argue that all performative actions can be thought of as an extension of one's voice. In section 3.3. I will argue that the metaphor of extension, in particular that of bodily extension often found in the context of technological implementation of artistic concepts, may be in need of re-examination. For now, though, let me consider the idea of extension. Cannot the gesture in a theatrical movement for example be seen as an extension of the actor's own voice? An actor will always 'speak' silently to himself the meaning that is coupled with the particular gesture he is making. In the same way, the playing of an instrument, which requires the shaping of one's throat and mouth cavity in order to sound a particular note, can be seen as an extension of the voice. Since the vocal apparatus is coupled to one's body, one has to consider a further aspect of this voicing oneself: the idea that it also establishes relations of facing and frontality. Steven Connor suggests that,

> "[w]hen I speak, my voice shows me up as a being with a perspective, for whom orientation has significance, who has an unprotected rear, who has two sides", [and] "if my voice is out in front of me, this makes me feel that I am somewhere behind it" (Connor 2000, p.5).

This implies that whatever the performer is 'saying', be it with an arm gesture, or through emitting an instrumental sound, he is exposing his voice as coming from inside his body and going into an exterior space that extends beyond his body. The performer's voice establishes him, "as an inside capable of recognising and being recognised by an outside" (Connor 2000, p.6). This can be an appropriate image of a performer: a container in space.

Lakoff and Johnson use the container metaphor in order to describe a physical being's sense of self; that is as a container with an in-out orientation. This means that one experiences the world as outside of oneself since one delineates oneself from the world by the surface of one's skin. A physical being views other objects, such as rooms, houses, a rock, or a clearing in the woods as containers with an inside and an outside (Lakoff, Johnson 1980, p.29). In Chapter III I will discuss the particular preoccupations with the body's "border" and its transgression in more detail. This shows that on further elaborating on the concept of performance, one has to include a physical being's sense of self and his orientation to the world. By also embracing the idea of voicing oneself in the presence of others, the initial understanding of performance as an action executed by a person visibly widens.

1.2.4. The Raw and the Cooked

A performer voicing herself necessitates that there be some communicative content *to* voice, and also that there exist a specific language made up of signs and codes that one can communicate with. Performance then can be understood as a cultural system in which signs are read and interpreted. In music performance, one finds codes and signs represented in a score or by computer software for example. The structuralist analyses by the French anthropologist Claude Lévi-Strauss give insight into the structure of such systems of cultural organisations. Lévi-Strauss particularly shows the relation between units within those systems and establishes those systems on the grounds of binary pairs, such as good and evil, light and dark or raw and cooked. According to Lévi-Strauss (1969), the basic structure of all human cultures, human signifying systems and human knowledge is formed by ways of those binary opposites. A structuralist reading would expose performance as a signifying system that derives meaning from cultural codes or signs situated along binary pairings. Such pairing may be what Lévi-Strauss refers to as 'the raw' and 'the cooked', which, according to him, is equivalent to 'the natural' and 'the human'.

Although intriguing at first sight, this pairing becomes problematic on second thought. Can performance be pinpointed along an axis of 'the natural' and 'the human', and does this make the body 'the natural/the raw' and the performance tool (the instrument, the computer, the dentist's drill) 'the cooked/the human'? Can one consider 'the raw/the natural' to be the sounds of a bird that in the signifying system become the sounds of a clarinet, or that of a computer?[23] And if, according to Lévi-Strauss, 'the raw' needs to become cooked for consumption, can performance be seen as that process that turns 'the raw' into 'the cooked'?

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[23] One could go further and ask whether the clarinet ('the human') is an elaboration of a piece of material, which the Greek goddess Athena (who is known to have invented the *aulos* or the double reed usually translated as the "flute") used for imitating the lament of the two surviving Gorgons, Stheno and Euryale. Or whether the dancer contorting onstage can be read as 'the

The problems that such a structural analysis exposes, in particular the linearity inherent within the binary oppositions, were recognised by Lévi-Strauss himself. He realised that there are many other facets and that some factors in fact cut across this axis. For instance, he considered two natural elements, the 'seducer' and 'poison', as elements that interpenetrate this axis. Lévi-Strauss suggests that the seducer "un-cooks" (or de-socialises) the woman he is seducing, and that 'the natural' substance poison is used to effect death, where death is considered to be 'the human' and life 'the natural'. Poison, then, cuts into the process of life turning to death, of 'the raw' turning into 'the cooked' (Lévi-Strauss 1969).

For my discussion of performance, it is precisely this cutting across, or interference into the linear process, which is of interest. I want to abstain from any linear translation of the body in performance environments and want to situate performance within the elements of the seducer or the poison, rather than locating performance within clean-cut oppositions and oppositional pairings such as nature/culture. In the same way that music cannot simply be read as noise ('the raw') that becomes transformed into sonic information ('the cooked'), performance conceptualised in a linear fashion occludes the complex interactions between humans and between humans and technologies that I see as an integral part of performance environments. Michel Serres also puts into question Lévi-Strauss' idea of the linear axis. According to Serres, music should be seen as something more akin to "the looping and labyrinthine interchange of the hard and the soft" (in Connor 1999). This looping interchange also points to what Simon Frith suggests in his writing on performance, in which he says that a shifting boundary between 'the natural' and 'the cooked', between the "staged" and the "everyday" exists (Frith 1996, p.204).

1.2.5. Performance – A Shared Encounter, and a Rare and Supposedly Fleeting Event

Up to now I have considered performance more from the point of view of the person doing the act and have less taken into consideration the other person who is 'receiving' the performance. I do, however, want to emphasise the role of the other. Performance is not only an aesthetic statement by a particular person; it is always intended for another. Performance implies the notion of the 'shared', of taking part in something that is given by one to another, as well as the idea of giving itself. Simon Frith has suggested that even the listener becomes a performer who always performs the music he hears to himself. For a performance to work, an audience of performers is needed so Frith suggests (1996, pp.203-6). Works that particularly seek the active role of the participant are the performance works by John Cage,

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human' dish derived from 'the natural/the raw'; that is the movements of a hunter throwing a spear, or even the movements of the game itself?

in particular his infamous piece 4’33 of 1952, often described as a silent work. Douglas Kahn argues that a performance of this work is achieved by withholding the performance, (Kahn 1999, p.262). I think that one can agree that the performative actions of a performer walking onstage, sitting at a piano and *not* playing a single note were, particularly at the time of the first performance, less decipherable as performance actions. However, I see this work as epitomising performance in which the listener becomes a central figure. A performance of 4’33 should be considered a performance as there not only exists the listener’s intention to partake, and the preparation on part of the performer, but also there exists a performer who is initiating the participants into listening rather than executing performative actions according to the listener’s expectations. More importantly, the performance is a being-in-time rather than a thing to be preserved. Cage emphasises this idea of a work as having to pass, of taking place this one particular time. Hence, one can argue that performance always emphasises the ephemeral. Cage thus highlights the idea of a performance being somehow ‘unique’, and one can say that about all performances, be they orchestral ones, tape music performances, instrument/live-electronic performances, laptop improvisations, dance or theatre performances. A performance is only heard or seen that one time in one particular space. Jacques Attali suggests this when saying performance “is a unique moment” (Attali 1985, p.41). This uniqueness, this fact that the work disappears again, and that one is able to experience the ‘now’, which lets one partake in a “rare and supposedly fleeting event” (DiPasquale 2001), is particular to all kinds of performances.

A performance of 4’33 incites the listener to become a performer, in which attention is shifted from the performer to the listener, from the sounds on-stage to the sounds off-stage. Similarly, the 1960s field trips described in the British music magazine *Obsessive Eye* bring the role of the listener into focus. As part of these trips, an audience in expectation of a conventional concert is taken by bus through a sound environment with their palms having been stamped with the word “listen”. The performance becomes an active event for the participant, an ephemeral “collective listening experience” (DiPasquale 2001).

Such collective encounter, or shared experience, requires certain openness to the other; it asks the listener and the performer to learn of the other. The 20th-century German philosopher Hans-Georg Gadamer (1900-2002) elaborates on this idea of the shared encounter. In a view close to Gadamer, a performance, as it constitutes such a shared encounter, also requires a certain attitude of humility. It demands being open to the encounter of another, in which another can break “into my ego-centredness and give me something to understand”. Gadamer’s thought “of the other as having a kind of claim on me” (Gadamer 1997) may be a vital aspect to understanding what constitutes a performance.

Gadamer's teacher, the German philosopher Martin Heidegger (1889-1976), had previously emphasised the equal importance and co-dependence of the performer and the listener. He suggested that in the creation of a work of art - and I consider any performance also to be the creation of a work of art[24] - the *creator*[25] (which may be understood as the composer, the performer, the programmer, the choreographer, the painter, or the writer) and the *preserver* (the performer as well as the listener, the viewer, or the collector of a work for instance) are equally dependent (Heidegger 1993[26]). This view resonates with Walter Benjamin's who, in his seminal writing "The Work of Art in the Age of Mechanical Reproduction" (Benjamin 1935), argues against the idea of the artist as the creative genius and therefore bestows equal importance onto the preserver and creator.

Heidegger continuously stresses that it is not of importance that a great artist was at work but that an "unconcealment of beings" (by the Greeks refereed to as "aletheia") has happened, and that it happens for the first time (Heidegger 1993, p.161 and p.190). This means that a person comes into presence as a being, that he reveals himself, and that he discloses himself as meaningful in that context. This possibility for unconcealment in a human being, the fact that being is an issue, defines human existence for Heidegger (1962).

If one regards performance as a shared encounter of several people, then one must also affirm that a performance requires a coinciding of unconealments of several beings. The being that gives the impulse for the performance, such as the composer, the performer, the choreographer, the painter, or the writer for example. Secondly, an unconcealment of the performer herself occurs, which may be the instrumentalist performing the work, the dancer dancing a choreography, or even the painting itself. And finally, an unconcealment of the listener or viewer takes place.

Furthermore, since human beings are not "definite" beings and are always in a constant process of completion themselves, one can argue that the work itself is also in a constant process of being completed. Gadamer's "hermeneutics of finitude" expresses this idea of things constantly being in completion, as a process that is superseded again and again with no sense of completion (Benson 2003, p.153). Hence, rather than definite beings, a performance involves people that are in constant movement and is therefore in itself something that is in constant flux.

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[24] To me, any type of performance is also a work of art, be it the dentist's or the violinist's performance. One can argue that every work of art (the endosteal tooth implant - an artificial tooth screwed into the jawbone-, as well as the Paganini Sonata) is derived by means of a performance.

[25] For clarification I add that Heidegger's "creator" has nothing to do with the Kantian "genius". Heidegger was against Kant's idea of the genius, as for him "everything with which man is endowed must, in the projection, be drawn up from closed ground and expressly set upon this ground", which means that for Heidegger all creation is such a drawing-up. He emphasises that it is modern subjectivism that "misinterprets creation, taking it as the sovereign subject's performance of genius" (Heidegger 1993, p.200).

[26] "The Origin of the Work of Art", originally delivered in a public lecture in Freiburg in 1935, entitled "Der Ursprung des Kunstwerkes".

1.2.6. Performance and Enchantment

It is not sufficient to note that a work of art is created or that a performance takes place. However, according to Heidegger, a work of art also has to do something particular. It has to "transport us out of the realm of the ordinary" (Heidegger 1993, p.191); thus the work or the performance can be seen as what Heidegger calls "a bringing forth" of an openness, (1993, p.187). This is an openness in which beings can ground themselves (1993, p.201). This openness is not something rigid, though. One can draw parallels here to Adorno and Horkheimer (Horkheimer, Adorno 1997). They suggest that although a work of art has its own boundaries and exists inside a self-enclosed area governed by special laws, distant from the profane and closed off from actuality, this closed-off area is not something unyielding, in which the work remains lethargically untouched inside. Rather, a work of art entails something magic, even mysterious, as existent in the work of the magician. The work of art, according to them, has something in common with *enchantment* (Horkheimer, Adorno 1997). Adorno says that,

> "[j]ust as in the ceremony the magician first of all marked out the limits of the area where the sacred powers were to come into play, so every work of art describes its own circumference which closes it off from actuality" (Horkheimer, Adorno 1997, p.19).

Apart from defining its own boundaries, the artwork must also always mediate something that is other to it, which Adorno refers to as 'the more' (das Mehr); this is the presence of the "non-factual in their facticity" (Horkheimer, Adorno 1997, p.86). This "Mehr" can be derived from a tension that exists between what is inside and what is outside, since, according to Adorno,

> "the artwork itself lives in the tension between the interior and exterior; because it becomes an artwork solely in that its manifestation points beyond itself…" (Adorno 1977, p.80).

This tension between interior and exterior is vital since the moment of rupture, "the instant of apparition" (Horkheimer, Adorno 1997, p.88), only takes place when the interior is threatened by the exterior. It is in this folding over, in the moment of rupture, in the instance that the work points beyond itself, or what Ciarán Benson refers to as the moment of being aesthetically absorbed, or even lost in an event that a performance takes place. Ciarán Benson (1993) terms this instant the moment of "absorption", "enchantment" or also "bewitchment". It is the moment, in which the boundary between oneself and the object is being broken down and in which one literally "pours" oneself into the object, becoming merged with it (in McCarthy, Wright 2004). This, according to Benson, is delight and pleasure.

It becomes clear that when thinking about performance one must also consider many other facets, such as the encounter with the other, the importance of the listener, as well as the idea that performance may possibly reveal something out of the ordinary, something mysterious, something that points beyond itself. However, even if the discussion has spread into many differing directions, the idea of performance involving action, making and doing remains vital. This implies that performance eliminates the thingness of a thing; it seeks extensions to the objective nature of things. This becomes particularly evident in the performative modes of Happenings and Fluxus[27] events. Here, by means of a performative approach, a kind of extension to painting is sought, a going-beyond the painting, which is considered an object frozen in time focussing on its surface rather than its depth. The painting is de-objectified through performance. Kahn suggests that in imbuing the act of painting with spatiality, the object becomes dissolved, and thereby leads to an extension of the painting (Kahn 1999, p.274). Painting becomes, through its focus on the action, a performance. For example, Jackson Pollock's (1912-1956) "Action Paintings", in which Pollock drips paint onto a flat canvas with elaborate and well-intended gestural action, constitute such extension of the painting.

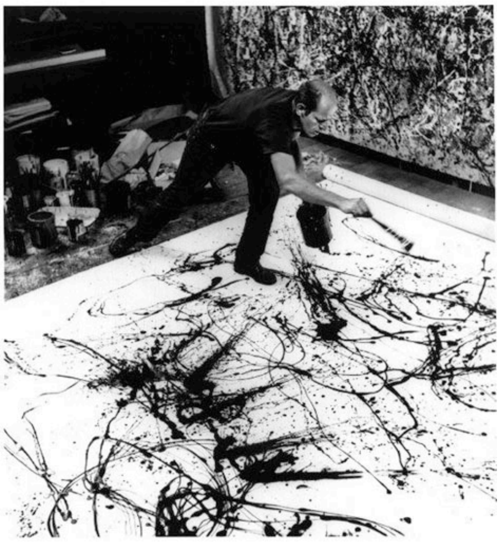

FIGURE 4: JACKSON POLLOCK
PHOTOGRAPH BY HANS NAMUTH; NATIONAL PORTRAIT GALLERY, SMITHSONIAN INSTITUTION, WASHINGTON, D.C.; GIFT OF THE ESTATE OF HANS NAMUTH
WWW.NPG.SI.EDU/IMG2/REBELS/9500316C.JPG; [NOVEMBER 2005]

Pollock's view that what was to go on the canvas was not solely seen as a picture, but as an event posits his acts as performances. Douglas Kahn explains that Pollock considered his paintings more closely to music, and many people would become to associate his paintings with jazz and consider them more as improvisations, just as a piece in jazz music (Kahn 1999, p.261).

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[27] Fluxus is an art movement, coined by George Maciunas in the early 1960's. In America it was commonly known as Happenings. Maciunas described Fluxus as "a fusion of Spike Jones, gags, games, Vaudeville, Cage and Duchamp". Fluxus was supposed to "promote a revolutionary flood and tide in art, anti-art, promote non art reality …". Fluxus artists included Joseph Beuys, John Cage, Robert Filliou, Ray Johnson, George Maciunas, Yoko Ono, Nam Jun Paik and La Monte Young, to mention but a few (Delahunt 2005).

1.2.7. Performance is a Paradigm of Process

Performance, then, emphasises *doing* and *making*, and at the basis of somebody doing or making something always lies an intention; an intention by a person *to do* something. In that way even a robbery, which can be understood as an intended act, one that will be observed by onlookers of the shopping centre, can be regarded as a performance. Although I will limit this investigation to cultural genres of performance, the robbery highlights one particular aspect that all performances have in common: that of process and sequence. Richard Schechner suggests the existence of stages that form part of a performance, such as preparation, rehearsal, warm-up, and finally the performance itself. He sees performance as “a paradigm of process” (in Turner 1987, p.8).

Added to these stages are the backstage processes, such as the cooling down after a performance, going to the pub, or the dividing of the money amongst the robbers. These actions are at the core of each performance and are also referred to as ritual actions, or what Schechner calls “restored behaviour”; that is, behaviour that can be repeated (Schechner 1988, p.324). In this way, one can agree that performance always entails processes.

The anthropologist Victor Turner speaks of these processes in terms of “breach-crisis-redress-outcome”. Turner sees this quadruple formula as particularly integral in the shaping of social dramas. This means that social dynamics in a group become first stirred up by a “breach”. This can be in form of a disregard of a certain rule or a moral misconduct. The breach then is followed by the “crisis”, during which the group may divide into two, unless the issue is somehow addressed, either through a court solution, by the village elders or even by a religious solution. This restorative stage Turner refers to as “redress. The eventual “outcome” consists of some reconciliatory or re-constitutive actions (Turner 1987, p.100). This means that for Turner the preparation and reason for an event’s occurrence form an equally important part of a performance, as does the final outcome. I believe that Turner was the first to refer to social actions, that evolve over several years, as performances.

Other writers have pointed to these processes. Ryszard Cieslak of the Polish Laboratory Theatre elaborates on his performance work by looking closely at the processes that take place during rehearsals of actors. He says that during the rehearsals, by acts of searching, accepting and rejecting, a kind of ‘score’ is created. This score can include descriptions of a particular feeling of one's body in a specific place, the tone of one's voice, the movements of one's fingers, or even associations one may have.

Cieslak says that the score is,

> "like the glass inside which a candle is burning. The glass is solid, it is there, you can depend on it. It contains and guides the flame. But it is not the flame. The flame is my inner process each night…. Just as the flame in the candle glass moves, flutters, rises, falls, almost goes out, suddenly glows brightly, responds to each breath of wind - so my inner life varies from night to night, from moment to moment" in (Schechner 1988, p.47).

Cieslak thus points towards the existence of constant changes and variations, emphasising the fluidity of a performance. Jerzy Grotowski also talks of the processes that take place in a performer's experience by drawing upon the metaphor of water flowing between the banks of a river (in Schechner 1988, p.47). Victor Turner emphasises performance as something open to change. As something that never finishes performance is decentred and liminal (Turner 1987, p.8). I will return shortly to the idea of Turner's liminal as this concept greatly informs this writing.

1.2.8. Performance is Play

I first want to examine the concept of play since performance reveals striking similarities with the ideas of play. In particular, similarities to performance can be seen when considering that both occur in a particular arena in which special laws and rules apply. The concept of play has been examined by several thinkers; it is central to Hans-Georg Gadamer's hermeneutic thinking for example. In "Truth and Method" (Gadamer 1989), Gadamer elaborates on interpretation in terms of play. He sees play's distinct features as involving absorption. Also, there is a specific self-discipline and order that becomes imposed during play. The movement of the game is of particular interest to Gadamer, more so than the players or the game pieces themselves. According to Gadamer, play always intends something with effort and commitment (1986, p.23), and human play includes binding rules as it involves an intentionality of consciousness, Everybody is involved as a participant engaging in some reflective and intellectual way (1986, p.124). I think it is not difficult to see similarities with artistic performance activities.

In one of the most seminal writings on the concept of play, the Dutch historian Johan Huizinga provides a great insight into the nature of play and its essential role in the existence of human beings. Huizinga goes so far as to suggest that play, rather than work, was the formative element in human culture; that man's most serious activity belonged to the realm of make-believe (Huizinga 1950). Play, according to Huizinga, has always been an essential feature in humans' lives. This is something that already Plato recognised when he said so poignantly that "life must be lived as play, playing certain games, making sacrifices, singing, and dancing…" (Huizinga 1950, p.19).

Huizinga's view of play as a well-defined quality of action, one that is different from "ordinary" life, not only different as to locality but also as to duration and his view of play as a special form of activity and a social function (1950, p.4) underline the links to performance acts. Huizinga differentiates diverse forms of play, such as exhibitions, dancing, music, pageants, masquerades and so forth; all of which he refers to as higher forms of play (1950, p.7). In reading Huzinga more closely, it becomes clear that play and performance not only are linked, but that performance is rather deep-seated in the concept of play, if not indistinguishable from it. Huizinga says that, "law and order, commerce and profit, craft and art, poetry, wisdom and science are all rooted in the primeval soil of play" (1950, p.5). He particularly emphasises the strong bond between play and music, which the term "playing" an instrument already illustrates (1950, p.158).

All the facets that I have so far linked to performance are already present in play. Conversely one can say, what is contained in play man has reconstituted in the performing of the arts. This becomes clearer when examining some of the inherent qualities Huizinga sees in play. He considers play as secluded and limited and suggests that play is being "played out" within certain limits of time and place as it contains its own course and meaning with a set of particular rules that are binding to everybody (1950, p.9). These are certainly qualities that recall more traditional performance settings, such as the classical music concert, in which an abundance of rules is noticeable. This includes a specific dress code, a precise starting time for the concert - late-comers are rarely admitted or only in intervals –, no clapping between movements, no coughing, and so on.

Also, according to Huizinga, in play there is a strong element of tension, uncertainty and chanciness. Play is always about tension and solution, as can be found in puzzles, in target-shooting, in gambling or even in athletics (1950, p.11). A further quality that one tends to find in play, and that becomes reconstituted in performance, is the need for a particular environment, one in which the "pretend play" can take place. Nowadays, one finds such specific environments for the settings of concerts, plays, and installations. Schechner's suggestion that these kinds of performance places are in fact variations on the meeting places of hunting and gathering bands of earlier human societies is worth noting here. In earlier times, humans did not live in one particular place. They had to keep on the move in order to follow game as well as to be able to adjust to the varying seasons. It was only for certain occasions, due to a common food source for example, that several bands would concentrate in a particular place where they would engage in festivities, or so-called carnivals (Schechner 1988, pp.171-2)[28]. During those gatherings, they would dance, sing, and share special food. It is here that one finds the contemporary performance space already anticipated: the gathering, the act of singing and dancing, or whatever else the performance may be, and the sharing of food - all taking place under the "roof" of a specially designated place[29].

It is commonly assumed and expected that the performer create a particular performative environment within those specially selected places. One that is somehow removed from "real" life, in order to transport the viewer/listener into a temporary world; a world exclusively dedicated to the particular performance. Huizinga argues that all performance spaces, like,

> "the arena, the card-table, … the temple, the stage, the screen,… are all in form and function play-grounds; i.e. forbidden spots, isolated, hedged round, within which special rules obtain" (Huizinga 1950, p.10).

A performer's responsibility lies in transcending any artificiality of a given environment, in turning the performance space into such a closed space, hedged off from everyday surroundings, as well as in transporting the viewer into the world of pretend-play[30].

It is interesting to note that a disturbance in a performance, such as somebody clapping between movements of a symphony, or somebody coughing or laughing inappropriately, or even the performer's own actions, restarting the crashed laptop, or playing the "wrong" notes, brings one's awareness to the fact that the performance was a "pretend-play". The pretend-play of the performance is disrupted. One's awareness is brought back to "real" life as one realises that one was *watching* somebody play, rather than being part of the temporary sphere of the playing activity itself. The play-world ceases to exist. The game is over.

Such disruption of a performance's play character recalls that beautifully innocent example of the playing boy in Huzinga's book (1950, p.8), of a father who finds his boy sitting at the front of a row of chairs, "pretending" to be the engine of the train. The boy tells his daddy not to kiss him as otherwise the carriages would not believe it was real. To be an engine is not to be kissed. Daddy’s kiss is akin to the crashing of the performer’s laptop, or the playing of the wrong notes. These are actions that disturb the performance and take one out of the world of play back into “real” life which one sought to escape from in the first place.

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[28] The term "carnival" is particularly suited to such gathering activities of hunting societies around a food source (which, most commonly, would have been meat), as the term "carnival" stems from the older Italian form of "carnelevare", literally meaning "to remove meat"; from "caro" = "flesh" and "levare" = "lighten, raise" (Harper 2001).

[29] Such specially designated place is not only found *inside* buildings, since street performers, such as clowns, buskers, acrobats, or jugglers always endeavour to create a performative space around them, making the shoppers and flâneurs of the street suspend their activities in order to gather for the performance.

[30] Traditional concert settings with rows of chairs and the confrontational setting of audience/performer unfortunately often become non-participatory spaces, and therefore represent a distinct antithesis to the participatory space of a play environment, in which dynamic movement, freedom, changes and voluntary activity prevail. The traditional concert setting with its given artificial awkwardness often makes the creation of a playful situation for the performer the more difficult. Hence, a lot of contemporary performance activities tend to be moved out of the traditional settings into more "playful", and socially more engaging, environments, such as the night-club, the market place, the outdoors, or the ruins of a factory.

1.2.9. Social and Aesthetic Drama

I have delineated real life with the temporary sphere of a performance that can further be distinguished by the fact that the listeners or viewers do not necessarily become physically involved. There are, of course, performances that involve the audience physically; that aim for the active and constant breaking-down of, and making-aware of, the performer-audience separation. I will discuss one such performance by the Catalan group La Fura dels Baus in chapter II. Schechner distinguishes between what he calls aesthetic and social drama in terms of the viewer's transformations that are affected. This means that in an aesthetic drama the audience is conceptually and actually separated from the performer and thus permanent body changes are not effected, i.e., the murder of somebody onstage does not physically affect the audience member. This means that an aesthetic drama acts *on* the participants, as opposed to the social drama, in which all persons present *are* participants, as in a war for example (Schechner 1988, p.192). In addition, Schechner distinguishes between differing types of performers, which he refers to as "grades" of performers. According to those grades, there exists a professional performer that is one who is aware of his performance. This performer stands in contrast to the "Goffman performer" who unknowingly "performs" everyday life (Schechner 1988, p.300). Schechner emphasises that participation and reception of a performance immensely vary due to the "emic-etic" problem. This means that a big cleft exists between what a performance is to somebody inside and what it is for someone outside.

Schechner therefore suggests the metaphor of the "frame" which allows one to distinguish between various performances. For example, in the conman's performance on the street the frame is hidden: one is not aware that one is being performed upon. In the case of an actor's performance, the frame is visible as one knows that one is partaking in a performance. Finally, the frame can be imposed, as in the situation of a TV crew arriving on the scene of a tragic accident. The presence of the cameras imposes a performance onto the injured and the witnesses. What I think is essential in Schechner is that although he distinguishes between aesthetic and social drama, he suggests that anybody could at any time, out of the blue, become a performer. He also argues that performances are integral for the social equilibrium in the same way that such equilibrium exists in life. In life, for example, the need for an initiation rite, in which a girl becomes a woman, arises due to the fact that a woman dies in a funeral rite. This indicates that such process is necessary in order to maintain a social equilibrium; to fill a vacancy, so to speak[31].

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[31] It can be open to debate whether a performance should be seen in this way; as an essentiality, in which a vacant hole in the social system becomes filled.

Schechner’s argument of conceiving of social drama as able to turn into types of performances echoes Victor Turner’s idea that from social life and its implicit “social drama”, as he calls it, a range of genres of cultural performances have been and are constantly being derived. He says that cultural performance activities imitate social drama and through reflection, they assign “meaning” to it. This becomes particular evident in genres such as opera as a performative genre that evolved, and still evolves, from stories of quotidian social life, or drama more often, taking up issues of love, betrayal, adultery, sacrifice and often murder.

1.2.10. Performance is Life – Life is Performance

Investigating this *reciprocal* relation of social life and cultural performance, Turner investigates various social dramas by studying the ritual performances of the Ndembu of Zambia (Turner 1967). What is intriguing about Turner’s studies is his way of investigating in line with a more Heideggerian approach, in which he does not solely consider the things that run smoothly. Turner also looks at the break-downs and at what occurs when things are “a-harmonic”. He examines the “breach” and “crisis” and in doing so, Turner encounters his most valuable findings on human processes. These findings show that performative genres come out of social drama and “in turn surround it and feed their performed meanings back into it” (Turner 1987, p.90).

One can argue that pointing to the reciprocal relation of quotidian life and cultural performance activities is not new, in particular when considering that poets, writers, musicians, and painters have always derived, and still derive, their ideas for a work from the experiences of life; that is from social drama.

The idea that everyday life is a performance also forms the basis to Erving Goffman’s enquiries; hence, the title of his book: “The Presentation of Self in Everyday Life” (Goffman 1959). Goffman says that all social interactions are staged and that all human interaction is a performance; one shaped by the environment and the participants. Goffman suggests that when individuals and groups meet, they perform for each other - as if on a stage. In particular, Goffman shaped the notions of the *frontstage*, where such meetings take place and the *backstage*, to which the group retires to either absorb their performance, or to prepare for the next frontstage performance.

This reciprocal relation of life and performance supports my above argument that the contextual information is important in an enquiry into a performance. The importance of the framework, of the fact that performance must be seen as context- *and* culture dependent permeates my discussion.

1.2.11. Liminality

In particular, my discussion posits performance closer to something that entails change and variation, as something that emphasises fluidity and process rather than rigid stages or binary oppositions. Turner already bestowed this decentred and liminal characteristic onto play. By locating play as something that does not fit in, as something that displays liminality, which according to Turner is “a state of ‘betwixt and between’, a fructile chaos, a storehouse of possibilities” (Turner 1982), he clearly does not confer evolutionary roots onto play. Rather, play is,

> “a liminal or liminoid mode, essentially interstitial, betwixt-and-between all standard taxonomic nodes. […] As such play cannot be pinned down by formulations of left-hemisphere thinking […]. Play is neither ritual action, nor meditation, nor is it merely vegetative, nor is it just ‘having fun’; it is also a good deal of ergotropic and agonistic aggressivity in its odd-jobbing, *bricolage* style […]. Like many Trickster figures in myths […] play can deceive, betray, beguile, delude, and gull” (Turner 1987, p.17).

Turner originally derived the concept of liminality from the writings of French folklorist Arnold Van Gennep. Van Gennep had previously divided rituals associated with passage into three stages, those of *separation*, *liminality* and *re-aggregation* (in Turner 1987, p.101).

Van Gennep’s stage divisions show parallels to performance and performance preparation, if one considers the first stage – *separation* - as the act of preparing for a performance, such as the composing or designing of a work, the collecting, rehearsing or selection of materials. Within the second stage – *liminality* – one can locate the performance itself. Turner already suggested locating play within this stage. Performance, then, can be seen - in the same way as play - as not fitting in, as somewhere “betwixt and between”. The third stage *–re-aggregation or evaluation* – forms an integral part of any performance. This is the feedback from the audience as well as the performer’s own evaluation of his liminal actions. The last stage always feeds back into the first and second stages.

It should be noted that Turner favoured the idea of “transition” or “limen” over the idea of states or stages since, according to him, transition always implies a certain threshold. Turner gives an excellent example of the idea of transition in exposing some of the rites of passage of the Ndembu of Zambia, where he studied the “neophyte” during his particular rite of passage[32]. According to Turner the rite of passage, in which a boy becomes a man, is the most prominent one in a man’s journey through life. It represents his transition from womb to tomb, so to speak, and is characterised by notions of transition rather than by the idea of static states. A neophyte in this liminal ‘state’ always finds himself in a stage of reflection, where a change in his being takes place: a boy is grown into a man. The neophyte's condition, just as that of the mythological trickster figure, is ambiguous. He is neither here nor there; he is, so Turner, "betwixt and between", and is often treated as sexless and poor. In this rite of passage the neophyte has a physical, but no social reality; he is a "naked unaccommodated" man (Turner 1967, pp.98). On the other hand, liminality also carries with it the notion of freedom; the "freedom to juggle with the factors of existence" (Turner 1967, p.106). This entails that, just as the trickster, the neophyte shuttles between categories. He occupies 'the edge', and this liminal state also opens up vast possibilities of experimentation.

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[32] The word neophyte derives from the Greek, which literally translates as “newly planted”; a word made up of “neos” = new + -“phytos” = planted. It implies the “one who is new to any subject” (Harper 2001).

The idea of the liminal is closely tied to the threshold metaphor that has undoubtedly been an influential one in the performing arts. For example, the threshold condition in design can be seen as standing in contrast to the quest for a seamless world. According to Richard Coyne it is "the site of edgy design, risk, hybridity, the problematic, and a portal into the new" (Coyne 2005, p.15).

Architects[33] and artists often question this idea of seamlessness and instead thrive on boundary conditions. Performance artists, such as David Blaine, Marina Abramovic and Ulay, Antonin Artaud, or Stelarc exemplify this. If one considers the performer as maker or inhabitant of this marginalised space, it entails that the performer also has the choice to identify with the trickster; with that figure that is forever going between hemispheres and categories, with the one who is,

> "at one and the same time creator and destroyer, giver and negator, he who dupes others and who is always duped himself. He wills nothing consciously. At all times he is constrained to behave as he does from impulses over which he has no control. He knows neither good nor evil yet he is responsible for both. He possesses no values, moral or social, is at the mercy of his passions and appetites, yet through his actions all values come into being" (Radin 1956, xxiii).

For a performer this means that she has to consider, accept, or reject a placement on the edge, and that she must decide how much and whether she critically engages, explores, and plays with the potential for highlighting ambiguities, blurring distinctions and provoking reactions. This line of thinking bestows a great responsibility, in terms of reflection, upon one's performance activities and onto the performer herself, who I see, just as Lewis Hyde sees the trickster, as "the god of the threshold in all its forms" (Hyde 1998, p.7-8).

It is worth noting that I am not the first to link performance to this marginalised space of the "liminal". Susan Broadhurst for example speaks of liminal performance "at the edge of what is possible". Liminal performance emphasises "the corporeal, the technological and the chthonic"; it favours "non-linguistic modes of signification". She describes the liminal as being represented in the hybridised performances of Robert Wilson, in Pina Bausch's "Tanztheater", Peter Greenaway's "Prospero's Books" or Lars Von Trier's "Europa/Zentropa", as well as in Artaud and Brecht, and in the music of the "Einstürzende Neubauten" (Broadhurst 2000). The liminal therefore celebrates indeterminacy and fragmentation. It blurs boundaries and can be characterised by disruption, by excess, by the ambiguous and by the paradoxical. It is this idea of the liminal that permeates the ensuing performances discussion.

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[33] Rem Koolhaas for instance turns towards the disjunct, the disjoint or the distorted; to what he calls "junk space", which is the "fuzzy empire of blur fusing high and low, public and private, straight and bent, bloated and starved to offer a seamless patchworld of the permanently disjointed" (Koolhaas 2004, p.163). Similarly, Bernard Tschumi finds his architectural ideas in the distorted, "in the most forbidden parts of the architectural act; where the limits are perverted, and prohibition are *transgressed*. The starting point of architecture is distortion" (in Coyne 2005, p.3).

1.2.12. A New Ontology of Performance

One can argue that the concept of performance changes dramatically with the introduction of reproduction technology, in particular the first phonographic technology. Thomas Edison's invention of the phonograph in 1877 made it possible for sounds to become dislocated and disembodied from their source for the first time.

The fact that a performance, particularly one dealing with sounds, could be repeated at home, and people argue whether this implies a reduced need for human live performers, immensely impacted on the idea of performer and audience as well as on the idea of personal identity. Technology in that sense not only blurs the boundaries between absence and presence, but also it significantly puts into question the concept of what constitutes a performance. Simon Frith elaborates in detail on this in his chapter "Technology and Authority" (Frith 1996, pp.226-245).

One of the main effects of technology is the possibility for the disappearance of a previously existing link between a sound and a sound source. Previsouly what one heard was what somebody was playing at that particular moment in that particular space. DiPasquale suggests that, "music *was* its performance"; it was "live". With the advent of new technologies "a new ontology of music, and thus, of live performance itself" appears (DiPasquale 2001).

I think that this shifting link immensely shapes the listener's cultural understanding and challenges his preconceived assumption of a performance.

Denis Smalley hints to this when saying that,

> "prior to the electroacoustic era [...] the listener could automatically assume before even listening to a piece of music that it would be rooted either in the instrumental gesture model, or human utterance, or both [...]. So, traditionally, the indicative framework and boundaries of a musical work were not only pre-determined but, as far as culture is concerned, permanent" (Smalley 1992, p.544).

It can be argued that the possibility of removing sound from its original source, i.e. the transplantation of sounds that become removed from a bodily source of a performer into different locations, as often found in instrument/live-electronic performance environments, has also opened up an entire new spectrum of performance possibilities. Examples of this are the spatialisation of sounds themselves or the live-processing of instrumental sounds. On the other hand, fewer listeners tend to be able to cope with the inherent "perpetual interplay of presence and absence", DiPasquale argues (2001), or with the loss of sense of an embodied sound source. The change in audience structures, where a large number of listeners can now be found listening to performances on the Internet or on their iPods, is indicative of this.

In technologically mediated performance environments what one now hears is not necessarily what the performer *is* playing at that particular moment in that particular space. What one hears can be what the performer *was* playing minutes before in that particular space, or even what the performer *was* playing days ago in another space. Steven Connor says so poignantly that one tends to define an instrument "as a sounding posture of the body", which means that,

> "[w]e learn to hear the postures imprinted in sounds: the fat, farting buttock-cheeks of the tuba, the undulant caressings of the cello". We tend to listen out for the instrument's manner of production, "the mutual disposition of body and instrument that results in the sound" (Connor 2003).

This says that one wants to know how sounds are made in order to be able hear the instrument. Computer music performances tend to be characterised by an absence of such sounding posture of the body. The mutual disposition of body and instrument becomes purposely displaced. It becomes evident that this mobility of the sounds requires the listener to have a certain mobility of the senses. It is also interesting to note that the invisibility of the technology, e.g. the software, in combination with the reduced physical aspect in those performances (tape music performances come to mind) brings about a reversal in the listeners' needs. The disappearance of the physical in the performance tends to cause a longing for something visible in the listener; be it a human performer, a screen display or even just lights attached to the loudspeakers.

The performative content on offer, such as slight fader movements, does not tend to be considered a performative action, or at least it is often not perceived as an active performance gesture. The more traditional ideas of a performance as displaying a visible expressive potential, and of a performance as having an intelligible connection between instrument and performer, is rendered invisible in tape music concerts[34]. The gestural vocabulary of the human performer has been substituted by the sounding of sounds alone. For a more detailed discussion into gestures in new media environments, see (Wanderley, Battier 2001).

DiPasquale argues that the listener tends to require a sense of active gestures; gestures that eventually can be decoded by the viewer or listener through visual means, and that this longing for gesture, for human agency, reassures the listener of life itself. It confirms to the listener a certain sincerity associated with the existence of such physicality that makes for the energy in a performance (DiPasquale 2001)[35]. On the other hand, one can argue that such gesture-less performances go beyond the physical production of sounds by a performer in order to highlight the physicality not of bodies, but of the *making* of sounds in themselves.

In other new media performance environments, a great emphasis is placed on human agency, though, and it is worth noting that particularly in virtual worlds that are often understood as environments in which bodies are dispersed or absent altogether, human agency is a particular focus. This may be by means of a 'remote' body; for example, a music performance performed within a computer game or a networked dance performance shows the reliance on bodily interaction and expression, as avatars or virtual dancers perform to and with each other.

Recent trends in new media practices have also shown that technology has contributed to the fact that all sorts of cultural performance practices become crossed and mixed. Digital media performances hardly ever refer to one or two particular cultural practices anymore, and laptop performers now use sounds and images; performers from visual backgrounds often employ sounds; installations contain images and sonic materials; architectural sites are designed in ways so as to become performative [the 2005 Interactive Environment (Dietz 2005), in which the presence of visitors stimulate lights on the building's façade, is an example of this]. Furthermore, dancers not only move their bodies but also move about sound and image; pictures and sculptures smell and emit sounds; instruments "control" pictures and sound processing, while brain signals affect the audio environment. Shape-shifting or growable clothing become sites for performances in the same way that the projection of artworks onto retroflective materials become performative. The wearing of clothes with active, responsive and changeable surfaces, or dynamic textiles that can receive and output data (see the Institute for Research/Creation in Media Arts and Technologies,

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[34] One could argue that most of the performative actions in tape works occur in the process of the making of the work in the composer's studio, which is physically invisible to the listener of the live performance.

[35] I have noted a trend over the last few years towards a re-implantation of physical objects, be they a violin, a radio, a faderbox, a sheet of paper, a glass bottle or paper clips, in such gesturally less intense performance situations.

Montreal) render the wearing of cloth performative in the same way that the not wearing of clothes can make for a performance. Today, the performance concept is particularly characterised by ideas of the “un-“ and the “dis“ [Ruccas.org (wiki webpage 2005) is such a platform where the un- and the dis- gather]. *Un-conventional* computer and electronic practices are widely spread terms and electronic *dis-obedience* performances can be found in various virtual sit-ins (see Wray, 2004 for Electronic Civil Disobedience and the Electronic Disturbance Theater; a group that has been staging virtual sit-ins since 1998).

Johannes Birringer refers to this expansion of the performance concept as the “relentless hybridization of all theatrical, visual-arts and media practices” (Birringer 2001). This trend to me highlights more than a *combination* of conventional practices. Rather, in order to derive new performance cultures, performance practices literally become placed into another, more akin to the interweaving of materials and in fact the interlacing of ideas and concepts.

One final point I want to make with view to performances that employ technologies is that they demand a coexistence of practical *and* conceptual aspects. They ask for certain craft aspects, the crafting of sounds in themselves as performative content for instance, *and* ways of thinking. Perhaps the original meaning of technology aids in this understanding. Something that Heidegger reminds us of when speaking of “techne” as referring to both art and craft [and the craftsman and artists are called by the same name of “technites” (Heidegger 1993, p.184)]. Technology, then, [as it consists of “techne” *and* “logos”, the latter meaning “word”, and also “thought” or “reason” (Shawver 2005)] also refers to a mode of knowing. I think that performances in technologically mediated environments[36] can make particularly transparent the existence of craft *and* knowledge. Thus, I agree with Johannes Birringer that,

> “performance, today, is not only a general term that applies to innumerable contexts and functional applications of media, but also a theoretical model for site-specificity, spatial practices and media practices that articulate the transactions between the work or event, its materials, context, site, and viewers” (Birringer 2001).

Performance, then, is always making *and* thinking and most clearly, it cannot be defined by means of a universal concept.

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[36] And I do not mean to exclude other performances here.

1.2.13. Summary

I have demonstrated that the concept of performance can, and must, be considered from various viewpoints. It is a concept, which defies clean-cut definitions, especially as it entails many underlying concepts, all of which in themselves give cause for further elaboration. These are concepts as diverse, and by no means all-inclusive, as the physical, gesture, reciprocity, connectivity, extension, embarrassment and vulnerability. They can include Gadamer's encounter and the shared, Heidegger's "unconcealment" and "openness", Adorno's "enchantment" and "rupture", as well as Schechner's ideas on "ritual action", Huizinga's and Turner's views on "play", which in turn reveal notions of "breach", "crisis" and the "threshold", right down, or up, to life itself.

In addition, I argued that the term performance has to be re-considered when reflecting on performances that remove the link between sound and sound source or that deliberately displace the mutual disposition of instrument and body by technological means.

Amongst this instability and fluidity in meaning, I think that one can draw one more or less stable aspect from this discussion. That is, that performances, be they real or virtual, traditional or new, always refer to one particular thing which is the body. This body can either be present or absent, solid, or "a flux of viscera, time, consciousness and space" (Warr 2000). Performance always anchors itself in the presence or absence of bodies.

In the next chapters, I therefore consider various performances that I approach from the point of view of a specific body. I examine ten different bodies by progressing from the more connected to the more disjointed, or the more seamless to the more schizophrenic body. I scrutinise: 'the body mapped', 'the body governed', 'the body connected', 'the body assaulted', 'the body pivotal', 'the body breathless', 'the body incestuous', 'the body skinned', 'the body without organs', and finally 'the body performed'. I will argue that all those performances question a linear translation of the body, and consider, and allow for, notions of failure. These are performances that engage in opportunities for making errors. As they oppose the quest for a seamless world, they can also be situated at the interstitial or the liminal.

Finally, I want to posit performance as a mode of thinking. I do this not by looking towards a merge of body and technology, nor by looking towards a translation of body onto technology, but by looking towards the idea of the threshold and by concentrating on a discussion of divergence and difference. In this way, I hope to cross boundaries that are not just boundaries of discourses, but also boundaries that confine my own thinking.

1.3. CHAPTER OUTLINE

In Chapters II to IV I tie the concept of performance and the body together by looking at diverse performances that range from music performances and sound installations to bodily interventions. The performances are considered by taking a specific body that is featured in these performances. I examine ideas such as the body being independent of the mind, the body as the initiator of the world, and the body being able to stand alone. A detailed outline of the chapters follows:

Chapter II consists of six sub sections.

In this chapter I consider performances in which the body takes on a central position in which the body is seen as the focal point that turns towards the world; a body that gives rise to the world. The types of bodies I examine are what I entitle 'the body mapped', 'the body governed', 'the body connected', 'the body assaulted', 'the body pivotal', and 'the body breathless'.

In section 2.1., entitled **"Performance: an artificially created stimulus, or running from the bear! – the body mapped"**, I propose to look at performance not simply as a physical act in which somebody performs onstage with an instrument, but as something that goes beyond pure external manifestations. Incited by the neurobiological findings of Antonio Damasio of the body, brain and mind as manifestations of a single organism, I propose to look at performance as a stimulus, as a trigger to a motivation in which pure physical actions are understood as the initiators for some kind of stimulus that in turn acts upon the body.

Performances are considered from the view of "the body mapped", which is a body that acts as an interface between the body-proper and mental patterns. Damasio's phenomenological thinking of the body and its bearing on the making of the mind, rather than the mind as working on one side and the body on the other, leads me to examine a performance in which a specific kind of "mind-body unity" is of necessity.

The second section of chapter II (2.2.), entitled **"The Cartesian Performance – the body governed"**, investigates a performance that, in analogy to Descartes' ideas of mind and body being separate substances, features a body that is informed by the higher rationality of the mind. This is a performance in which the division of the body and mind and the stretching of the body's physical and mental limits become integral for the performance. The body that I consider is titled "the body governed".

Section 2.3., entitled **"The Bergsonian Performance – the body connected"**, takes as a point of departure the philosopher Henri Bergson's views of the body as the centre of our actions; the body as initiator of the world. "The body connected" features in this section. I extract from Bergson what I deem to be one of his major contributions, which is a philosophy of the "extensive". This implies that Bergson never situates at either end of extremes. I therefore consider performances in ways that feed on what I come to term "the shift". The shift establishes a particular preoccupation with the 'in-between' or the interstitial and highlights that some performances can be best understood as acts that strive towards this shift.

Section 2.4., entitled **"The Artaudian Performance – the body assaulted"**, examines the body that is able to stand alone, which is a body without the need for its organs, as articulated by the French artist Antonin Artaud. In this section I consider performances that feature an unattached or a vulnerable body. These are performances in which the body becomes a surface for assaults and attacks. I thus refer to this body as "the body assaulted". I regard assault as a form of revenge on one's own body and consider the assaulted body in dance, in a theatre performance as well as in music performances.

Whereas the Artaudian performance highlights the body beaten out of a pivotal position, in section 2.5., entitled **"The Ponty-dian Performance – the body pivotal"**, I place the body back into the centre of the world. This section takes its cues from the French philosopher and phenomenologist Maurice Merleau-Ponty and features what I call "the body pivotal". Here, performance is considered as an activity of bodily attitude in which bodily synthesis informs the performative act. In the Pontydian performance the body comes into being as a body with which one takes possession of the world.

Section 2.6. is dedicated to the ideas of German philosopher Martin Heidegger and is thus entitled **"The Heideggerian Performance: a hermeneutical kick? - the body breathless"**. This section takes Heidegger's concept of intentionality and describes listening attitudes in a live-performance with regards to various present intentions; those of the performer and those of the listener. I ask how, or whether, in a performance these sets of intentions should coincide. I contend that when intentions go against each other, and therefore mismatches are encountered, a performance can furnish one with a less linear understanding of the body. The use of technology in performance environments can facilitate the emergence of the unpredictable, hence, aiding in creating a situation in which intentions go against each other more easily. This chapter, by looking at the idea of unpredictability and at the encounter with surprise, situates performance within the liminal and therefore within the threshold. This chapter, as it deliberately neglects bodily aspects in a performance, features what I call "the body breathless".

Chapter III consists of four sub sections, the first one being a brief summary of the preceding chapters, the second being an introduction to chapter III.

In this chapter, I question the central position of the body that reaches out to the world, and consider performances by moving in a centripetal way, which is from the world *towards* the body. This is in contrast to chapter II where I moved centrifugally from the body to the world. Therefore, rather than the body having a central position, in which one sees instruments or technology as extending from the body to the world, and thereby giving rise to the performance, I consider the idea that the performance gives rise to the body, for example, by suspending one's own body during a performance.

Section 3.3., entitled **"The Touching of the Touch – the body incestuous"**, examines performances that use bodily extensions or prostheses. The idea of 'reaching out', of extending from one's body to another is problematised. Instead, I pursue the idea of performances that nurture the idea of the self-touch. In this way, I expose the body not as a linear "from – to" conception, but argue for the need of making one's body into a fetish object. I particularly stress the exploration of a quasi- incestuous relation with this fetish object. I contend that by exploring discontinuities between the performer and the instrument, not only the boundaries of one's body are revealed and threshold conditions uncovered, but also that the 'in-between', or the liminal is brought to the fore. In this section I feature "the body incestuous".

Section 3.4., entitled **"Redesigning the Body – the body skinned"**, considers a body whose skin is stretched, suspended and interfered into. The stretching of the skin is regarded as the initial step towards entirely opening up of the body, which will lead me to Gilles Deleuze's body without organs, to a body without surface that I examine in chapter IV.

In section 3.4. I consider performances that display a redesigned body, examining the redesigned human body as proposed in Kurzweil's Human Body Version 2.0, as well as the surgical performances of the French performance artist Orlan. Stelarc's suspended body and the body of the transsexual are investigated as the treatment of these bodies illuminates notions of ambiguity, of contradictions, and of difference. These are all performances that move away from a linear translation of the body and conceive of the body as a refigured and re-inscribed one.

And finally, in **Chapter IV**, when turning towards Gilles Deleuze's and Félix Guattari's "body without organs", I consider the possibly most radical move away from the Cartesian idea of the body as guided by the mind. In section 4.1., entitled **"The Deleuze-ian/Guattarian Performance: performancing at n-1 dimensions - the body without organs"** I expose performance in terms of becoming, of involution, of something creative. I define performance as performancing, as a rhizomatic or non-hierarchical activity. This chapter celebrates dispersion. It rejoices in the transfinite and the schizophrenic. I look at performances that are not only schizophrenic, but that also put into question categories of compositional and improvisational activities. These are performances that thrive of 'the in-between', that revel in the threshold and that violently ignore lefts and rights. Kaffe Matthews's laptop performances, Nic Collins' sonic activities and Phil Archer's modified and mis-interpreted appliances are tested.

Section 4.2., entitled **"IKAS: The voice as transcursive inscriber - the body performed"**, elaborates on performative things closest to me which is the process of realising a performance of one of the works I immensely admire: "IKAS" for solo saxophone by German composer Hans-Joachim Hespos. In this section I conceptualise a performing activity with view to the workings of a Deleuze-ian machine, and in doing so, I unite all the bodies that have featured in this thesis.

A brief **Conclusion** is followed with the **Reference** section.

CHAPTER II

In this chapter I examine various performance environments from the point of a specific body. I take six different types of bodies: the body mapped, the body governed, the body connected, the body assaulted, the body pivotal, and the body breathless. I commence with what I title the body mapped. This body is derived from the neurobiological findings of neuroscientist and philosopher Antonio Damasio.

2.1. PERFORMANCE: AN ARTIFICIALLY CREATED STIMULUS, OR RUNNING FROM THE BEAR! – THE BODY MAPPED

2.1.1. Background

Antonio Damasio's laboratory investigations, outlined in his book "Looking for Spinoza" (2003) suggest that the body be considered in its broadest sense and its bearing on the *making of* the mind. This view, according to Damasio himself, stands in opposition to the scientific view of the mind closely *depending* on the working of the brain (an idea that Hippocrates already held long ago), and in opposition to views of the mind and brain working together on *one* side, and the body on the *other* (Damasio 2003, p.190: my emphasis).

In mentioned work Damasio proposes that emotions precede feelings, that emotions are the foundations for feelings, which in turn are the perceptions of a certain state of the body. The difference between emotions and feelings need highlighting here. Emotions, according to Damasio, are actions or movements that are "visible", that play out in the body and are the foundations for feelings whereas feelings are always hidden. They are unseen to anyone apart from the person owning them and they play out in the mind (Damasio 2003, p.28). Thus, emotions always already imply a bodily condition, which the word's etymology also highlights. The Latin "emovere" literally means "moving out" and also implies "agitation", in the same way that the French word "emouvoir" suggests a physical aspect as it entails movement (se mouvoir - to move). "E-mouvoir" then is to "move out" of, "to agitate", "to stir up" (Harper 2001).

The idea of feelings being secondary to the perception of one's body state dates back more than a hundred years, to the findings of the psychologist William James (1842 - 1910). I briefly outline James' findings as I see them as precursory to Damasio. At the time, William James offered an understanding of the body/mind interaction that foreshadowed existing contemporary views. James saw mind and body as consisting of "entities of the same basic kind, each of which is neutral in that it is neither mental nor physical" (Parkinson in Spinoza 2000, p.18). According to James's pragmatic views[37], in line with Darwinian evolutionary theory, one thinks, one knows and one feels in order to encourage behaviour that enhances self-preservation. This James refers to as the mental life. For James, then, the mental life is followed by bodily activity of some sort. He says that the reason a person thinks and feels in a particular way is due to his feelings', thoughts' and his knowledge's practical consequences in reacting to the world around him. James' famous example is the, rather unlikely one would hope, situation in which one encounters a bear. He argues that one's natural, but not correct, way of thinking in such a situation is to assume that, "the mental perception of some fact excites the mental affection called the emotion, and that this latter state of mind gives rise to the bodily expression" (James 1884, p.190). This implies that the one mental state is induced by the other in such a way that when one encounters a bear, one becomes frightened and runs away. This order of sequence however, according to James, is incorrect. He proposes the exact opposite in saying that the bodily changes follow the perception of the exciting fact directly, and therefore the feeling of these bodily changes is the emotion. This means that one mental state is not immediately induced by the other but, that the bodily expressions that result from the excitement-triggering perception, the bear, come first. Thus, one feels afraid of the bear because one's body trembles; one does not tremble because one is afraid (James 1884).

In brief, James proposed that one feels afraid of the bear because one's body acts in a particular way to the world; that when we feel emotions we perceive body states, and that feelings come after we perceive of our body having been changed by emotions. James' idea of a person's thoughts, feelings and knowledge existing out of a practical necessity, in which each thing endeavours to persist in its being, is an idea that already Baruch Spinoza (1633-1677) anticipated[38].

Spinoza also becomes the essential starting point for Damasio's investigations. Thus, Spinoza's revolutionary, and as Damasio argues often neglected, ideas from the middle of the 1600, as well as James' findings foresee ideas of contemporary thinkers, such as Damasio. Damasio argues that body, brain and mind are manifestations of a single organism and that the endeavour for perseverance forms the basis of one's existence, which is in place to achieve a state of positively regulated life. To take the example of the bear again: it is due to the existence of "conatus", due to the strive in persevering in one's being, that one eventually runs away from the bear. This bodily reaction has the one and only aim, so Damasio argues, of making "the internal economy of life run smoothly" (2003, p.39).

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[37] James' pragmatic approach to the body/mind is often referred to as pragmatism (Goodman 2005). James elaborates on this approach in his work "Pragmatism" (1907/1979).

[38] Spinoza's concept is also known as "conatus", which states that "each thing, in so far as it is in itself (meaning independent, my remark), endeavours to persevere in its being" (Spinoza 2000, p.171). Spinoza understood the organism as being integrated; a rather revolutionary idea for his time. And further, this organism, according to Spinoza, always produces advantageous reactions in order to lead one to a greater or lesser physiological balance. It is important to note that these reactions do not need to be consciously decided upon (Damasio 2003, p.50).

Therefore it is due to the fact that one trembles, that one becomes afraid, which in turn makes one run from the bear. Damasio adds that, along with the perception of a certain body state, goes the perception of a certain mode of thinking and of thoughts with certain themes (2003, p.86). To Damasio, then, emotions are a natural means for the brain and mind to evaluate the environment (2003, p.54). In a simplified way this means that when one sees the bear, or the "emotionally competent object", as Damasio refers to such stimulus (2003, p.57), images related to that stimulus (the bear's giant claws, effulgent eyes and its massive teeth for instance) become represented in the brain's sensory processing systems. This is also called the *presentation stage*. Signals that relate to that stimulus then become activated at several emotion-triggering sites, such as the amygdala or the ventromedial prefrontal cortex amongst others, which in turn activate certain emotion-executing sites, such as the hypothalamus, the basal forebrain, and some nuclei in the brain stem tegmentum. These latter ones cause the emotional state in brain and body by releasing chemicals into the bloodstream. This results in the emotion-feeling process such as trembling, and certain behaviours such as running from the bear (Damasio 2003, p.58)[39].

One of Damasio's central ideas is thus that, "the essential content of feelings is the mapping of a particular body state", i.e. feeling is an idea of the body, more particularly, "an idea of a certain aspect of the body, its interior, in certain circumstances" (Damasio 2003, p.88). This view reinforces Spinoza's idea of mind and body being simultaneous in nature, of being one and the same thing, as according to Spinoza, the human mind only knows of the existence of the human body "through the ideas of the affections by which the body is affected" (Spinoza 2000, p.135). For Spinoza, the human mind is an idea composed of many ideas, as opposed to René Descartes' (1596-1650) view of the mind and body as separate substances where the mind is a thinking substance and is absolutely independent of the body. Spinoza saw the human body as a highly complex individual and considered the human being as dynamic, consisting of both body *and* mind[40]. Spinoza thus strongly opposed Descartes' view of the mind informing the body. He thought it ignorant to state that the body had its origin in the mind and says that it would be wrong to claim that the mind guides the body (Spinoza 2000, Scholium, p.167). For Spinoza, Descartes' understanding reveals a total ignorance of what the body can do by its own powers. In that way, Spinoza refuses to ground mind and body on different substances opposing other thinkers in his time. By proposing that "the human mind must perceive everything that happens in the human body" (Spinoza 2000, Proposition 14, p.131), he offers a rather modern view of the human mind which becomes directly linked to, if not informed by, the human body.

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[39] This seemingly single chain of event is evidently more complex. In fact, the process is a much more lateral one resulting in parallel rather than single chains of events, according to Damasio. One may for example recall other related stimuli when confronted with the bear (other frightful creatures one has encountered), which act as emotionally competent stimuli that can either trigger the same emotion or modifications of it, or even conflicting emotions (Damasio 2003, p.65).

[40] In Spinoza's eyes, body and mind are a unity, with the becoming-active of mind and body originating in passion, in impingement; and it follows that when the body is impinged upon, it is in a "state of passional suspension in which it exists more outside of itself […], than within itself" (Massumi 2002, p.31).

Damasio, influenced by the revolutionary thinking of Spinoza, shows that it is the body that informs and indeed shapes the mind, contradicting the traditional views that emphasise the mind as being filled with images related mostly to the outside world. This means that, as the mind arises from or in the brain, which is integral to the organism, the mind is part of the whole apparatus: "body, brain and mind are manifestations of a single organism", Damasio argues (2003, p.195).

In 1998, a few years before Damasio's book "Looking for Spinoza", Candace Pert had made a unique discovery. She discovered that when one has feelings, one experiences a kind of cocktail of neuropeptide and neurotransmitter activation. This not only takes place in the brain but all over one's body. This implies that the same biochemicals that exist in the brain and emotion system also exist in the spinal receptors, for example (in Gerhardt 2004, p.100). This discovery that one feels feelings with one's entire body reinforces Damasio's argument of the interconnectedness of brain and body and his emphasis on the brain as being situated within a body-proper, as well as the mind arising from or in the brain, which in turn is vital to the organism itself. For Damasio, then, the *mapping of a particular body state* as it occurs is the critical interface between the body-proper and mental patterns - **the body mapped**, I hence title it. Damasio's findings persuasively show that the brain is influenced by the body itself, and that images not only arise in the brain, but that they are "shaped by signals from the body-proper" (Damasio 2003, p.214). He says that,

> "[t]he mind arises from or in a brain situated within a body-proper with which it interacts; [and] due to the mediation of the brain, the mind is grounded in the body-proper… ." (2003, p.191).

2.1.2. Performance as Learned Arousal of Bodily Responses

Let me, then, consider performance in its broadest definition of somebody performing something in front of others, and approach it from the view of **"the body mapped"**.

This is a body that acts as an interface between the body-proper and mental patterns. Following on from the writings of Damasio, I want to suggest that any type of performance that involves the body can, just like any other stimulus, such as the bear for instance, turn into a trigger to a motivation, a drive, a fear or anger, pain or pleasure, in which the mapping of a particular body state sheds light on the highly complex interactions of body and mind. In such a neurobiological reading of performance, one can consider performative actions, such as contorting body parts, pressing a key on a computer keyboard, playing an instrument, shouting a word, or gazing at an audience, as initiators for some kind of stimulus that in turn act upon the body. In this light, through the act of performing, an "emotionally competent object", a stimulus, is created. It can also be argued that in order to perform, a performer needs to *learn* how to create a particular stimulus. Hence, performance can be seen as a learned arousal of bodily responses.

In a simplified way, based on the findings by Damasio, the chain of event must go like this. While performative actions initiate a stimulus that cause bodily reactions, and this is true for both the audience *and* the performer[41], images that pertain to this stimulus become represented in the brain at the presentation stage at which seeing, feeling and hearing occur. One can see that these images will differ for the performer and for the audience[42]. Whereas the performer's images that become represented in the brain are more directly linked to the stimulus, she is physically engaging *directly* with her instrument, the audience has no direct physical access to the performer's body or her instrument, but has access to images of the performer herself. Thus, at the presentation stage, the images pertaining to the stimulus that become represented in the audience's brain may be the facial expression of the contortionist, which the contortionist himself does not see but has physical access to, i.e. he can feel his facial muscles, or they may be the sight of the performer in the white shirt behind his laptop, the unpolished shoes of the cellist, or the posture of the gazing actress. Performance effectively becomes just another stimulus. Admittedly this stimulus is an artificially initiated and self-chosen one by the performer, as opposed to the encounter with the bear that one could argue is not necessarily of one's choice.

Extracting from Damasio's findings (2003, p.58), this artificially created stimulus ("the performance") is then made available at several emotion-triggering sites, such as the amygdala or the ventromedial prefrontal cortex, which then activate a number of emotion-executing sites, such as the hypothalamus, the basal forebrain, and some nuclei in the brain stem tegmentum elsewhere. These emotion-executing sites, by discharging chemicals into the blood, cause emotions. Finally, the performer and the audience feel something, like trembling at the sight of the bear.

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[41] Recent mirror neuron research supports this view: Giacomo Rizzolatti discovered in the ventral premotor cortex of the frontal lobes of monkeys the existence of neurons that discharge when a monkey executes a certain action, and, what is more interesting, that any given mirror neuron will discharge when the monkey observes another individual performing the same action (Kohler et al. 2002).

[42] Performance studies use the term "metaxis", employed by Augusto Boal, to describe "the state of belonging completely and simultaneously to two different autonomous worlds: the image of reality and the reality of the image " (Boal 1995, p.43).

This chain of events makes me contemplate particularly how one thinks about and how one talks about performances. Does one not often tend to adhere to James' natural, but incorrect, way of thinking about a performance? Is it not true that one sees "the bear, one hears a sound or sees a work and one feels afraid, which is analogous to, "I hate that sculpture" or "I love that scratchy sound"? Whereas in fact, one is seeing the bear ("the performance"), while immediately changes in one's body occur. According to Damasio's and James' arguments, one should first be "thinking", or sensing may be a better word, how one's body has been affected before expressing one's emotions, as the changes in one's body state *do* occur before one even thinks or senses, as James argued. Of course, once the emotions-proper, such as hate or love for a particular thing are put into words, those emotions have already turned into feelings. Emotions have played out in the body and vocalisation of the emotion was thus enacted. Damasio points to exactly this idea, that nothing is ever neutral in terms of emotion and that all feelings are always feelings of some of the basic regulatory reactions (Damasio 2003, p.92).

With a view to Damasio's findings of the essential content of feelings being the mapping of a particular body state, I suggest that instead of "I hate that sculpture" or "I love that scratchy sound", one needs to orient one's awareness to the changes that take place in the body, and should instead be saying "this sculpture made my left toe tremble" or "this scratchy sound made my skin tingle".

Considering performance as a stimulus or a trigger to a motivation is one possible way of thinking about performance, and it may open up different ways of reflecting upon performative activities. Moreover, and more interestingly though, is Damasio's finding of the mind being "filled with images from the flesh and images from the body's special sensory probes" (Damasio 2003, p.214), rather than the mind being populated by images from the outside world; that is by images that do not relate to our bodies. This brings to the fore the idea that complex interactions of brain, body and mind exist. Implicit in this is that there is not a one-to-one chain of events, and that there does not exist a linear way of conceiving the interaction of brain, body and mind. One can extract from Damasio's findings that nature already provides us with a certain diversity and with a certain complexity of the body. The body mapped, thus, has to be understood in a way more akin to the metaphor of translation and its implications that I outlined above. In this reading, a performance that celebrates this body and conceptualises the body in such a way, comes closer to the act of speaking a foreign language. This is a non-linear process that is context dependent and that is particularly characterised by a mismatch of information; a process in which a great potential for the making of mistakes exists and in which the focus is at times geared towards this potential for failure. I argued above that the opportunities for making errors also aid in shaping new languages. Finally, the body mapped, which accentuates diversity, stands in direct opposition to the idea of a one-to-one mapping of the body, of mapping a rising arm movement to a rising pitch, or of playing "happy music" to "sad" people.

2.1.3. Enacting the Surrounding

In thinking of performance as a stimulus, it is also implicit that what the performer eventually feels is dependent on the original input; an input that is chosen by the performer herself, so I argued. It seems that I am biting my own tail in suggesting that a stimulus affects the performer and that the performer's "output" is dependent on the "input", an artificially initiated and self-chosen one as created by the performer herself, i.e. the stimulus for the organism is in itself informed by external influences. The reason for putting "output" and "input" in inverted commas is to highlight that the organism does not function like some linearly conceived machine as an input-output device. This implies that the organism chooses the stimulus towards which it is sensitive. This theme of the organism as a whole extending beyond itself to include the interpersonal and social world of self and other has a long tradition in continental European phenomenology, as first elaborated upon by the philosopher Edmund Husserl (1859-1938). This theme is also one of the key issues in Maurice Merleau-Ponty's work "The Structure of Behaviour" (1963). Here, Merleau-Ponty describes the organism not as a passive input-output device, but as the initiator of the world, as one that in fact contributes to the enactment of his surrounding environment. One of Merleau-Ponty's passages reads:

> "Since all the movements of the organism are always conditioned by external influences, one can, if one wishes, readily treat behavior as an effect of the milieu. But in the same way, since all the stimulations, which the organism receives, have in turn been possible only by its preceding movements, which have culminated in exposing the receptor organ to the external influences, one could also say that *behavior is the first cause of all the stimulations*. Thus the form of the excitant is *created* by the organism itself, by its proper manner of offering itself to actions from the outside" (Merleau-Ponty 1963, p.13).

This passage reinforces the image of the serpent biting its own tail. The way, in which a person behaves is conditioned by the environment, and since the organism is receptive to external influences, it offers itself to the outside at the same time. To elucidate this idea I want to consider the act of breathing. Even if breathing is not strictly speaking a type of behaviour, it is however something which organisms are sensitive to. One reason that one breathes is the fact that there is oxygen in the environment. Breathing is therefore an effect of the oxygen being there for one to breathe. On the other hand, because a body capable of breathing exists, and I remind that one of the first ever cells on earth were anaerobic, i.e. they did not require oxygen, it may cause the environment to come into being. It may cause oxygen, the excitant, to exist[43].

This phenomenological approach of reciprocal specification and selection lies at the heart of Merleau-Ponty's writing and also characterises Damasio's findings of the brain, body and mind being manifestations of a single organism, rather than the mind *depending* on the working of the brain, or the mind and brain working on one side and the body on the other.

Francisco J. Varela et al. (1991), by focussing on cognition and human experience, also elaborates on this idea of a perceiver-dependent world; of perceiver and world being engaged in some mutual exchange. Varela argues that cognition has to be understood as an "embodied" action; embodied meaning that the mind, rather than being seen as located in the head, is embodied in the whole organism embedded in its environment. The title of the book "The Embodied Mind" (1991) already suggests this line of argument. Thompson suggests that Varela's writing is central to supporting the move from the classical, cognitivist view of an inner mind representing an outer world through the use of symbols in a computational language of thought, to "enactive" or "embodied" cognitive science (Thompson 1999).

Varela's argument posits world and perceiver as specifying each other; therefore cognition ceases to be the representation of a pre-given world. One of the main points that Varela makes is that instead of the two extreme, he describes them as "the Scylla of cognition as the recovery of a pre-given outer world (realism)", and "the Charybdis of cognition as the projection of a pre-given inner world (idealism)", it is mutual specification that allows for the negotiation of a middle path between them (Varela, Thompson et al. 1991, p.172). This means that Varela proposes an "enactive approach" to perception in which it is not important to determine how some perceiver-independent world is to be recovered but rather,

> "to determine the common principles or lawful linkages between sensory and motor systems that explain how action can be perceptually guided in a perceiver-dependent world". [In this approach], "the reference point for understanding perception is no longer a perceiver-independent world but rather the sensorimotor structure of the perceiver" (Varela, Thompson et al. 1991, p.173).

This line of thought also recalls Henri Bergson's view of the body as the centre of one's actions, in which Bergson particularly stresses that action has been neglected by realism and idealism that assume that conscious perception points to knowledge, rather than to action. I will return to Bergson in detail in section 2.3. By drawing on Non-Western thoughts and incorporating the Buddhist concept of mindfulness meditation, in which the aim is to lead the mind to one's experience itself, away from its theories and preoccupations, Varela is able to offer a reflective and immediate; a lived, rather than purely theoretically abstract concept of Western tradition (Varela, Thompson et al. 1991, p.22). Furthermore, Varela blames Western thought for being too strongly anchored in foundations. He says that Westerners suffer from what he terms the "Cartesian Anxiety"; an anxiety derived from the fact that one needs, and craves for, a fixed and stable foundation for knowledge, as otherwise one feels lost in confusion and things fall apart (Varela, Thompson et al. 1991, p.140). With this in mind Varela looks towards the Buddhist mindfulness meditation that I just mentioned, in which such grasping for an absolute ground is eliminated and a full realisation of groundlessness (sunyata), "the loss of a fixed reference point or ground in either self, other, or a relationship between them", is attained (Varela, Thompson et al. 1991, p.248).

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[43] I am grateful to Richard Coyne who pointed out that one may consider oxygen as a purely scientific construct that supplies us with a plausible explanation for the cause. And indeed, scientists believe that oxygen was first produced by photosynthetic microbes, (also known as cyanobacteria, or blue-green algae), which, by performing oxygenic photosynthesis, converted carbon dioxide and water into food. In that process, oxygen was produced as a waste product; once the microbes had become so abundant, free oxygen started to accumulate in the earth's atmosphere, creating breathable oxygen (Science Bulletins 2004, Siegel 2003).

I think one can extract two points from Varela's writing that are central to a performance discussion. Firstly, and this is probably the more straightforward point, any performance situation struggles with this "divide" of performer and listener/viewer, and questions as how to convey performative intent across the "gulf. How the listener/viewer is to engage with what is "on the other side" are recurrent preoccupations for a performer. To me, this recalls Varela's idea of Scylla and Charybdis that he encounters in cognition. The reader may remember that Scylla and Charybdis were the two monsters in Homer's "Odyssey": Charybdis, once a nymph-daughter of Poseidon and Gaia, was turned into a monster by Zeus. She lived in a cave at one side of the Strait of Messina and sucked water in and out of the Strait, engulfing any vessel coming near her. Opposite her lived Scylla, once a nymph, transformed into a frightful monster with twelve feet and six heads by the sorceress Circe. Whenever a ship passed, each of Scylla's heads would seize one of the crew.

One can argue that in any type of performance situation, the Scylla of perception is found in the listener/viewer; in the person who recovers what is in the outer world or what is offered to her by the performer. On the other side of the "divide", there is Charybdis, the performer, who is engaged in the projection of an inner world. It is worth noting that in Homer's "Odyssey" the two monsters form a dangerous threat to passing ships, and it is their close bond that makes them so strong and menacing to passing vessels. This, then, can imply that rather than *passively* looking at this "divide" of performer and listener, and seeing performance as such "outer" versus "inner", there is a need to *actively* navigate the "middle path". Varela urges one to look at this "middle path", which is achieved through mutual specification; a path that, by bringing together the main elements of each side of the "divide", strengthens the bond between Scylla and Charybdis. I feel that Varela regrettably refers to this path as the "middle path", whereas I think Turner's idea of the threshold, or the liminal, a state of "betwixt and between" (Turner 1982) is a much more appropriate way of conceptualising this middle path, as it not solely exists between left and right, between performer and listener or viewer, but it is also one that moves between those same categories. It is on this middle path that extremes meet and touch, while at the same time, the extremes only exist *due to* the presence of the threshold.

2.1.4. Performance as Negotiation of the Cartesian Anxiety

The second point that Varela draws to my attention is the Cartesian Anxiety, of Westerners craving for a fixed foundation. A powerful metaphor can be to understand performance as a way of negotiating the Cartesian Anxiety, as a way of eliminating the grasping for an absolute ground. In order to achieve such realisation of groundlessness (sunyata) in a performance, one has to acquire a certain mind-body unity; one that the performer needs to develop in order to perform. Varela suggests that when learning an instrument the accomplished performer develops a specific "mind-body unity", which comes into existence once the connection between the mental intention, i.e. how to play the notes on an instrument, and the physical, i.e. the actual playing of the notes, becomes so close that one achieves a specific condition that "phenomenologically feels neither purely mental nor purely physical; it is, rather, a specific kind of mind-body unity" (Varela, Thompson et al. 1991, p.29).

This specific "mind-body unity" can be found in the Indian performers educated in Kathakali Dance, for example. In this dance, the dancers' bodies literally become "massaged" and "danced into" the required shapes, until the dance "goes into the body". What is at first being imposed from the outside, slowly over the years, and it can take more than six years to become a kathakali performer, becomes read from the inside (Schechner 1988, p.314). One can argue that the acquisition of such mind-body unity can be understood as a way of leading the mind back from its theories to one's experience. Hence, if it is the case that in order to perform, one has to acquire this mind-body unity, one may be well equipped to negotiate the Cartesian Anxiety, to realize a certain groundlessness. The performer may be able to eliminate, even if solely for the duration of the performing activity, the grasping for such absolute reference point or ground. A specific type of performance, the

Japanese Butoh dance[44], emphasises the fact that a mind-body unity can only ever be achieved by actively performing oneself.

Butoh dance is a particular type of performance that has at its basis such specific mind-body unity, which can be expressed in rather invisible ways. Since Butoh dance can deviate from what one may consider a dance to be, it is also sometimes referred to as a "un-dance". For example, by means of barely visible bodily movements the performer can attempt to shift air from the right to the left lung via the trachea, which may lead the viewer to wonder whether the dance is more in the mind than in the body. A characteristic example of "un-dance" is that of Tatsumi Hijikata's Butoh of "a dead man standing in desperation" (Kasai 2000). Such description highlights a more conceptual understanding of using one's body in a performance. Hijikata's Butoh specifically developed certain techniques that were not only non-existent in Western dance at that time, but that focused on such conceptual uses of the body. One such technique is *te-boke* (absent minded hands), where the dancer's hands are supposed to be wandering "anxiously in the air with no practical purpose" (Kuniyoshi 2004).

2.1.5. Butoh Dance

Butoh is a good example of a performance in pursuit of groundlessness; a dance that attempts to negotiate the Cartesian anxiety. I consider this a performance that features the body mapped, as it highlights the complex interactions of brain, body and mind. It is a type of performance that seeks the dissolution of the self in the body, in a body that becomes worn out, one that aims for a unity of mind and body. A strong endeavour is to minimise the mind/body split and, as Kasai and Parsons point out, the idea of "mind and body as an integrated, mutually influencing unit" is at the core of Butoh (Kasai, Parsons 2003, p.5).

In Butoh, the performer attempts to achieve a balanced position of being inextricably part of the world around her. This implies that she is not too focused on what is "out there" and not too strongly focused on what is "in here". In a way, the dancer has to remain open to her surroundings, while at the same time allow for a certain diffusion of the external environment in order to perceive her own mind-body. Butoh uses movements in which the body is in contortion; the legs are bent and the performer's face reveals "grotesque ugliness of old age" (Kuniyoshi 1991). The body may tremble and jerk with distortions. The movements are rather disorganized and can be both abrupt and continuous[45]. The dance is intended as a way of liberating the mind-body; as a way of examining the unconscious. It is a questioning of the human body and a way of confronting and liberating aspects of the mind-body that may have been suppressed by social conditioning. Thus, Butoh can be understood as a kind of watching and “noticing” of the mind-body (Kasai, Parsons 2003).

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[44] Butoh is a dance form developed by Tatsumi Hijikata in the late 1950s in Japan.

[45] These unconventional dance movements were seen as an attack on the conventional notion of dance during the early 70's (Kuniyoshi 1991).

One can see that Butoh approaches the body in a specific way, and in contrast to Butoh, there are performances that aim for bodily improvements, using extensions, implants and artificial organs. Such bodily constructs that are implemented with new technologies aim for the enhanced, extended and even re-engineered body and can be found in some of the works by the artist Stelarc. Artists constantly explore the impact of such new technologies, as was the case in the recent show “Designer Bodies” that investigated the impact of current scientific breakthroughs in human genetics (Nedkova 2004). I will examine performances that deal with notions of extension and re-engineering in chapter III.

The approach towards the body in Butoh is the opposite. The body’s natural decline and its wearing-out is accepted. The idea is not to show off a body that can stand against nature, but to accept that man and nature are bound together. Accepting the workings of nature is also to accept the resulting changes in one’s body. Butoh’s dance movements highlight these deformations of the body. They show a debilitated body as imposed by nature (Kuniyoshi 1991, p.8).

Culturally different ways of thinking of the self come to light in the difference between:

1) The pursuit of an enhanced, re-engineered body, often seen as one of humanities’ greatest possible achievements, and undeniably seen as a competitive necessity in a world increasingly imprinted with technology, and

2) The quest for a debilitated body; a body that, rather than designed against the workings of nature, is dragged from its prime position.

This also underlines the differences of self as central to survival on one hand, which is a self that is fixed and grounded in the world, and the self as groundless on the other hand, which is a self that becomes dissolved in the worn-out body.

To be able to dance Butoh is to aim constantly for a mind-body unity and to accept the debilitated body. To me, the idea that some reactions in the dancer’s body may surprise the dancer himself, or the fact that the dancer may not even expect or predict certain reactions of his own body shows that the negotiation of the Cartesian anxiety has occurred. The dancer has managed to free himself from a certain fixed reference point; from a ground in either the self, in another, or in a relationship between them. The Butoh dancer has ceased to grasp for such absolute ground and realised groundlessness. Further, these surprising bodily movements suggest certain unpredictability in the workings of the performing body, an inherent instability, something that “the body mapped”, an interface between the body-proper and mental patterns, celebrates. The body in this “un-dance” is highlighted as one that favours failure, the debilitated body, and non-control. It shows up as a body open to the encounter with surprise. I therefore see this body as unable to be conceived of linearly.

2.1.6. Performance as Alteration of Body States - Trance

I want to return to the act of breathing and consider performance activities that have breathing at their foundation, as breathing demonstrates particularly well the idea of triggering a motivation. Breathing highlights this idea of initiating a stimulus that brings with it the modification of one's normal body chemistry, and thus highlights the characteristics of the body mapped; that is the reciprocal interaction of body, brain and mind.

Above, I showed that any kind of stimulus always produces very physical outcomes, i.e. the bear that makes one run. The way one's body participates, or is being participated, in a performance has to be understood as closely related to its physical sensations: one sweats, one weeps and one smiles. It can therefore be said that performance, especially the kind of performing activity that has at its foundation the act of breathing, brings with it the modification of one's normal body chemistry. Performance always has the potential to lead to a physiological alteration of one's body state. Aldous Huxley in "Heaven and Hell" (1994), the sequel to "The Doors of Perception", suggests that such physiological alteration of one's body state can lead to meditative states, and even visionary experiences. He argues that long suspensions of breath result in a modification of the body's chemistry. This type of breath suspension can be seen in certain yoga practices as well as in the breathing cycles of singers, or instrumentalists for that matter; in short, in performers that tend to breathe little air in quickly and sustain a long slow out-breath. An increase in carbon dioxide in the blood, which in turn lowers the efficiency of the cerebral reducing valve, takes place. In such altered body states the brain admits, as Huxley puts it, "biologically useless material from Mind-at-Large". This means that prolonged shouting, chanting, the psalm-singing and sutra-intoning of Christian and Buddhist monks can create those same favourable conditions that lead to visionary and mystical experiences, Huxley argues (1994, p.105)[46].

Trance performances are a good example of such acts that have at their basis the alteration of a person's body chemistry. The lexicographical meaning for "trance" derives from the Latin "trans-ire", literally meaning, "to go across". This may be understood as a going across from one's normal body chemistry to an altered body state; a going across from a state in which one moves from biologically useful to biologically useless material, from

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[46] One can speculate whether Charlie Parker would have achieved the same virtuosic "speeding" while "on speed", had he focused on particular ways of breathing, aiming for a drug-free induction of an altered body chemistry.

‘Mind-at-Small’ to Mind-at-Large, from confined to unconfined[47]. Trance is a well-researched phenomenon that has been tackled by fields as various as neurophysiology, social psychology, the anthropology of religion and psychodynamic psychiatry (Harrington 2000). I will therefore not detail it here. However, it is essential to note the agreement that, on a very general level, trance is considered an altered form of consciousness. Analogies between trance and different forms of epilepsy have been drawn. On the other hand, various distinctions within the concept itself have been made. In this way, trance, understood as a more voluntary mastery of the experience, has been delineated from ecstasy, considered an involuntary experience, from trance-possession, or from absorption [see (Harrington 2000) for a thorough investigation into trance].

In order to induce a trance performance, changes in breathing patterns are essential. In addition, repetition, such as can be found in voodoo drumming, in the recurring and regular 4/4 beats in the deep bass lines of acid house music[48], as well as in the repetitive sounds produced in the Balinese Kecak Dance[49], and regularity become an important factor for the trance state to occur. A complex interaction of body, brain and mind has to take place for trance to occur, which is akin to the body-mind unity that characterises Butoh dance. The altered body state in trance performances underlines Damasio’s view of the mind arising from or in the brain that is situated within the body-proper, and that all interact in non-linear and unpredictable ways with each other.

2.1.7. Turner’s “Play” as Everywhere and Nowhere

The idea of performance pushing one’s normal body chemistry towards an altered body state sheds a somewhat bi-polar light on the discussion; normal to altered, or biologically useful to biologically useless is mentioned, highlighting the dualistic or linear aspects that I am challenging here. I want to return to the ideas of two of the most influential writers on performance and performance theory: Richard Schechner’s concept of “I” and Victor Turner’s idea of “play”, as both these thinkers propose concepts that I believe move the discussion away from those bipolar views, as they look at the in-between, or the liminal instead. As a starting point for discussing performance and involved brain activities both writers take the brain's two hemispheres. However, both Turner and Schechner also go beyond the bipolar view that underlies this discussion of the brain. I will briefly provide an insight into the two brain hemispheres before proceeding to Turner's and Schechner's concepts.

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[47] Roy Ascott refers to this state, in which one may be in two different fields of experience at one and the same time, as “double consciousness”. According to Ascott, in classical anthropological terms, this state designates the shamanic “trance” (Ascott 2003, p.357).

[48] Acid House is a music movement that appeared in the mid 80’s. The movement was usually accompanied by the use of recreational hallucinogenic drugs such as MDMA, i.e. ecstasy (Lyttle, Montagne 1992).

[49] In this dance over 150 men create a “cacophany of synchronized and repetitive chak-achak-achak clicking sounds while swaying their bodies and waving their hands” (Carvin, Carvin 2005). In Jim Jarmusch’s film “Down by law” (1986), even a silly play on words such as: “I scream, you scream, we all scream for ice cream”, repeated over a long period of time in combination with body movement, conviction, and an increase in amplitude, incites a trance-like state. In Jarmusch’s film, the three prisoners, the instigators of the chanting, motivate the entire prison to join in the rhythmic patterns, almost causing a revolt in the prison system.

According to scientists - Roger W. Sperry is most known for research into brain hemispheres - the brain is made up of a right and a left hemisphere. The left hemisphere tends to be associated with motor functions, analytical skills, and things like speech and processing capacities, whereas the right is seen to be "in charge" of spatial and tonal perception, pattern recognition and more holistic thought (Turner 1987, p.164). It has been shown that a conscious mind exists in both hemispheres, and Roger W. Sperry suggests that "both the left and the right hemisphere may be conscious simultaneously in different, even in mutually conflicting, mental experiences that run along in parallel" (Horowitz 2005). This implies that both hemispheres work via mutual inhibition, controlled at the "corpus callosum", the brain stem[50]. In addition, it is understood that there are two systems in place in the nervous system: the ergotropic and the trophotropic systems, both being influential on the workings of the organism. In a way, the ergotropic system (from ergo = work + tropos = way, manner) looks after the organism's short-term wellbeing. It triggers quick responses and affects behaviour in the direction of arousal. This system is often characterized as 'fight or flight': the left hemisphere is associated with this ergotropic system. The trophotropic system (from trophe = food, nourishment) on the other hand looks after long-term wellbeing and renewal. While it maintains a certain baseline stability of the organism, it is also responsible for certain inactivity, such as sleep or drowsiness. The right brain hemisphere is associated with this trophotropic system (Turner 1987, p.164).

In their discussion of performance activities both Turner and Schechner question these clean-cut brain regions. Schechner suggests that if performance involves a way of learning to arouse the two extremes of brain activity, there must exist something like a "triple state", which he refers to as the "I" that stands outside, controlling the two halves (Schechner 1988, p.320).

Victor Turner situates the concept of play within the activity that takes place between the two brain hemispheres. He suggests that there is more to the brain in performance than the two halves. He bases his argument on the fact that so-called "spillovers" from one to the other system (the ergotropic and the trophotropic) occur (this, of course, is only true in the case of an intact "corpus callosum"). With those "spillovers" in mind, Turner suggests that ritual, for example is initially an ergotropic excitation, meaning that arousal is affected with the triggering of quick responses. If the excitation continues, so Turner argues, the trophotropic system also becomes excited. This kind of "spillover" shows that one can get mixed discharges from both sides, which Turner says, leads to ritual trance.

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[50] In 1981 Roger Wolcott Sperry received the Nobel Prize for his important discoveries on what is known as "split brains". He showed that if the two hemispheres of the brain are separated by severing the "corpus callosum" (the brain stem), information can be no longer transferred between the hemispheres (Horowitz 2005).

In the midst of these mixed discharges Turner places the metaphor of play. He says that play's neuronic energies "lightly skim over the cerebral cortices, sampling rather than partaking of the capacities and functions of the various areas of the brain". Play's "metamessages are composed of a potpourri of apparently incongruous elements: products of both hemispheres are juxtaposed and intermingled" (Turner 1987, p.168). By turning towards play, Turner shows, with a slightly different vocabulary from that of scientific enquiry, the complex motions that can occur in the brain. Turner even goes as far as suggesting that play can be dangerous as it "may subvert the left-right hemispheric regular switching involved in maintaining social order" (1987, p.168). In reminding of the interconnection of play and performance, above I argued that aspects of play have been reconstituted in performance activities, one can place performance, just as Turner placed play, in the midst of the ergotropic and the trophotropic systems, in the midst of those spillovers. Thus, on one hand, performance can be seen as a mediator of those systems, something that sits in-between, and has access to both systems. On the other hand, it can be seen as an interrupter to the system, as something that stirs up the "normal" workings of the system, something "betwixt-and-between all standard taxonomic nodes", in particular if it acts like play, which can be,

> "everywhere and nowhere, imitate anything, yet be identified with nothing" […]. [i]t makes fun of people, things, ideas, ideologies, institutions, and structures; it is partly a mocker as well as a mimic and a tease, arousing hope, desire, or curiosity without always giving satisfaction" (Turner 1987, p.168).

In this reading, performance constitutes something interstitial, something in-between that also has the potential to subvert. It is an act that arouses bodily responses while highlighting the complex processes within the body itself. The body mapped, a body conceived as a non-linear and context dependent body, supports this argument.

2.1.8. The Body Mapped - Summarised

In this chapter, I have considered performances from the view of “the body mapped”; a body seen as an interface between the body-proper and mind, and I proposed to consider performance as a kind of stimulus, which initiates the complex interaction of brain, body and mind. This highlighted the idea that not a simple one-to-one chain of events, or a linear way of conceiving the interaction of brain, body and mind exists.

The suggestion of the brain, body and mind being manifestations of a single organism, of the organism being an initiator of the world, as suggested by various thinkers, led me to examine performances that have at their basis a specific mind-body unity, such as the Butoh dance. Butoh exemplifies a performance that brings to the fore notions of failure. It is a performance that highlights deformations of the body, one that celebrates the body’s struggles and potential for failure.

Finally, I examined Victor Turner’s suggestion of considering the “spillovers”, or of what occurs between the two brain halves, which led me to suggest that performance, in the same way as play, can be conceptualised as something interstitial, something in-between. It is an act that arouses bodily responses while accenting the highly complex processes that occur within the performing body.

2.2. THE CARTESIAN PERFORMANCE – THE BODY GOVERNED

or:

“I am certain that I am a thinking thing" (Descartes 1986, 3rd Meditation, Paragraph 35, p.24).

From performances that feature an inextricable link of mind and body, I arrive at performances in which, as an analogy to the notion of the Cartesian dualism, mind and body become manifest as separate substances, or in which the division of the two substances is emphasised[51].

In this section I consider performance from the point of view of what I call **the body governed**; a body that is dominated, and controlled, by the mind.

Descartes’ main hypothesis is that mind (*res cogitans*) is pure thought, and matter (*res extensa*) is something that does not think, establishing humans as consisting of two finite substances, where one can exist without the other. Although these substances seem to be separate, Descartes, in a seemingly bizarre twist, insists that mind and body do inform each other mutually. For the substances’ causal interaction, Descartes gives the explanation that there exists a meeting point in the part of the brain called the pineal gland where the substances can interact[52].

This idea for the body governed I find expressed in Descartes’ “Meditations” (1641), where Descartes says that things are not perceived by the senses or by the imagination, but by the intellect alone; that things are not perceived through sight or touch, but by understanding them (Descartes 1986, 2nd Meditation, p.22). This statement also reflects Descartes’ more often quoted and rather famous argument, called the Cogito: “Cogito ergo sum”, which translates as “I think, therefore I am”, a statement that underlines his views of the existence of mind and body as separate substances.

In this section I discuss a performance that features the body governed. It will, however, become apparent that this body also reveals the fragility of the body. The potential for its breakdown leads me to think of this performance, rather than one that emphasises notions of control and predictability, as one that in fact highlights traits of inconsistency and mismatches.

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[51] René Descartes (1596-1650) conceptualised the body as made up of separate “substances”, these being mind, body and God, whereby a “substance” is “a thing which exists in such a way as to depend on no other thing for its existence” (Descartes 1984, p.114). According to Descartes, the essence of mind (*res cogitans*) is pure thought and is not extended; a non-physical substance, as it were; whereas the essence of matter (*res extensa*) is extension and does not think (Gregory 2004). It is, then, that a person consists of two finite substances, in which one can exist without the other.

[52] Gareth Southwell suggests that Descartes may have chosen this gland as a way of interaction for mind and matter, as he thought this gland only existed in man and not in animals, an assumption that recent research has disproved (Southwell 2003).

2.2.1. David Blaine – The Freak

The performances by David Blaine have been referred to as “public stunts” and I think that they represent at its most explicit the idea of what I term a Cartesian performance. The media refer to Blaine’s Harry Houdini inspired events as anything from “attention-seeking freak shows” to the “must-see attractions of a conman”, an illusionist, a conceptual artist, an existentialist, a genius or a sex god (The Independent 2003). I will refer to Blaine’s stunts as performances. They are performances that incite one to rethink the borderline of art and life. In particular, they show the reciprocal relations of the performance and social life represented by the watching and re-acting public. Blaine’s performances tend to attract public reactions of all kinds, and during his performance “Above the Below” spectators threw golf balls, eggs and bottles amongst verbal abuse at the performance space. Blaine’s performances also tend to incite the public to stage their own perfomative acts - in forms of fights, but also in the form of street performances. (Contactmusic 2003). Blaine’s performances explore the testing of the body’s limits and thus set up a distinct ground for the body governed, for a body that is somehow informed by the higher rationality of the mind.

In the 2003 performance “Above The Below” for instance, Blaine survived for 44 days without food in a small plexi-glass box suspended in the air near Tower Bridge in London. In 2000, Blaine performed “Frozen in Time”, in which he let himself be encased for over 61 hours in a block of ice in Manhattan’s Times Square. Blaine has staged other similar performances that always push the body to its “limits”; the limits as conceived by the public, and as understood and imposed by the media[53].

Blaine’s performances, in which he intentionally pushes his body to perform strenuous tasks, reveal the Cartesian idea of the body being guided by the mind, by pure thought (res cogitans). They highlight the idea that the mind is able to control the functioning of the body and as Blaine himself stresses, his acts of endurance rely on the ability to think and to stay mentally focused. He says that he needs to achieve a state in which the mind has control over the body (Blaine 2005).

In Blaine’s performances the body is considered and treated as pure flesh; the body is rejected, and even despised. The ability to control the body, as well as the realisation of a higher spiritual state; a process in which, as Blaine says, one may even lose one’s mind, is valued over the flesh. In Blaine's performances the body becomes a nuisance. The body needs to be purified and emptied of unnecessary waste. In "Above The Below", Blaine uses diapers until his body stops producing solid excrements. Afterwards a urine tube is used to eliminate the body's remaining excretions. The focus of the performance is on eliminating or at least reducing the biological functions of the body as much as possible. Blaine constantly highlights the fact that the body is somehow bothersome and that it is in the way. For performing "Above The Below", he insists on taking lip balm with him, as he states: "I've done these kind of things before, and I know how annoying it is to get chapped lips" (Channel 4).

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[53] This is not to suggest that abstaining from food for over a month is not a difficult endeavour; I solely wish to point out that Blaine’s performances raise the issue of what is considered “within the limits”, or “doable” for a human being. One assumes that the performance act is a strenuous and impossible task that pushes the body to “its” (that is Blaine’s) limits; this is something that one has been communicated to by the press. Until each of person defines for himself what is “within one’s limits” or “doable”, Blaine’s marketing team has to be believed. Indeed, a recent news article in the Sunday Times (05/12/2005) speaks of Ram Bahadur Bamjan, the 16-year-old boy who is said not to have eaten or drunk in six months during which he has been meditating in the forest of southern Nepal.

Blaine's performances are intended to be heroic; they show a person publicly confronting his fears, as Blaine says. It is assumed that by bypassing one's body, by reducing it to its purely biological functioning, one is able to aim for a higher spiritual state, and is therefore capable of getting closer to God. Blaine is known for finishing his performances by sending a blessing to God: "This is just the beginning", and "God bless us all", he announces (Blaine 2005).

For the flesh to continue in its most minimal biological functions that keep it alive, a focused mental intention has to be present. Mind over body becomes a necessity for the survival of the flesh and in the case of the body failing, one can question whether it is either the mind that has won over the flesh or the mind that has failed the body. Rather than a mind-body unity and mind and body informing each other, Blaine shows a performance in which the body is of lesser importance; the body is an object, something to be conquered, to be dominated and to be controlled by the mind. Blaine's performances celebrate the body governed, a body apparently controllable by the mind.

"Above the Below" also recalls the one-year performance by artist Sam Hsieh, who, in 1978, committed himself to one year of solitary confinement, without imposed starvation, inside a small cell built inside his own studio. Hsieh artistic statement reads: "I shall not converse, read, write, listen to the radio or watch television until I unseal myself" (in Schechner 1988, p.294). In a similar way of literally "starving" the body of its biological importance, the artist couple Marina Abramovic and Ulay performed "Nightsea Crossing" between 1981-86 (Abramovic, Ulay). This performance, in which the couple sits opposite each other at a table without moving, speaking or eating for up to 16 days, may reveal the "mystery of existence", as Warr suggests; but also, in the same way that Blaine's performance does, "Nightsea Crossing" displays the artists as "embodied consciousnesses, in the process of being" (Warr 2000).

It is worth remarking that in performances that feature the body governed, the potential for the body's breakdown is what particularly attracts attention towards the performance. What is made explicit to the audience is the possible loss of control of the performer's mind over his body, and thus the potential for damage: Blaine could freeze, dehydrate, fall, break, or die. It is this inherent danger that Blaine's marketing team tends to point out before the start of each performance, which in turn creates the hype around the acts. Blaine's team assures us that the performances are accompanied by possible "dangers", "problems" and "risks". The potential for breakdown is continuously mentioned: possible brain and/or organ damage, starvation or even death. Blaine's statements such as, "this could easily be the last thing I do", help to emphasise the inherent potential dangers (Channel 4). The body's potential for failing, in case of the mind losing control over the body, lends the performance some, or most, of its excitement.

2.2.2. The Body Governed - Summarised

The Cartesian performance, then, is one in which mind and body are emphasised as two separate substances, featuring the body governed. However, in pushing the body to its limits, and emphasising the involved risks in doing so, the performance also reveals the body's potential for vulnerability. One can argue that beneath the apparent ability of controlling the body, the potential for mismatches of body and mind, and the promise of human error is implied. In this line of argument, rather than conceiving of the performance as one marked by control and predictability, I see this performance as one that in fact points to the body as inconsistent, diverse and unpredictable; one that opens up this marginalised space full of the "possibility of potential forms, structures, conjectures, and desires, …", as Susan Broadhurst characterises this space (Broadhurst 2000).

A performance of the body governed discloses performance as something interstitial or liminal, as something that, contrary to Blaine's emphasis of the need for the body's control, highlights what it endeavours to conceal: the body's mismatches and inconsistencies, emphasised through the involved potential risks.

2.3. THE BERGSONIAN PERFORMANCE – THE BODY CONNECTED

or:

> “Spirit borrows from matter the perceptions on which it feeds and restores them to matter in the form of movements which it has stamped with its own freedom” (Bergson 1991, p.249).

Having considered performance in light of the Cartesian assumption of mind and body becoming manifest as separate substances, I now want to look at Henri Bergson’s view of the Cartesian problem. I follow Descartes’ thoughts with a discussion of Bergson, as Bergson is sometimes considered a dualist himself[54]. Eric Matthews argues that Bergson is a dualist in that he emphasises the idea of a human being as both matter and spirit. On the other hand, Matthews explicates, Bergson is very far from the Cartesian conception in his way of understanding the terms ‘matter’ and ‘spirit (Matthews 1999, p.130). When consulting Bergson’s central work “Matter and Memory” (MM), (1896/1991), it becomes clear that the meaning of the terms used by Bergson differ widely from Descartes’. In fact, in the introduction to MM, Bergson states that his writing will affirm the “reality of the spirit” and the “reality of matter” as well as their relation, which, he admits, may be considered dualistic. However, Bergson proceeds to say that he will deal with the body and mind in such a way as to overcome dualism. Thus, Bergson shows that “while introspection reveals to us the distinction between matter and spirit, it also bears witness to their union” (Bergson 1991, p.180). According to Bergson, then, one is not made up of two distinct substances, but, as a human being, one experiences oneself as a *unity* of body and spirit - **the body connected**, as I refer to this body. This following quotation from Bergson points to the distinction of matter and spirit, but emphasises this distinction not as one of kind, but as one of degree:

> “[M]atter is supposed to be in space, spirit to be extraspatial; there is no possible transition between them. But if, in fact, the humblest function of spirit is to bind together the successive moments of duration of things, if it is by this that it comes into contact with matter and by this also that it is first of all distinguished from matter, we can conceive an infinite number of degrees between matter and fully developed spirit – a spirit capable of action which is not only undetermined, but also reasonable and reflective” (Bergson 1991, p.221).

As I pointed to above, Descartes creates the big question of how mind and matter, thought and physical substance, can inform each other. I think that Bergson, in contrast, by looking at the function of spirit, or memory, and matter themselves, and more importantly, by establishing the distinction between body and mind in terms of time, and not by starting from a spatial point of view, as is the mistake of ordinary dualism Bergson argues (1991, p.220), he is able to push the discussion out of a dualistic territory.

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[54] For this discussion, see essays by F. Worms or M. Cariou (1999, Worms pp.88-98 and Cariou 1999, p.99-117).

The importance of how one experiences oneself, that is as embodied, as a material living organism, is pivotal to understanding Bergson. He contends that, “the orientation of our consciousness toward action appears to be the fundamental law of our psychical life” (Bergson 1991, p.180). Thus, everything points towards the body in action. Bergson is not so much interested in explaining the nature of the substances. Rather, his main aim is to show that the joining element of the substances is the *function* of the body. An active being implies one that executes some type of action; and action for Bergson involves both material and spiritual elements; more precisely the *union* of matter and spirit. Hence, he says that the body clearly is not distinct from me; me as a being able actively to perform actions, but the body *is* me. The “body is an instrument of action, and of action only” (Bergson 1991, p.225). Further, Bergson does not consider the mind as being on one side or the other, but mind is, as Garrett Barden has expressed it so poignantly, “the name for a developing, creative, historical set of interrelated activities”, it is “process, open and never-to-be-completed virtuality” (Barden 1999, p.36).

It becomes clear that the body in Bergson occupies a central position. However, even more than this, it occupies a privileged position in regard to its surroundings, and Bergson clarifies this when he says that, “it is this particular image [the body] which I adopt as the centre of my universe and as the physical basis of my personality” (Bergson 1991, p.61). This means that the body is capable of exercising a genuine action upon surrounding objects, while it itself does not vary. At the same time, while my body is destined to move objects, to act upon them, the objects “send back, then, to my body, as would a mirror, its eventual influence”. “The objects which surround my body reflect its possible action upon them” (Bergson 1991, p.21). This significant insight of the body as initiator of the world, which Bergson provides in MM, will be remembered almost sixty years later by Merleau-Ponty in his “Structure of Behaviour”, referred to above.

In this light, Bergson reveals the acting body as the mediator between substances[55]. He argues that if, with this ‘privileged’ and ‘favoured’ image, the body, one places oneself at the meeting place of spirit and matter, one is able to throw light on their reciprocal action (Bergson 1991, p.244).

Bergson’s idea of external images influencing the body, of transmitting movement *to* the body, while at the same time the body also influencing external images, giving movement back to them, points towards his understanding of things being *mixtures*. Mixtures imply that one thing always contains some of the other: the body comprises its surrounding objects, while the surrounding objects somehow contain the body. Bergson clarifies this in the following passage, in which he shows that the excitations which the body receives at the same time also determine surrounding objects and their emerging reactions.

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[55] The idea of the body’s mediating role has been elaborated in detail by F. Worms (1999, pp.88-98).

> "[I]f we suppose an extended *continuum*, and, in this *continuum*, the center of real action which is represented by our body, its activity will appear to illuminate all those parts of matter with which at each successive moment it can deal. The same needs, the same power of action, which have delimited our body in matter, will also carve out distinct bodies in the surrounding medium…. But […] the excitations which our body receives from surrounding bodies determine unceasingly, within its substance, nascent reactions…" (Bergson 1991, p.232).

Bergson's idea of mixtures is similarly reflected in his refusal to make a division between quality and quantity, between consciousness and movement, or between the 'nothing' and existence. Bergson always seeks to invert the priority of dualistic concepts. For example, rather than seeing inextension and extension, he proposes something intermediate, which he terms *the extensive* (1991, p.245). Thus, Bergson argues, in the same way that inextension and extension relate, freedom and necessity feed off each other, as, according to Bergson, freedom is deep-rooted in necessity (1991, p.249). In the same way of considering things as mixtures, Bergson says that the 'nothing' already has to include notions of existence. Perception, for example, is one such mixture. It is something that is also turned towards action, as its true office is to prepare actions. "*My body* is that which stands out as the centre of […] perceptions; *my personality* is the being to which these actions must be referred", Bergson says (1991, p.47). As every perception partakes of memory, perception is also part of objects themselves. It is in them rather than they are in it. Perception, according to Bergson, "consists in detaching, from the totality of objects, the possible action of my body upon them (1991, p.229). Therefore, into perception something of the body also enters, which underlines Bergson's ideas of mixtures.

If things always partake of other things, then it follows that there also must exist differences, or more specifically, the idea of "degrees of difference", rather than "differences of degree", as Gilles Deleuze persuasively establishes (1999, p.61). In MM, Bergson continuously weaves the notion of difference through his arguments and he goes so far as to even consider difference as a thing itself. This becomes more lucid in Bergson's argument of matter and duration[56] being inversions of each other, and of the difference of nature no longer being between matter and duration, no longer between two things, but “difference of nature itself being a thing” (Deleuze 1999, p.48).

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[56] Matter may be better understood in the way Deleuze sees it, which is "what does not differ from itself, what repeats", and duration as "what differs from itself". Bergson also refers to matter and duration as two extreme levels of relaxation and contraction. But they are seen as two extremes that coexist (a memory coexists with what it is a memory of); (Deleuze 1999, p.48).

To me, Bergson’s philosophy, then, is not about ‘the made’, but about ‘the in-the-making’[57]. For example, when he says that all things point towards the body, this body is not implied as a fixed one, not as a stationary entity. The body, and all that surrounds it, is understood as the “pointed end ever moving, ever driven into the future by the weight of our past” (Bergson 1991, p.243).

Bergson’s thinking is one of progression and not regression; in the same way that he does not see memory consisting “in a regression from the present to the past, but, on the contrary, in a progression from the past to the present” (Bergson 1991, p.239). At the centre of Bersgon’s argument, there is always the tangible of the actual physical, the body in action.

2.3.1. The Body Connected

Evidently Bergson elaborates on these ideas and concepts in ways much more thoroughly than I am recapturing here. Indeed I am hardly scratching the surface of Bergson’s ingenious work. However, as my reading of MM has influenced my thinking about performance immensely, while revealing some of the origins of Deleuze’s thoughts that I turn to in chapter IV, I will extract some of Bergson’s thoughts for the discussion of performance.

Thus, I conceive of the Bergsonian performance as an embodied performance that celebrates the body connected, which is a body that does not feature mind on one side and the body on the other. It is a performance that emphasises mixtures and differences, rather than contradictions. The opening quotation of this section, which is Bergson’s concluding remark in “Matter and Memory”, is indicative of the idea of things feeding off each other, of one thing (spirit) borrowing from another (matter), and, after having imprinted it with its own language, feeding movement back to it.

In performances that I refer to as Bergsonian performances, the body connected is of central importance. However it is only so as long as the body is able to perform actions, since the body is an instrument of action, so Bergson continuously reminds us (1991, p.225), and in the act of the body performing certain actions, the relationships between the body and the surrounding objects also come into focus. Bergson particularly stresses these relationships, this movement between things. As has been shown already, the body is never a stationary entity, but is itself a “pointed end ever moving” (Bergson 1991, p.243). In this light, I consider the Bergsonian performance one that favours the ‘in-between’, the

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[57] Parallels can be drawn to Hegel’s concepts of “being”, “nothing” and “becoming”, as outlined in “The Doctrine of Being” in his book “Science of Logic”, Vol. I, Book I, originally of 1812 (Hegel 1812/1989). Thanks to Richard Coyne for making this link.

'intermediate'; one that strives towards degrees rather than towards rigid abstractions. This way of thinking, once again, is more akin to the process of language acquisition, which, I argued above, is characterised by mixtures, or by an approach where things fold back on to themselves rather than by a fixed one-to-one linear conception.

At its heart a Bergsonian performance has "centres of actions". For the purpose of simplicity, I will refer to them as COA and as CsOA for the plural form from here onwards. Performance involves the presence of bodies, or at least the reference to a body. Since performance always involves some sort of action, and all action requires a kind of embodiment, in the sense that allows for "the possibility of physical interaction between the agent and the things acted upon" (Matthews 1999, p.129), I understand a Bergsonian performance as an embodied act. In this light, the presence of COA, or reference to them, is integral to this performance.

I want to consider the idea of the 'in-between', or what Bersgon calls the "extensive" (1991, p.245), and, in this discussion of performance environments, I propose to refer to this as "the shift". This shift I conceptualise as the 'in-between' as something that exists between CsOA. I understand the shift as a flow or a sort of elastic mass that can get moulded in various ways that keeps CsOA in states of tension. The shift may be seen in analogy to Heidegger's idea of 'hammering', which he uses to clarify the respective function of one's tools, like the hammer I hold in one hand and the nail that I hold in the other. Heidegger argues that one needs to look at the 'hammering' itself as it reveals the tools' function and their relationship. In a similar way, the shift between the CsOA reveals to me the CsOA's performative meanings. For the 'hammering', and likewise, for the shift to take place, a joining element such as a body in action has to be present. I want to suggest that the shift becomes more essential to a performance than the CsOA themselves, that it is the shift, rather than the properties of CsOA, which should be seen as conducive to performative action[58].

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[58] This shift, or this space has been conceptualized by various other writers, and I dare to suggest that what I title the shift is what Deleuze and Guattari define as the "machinic phylum", which, according to them, in physical systems, such as clouds, flames, or rivers, is "matter in movement, in flux, in variation, matter as conveyor of singularities and traits of expression" (D&G 1988, p.409). Traits of expression, as DeLanda explains, are emergent properties, which are deduced from components' interactions, rather than from components' properties themselves (DeLanda 1992, p.162). Thus, it is a term that indicates how "nonlinear flows of matter and energy generate machinelike assemblages when internal or external pressure reaches a critical level"; but more importantly it has been argued that there exists a single machinic phylum, an "abstract reservoir of machinelike solutions" for very different systems (DeLanda 1992, p.136). This implies that "inert" matter, by drawing from what DeLanda calls a "reservoir of abstract mathematical mechanisms" (1992, p.135) is capable of spontaneously acting in machinelike ways. One reason for mentioning Deleuze's concept here is that he credits Bergson, among others, as having "seen" such nonorganic life, even if Bergson was not able to visualize it, since it has only has been made possible through the advent of the computer (DeLanda 1992, p.162).
Martin Heidegger refers to this space as the "clearing", which to him is an open centre that is "more in being than are beings". It is a space that is "not surrounded by beings; rather, the clearing centre encircles all that is, as does the nothing, which we scarcely know". For Heidegger, "this clearing grants and guarantees to us humans a passage to those beings that we ourselves are not, and access to the being that we ourselves are" (Heidegger 1993, p.178). Although what I term the shift can be better conceptualised as a space situated *between* things, Heidegger's clearing seems to come forth more clearly as an *external*, an all

2.3.2. Performance Involves Centers of Actions Propelled by the Shift

In order to substantiate the shift's essential nature, I want to examine various CsOA, and examine their relationship with, and their engagement to, each other.

The 1994 interactive solar robot installation entitled "Terrain_01" by Ulrike Gabriel (Germany) and Bob O' Kane (USA) is a performance in which CsOA feature. Here, a body is equipped with a specific technology that is able to influence another body. In "Terrain_01", the invasive interfaces, also called wearable interfaces, constitute head-bands that detect alpha and beta brain waves of two performers, which are then used to influence the behaviour of small, animal-like robots. These miniature tin robots, equipped with wheels and solar panels, move on a large glass table situated between the performers. Biofeedback sensors in the head-band that monitor the performers' brain waves are used to configure the amount of light projected onto the table.

The "quieter" a performers' brain waves are, the more light is produced. The more light is produced, the more movement of the miniature robots can be affected. This state usually does not occur easily at the beginning of the performance when the performers may still be unsettled and are adjusting to the system and their respective performance roles. Also, the brain wave frequencies of the two performers are compared and, the more they resemble each other, the more homogeneous and fluid is the movement of the robots (Mulder, Post 2000, pp.55-6 and Gabriel, O Kane 1994).

In "Terrain_01", various CsOA are present. The designer of the environment, human performers and the robots, and I refer to the miniature robots as CsOA, as they reference to a body, also, they inevitably influence the human performer. For example, the robots may wheel off the plate, loose a wheel or stop moving all together, in which case the robots also affect the performer's brain wave patterns. I also think of the technology, i.e. the sensors, as well as the computer that measures, compares, and eventually outputs data for the mapping of the projected light, as a COA. The technology becomes an integral COA as it aids in allowing for the physical interaction between the agent and the things acted upon. Therefore, the CsOA, the designer, the performers, the robots and the technology all affect each other in some way. They all stand in a certain relationship to each other, even if, one could argue, no physical interaction takes place, i.e. the performers do not touch the robots or vice versa. To me, "Terrain_01" is a good example of a Bergsonian performance, as it celebrates what Bergson calls *mixtures*: the CsOA perform each other; the robots transmit movement to the performer, while at the same time the performer also gives movement back to the robots; the

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encircling space. However, I think that all concepts of that space have inherent notions of tension and difference, of flow and energy.

technology performs the human and the robots, and vice versa. Likewise, the interaction with the robot can be read as a dance between the performer and the designer. The excitations the body receives, always also determine other CsOA, as well as their "nascent reactions", to use a Bergsonian term.

The particular mapping approach in "Terrain_01" questions connections between one's expectations and the resulting performative action. This stands in stark contrast to the often linear mapping approaches in which a quiet sound is mapped to a dimming light, and a loud burst of sound to bright and flashing lights, or in which a dancer's upward jump is mapped to a rise in pitch. Thus, "Terrain_01" employs a mapping strategy in which relationships become inverted; in which "quieter" brain waves affect more light and in turn more movement of the miniature robots. It is by questioning and exploring the relationships of the CsOA, rather than by focussing on the CsOA themselves, that this becomes a performance that pays particular attention to the shift[59]. To look towards the use of the CsOA, towards their unpredictability rather than towards their thingness, or towards what they aim for, constitutes a Bergsonian way of conceiving of performance. Bergson argues that there can never be an absolutely definite separation between a thing and its environment, but that from one to the other, there exists a passage of gradations. In a sense, this means that to focus towards the thingness of the CsOA, to attribute precise limits to objects, which they do not possess, is not important. Bergson suggests that it is solely one's perception that determines objects at a particular point; a point at which one's action ceases upon the object. It is solely due to the needs of one's practical life that these divisions become marked out (Bergson 1991, p.209). Bergson's argument provides a good motivation for concentrating on the shift, rather than on the CsOA themselves. "Terrain_01" is a work that creates this space between CsOA; a space in which the movement between the CsOA keeps them in a state of tension. This is a performance in which the shift becomes the conducive element.

2.3.3. "Sonic Constructs" – Interactive Lego Installation

A further example I want to examine is a performance environment that also focuses on the shift, more so than on the CsOA's properties. This is the interactive Lego sound installation/performance "Sonic Constructs" (l a u t 2004), which I helped in showcasing for the NewformsFestival in Vancouver/Canada in October 2004. In this work, just as in "Terrain_01", the shift becomes the central concern in the design of the technologically mediated environment.

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[59] Such approach of inverted mapping is the focus of one of my own collaborative works, entitled "Oscillation", a work for saxophonist, 3D animation and real-time sound processing controlled by motion capture data (Schroeder, Rebelo et al. 2004).

In “Sonic Constructs” I refer to the robots as CsOA, as there is a strong reference to the human body. This reference to the human body is often reflected in the design trend of robots in general, in which an orientation towards humanoid structures exists. The construction of robotic devices is driven by the desire to automate in order to replace human labour, and thus robots often come in the shape of humans (at times, of animals). Some of the robot’s names, such as “Robosapien” support such reference to the human body (see Figure 5).

FIGURE 5: ROBOSAPIENS
WWW.GIZMODO.COM/GADGETS/ROBOTS/INDEX.PHP
[NOVEMBER 2005]

In the work “Sonic Constructs”, two semi-automata musical robots, constructed using the Lego Mindstorm Robotics kit, are programmed to perform random trajectories on a large resonant metal plate. In this work, the robots are conceived to be musical instruments in themselves, and are not designed as automata musicians. Although my suggestion is that “Sonic Constructs” is a work that focuses on the shift, that it is a performance, which favours the ‘in-between’, one that strives towards degrees, rather than towards rigid abstractions, I will describe the robots in some detail for the reader to visualise a possible performance of this work, and am thereby paying close attention to the properties of the robots, which, as I argue, are not the main focus in a Bergsonian performance.

I want to emphasise once again that when conceiving of a Bergsonian performance, one constantly poses the question of the CsOA’s function, and not of their properties; of how they are used, or how they use themselves. Function, however, should not imply the outcome of any final product. Because CsOA function in certain ways does not mean that they function in order to… . When examining performance from a Bergsonian point of view, one needs to consider Bergson’s idea of things not tending towards a telos, towards an end (Cohen 1999, p.26). Bergson is not interested in the nature of substances. For him, the difference from the thing stems from its use. I therefore do not conceive of the CsOA as things that are somehow separate, and that, in performance, become related through the shift. I do not consider the shift as something that brings CsOA into some kind of unity. In my opinion, it is essential not to search for such a unity in any performance environment. Rather than asking about the CsOA's 'thingness' or questioning why one COA is this rather than that - a question of difference that certainly Bergson would pose – I want to highlight the unpredictability of CsOA, as, according to Bergson, things unfold unpredictably and the world has to be grasped as a relationship between matter and spirit; as "essentially a current sent through matter, drawing from it what it can. There has not, therefore, properly speaking, been any project or plan" (Bergson 1911, p.265).

2.3.4. "Sonic Constructs" – The Workings

So, let me briefly look at the robots. Each robotic device in "Sonic Constructs" has two infrared sensors, a light sensor, and two motors. The robot's behaviour is programmed using the NQC (Not Quite C) programming language. Instructions are sent from the computer via infra-red to each robot, also referred to as the RCX. The RCX processes the received instruction and either sends signals to activate its motor that controls the robot's wheels or gathers responses from its sensors. The light sensor, for example, measures the intensity of light that is reflected off the metal plate that the robots perform on. The robots are programmed to change direction on detection of a non-reflective, i.e. black, surface. The metal plate has a black, non-reflective, border and is fitted with custom-built Piezo pickups. It acts as a sound stage and a platform for the interaction of the robots. The movements of the robotic devices, their scratching and collision produce a complex sonic world that, at times, is manipulated by real-time electronic processes. The programming environment Max/MSP is used to manipulate the spectral content of the sound in order to extrapolate the plate's resonant properties (see Figure 6 for a diagram of the installation). The sound that is heard is the product of the robot's performed trajectories; more precisely, the sound is not the main focus of the work, it is rather "the by-product of a behaviour [the robot's behaviour] - a residue" (Rebelo, McAllister 2005).

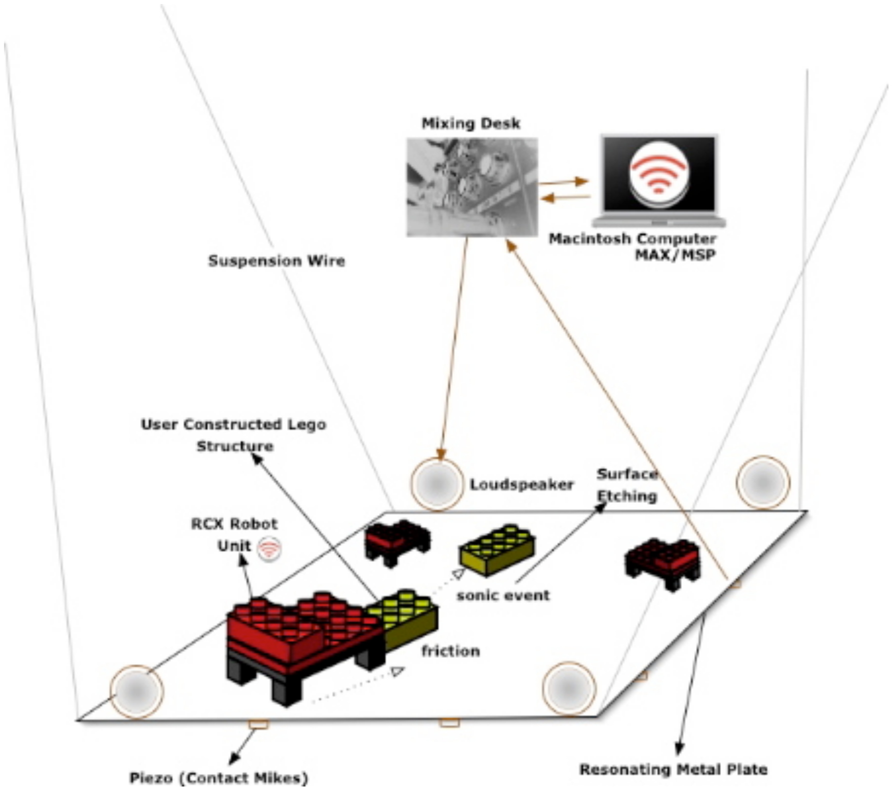
Mixing Desk
Macintosh Computer
MAX/MSP
Suspension Wire
User Constructed Lego Structure
Loudspeaker
Surface Etching
RCX Robot Unit
sonic event
friction
Piezo (Contact Mikes)
Resonating Metal Plate

FIGURE 6: SONIC CONSTRUCTS
WWW.SARC.QUB.AC.UK/~PREBELO/LAUTNET/PAGES/SONICCONSTRUCTS/SONICCONSTRUCTS.HTM
[NOVEMBER 2005]

“Sonic Constructs” was conceived in ways that allow a performer - this can be a visitor to the installation - to participate in the work by placing Lego pieces onto the metal plate. These pieces become part of the sound-making process as they obstruct or divert the robots’ movements, causing them, either to change direction, to collide with the objects, or with each other, or even to stop moving all together. In the world of robotics, such a collision is seen as a failure; a lack of the ability to detect and avoid obstacles (Rebelo, McAllister 2005). In “Sonic Constructs”, these collisions are at the centre of the design process; the confrontation with or the inattention to the obstacles shape the performance environment.

The conception of “Sonic Constructs”, similarly seen in “Terrain_01”, is grounded in a Bergsonian way of thinking of, and about, a performance environment; an environment particularly preoccupied with Bergson’s idea of mixtures, of the body comprising its surrounding objects while the surrounding objects also contain the body. It is an embodied performance, as it features the body connected that performs actions. It also features other CsOA, which reference themselves to a body. The CsOA, that is the designer, the performers and the robots, transmit movement to each other, and indeed can be seen to perform each other. The performer may place an obstacle in the way of the robot, altering the robot’s behaviour; the robot falling off the plate or stopping will in turn determine the performer's behaviour, or performative action.

I see this as a particular Bergsonian performance as it questions the specific functions usually attributed to a device, such as a robot. Whereas at the heart of the concept of Lego Mindstorm robots are the functional ideas of building one particular thing in order achieve something else, building a house in order for somebody to shelter or to hide for example, or of locating criminal suspects, of eavesdropping on conversations, or of gathering evidence in order to catch the evil character (Lego 2005), the two semi-automata musical robots in "Sonic Construct" playfully challenge such preconceived ideas of what a robot "should" do. The robots in this work are not expected to accomplish any pre-designed tasks. In fact, the robot's expected role is sabotaged and its failure, contrary to the original design intension, such as its own disintegration, is welcomed.

This sabotage aids in bringing one's awareness to the shift, towards the relationships between the CsOA. It is a way of focussing one's attention towards the infinite number of moments that the CsOA can effect. It is a way of diverting one's attention from the concept of space towards the concept of duration, towards process rather than towards a particular state of things.

This is a way of conceiving of a performance environment that builds on Bergson's idea of there existing an infinite number of successive positions or moments in the material universe, but that what one perceives is a condensed version of theses moments; i.e. a human condenses into a few differentiated moments. Bergson explains this proposition with the example of a human being able to perceive red light. As red light consists of 400 billion successive vibrations per second, a human being, in order to conceive this number, would need to separate these vibrations, and would need to allow his consciousness to count these successions. He argues that, as a human being is limited to detecting only an interval of 0.0002 seconds, it would take more than 25,000 years to do this. However, since one can experience the sensation of red light in a matter of a second, it shows that,

> "there is no one rhythm of duration, [but one can imagine] many different rhythms which, slower or faster, measure the degree of tension and relaxation of different kinds of consciousness and thereby fix their respective places in the scale of being" (Bergson 1991, p.207).

Bergson suggests conceiving of durations as having different tensions, and not thinking of what one has acquired as a habit; that is of substituting the true duration with a "homogeneous and independent Time" (Bergson 1991, p.207).

As one last example, before summarising, I want to look at one of my own music performances, entitled “A-Synk” (2005). This performance is interesting to the discussion of the shift, not only as it discloses various CsOA, but also because it is particularly geared towards the shift itself. This is a performance in which the shift not only holds CsOA in a continuous state of tension, but more than this, it derives its meaning and in fact its musical cues from the nature of the shift itself. This type of performance presents a Bergsonian way of considering a performance environment, as it is not concerned with predetermined and rigid forms, or with instrumental properties; rather, it is a performance that thrives on differences of internal tension.

2.3.5. “A-Synk” - for Percussion, Saxophone, Live-electronics and Internet Audio Chat

“A-Synk” is a piece for percussion, saxophone, live-electronics and internet audio chat client (see Figure 7 for a set-up of the work). The piece explores the improvisational content between two groups of musicians in two different locations (Belfast, UK and Lisbon, Portugal), as informed by the inherent behaviour and misbehaviour of the group’s audio chat link. In this way, the music’s development is shaped by the limitations of bandwidth, unpredictable delays and interruptions, which are inherent in such technology. The computer’s role is,

> “that of an extrapolation of the types of down-sampling, filtering, delays and interruptions presented by the audio link itself while the instrumental parts are based on close response to (delayed) events created by each of the performers” (Rebelo, Schroeder et al. 2005).

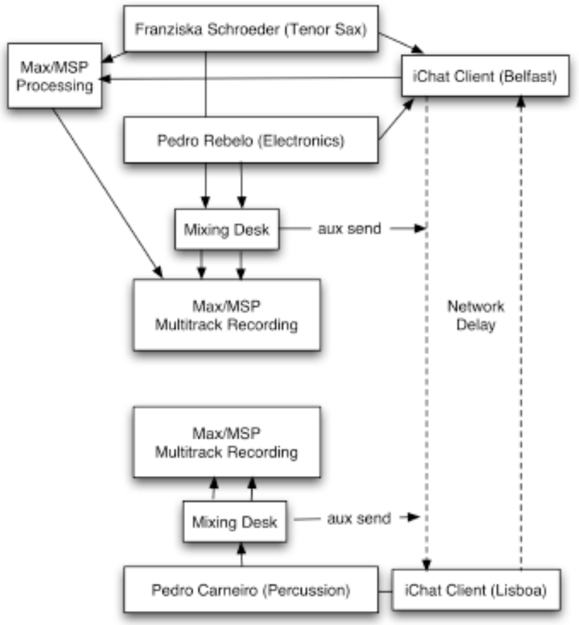
Franziska Schroeder (Tenor Sax)
Max/MSP Processing
iChat Client (Belfast)
Pedro Rebelo (Electronics)
Mixing Desk
aux send
Max/MSP Multitrack Recording
Network Delay
Max/MSP Multitrack Recording
Mixing Desk
aux send
Pedro Carneiro (Percussion)
iChat Client (Lisboa)

FIGURE 7: DIAGRAM OF A-SYNK SET-UP
WWW.SARC.QUB.AC.UK/~PREBELO/INDEX/WORKS/ASYNK/LEFT.HTM
[NOVEMBER 2005]

"A-Synk" also exposes the vital idea, something that I have discussed in the two previous performances, that in designing a performance environment, the interaction of CsOA is at the centre, and that there is the need for looking at *how* CsOA are used, and *what* they are used for, rather than looking at how they function. This is, once again, like looking at the Heideggerian "hammering" in order to understand the respective function of the tools. "A-Synk" is a good example of a Bergsonian performance, as it abstains from looking at the things themselves, but explores what is situated in-between them. It explores the tendency of things to develop themselves. As Deleuze suggest, it is the tendency to emphasise certain characters that is more important to Bergson, than the possession of characters themselves (Deleuze 1999, p.45).

"A-Synk", then, by exposing a lack of visual cues (the performers cannot see each other's gestures when performing) drives one's focus away from the thingness of things, and, combined with the restrained audio feedback (the subtle audio nuances present in a live-performance are absent), not only shapes the musical interaction, which becomes highly distinct from that of a traditional performance environment in which all performers are in the same space, but also allows for concentration upon the shift itself. It is a move towards relations, away from the absolute; a move that Bergson would support in saying "the essence of things escapes us, and will escape us always; we move among relations; the absolute is not in our province" (Bergson 1911, Introduction, xi).

2.3.6. The Body Connected - Summarised

I have considered three different types of performances from a point of view triggered by the writings of the French philosopher Henri Bergson. I argued that the body connected, its function, as well as how it relates to the surroundings, is central to this performance.

Further, the body's privileged positions in regard to its surroundings highlighted the idea of *mixtures*. It brought out the idea that the body comprises its surrounding objects, while the surrounding objects also contain the body. I examined three performance situations by looking at what I term the 'shift', a kind of flow that, by going from one COA to another, holds CsOA in a state of tension. The shift takes on the role of intermediary; it places one COA into the other, the body into technology, technology into the body, thus affecting CsOA themselves.

The shift is of importance as it makes the CsOA be and behave in certain ways. It is the existence of the CsOA, coupled with the fact that they act in certain ways, which discloses the most, and is at the same time highly essential to a performance environment. The shift becomes more vital to the performance than the CsOA themselves. With this in mind, it is essential for a performance to question when the shift occurs and how it occurs, and whether it is true that only *if* it occurs does the performance take place, or whether the CsOA only exist due to the presence of the shift, rather than enquiring into the nature of the CsOA.

In designing a performance environment, I argued not only that the concept of mixtures becomes important, but also, that a Bergsonian performance has to allow things to unfold unpredictably. It has to let one grasp the world as a relationship between matter and spirit without any existing project or plan. The Bergsonian performance abstains from continuously grasping for a telos. Instead, the shift becomes the starting point for the design of the performance environment.

I suggest that by regarding the shift as the beginning, as that which brings out CsOA and places them as active bodies into one another while exposing their inherent difference, inside which the shift shows itself as pure difference, one must conceive of performance environments in differing ways.

2.4. THE ARTAUDIAN PERFORMANCE – THE BODY ASSAULTED

or:

> "I wanted to inhale myself in order to prove that I was alive… (in Deleuze, Guattari 1984, p.48).

From Bergson's view of the body as an instrument of action, of a body that acts as mediator of matter and mind, in which mind and body are attached, I arrive at the body able to stand alone. This is the body that the French dramatist, actor, poet and artist Antonin Artaud (1896-1948)[60] refers to as the body that has no need for its organs, an idea that years later will inspire Deleuze and Guattari, and one that I will revisit in chapter IV. This body leads me to the writings and ideas of Artaud and his motto: "the body is the body, alone it stands" (Artaud 1977, p.59). For Artaud, all there exists is a body; one without the need for its organs, as he says, "there is nothing more useless than an organ". In his radio play of 1947 Artaud advocates making man a body without organs, as,

> "then you will have delivered him from all his automatic reactions and restored him to his true freedom. Then you will teach him again to dance wrong side out as in the frenzy of dance halls and this wrong side out will be his real place" (Artaud 1947).

A body conceptualised in this way is a rather daring move away from the body as it had previously been conceived. Jacques Derrida suggests that in this way Artaud attempts to destroy the history of dualist metaphysics (Derrida 1978, p.175). Artaud's body is a body that does not refer to either matter or mind, but Artaud presents a body that is open to new encounters, freed from automatic responses. It is a body without organs, without any hierarchical organisation. Artaud's body is a liminal body, a changing interface between subjectivity and the world, and this body, by being free and open, also becomes a vulnerable body, one opened up to attacks and assaults. This body leads me to reflect on performance activities as an encounter with the struggles and resistances that so much form part of any performance. I title this body **the body assaulted**. It is a body that, with regard to previous conceptions of the body, is new and does not fit in. In the same way that Turner sees play as "betwixt-and-between all standard taxonomic nodes", I see this body as liminal; as essentially interstitial. Hence, the Artaudian performance, making use of the body assaulted, allows for the unpredictable, the unexpected and the new to take place. Moreover, it is a performance that features the body that stands alone. It features an exposed body, which is one that is laid bare and vulnerable. The performances I discuss in this chapter therefore concentrate on the body as exposed and vulnerable, and highlight the body's potential for struggle and resistance. In those performances I consider the body's vulnerability and show that its potential for breaking-down becomes the important feature of the performance.

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[60] Artaud worked with various theatres and is considered highly influential for Western theatre theory, as Graver notes (2000, p.45). Artaud's ideal metaphor for the theatre was the plague: as with the disease, no human is supposed to be responsible for its appearance; it somehow originates through divine powers. In this reading, performance becomes a frantic spectacle in which there is no order or focus. The disintegration of all social forms and values as random, unexpected and unnatural behaviour is at the centre of the performance. Artaud was in favour of disintegrating social forms and wanted to inject new life into the theatre tradition. He was more interested in creation than representation. His ideal to transform "text into hieroglyph, the spectacle into cruelty and performance into affective athleticism" (Graver 2000, p.48) supports this idea. By shaping text as theatrical hieroglyphs, Artaud points towards significance beyond the text, and since text expressed as signs can destroy meaning and order, it requires less interpretation of meaning. In that way, Artaud is able to create a world rather than to represent it, Graver suggests (2000, pp.45-9).

2.4.1. The Body Assaulted

One may wonder how Artaud derives at this body. He regards man as badly constructed and considers organisms as superfluous, indeed, as the enemies of bodies. Artaud even states that reality has not been constructed as the "legitimate organs of the human body are still to be composed and set" (Artaud 1976a). The body is somehow still open to definition, and Artaud continuously re-imagines the body, as his idea of a "new gathering together of the activity of the human world: the idea of a new anatomy" shows (in Barber 1999, p.78). Steven Connor suggests that Artaud may have discovered this idea for a re-imagined or "unthinkable" body, for a body that wears its skeleton as a kind of second skin or armour on the outside, during the time in 1936, which he spent in Mexico with the Tarahumara people, with whom he participated in their drug-induced Peyote rituals (Connor 2004a, p.72). (Artaud later recorded those experiences in a volume called "The Peyote Dance"). Artaud's mistrust and the constant need for re-imagining the body, equipping it with some type of armour, come as no surprise. Artaud's own body would have been in need of such shield when being subjected to electroshock treatments in a French asylum in Rodez during France's occupation by the Nazis. Barber suggests that Artaud creates the body without organs as a revolt against the judgment of God (Barber 1999, p.99). His radio play of the title "To Have Done With The Judgement of God" expresses his unfavourable position towards God. Here, he says that whatever enters and leaves the body (ideas and thoughts for instance) are excrements, and excrements and God are excess organs (Artaud 1947).

Artaud's body to me is a body that consists of soft, pliable meat, and although Artaud suggests that in order to live one needs to be "someone, [and] to be someone, one must have a *bone*, not be afraid to show the bone, and to lose the meat in the process" (Artaud 1947), Artaud is constantly in search for the flesh. He asks,

> "how will the theatre of cruelty save me, give me back the institution of my flesh itself? How will it prevent my life from falling outside me? How will it help me avoid "having lived"… with a body stolen by effraction? (in Derrida 1978, p.185).

This quotation and Artaud's idea of wanting to inhale himself to prove that he was alive, shows that Artaud is in constant need of searching, or verifying the body's existence. Artaud blames God for having stolen his body. He says that God projected himself across his body to be born first, to be born before him; that through the "disembowelling" of his body, God "passed himself off" as him. God was born at the price of his assassination, he says (in Derrida 1978, p.180).

The body assaulted is free, open to re-definition. It is soft and pliable while at the same time this pliability also makes it vulnerable, ambiguous, uncertain and unsafe. It is a body that has already been broken into and entered into before (by God). This vulnerability renders the body a surface for constant insults, assaults and attacks. Barber notes that in Artaud's drawings for example, the body is often spread out, dissected as in an autopsy session. It is worth noting that most of Artaud's drawings stem from mentioned French asylum where he received electroshock treatments. Artaud draws shattered fragments of human figures, and in his later drawings, he destroys his friends' bodies and faces (Barber 1999). The body assaulted may stem, as for Artaud, from a total mistrust in one's body. Steven Connor points out that Artaud rejected the top-to-bottom stratification of the body; that to him, the body is one infected by God, language and history (Connor 2004a, p.71).

2.4.2. The Body Assaulted by La Fura dels Baus

I now want to turn towards performance situations that aim at assaulting the body, be it a human body or that of an animal, be it physically or mentally. To mind come the theatrical and violent performances during the 1970s with animal slaughters, electric chairs, guillotines and fake blood by the heavy metal singer, or better titled 'shock-rocker', Alice Cooper (pka Vincent Damon Furnier), the destructive sonic forces of the "Einstürzende Neubauten", as well as the performances by the Catalan performance group "La Fura dels Baus".

The Catalan group La Fura dels Baus stages performances, one of which I attended several years ago in Lisbon/Portugal, that use the performance room in ways as to cram a standing, and soon hysterically running, audience into contained areas. They cage members into corners in order to pull individuals up onto their mobile stage. Up there, on reconstructed guillotines and torture tables, the chosen individual is splashed with blood; his shirts may be cut open, buckets of an indiscernible, stinking fluid may be poured over him. The group rides on giant metal machines that spurt fire and flash bright lights at the audience thereby creating a high-voltage technology performance environment. The spectacle is accompanied by the most powerful and pulsating sounds drumming the audience into obedience. This polysensory performance makes the audience feel uncomfortable and disconcerted. It destroys their expectancy of a comfortable and “safe” performance environment, a veritable assault not only on the body, but also on the mind that had, up to the start of the performance, rested so assured of a forthcoming peaceful and pleasant event[61].

One can argue that, by breaking the barrier between performer and audience, the performance becomes physical and real as the performers’ actions have immediate consequences for the spectators. I remind here of the distinctions that Richard Schechner makes between the aesthetic and the social drama. Schechner argues that in an aesthetic drama the audience is actually separated from the performer; that the aesthetic drama acts *on* the participants and permanent body changes cannot be effected, whereas in a social drama all persons present *are* participants (Schechner 1988, p.192). One can argue, that due to the breaking-down of the performer/audience boundary, the performances by La Fura dels Baus come closer to a social drama as their performances cease to be pure contained images on stage. The body of the viewer is exposed; it becomes vulnerable and open to attacks as it is laid bare to the unpredictable and the unexpected. La Fura’s performances recall Artaud’s concept behind the “Theatre of Cruelty”, which, although Artaud says does not imply “sadistic violence”, is akin to violence. Artaud advocates performances that are more felt than seen. He says,

> “[t]he spectator will go to the theatre the way he goes to the surgeon or dentist. In the same state of mind - knowing, of course, that he will not die, but that it is a serious thing, and that he will not come out of it unscathed… . He must be totally convinced that we are capable of making him scream” (Artaud 1976a, p.157).

La Fura dels Baus performances are such felt spectacles in which the assault of the body is in the foreground[62]; they can be akin to going to the dentist or the surgeon.

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[61] This applies at least to those attending the performance for the first time.

[62] In a similar outrage of violence, one can place Ralph Ortiz’s performance entitled “The Sky is Falling”, which also has at its focus the body assaulted. In this performance, mice and chickens are killed, and members of the audience are covered in blood. Participants are divided into Initiators and Initiates, the latter being interrogated by the Initiators. The Initiates may get verbally abused when refusing to fully participate in the work. In “The Sky is Falling” “violence is combined with sexuality and scatology. The violence increases through a series of overlapping and simultaneous “rituals” culminating in the “Piano Destruction Rite”… Preparatory events include breaking eggs, killing mice, cutting paper screens on which images of human dissections are projected, burning clothes, burning food, … dismembering dead chickens, tearing clothes off participants, and throwing blood at each other”. The piece continues with smashing the piano with the aid of an axe, with moans, groans, violent screams, and chickens spread onto the piano where they are finally decapitated (in Schechner 1988, pp.49-50).

2.4.3. Assault in Theatre Performances

On a level of assault that displays less of a physical involvement, one can mention the epic theatre performances of German poet and playwright Bertolt Brecht. Brecht's theatre plays, rather than physically assaulting, aim at attacking the viewers' ideologies that Brecht felt had turned into commodities and were no longer real beliefs. Brecht, rather than making the viewer too involved in the story, intends to alienate the audience, and in order to achieve this, he uses the "Verfremdungs-Effekt" (alienation effect or distancing effect). By employing certain theatrical devices, the spectator is constantly being made aware that s/he is taking part in a production rather than in a real life situation. Through the "Verfremdungs-Effekt", the audience is supposed to become alienated from the action, and an attempt is made to focus the viewers' attention towards the social and political ideas of the characters on stage. In Brecht's theatre, the performer may affront public taste or morals, hence creating an outlet for the audience to become actively involved, even if not physical, although physical engagement can form part. [For details on Brecht's theatre method see (Jameson 2000)]. Just as in Artaud's "Theatre of Cruelty", the body of the listener is opened up to attacks, opened to new ideas and encounters. I see this as a performance that features the body assaulted.

Similarly to Artaud's idea of a spectacle more felt than seen, one can mention the Brazilian theatre director Augusto Boal and his "Theatre of the Oppressed", which developed during the 1950s and 60s. Boal's theatre attempts to open up the traditional stage performance in order for audience and staged action to enter into dialogue, for people to interact and to think critically. The viewer in Boal's terms becomes a "spect-actor", an activated spectator taking an active part in the theatre (Paterson, Weinberg 1996). Just as in the other activating forms of theatre, the performer or the audience can become physically assaulted.

An even more extreme case of the body assaulted can be encountered in Hermann Nitsch's "orgy and mystery theatre". Nitsch, the principal figure of the Viennese Action Group, developed the "o.m.theatre" in 1957. Nitsch, in collaboration with artist Otto Muehl - both staunch allies of Artaud - staged performances that exposed the assault of the human and/or animal body to an extreme. By cutting open animal carcasses over naked bodies of performers, the performance scene becomes drenched in blood[63]. Nitsch continues to stage various such orgiastic "Gesamtkunstwerke". His Six-Day Orgies-Mysteries Theatre of 1998 for example comprised a “series of rituals featuring animal sacrifice, bloodletting, mock crucifixions and bacchanalian cavorting in the midst of animal innards and smashed tomatoes” (Duncan 2000). Nitsch’s performances involve assaults on the body and, as Wilson argues, bring the performer and the audience to new states of consciousness, purifying the body (Wilson 2002). This purified body is then able to receive new kinds of sensations and even new assaults.

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[63] The 'o.m.theatre' carnage is usually recorded with hand-held cameras in black-and-white film. The camera's wild movements evidently result in impoverished and vertiginous recordings, lending the act of assault an even greater detail of disturbance. Around thirty years later, the Dutch filmmaker Lars van Trier uses the technique of hand-held cameras in his "Dogma" films, and introduces the "Vow of Chastity", a film-making ideology set out in 1995.

The body cut open by Nitsch can be understood in analogy to Artaud’s disembowelled body, to Artaud’s body that had been assassinated by God. The body is broken into and rendered exposed and vulnerable. It is a body open for exploration, open for new encounters, one that is not marked by constraints. After all, Nitsch celebrates ecstasy rather than restraint, to him “life is more than duty: it is bliss, excess, waste to the point of orgy”. (in Wilson 2002, p.176).

2.4.4. Assault as Performance Art

A rather intense and real, a truly masochistic, way of performing the body assaulted is demonstrated by the performance artist Bob Flanagan. Rather than “performance artist”, Flanagan is more often referred to as masochist, or even supermasochist, as the title of the 1997 film “Sick: The Life & Death of Bob Flanagan, Supermasochist”, directed by Kirby Dick, attests to. Flanagan is possibly best known for having pain voluntarily inflicted upon him, as when he is strapped into a torture device in the video “Happiness In Slavery” (directed by Johnathan Reiss; www.9inchnails.com), as well as for his onstage acts of self-mutilation, piercing his penis with a nail.

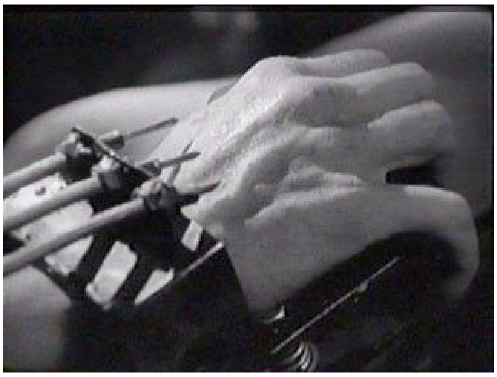

FIGURE 8: “HAPPINESS IN SLAVERY” BY JOHNATHAN REISS (VIDEO SCREEN CAPTURE)
COPYRIGHT 1995 - 2005 PAINFUL CONVICTIONS

Flanagan commenced his tortures early in his childhood, when he would hang himself suspended from his bedroom ceiling or the bathroom door (Ebert 1997).

There is a noticeable link to Artaud's treatment of the body, as one that is open to insults and attacks. What I find even more fascinating though is that Flanagan, who was born with cystic fibrosis, seems to assault his body out of similar motives to Artaud, that is as a way of punishment. The body has somehow betrayed the individual: Artaud was deprived of his body through electroshock treatments, Flanagan through his disease. Both performers resort to assaulting, to tormenting, or to being tormented as a kind of pleasurable revenge. Revenge here is a way of getting back at your own body for having betrayed "you"; and as "you" are your body, by getting back at your body, you get back at yourself, which lies at the heart of masochism.

Flanagan's "final artwork" highlights the idea that the body assaulted can, and should, survive. He asks for a video camera with a link to the outside world to be installed in the coffin alongside his body, so that the living can follow the decay of his body (Ebert 1997).

2.4.5. Assault as Punishment

One of the most gruesome, and at the same time, possibly one of the greatest spectacles, but certainly, a most brutal display of the body assaulted, is the public torture of Damiens the regicide in 1757, as described in the first chapter of Michel Foucault's "Discipline & Punish" (1975). I consider this spectacle a type of performance (possibly not an aesthetic one, but surely a performative event carried out for a watching crowd).

This public spectacle presents the body assaulted at its height. However, interestingly enough, this is not due to the inflicted torture itself, in which the flesh is torn with red-hot pincers from Damiens' breasts, thighs and arms; or in which melted lead, boiling oil, burning resin, wax and sulphur are poured onto the wounds; or in which Damiens' hand is burnt with sulphur; or in which Damiens' truncated body, after having been quartered by horses, is burnt at the stake. No, the main assault and the most violent aspect of this torture lies in the unsuccessful implementation of all those procedures, which bit by bit have to be 'upgraded', or changed, and then repeated in various ways. The horses for example were not used to drawing a body apart; therefore instead of four, six horses were needed. When this proves to be inadequate, the direction in which the horses were pulling has to be changed, and eventually Damiens' thighs have to be cut off in order to sever the tendons, and the joints have to be hacked. The sulphur that is supposed to burn his hand does not light properly, so that only the surface of the skin is slightly burnt, and when the executioner has difficulties in tearing away the pieces of flesh with specially made steel pincers, he resorts to twisting the pincers and repeatedly attacking the same spot several times. When Damiens is finally successfully quartered he is carried off in pieces to the stake where his limbs and trunk are burned (Foucault 1995, pp. 3-8).

Although, this is possibly the most literal, and surely the most violent and sickening form of the body assaulted, I could not help feeling physically sick when reading Foucault's description, the body also demonstrates something else here; something I see as an integral aspect in the discussion of performance, which is the body's resistance and its capability for struggle.

All the performances I mention bare not only the potential of the body breaking-down - Damiens does die in the end -, but they also show the body's potential resistance as well as its capability for existing in complex and unpredictable ways.

I can think of numerous other performances that can be considered in light of the body assaulted: from body suspensions, to body manipulations, even plastic surgery, to the enduring minimalist pieces of Terry Riley or Steve Reich[64], as well as the assaulting choreography of Vaslav Nijinsky[65] designed for Igor Stravinsky's ballet "The Rite of Spring" (1913), that was, at least at the time of its first performance, understood as an assault on the ear. However, I now want to inquire into the notion of assault in ways that move beyond the literal meaning of the term assault.

2.4.6. The "nothing-to-do"

An enquiry into the actual meaning of the word assault exposes the term as something that involves attack, invasion and the application of force; it is something offensive and violent. One can argue that it is more likely for assault to take place when the thing to be assaulted is somehow laid bare, exposed, or vulnerable. The wounded bird lying on the street, not able to fly away, is exposed and becomes more likely to be attacked by the stray dog. It is this *exposure* that may function as a sort of prerequisite for the assault on the body that I want to examine more closely.

When talking about a performer's appearance, and I particularly have in mind a performance by a musician, one tends to comment obsessively on bodily characteristics, on her posture, mastery of control, bodily tension and comportment. Although I believe such

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[64] The repetitive prolonged action in those works, requiring machinist timing and precision, can be regarded as an assault on the body. Musicians who, after years of diligent, daily and prolonged practice, sustain repetitive strain injuries could certainly bring one's attention to the body assaulted.

[65] One of the dancers is supposed to have said that the choreography was physically unnatural to perform, and that with every leap the dancers would feel their organs sharply jerked (Kelly 1999). The "Rite of Spring" literally exposes the body assaulted on several fronts: the dancers are performing movements previously not done, the instrumentalists are made to play in ranges never thought of using before (demonstrated in the high bassoon register that Stravinsky asks for), and, one can argue, the audience may have felt assaulted in that their expectations were totally and utterly left unfulfilled, and possibly even betrayed. Instead of providing a musical theme, as was the norm at the time, Stravinsky's "Rite" offers "loud, pulsating, dissonant chord[s] with jarring, irregular accents" (Kelly 1999). And as a response, the audience engages in assaulting the performers during the premier in 1913 at the "Théatre des Champs-Elysées" in Paris: they respond with hisses and catcalls to such extent that the performers could hardly hear each other (Kelly 1999).

‘body awareness’, the way the body is being guided or directed through a performance, is one of the most essential assets of a performer, it is at the same time that which reveals, more than anything else, the performer’s vulnerability. It follows that it is in what I call “the nothing-to-do”[66], and this “nothing-to-do” does not imply not doing, contrarily to the belief that difficult movements, fast passages, long monologues are the most exposing for a performer, the body’s potential impotence is revealed. It is, then, surprising that the “nothing-to-do” often is not given as much attention during rehearsal periods.

One work that addresses the phenomenon of the “nothing-to-do” is John Cage’s infamous 4’33”, a work previously referred to, a work displaying a deep involvement with the “nothing-to-do” in music. It is known that 4’33” was inspired by Cage sitting in an anechoic chamber when he realised that he was able to hear his nervous system ringing and his blood circulating (Warburton 2001). Cage concludes that sounds are constantly being made, whether intended or not, and often without one noticing them. In addition to showing that by the absence of music, silence becomes disclosed as an autonomous musical phenomenon, Cage creates the perfect situation for the body assaulted. During those four and a half minutes the audience’s, as well the performer’s body is laid bare and exposed in ways that serve as pre-requisite for a possible assault. Their exposure to the “nothing-to-do” is at its height.

Similarly, some of the 1960s compositions by La Monte Young give rise to the body assaulted. These compositions with their intent focus on time and pitch relations also prepare a fertile ground for the “nothing-to-do”, and once again, the “nothing-to-do” does not imply not doing. I am thinking of La Monte Young’s Composition 1960 #7, comprised of the sustained interval of a perfect fifth with the instruction “to be held for a long time”; or the straight line drawn on a file card in Composition 1960 #9, or the instructions “Draw a straight line and follow it” in Composition 1960 #10. Here, just as in Cage’s 4’33”, the focus is shifted towards the performer’s bodily tensions, in particular, towards his non-actions. The way the body is being guided through the “nothing-to-do” *exposes* the body most, and a path for assault on the body is prepared[67].

This entails that the “nothing-to-do” tends to expose a performer’s tensions, intentions and effort. For the audience it implies that, by emulating the performer’s conveyed tension in their own bodies, by ways of their own muscles and nerves tingling in sympathy with the performer's body, they can best identify with the performance. Artaud suggests something like that when saying that,

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[66] Thanks to Pedro Rebelo who, after one of our long conversations, suggested this term.

[67] A similar potential for an assault of the body can be found in Samuel Beckett’s play “Waiting for Godot”. The extreme lengths of silences in the dialogue, the prolonged reflections and pauses that are marked by Beckett in his directions to the actors - acting directions that give rise to the “nothing-to-do” - focus one’s awareness towards the performers’ bodily actions, and particularly his non-actions.

> "[t]o become conscious of physical obsession, of muscles quivering with affectivity, is equivalent, as in the play of breaths, to unleashing this affectivity in full force, giving it a mute but profound range and an extraordinary violence" (Graver 2000, p.54).

Artaud wants the audience member to identify with the performer "breath by breath and beat by beat…; [and to him] to know in advance what point of the body to touch is the key to throwing the spectator into magical trance" (Artaud 1958, p.140). This identification with the performer and the emulation of the performer's physical obsession becomes integral to any type of performance, and Artaud suggests that this aspect leads one to a "magic experience".

One could then argue that in a performance by a laptop improviser, the "nothing-to-do" is somewhat disguised; the possibility for the body's impotence is hidden due to the minimal physical involvement of the performer. The workings of the body, specifically the body's potential for breakdown, is masked or absent. Does this mean, since the listener is not able to emulate easily the performer's conveyed tension, he can not be throw into what Artaud calls "magical trance"? In the next paragraph I want to examine two recent laptop performances staged by the Sonic Arts Research Centre in Belfast. The discussion focuses on the "nothing-to-do"; the idea of body tension and the body's potential for breakdown, and is thus intrinsically linked to the idea of gesture[68].

2.4.7. Exposing the Body's Workings – On Laptop Performance Gesture

One laptop performance I want to consider is the 2004 Christmas collective laptop improvisation "XMESS" in which I performed as a laptop musician. This concert was facilitated by Pedro Rebelo. The other performance I will examine is "XS-X-XL: Working in Public Collective Improvisations", facilitated by John Bowers in February 2005.

Looking at these performances, in which several performers mostly seem to manipulate the keyboards and mouse buttons of their laptops - and this is more applicable to the first of the two performances - one somehow encounters difficulties in identifying bodily characteristics, such as bodily control or body tension. A performance with laptop computers, such as highlighted in the "XMESS" concert, makes me aware that in order to perceive bodily tension, there also needs to exist release. When looking at a saxophonist playing her instrument for example, one notices several things in the performer's posture, in particular when air is inhaled before the actual sounding of a note. The mouth opens, the ribcage expands, the elbows become drawn away from the body while the fingers are being readied onto the instrument's keypads. This state of tension is then followed by a state of release in which the mouth closes, the lungs contract, the elbows quickly move towards the body and the fingers touch the keys, i.e. the note is finally played. In the same way, a dancer stands still and her body tenses in order to prepare for the ensuing jump, the release, in the same way that the drummer holds up the drumstick in the air before hitting the drum. The particular performance piece by Nam June Paik titled "One for Solo Violin" (1962) has the performer slowly lifting a violin over the course of five minutes before the instrument is smashed on the table. This is the moment of release. I revisit the idea of tension and release in chapter III when talking about the performances of Istvan Kantor, who uses Wilhelm Reich's orgasmic formula that includes notions of tension, charge, discharge and relaxation.

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[68] As previously stated the field of gesture is a vast field of research, and its detailed inclusion is beyond the scope of this thesis. A good overview of gesture classification can be found in (Wanderley, Battier 2001).

In a laptop performance such visual cues are clearly less intense, which does not mean that they are not present. It is solely that the pressing of a key does not convey bodily tension and release in the same way as the inhalation-exhalation of the saxophone player. One can argue that in the "XMESS" laptop performance, gestural information takes place on a rather miniature level, since the faders of a faderbox are manipulated with the tips of a few fingers only; the mouse is manoeuvred by the tip of the index finger, or the eyes of the performer move minimally, scanning the screen as if a rather unexpected email message had just appeared on it. One can understand these actions as gestures that relate to the performance, even if they may seem less intense than the bowing movements of a cellist or the downward head movements of a pianist for example. They are not invisible, but certainly less visible.

2.4.8. Gestures as Suggested by the Instrument

However, this is precisely the point in playing a laptop as a musical instrument. It is not the lack of, but the lack of *need* of physical gestures that forms part of the fascination of making music with computers, and what is of importance is the fact that the performer engages in the gestures suggested by the instrument itself. One can argue that any instrument requires a certain layer of invisible or less visible gestures, such as the tongue movement of the saxophonist used for playing sub-tone, or the pedal of the pianist employed for sustaining a note. In this light, a performance with a computer can be understood as solely consisting of such a less intense gestural layer. There are no grand, visualisable physical gestures, since the computer does not suggest strong physical actions, in the same way that a cello suggests to the cellist. A computer instrument becomes the tongue on the reed, or the foot on the pedal.

Julio D'Escrivan acknowledges this absence of effort in the performances of electronic music and suggests that a new generation of listeners indeed happily accept the absence of what he calls the "muscular virtuosity" of traditional performers (D'Escrivan 2006). D'Escrivan suggests that such new listening attitude is informed by our lives that are now predominantly characterised by effortlessness. As example he gives the generation of people brought up on video games that characterises this absence of physical effort.

John Bowers' important research into the gestural vocabulary in technologically mediated performance environments emphasises the existence of gestures that are particular to the computer instrument. He investigates what he calls "performance ecologies", drawing particular attention to differential desktops of laptop improvisers. Bowers shows that the desktop is set up in a way in which devices are placed in relation to their role in a performance, which means that there is a certain organisation in which devices are placed within reach for certain actions. For example, immovable devices such as a score or a music stand may be placed to the left of the performer, whereas the algorithmic or computational items such as a faderbox may be situated in the centre of the desktop. The directly manipulative devices such a joystick or devices with contact microphones, for example, may be placed to the right of the performer. Such spread of interactive possibilities across these different devices as spatialised on the desktop supports a gestural variety that is present in those performance environments. This implies that the performer, by moving from one side of the table to the other, is not only able to do different things in an effective way for himself, but this spread of possibilities also gives cues to the audience, as well as to the other performers with regard to the legibility of the performer's gestures (Bowers 2003)[69].

Nonetheless, I agree that it can be argued that these gestures tend to be more difficult to recognise, especially to a lay computer audience, and several authors have commented on the loss of legibility of gestures in those performance environments, talking of losing the touch (Emmerson 2000), or of gestures becoming dislocated from the sound (Smalley 1986, p.83). I think, however, that Bowers' gesture studies reveal something highly essential about the computer as a performative instrument, which is that there exist different types of concepts and different ways of understanding gestures. This is because the computer is a *different* instrument.

I propose that the way forward in making music with computers is to accept and to see the computer as a *different* type of instrument, rather than to engage in emulating acoustic instruments and their inherent gestures with a computer. The computer is an instrument and it makes music, but it may not make the best music in an attempt to imitate traditional acoustic instruments, or by being modelled to behave like a'real' performer giving an 'expressive performance'. One has to allow the computer to make the kind of music that it has long suggested. This means that the body that performs that instrument has to be allowed to be a specific type of body, whose workings are of a specific kind, which may mean that the potential for the body's breakdown becomes invisible, or less visible, depending on how one looks at it.

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[69] The paper can be found on the ARiADA site (ARiADA), which also offers other good texts on digital media issues.

The second laptop performance, "XS-X-XL", was also characterised by the absence of strong visual performance cues. This absence in that particular performance was, however, countered by the compulsory use of physical devices. Performers brought anything from a prepared guitar, a pen, a piece of paper, a wine bottle, a turntable or a violin, a vibrating toy more reminiscent of a dildo, as well as two baby monitors that could be passed between performers and the audience, making it possible for the listeners to visualise the "nothing-to-do", or to expose each individual performer's workings of the body more clearly. I do have to stress that the use of devices does not automatically generate a more musical work, in the same way that the fact that certain gestures can become more noticeable through manipulating a device, does not automatically validate the sonic materials.

In fact, this particular performance showed that an excess of devices, hence the overload of visual information, coupled with the fact that the performers encircled the audience - a setup more akin to the public torture of Damiens - can lead to a visual overkill, in particular when the devices hardly ever correspond to a particular sound. In this case, the gestures become dislocated from the sonic output, and if, in addition, the device–sound-coupling is encumbered by a changing placement of sounds into varying loudspeakers (sound diffusion), one not only feels displaced and disjunct, but also disengaged and de-sonified. The performance becomes a sonic assault on the ear, to speak in an Artaudian sense.

It is worth noting a newer trend in laptop performances that addresses the loss of visual performance information by making transparent the workings of the machine itself; these evidently being coupled to the physical actions of the performer. The audiovisual laptop duo "Klipp AV" (Collins, Olofsson 2005) presents us with a good example of a performance that displays the machine's performative actions. The duo's philosophy is such that their performance actions are intended to be transparent. The performers generate everything live and manipulate data "on-the-fly". The generated and manipulated information is displayed on screens to the audience during the performance in real-time. It is possible to think that such example can also expand discussions of performance virtuosity, in which the performer's conceptual thinking, his on-the-fly programming, and real-time handling of the machine's idiosyncrasies may now be considered the virtuosic aspect of the performance.

2.4.9. The Sighted and the Under-Sighted

I think above laptop performances do not suggest that one cannot be thrown into a "magical trance". However, what they do reveal is that, apart from re-thinking the basics of performance space, device-to-sound mapping, and re-focussing towards what in fact makes for a coherent work, some relearning on the part of the listener is required.

It is feasible to think that in the kinds of performances in which physical gestures occur at a minimum level, the listener is not able to participate in the way a seeing person does, but that the listener may need to engage more in a way an unsighted, or an under-sighted person, as Steven Connor refers to both the blind and the intently listening (Connor 2003), would. This is by means of relying on the sound alone, through *listening*, rather than through the constant search for gestural cues that may relate to a particular sonic output. Look away and listen, rather than look *and* listen. It can be argued that the advent of technologies that are used for performance purposes underlines the need for turning our ways of listening towards past attitudes; a past in which musicians were in fact hidden from the view of the listeners, such as Richard Leppert finds in Italian Renaissance pastorals, in Elizabethan masques, or in Wagnerian music dramas. Leppert speaks of the rupture of sound from sight (Leppert 1993, Introduction, xx), and indeed, one should not forget how much the entire body forms part of the process of hearing, since hearing implicates not only the ear, but also the skin, feet and abdomen. Michel Serres states something vital about hearing, about how one hears, where the ear not only receives vibrations, but also broadcasts them to a sort of third ear. He says that at,

> "the beginning, the whole body or organism raises up a sculpture or statue of tense skin, vibrating amid voluminous sound, open-closed like a box (or drum), capturing that by which it is captured. We hear by means of the skin and the feet. We hear with the cranial box, the abdomen and the thorax. We hear by means of the muscles, nerves and tendons. Our body-box, stretched with strings, veils itself within a global tympanum. We live amid sounds and cries, amid waves rather than spaces the organism moulds and indents itself...I am a house of sound, hearing and voice at once, black box and sounding-board, hammer and anvil, a grotto of echoes, a music cassette, the ear's pavilion, a question mark, wandering in the space of messages filled or stripped of sense...I am the resonance and the tone, I am altogether the mingling of the tone and its resonance" (Serres 1998, pp.180-1).

In thinking of a move away from seeing, I want to underline the vital differences between the sighted and the unsighted world. Connor outlines that the sighted world is filled with frames and rooms in which things take place; that it is a world in which containers exist for the sighted to see something into. In contrast to this, the unsighted world is not spatial but temporal; the scenographies of the sighted world are absent to the unsighted (Connor 2003).

This shows that it is natural for the sighted to impose visual cues. The sighted search for those visual cues in a performance, and have come to grasp performance in terms of the necessity of the physicality, in which the specificity of the instrument is enhanced by grand gestures. After all, the Luciano Pavarotti a seeing person hears also consists of the sight of him: Pavarotti's extending arms embracing the world, the puffing up of his chest, and his gently resting hand on the heart. In contrast to the world of the seeing, however,

> "[t]he world of the unsighted is a world without firmament, without permanent fixtures and fittings, walls or rooms. It is a world rather of events...", so Steven Connor suggests (2003).

The laptop performances may be asking for a rupture of sound from sight, as vision features as a Serres-ian "non-sense", as a kind of dead zone. They may be asking the listener to reorient himself, as such physically less intense performances put,

> "us in the world from which vision requires us, however minimally, to withdraw. Even this is a simplification, for, in order for a sound to be audible, it is always necessary for it to be in us just as much as we are in it. We inhabit sound, because it happens to us. We do not inhabit the world of vision because our acts of looking are constantly doing things to that world. Looking, as Merleau-Ponty has remarked, is a kind of having. Listening can only approximate to this appropriative hand-eye coordination" (Connor 2003).

It is in inhabiting sound that one can penetrate beneath the surface of things given by vision, into the "invisible interiorities"[70], if such things exist, of sound.

2.4.10. The Body Assaulted - Summarised

In this section I examined various performance situations from the point of view of a re-imagined body; one informed by the new anatomy that Antonin Artaud proposes. Artaud's attacks on the body led me to conceptualise this body as an assaulted body. I considered various performances that feature the body assaulted rather literally, such as the onstage slaughter of animals in Alice Cooper's shows, the attacking of the audience in the performances of La Fura dels Baus, or the gruesome torture spectacle of Damiens the regicide.

I argued that Artaud's body presents something new, in particular with regard to the previous conceptions of the body, which is a body that does not fit in, a body that considers failure and exposes the inherent potential for its breakdown. I thus examined the "nothing-to-do", as it is closely linked to the notion of exposure, and showed that the visual struggles and resistances that are integral to some performance situations are not the main focal point in laptop performances. Here, the computer as a musical instrument suggests particular gestures, and these kinds of gestures are not as visualisable, or as physical, as a listener, accustomed to more legible gestures, may expect.

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[70] This term is derived from Walter Ong who, in talking of sculptures, says that sound is capable of informing us about otherwise invisible interiorities of a structure (in Connor 2003).

I finally argued that laptop performances emphasise the need for turning listening attitudes towards past traditions in which sounds were detached from sight, and, that by inhabiting sound through intent listening rather than through constantly searching for visual cues, one may be better equipped to penetrate beneath the surface of things given by vision.

If, on the one hand, the body assaulted makes one conscious of its potential for breakdown, of its exposure and of its fragility, it can be argued that on the other hand, the consistent attacks repeatedly beat the body out of a pivotal position and obstruct one's consciousness of the world. The need for the body's resurrection may be its subsequent destiny.

2.5. THE PONTYDIAN PERFORMANCE – THE BODY PIVOTAL

or:

> "the union of soul and body is not an amalgamation between two mutually external terms, subject and object […]. It is enacted at every instant in the movement of existence" (Merleau-Ponty 1962/1999, pp.88-9).

It is plausible to suggest that Artaud's idea of "a new gathering together of the activity of the human world: the idea of a new anatomy" (Barber 1999, p.78) becomes elaborated upon and refined by the French philosopher Maurice Merleau-Ponty (1908 – 1961), whose idea of the body as one that is placed back into the centre of the world indicates the body's resurrection from the Artaudian assaults.

If, according to Merleau-Ponty, man is not solely a psyche joined to an organism, and the union of soul and body is not seen as a compound of mutually external terms, as subject and object, but as a union which is "enacted at every instant in the movement of existence" (Merleau-Ponty 1962/1999, pp.88-9), then Merleau-Ponty again bestows significance onto the body as a whole, as a lived body - **the body pivotal**, I call this body[71]. The body's resurrection does in no way render the Artaudian body less significant. In fact, it is only through the body's vulnerability that Artaud was made aware of its significance, while at the same time of its bad construction. However, by making the body subject to constant assaults and attacks, by beating the body into unconsciousness, one can argue that Artaud denies one the world. If, according to Merleau-Ponty, "I am conscious of the world through the medium of my body" (Merleau-Ponty 1999, p.82), a body beaten into skeletal unconsciousness does not serve one well as a vehicle for being-in-the-world.

I will therefore investigate the idea of being-in-the-world as expressed by Merleau-Ponty, in particular in his major work "Phenomenology of Perception" (Merleau-Ponty 1999). Here, he elaborates not only on the physiological aspects of being, but also injects the notion of the psychic. Thus, for Merleau-Ponty the body, or body-subject as he sometimes calls it, takes on a central position. It is not considered an object ordered by the mind, as had been a main tendency of the philosophical tradition up to then. In "PP", Merleau-Ponty relies on accounts of perception and emphasises the body's exposure to the world as a central experience. This means that a person's embodied position in the world, rather than his reflective capacities, is considered significant in experiencing the world (Reynolds 2001). Merleau-Ponty's body is a lived body and, according to him, consciousness is not only inside a person's head but is also lived through the body. To clarify this proposition Merleau-Ponty gives the example of the phantom limb. He argues that people who have had a limb amputated can still feel the limb and experience the sensation of it; they are still called to use it in certain situations, even if it is no longer there. The example of the phantom limb shows that the body is not a machine, which, in the case of having a part severed, would continue its work without the use of the limb. Thus, Merleau-Ponty argues that as a bodily being engaged in the world, one never experiences things independently of one's experience (Robbins 1999).

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[71] It can be noted that this pivotal body, the union of body and soul, recalls Bergson's ideas on matter and spirit as being tied together, and of the body as being at the centre of the world.

These phenomenological insights into the body also reflect an approach of negotiation between two approaches that Merleau-Ponty calls "empiricism", which claims that one's knowledge of the world comes from experience, and "intellectualism", sometimes referred to as rationalism, which understands knowledge as *a priori*, presupposed by experience. Merleau-Ponty says,

> "[e]mpiricism cannot see that we need to know what we are looking for, otherwise we would not be looking for it, and intellectualism (rationalism) fails to see that we need to be ignorant of what we are looking for, or equally again we should not be searching" (Merleau-Ponty 1962/1999).

By placing the body as a living organism at the centre of the world, Merleau-Ponty is able to overcome Descartes' dualism while at the same time negotiating the two predominating views, empiricism and intellectualism (Flynn 2004). Merleau-Ponty's suggestion of a person not unilaterally affecting her environment, but the environment also coming into being by the organism being there, in other words, by the organism offering itself to the environment (Merleau-Ponty 1963, p.13), is vital to a discussion of performance, in particular to the performer herself, as it forces her to rethink her own position within the performance environment. In other words, a person does not make the world that she experiences, but her body opens onto the world while allowing the world to exist for her. This also implies that objects or things are never stationary but are always given within a constantly changing, indeterminate background or horizon. Consequently, things are context dependent and furthermore, the context itself is temporary and always subject to change.

In reflecting on performance I want to place the body pivotal at the core of this section. This is a body that turns towards the world for its existence while allowing the world to exist due to the presence of the body itself. This is a body open to change; one that experiences things as multi-determinate, within a context. It is therefore a body that may be viewed as constantly in flux. A body conceptualised in this way shows that there is no such thing as an "orginal", in the same way that one can never translate a word into another language assuming a one-to-one exact correspondence in meaning. It is thus bound to give rise to a nonlinear way of conceiving of the performative body. A Pontydian reading of performance, then, takes into account this inexistence of an exact bodily meaning and counters the idea that the body can be mapped in unidirectional ways onto another system. A Pontydian understanding of performance also focuses one's awareness towards the resistances and struggles that a body becomes engaged with in the process of being-in-the-world. I therefore believe that Merleau-Ponty, contrary to his often overly holistic interpretation, particularly as offered in the discourse of the arts, allows for notions of in-completeness, of in-extension, and of dis-continuities.

One can argue that, while Merleau-Ponty uses the body pivotal, or the experiential body, to overcome the problems of empiricism and rationalism, he also splits this body into two distinct layers that he refers to as the habitual and the present layer. I will elaborate upon these in a moment. When looking at performance, which I consider a particular way of being-in-the-world, or requiring a specific use of one's experiential body, I want to propose the addition of a third layer, which I refer to as the performative layer. The addition of this layer ties in conceptually with Merleau-Ponty's use of the experiential body in solving the problems of empiricism and rationalism. In a way, when considering performance, I suggest the folding in of a third layer into this split body, thereby investing Merleau-Ponty's experiential body with further kinetic potential.

2.5.1. Habitual, Present, and the Performative Body

The habitual or customary layer of the body, according to Merleau-Ponty, is a layer that includes certain skills a person has acquired in the past, such as walking or opening a door. The second, the present layer, is, as the name suggests, the body at this moment. Merleau-Ponty sees the habitual body as constantly being at the disposal of the present body (Merleau-Ponty 1999, p.82). The example of the phantom limb can clarify such layering, as this phenomenon must imply, or so I presume, an altered understanding of the habitual layer. The leg that one used to have is no longer being used for walking and a refocusing of one's awareness towards the present body must therefore occur.

In a performance context, I want to suggest that a body layered in this way would be inadequate to perform, and that an extension, a refinement, or a connection of previously untrained and unknown circuits, be they of sensori-motor or conceptual nature, a becoming-aware-of and awakening of unused abilities of the habitual body, is also required. I want to think of such newly created layer not so much as a linear addition to the customary body, as an add-on, or an 'extension'[72] of the body, but more as a folding in of a new substance; a substance that I believe all performative activities require, and one that I title the *performative layer*. If one thinks of the habitual body as being at the disposal of the present body, the performative body requires the present body to also re-orientate itself towards this new layer.

For Merleau-Ponty, certain actions, such as dancing or playing an instrument are a constructed entity. He suggests that those actions are a habitual elaboration on primary actions, which are those used for the conservation of life, such as running (Merleau-Ponty 1999, p.146). Therefore, dancing, according to Merleau-Ponty, would be an elaborated form of walking or running.

For a performance context I want to propose that a habitual elaboration on primary actions is insufficient. I see a necessity to acquire the peformative layer and the making of this layer involves the connecting of previously un-connected tasks and abilities. This is necessary and I will exemplify this in the act of walking: walking into a performance environment is a type of walking that requires the performative layer. This walking is very different from walking with one's habitual body. I can walk down the road and I can walk down the road performatively, which are two different ways of walking. A performer will never walk onto the performance stage in the same way as she would when walking down the road, not even if she was performing the act of walking down the road. In the same way, a dancer does not dance as an elaborated act of walking or running; but, when a dancer performs, he dances performatively, or with the performative layer.

There is a particular aspect to the acquisition of this layer. In the acquisition process (and one can think of the instrumentalist rehearsing scales or a particular bar in order to perform a work of music, or of the actor repeating a particular facial expression over and over again until he is contend that he will be able to reproduce the one facial expression that best suits his performance character during the performance) one is constantly being reminded of the world around, in the same way that the world reminds one of one's body, especially of one's habitual body, and its inadequacies or short-comings in executing the performance act. I want to put forward the idea that the acquisition of the performative layer is not geared towards performing a work to the best of one's abilities, that one does not rehearse in order to play a piece perfectly, or to recite a text without mistakes, but that the performative layer is acquired in order to hide, during the performance, the inadequacies of one's habitual body.

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[72] I use the word extension here carefully, as I argue in chapter III that the metaphor of extension in performance contexts is in great need of reassessment.

Performance, then, can also be understood as an ability to smoothen out the inadequacies of one's experiential body.

2.5.2. Integrating the Performative Layer

It is worth noting that the acquisition of the performative layer does not signify a supplanting of the habitual body; the habitual body has not become superfluous. In order to perform, and this applies to any type of performative action, the performative layer has to be acquired and then integrated into, or folded into the habitual and the present body, giving an entirely new use of the body. In other words, just like walking or running, performing also has to become a habit; not solely one that relies on the elaboration of primary actions, but a habit that makes use of the performative layer. In the same way that Merleau-Ponty says getting used to a hat, a car, or a stick requires one to be "transplanted into them" (Merleau-Ponty 1999, p.143), performing an instrument allows the performer to become part of the instrument just as the instrument becomes part of the performer. It allows the body to anchor itself in an object, with which the body can express its tasks: tasks such as pressing keys, moving arms, forming embouchures, filling lungs with air, or asserting force upon strings.

This is important since the viewer during a performance does not want to be reminded of the performer's acquisition process. When sitting on the dentist's chair, I do not want to be reminded of the process of the dentist' s skill acquisition. I do not want to feel that the dentist is using her drill for the first time or that she has never manipulated the hydraulics of the chair in which I am sitting. I truly want to put the treatment behind me as quickly, and painlessly, as possible with the belief in the competency of the dentist. For this, the dentist, after having acquired the performative layer, which has to take place in the privacy of her own space, needs to perform with that layer tucked away into the bulk of her own body. The dentist's performance needs to have turned into a habit rather than into a public display of her performative layer. The same applies for a music or acting performer.

2.5.3. The Body Pivotal - Summarised

In short, when reflecting on performance with view to the ideas of the philosopher Maurice Merleau Ponty, the body pivotal that denotes a person's embodied position in the world becomes the focus. I have suggested that this type of performance asks one to acquire a new layer in order to perform. This layer I titled the performative layer. It is a layer that needs to become folded into one's experiential body in order to form a body with which the performer is able to take possession of the world. The performative layer has to become akin to any other habit, and in the same way that learning to see colours is learning a *style* of seeing, the instrument, one's voice, or whatever one uses to perform with, by incorporating the performative layer into one's body, are no longer given. They are no longer perceived as an instrument, but they become an extension of the bodily synthesis, the object *with* which we perceive. Just as Merleau-Ponty suggests that the pressure on the hand and the blind man's stick are no longer given, and the stick is no longer an object perceived by the blind man, but an instrument *with* which he perceives, the body has come into being as a body (Merleau-Ponty 1999, p.148 and pp.152-3). In performance, the body pivotal is a body that makes use of the performative layer, and as it looks towards the world while allowing the world to exist for it, it also highlights the ever-changing nature of the environment and of the body itself. It shows that things are context dependent; a context that itself is always subject to change. By allowing for this exchange and by being open to constant flux, it must turn one's awareness away from unidirectional concepts. To read a performance the Pontydian way suggests embracing ideas of change and the inexistence of 'exact' meanings. Finally, it asks to allow the body to be in process; in the process of being-in-the-world.

The body as a vehicle for being-in-the-world had been anticipated earlier in the German philosopher Martin Heidegger's (1889-1976) most influential work "Being and Time" (1962; first published in 1927 under the title "Sein und Zeit"). In this work, Heidegger elaborates on the concept of Dasein[73] and expresses the idea of "Dasein ist in-der-Welt-Sein" (Dasein is being-in-the-world). With the concept of Dasein Heidegger introduces a new way of being-in-the-world, as for him Dasein is distinctly different from other beings and does not simply occur among other beings. "Dasein always understands itself in terms of its existence, in terms of its possibilities to be itself or not to be itself", Heidegger notes (1993, p.54). It is always both historical and finite. Since one builds an understanding from one's fore-knowledge, Dasein has to be understood as historical, and on the other hand, Dasein is finite due to what Heidegger terms "thrownness" (Geworfenheit). One is thrown into the world, which implies that one has to act in situations without being able to grasp the consequences of one's actions in advance. Heidegger's being-in-the-world becomes a necessary part of human being, for which the ultimate context is the world; hence, "Dasein ist in-der-Welt-Sein" (Moran, Mooney 2002, pp.246-7).

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[73] Dasein is widely used in German philosophy to mean existence.

2.6. THE HEIDEGGERIAN PERFORMANCE: A HERMENEUTICAL KICK? - THE BODY BREATHLESS

or:

> "For questioning is the piety of thought" (Heidegger 1953/1993, p.341)

In this section I examine Heidegger's idea of intentions and his view that understanding is built by focussing on the past, on fore-knowledge and on tradition. The discussion leads me to the concept of intentionality and incites me to reflect on the listening attitude in a live-performance with regard to intentions.

I will draw from my experience of listening to jazz saxophonist Wayne Shorter's live-improvisation. The role of what I call "the hermeneutical kick" in a performance will be exposed, and I will argue that it is through obstructing the hermeneutical kick from emerging that one is able to encounter the essence of one's "Dasein". The following writing will touch upon aspects of hermeneutics[74], as I see hermeneutics as tightly linked to acts of performance.

The ensuing discussion deliberately neglects bodily aspects of performance; it places a large emphasis on ways of thinking and conceptualising performance. Hence, I want to feature **the body breathless**, which is a body I attribute to Martin Heidegger. He has been criticised, in particular by the French theorist Luce Irigaray in her book "The Forgetting of Air in Martin Heidegger" (Irigaray 1999) for neglecting bodily aspects. I therefore title the body of the Heideggerian performance in reference to Heidegger's obliviousness to the body[75]. To commence, I want to examine one of the literal meanings of the word performance. To perform can signify "to act in fulfilment". The term "fulfilment" may of course raise the issue of what fulfilment means in the first place, and evidently, to whose fulfilment the action is to be carried out. So, let performance be "an act to be fulfilled", an act not solely expressing some kind of physical activity but also an *intentional relation*[76].

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[74] Hermeneutics traditionally involves the interpretation of text (Mallery, Hurwitz, Duffy 1987). One can argue that the way in which a text is read and understood displays certain performative actions, and that there exist similarities to a performer reading or interpreting a work of music for example. In this light, ideas of hermeneutics inevitably touch upon aspects of performance and vice versa.

[75] I want to thank Kasia Glowicka who pointed to this absence of bodily aspects during my presentation of this chapter at Queen's University, Belfast, 2004.

[76] Heidegger elaborates on the act and on intentionality in his writing "History of the Concept of Time" (Heidegger 1985). According to Heidegger, an act refers to "lived experiences that have the character of intentionality" (Moran, Mooney 2002, p.264).

2.6.1. Intentionality

Intentionality is a major concept that 20th Century Western philosophy has greatly dealt with at length. The word 'intentionality' in contemporary philosophy is related to the meanings of words such as 'intension' and 'intention', which should not be confused. I will not elaborate on the rather intricate and well-discussed concept of 'intentionality', but shall provide a brief insight[77] into a term that Siewert sees as "tangled up with some rather involved philosophical history" (Siewert 2003). Within Western philosophy, one can distinguish between the so-called 'analytic' and 'continental' traditions. Both of those traditions have been immensely concerned with the concept of intentionality. Their approaches differ with respect to their vocabulary and background assumptions. In one way, intentionality often includes concepts of *directedness or aboutness*. It relates to the idea that a state of mind is 'directed toward' something, that it is about something, as in the question "What are you thinking of/or about?"

In particular, Franz Brentano's treatment of intentionality refers to the mind's capacity to 'refer' or be 'directed' to objects that exist solely in the mind. This is what he calls 'mental or intentional inexistence'. Many contemporary discussions on intentionality were anticipated by Franz Brentano's writing "Psychology From an Empirical Standpoint" (1874). Two famous paragraphs of that work may elucidate the complex issues involved in the concept of 'intentionality'. Brentano states that,

> "[E]very mental phenomenon is characterized by what the Scholastics of the Middle Ages called the intentional (or mental) inexistence of an object, and what we might call, though not wholly unambiguously, reference to a content, direction toward an object (which is not to be understood here as meaning a thing), or immanent objectivity. Every mental phenomenon includes something as object within itself, although they do not do so in the same way. In presentation, something is presented, in judgment something is affirmed or denied, in love loved, in hate hated, in desire desired and so on" (Brentano 1874/1995, pp.88-9).

The second paragraph reads,

> "This intentional inexistence is characteristic exclusively of mental phenomena. No physical phenomenon exhibits anything like it. We can, therefore, define mental phenomena by saying that they are those phenomena which contain an object intentionally within themselves" (Brentano 1874/1995, pp.88-9).

Brentano says firstly that mental states are directed towards things different from themselves, and secondly that the objects towards which the mind is directed have the property of ‘intentional inexistence’ (the meaning of this expression has resulted in some discussion), which is a phenomenon that only mental states exhibit (Jacob 2003). This idea of ‘aboutness’, of a state of mind being ‘directed toward’ something is one way of thinking about intentionality.

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[77] For a more detailed discussion and source of this information, see (Jacob 2003 and Siewert 2003).

It has been argued that intentions can also be unfulfilled or unsatisfied, since it is possible for one’s intentions to be directed toward things that may not exist or that only exist in the mind, like a square circle for example. In this light, notions of satisfaction have been used to get a theoretical hold on intentionality. John Searle (1983) speaks of intentional states as being those that have *‘conditions of satisfaction’*, which of course raises the issue of what ‘conditions of satisfaction’ are.

A third important way of conceiving of intentionality, which is particularly central to the analytic tradition derived from the study of Frege and Russell, focuses on the notion of mental, or intentional content, as it is assumed that to have intentionality is to have content. This in turn leads to varying views on the definitions of content itself (Siewert 2003).

2.6.2. Heidegger’s directing-itself-toward

For my discussion of the Heideggerian performance, I want to concentrate on the idea that in a performance there always are intentional relations, that intentions lie at the basis of an act to be fulfilled, and that there is a need for intentions to exist *in order* for something to be fulfilled, whether these be past or present intentions, whether they have conditions of satisfaction or not. Heidegger points out that “every intention has within it a tendency toward fulfilment” (Moran, Mooney 2002, p.270). Performance, on one level, can thus be understood as *intentions looking to be fulfilled.* Heidegger provides his own reading of intentions, and offers one path for understanding this concept when looking to the origin of the word *“intentio”* as “directing-itself-toward”. According to Heidegger, every lived experience directs itself toward something (Moran, Mooney 2002, p.258). I already pointed to intentionality being able to include notions of “directedness” or “aboutness”.

For a performance discussion, it suffices to think of a lived experience directing-itself-toward something as a central aspect. In this directing-itself-toward, one is faced with at least two specific types of directing-itself-toward. A music performance for example displays a set of intentions of the performer and a different set of intentions of the listener. I, then, want to question how in a performance, or whether, these intentions coincide?

If intentions look towards fulfilment, what does Heidegger understand by fulfilment? According to him, it is an act of carrying something into effect; it occurs when content that was previously presumed becomes completed, or as he expresses it, when the present entity becomes “grounded in the matter” of what is at first only “emptily presumed” (Moran, Mooney 2002, p.274). Fulfilment is thus about a bringing into balance of what is presumed (which Heidegger refers to as '*intellectus*') with the intuited subject matter itself (referred to as '*res*') (Moran, Mooney 2002, p.276). This means that fulfilment takes place when intellectus and res touch upon each other; i.e. intellectus + res = fulfilment.

To clarify this, I draw on a particular experience of listening to a live performance by the saxophonist Wayne Shorter, in which what I “emptily presumed” becomes “grounded in the matter”. This is the case, in which I pre-hear the continuation of a melodic line, which is answered by Shorter with what I heard split seconds before[78]. I am assuming, of course, that Shorter intended, maybe even before I pre-heard, what finally emerges from his saxophone. However, what really is of interest here is that I am hearing what I pre-heard, and what was first presumed demonstrated itself as “grounded in the matter”. Through this bringing into coincidence, I seem to obtain some kind of ‘insight’, an identifying fulfilment, in which two lived experiences seem to be “directing-itself-toward” the same state.

I ask myself whether, when I pre-hear what then is responded to by Shorter in the same way that I had pre-heard, is only a self-confirmation of my own being, a self-fulfilling prophecy, a proof of being in the world? All that takes place is that I become reinforced in what I already know. Heidegger points out that this fulfilment, this obtaining insight into the groundedness of the previously presumed matter is an act of identification, which is also called evidence. It is through this knowing, then, through gaining evidence, and by acknowledging this identifying fulfilment in Shorter’s performance that I must admit to a past and a future as having to coexist. This means that I can only know, or in Shorter’s case, I can only hear what I hear, because I already had some knowledge, some fore-understanding of what I heard. I will discuss this in more detail briefly. This circular way of understanding underlies the idea that understanding something employs attributes that already presuppose an understanding of that same thing. John Dewey in “How We Think” (originally of 1910) expresses this idea of understanding requiring some sort of fore-knowledge when saying that “no one can think about *any*thing without experience and information about it” (Dewey 1997). This statement leads me to the hermeneutic circle, the idea that understanding something implies that one already has an understanding of the thing to be understood.

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[78] The Implication/ Realization (I/R) model proposed by Eugene Narmour investigates this phenomenon by establishing certain principles for the perception of melodic sequences. Narmour proposed this theory of perception and cognition of melodies, which suggests that listeners have certain expectations with respect to the continuation of a melody (Narmour 1990). Those expectations, according to Narmour, can either be innate or learnt.

2.6.3. The Hermeneutic Circle

A brief look at discussions on the hermeneutic circle reveals the existence of various views and theories. I shall, however, situate this discussion within Martin Heidegger's and Hans-Georg Gadamer's notion of the hemeneutic circle whose *philosophical hermeneutics* shift the focus away from interpretation to a more existential understanding. In their view, understanding, rather than being a way of knowing, is treated as a way of being in the world, so Mallery, Hurwitz and Duffy suggest (1987). Heidegger questions the formal structure of the circle, and stresses the importance of the interplay between tradition, through which one has gained an anticipation of meaning, and interpreter. For Heidegger, one's own fore-understanding is the most basic of all hermeneutic preconditions (Moran, Mooney 2002, p.328).

Gadamer follows Heidegger in that he also sees understanding as being embedded in history and cultural tradition. The grounds for understanding are tied to one's present horizon; that is, one's knowledge and experience, which Gadamer refers to as *effective-history*. Further, Gadamer stresses the role of language, which he places at the core of understanding. For him, understanding becomes a fusion of horizons, in the way that in gaining meaning, the "knower" constantly transcends her own horizon while going beyond a text's original horizon until a fusion of the two horizons occurs[79].

2.6.4. Foreknowledge in Music

Thus, in a music performance, one understands on the basis of expectations of meaning that one gains from one's own prior relation to the subject matter. In the case of Wayne Shorter, and in order to relate to Shorter's playing, to experience what I experienced, some content must have been present that corresponded to my knowledge of those things. Furthermore, even prior to such understanding taking place, there must simply and purely have been something that existed *to understand*, and only by allowing myself to move between "the horizon of an open future and an unrepeatable past" (Gadamer 1986, p.10), this something could come into existence.

In order for me to pre-hear the continuation of a musical line, which is answered by Wayne Shorter in the way that I had pre-heard, I do require some basic knowledge of music. This knowledge of music does not imply having a ”classical” music training or possessing a specific knowledge of harmony or counterpoint. It solely implies that I must have previously heard music based on the "Western" music tradition, or at least music that relates to

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[79] This fusion of horizons is ultimately derived from Hegel for whom every "new achievement of knowledge is a mediation, or a refocusing of the past within a new, present situation" (Mallery, Hurwitz, Duffy, 1987).

Shorter’s own musical understanding. Otherwise, so one can argue, I may never be able to anticipate a musical line played in that genre. In the same way that infants who have never been talked to do not acquire language, or, extending from this, if a child had never been sung to or had never heard a sung sound, it may never sing. This shows that some ‘knowledge’ of Shorter’s style of playing, or any other fore-understanding of jazz and/or improvised music aided in my pre-hearing of the melodic line. Further, one could say that I needed to have heard the saxophone on previous occasions to be able to judge what it can and cannot do/play. Hence, some conditioning has to be in place for the “emptily presumed” to become “grounded in the matter”; for identification, and ultimately fulfilment, to take place. It is precisely this notion of the hermeneutic identity that Gadamer acknowledges as constituent for meaning and for establishing the unity of a work, when arguing that,

> “to understand something I must be able to identify it. For there was something there that I passed judgement upon and understood. I identify something as it was or as it is, and this identity alone constitutes the meaning of the work” (Gadamer 1986, p.25).

2.6.5. Gadamer on Werner Scholz

In a similar act of intentions coinciding and leading to fulfilment, I want to look at Gadamer’s description of some pictures drawn from Greek mythology by the artist Werner Scholz. Gadamer describes these paintings in the essay “Image and Gesture” (Gadamer 1986). His descriptions of those pictures make apparent that what at first was “emptily presumed” becomes “grounded in the matter” for him, and that by bringing into balance “intellectus” with “res”, Gadamer must gain some kind of fulfilment, in the same way that I attain fulfilment through pre-hearing parts of Wayne Shorter ‘s playing.

In one of the pictures, Scholz depicts a ship with three roughly identifiable coloured sails. I argue that, unless somebody has difficulties in differentiating colours, the vast majority of people would be able to see just that: a ship with coloured sails. However, how much more can an individual see in this painting? Gadamer says that in the sailing of the ship one can “see” the Greek’s homecoming from Troy, and that the ship “present[s] the very gesture of human destiny”. Gadamer also describe one of Scholz’s landscape paintings in terms of special kinds of gestures: the sea breaking, the flowers, and fish, owls and butterflies. For Gadamer they,

> “speak the silent language of heraldry, a language of symbol that allows us to recognise things that belong together with no need of words” (Gadamer 1986, p.80).

Gadamer, then, describes the pictures in terms of gestures of individual human beings, of pictorial gestures, and of the gestures of the background of surface and colour. What follows in his description of one of the paintings takes me by surprise. The painting, so Gadamer says, reveals an,

> "image of Antigone immured, slowly starving to death. [….] This Antigone […] is a gesture representing self-chosen death and nothing else. The cavernous walls about her sink too in a single gesture that fuses man and world in one. Or consider the figure of Penthiselea: the gesture of the rider in full flight, at once hunter and hunted, before the arrow strikes her and she falls. […] Consider too the gesture of Orestes on the left of the tryptich: his head is bowed before imminent catastrophe" (Gadamer 1986, p.80).

The next sentence that Gadamer uses in grounding the subject matter of the picture is worth paying particular attention to,

> "[w]e need no special knowledge to understand that what we see is a sacrificial victim who holds his head ready for the final blow from a fate mightier than himself" (Gadamer 1986, pp.80-1).

He continues to say that Ariadne stands abandoned at the shore in "a gesture of sacrificial love", and that Iphigenia is represented as a "massive gesture of submission to her sacrifice". The reason why these descriptions take me by surprise is the fact that, apart from apparently not requiring any special knowledge to understand them, Gadamer sees in the pictures what my *effective-history* does not reveal to me. I acknowledge that somebody else can argue the same about my Wayne Shorter case. How can one pre-hear a musical line in an improvised music performance?

As much as I am opening myself to gaining meaning by transcending my own horizon, the refocusing of my past within this new, present situation, looking at the Scholz paintings, occurs in a different way to Gadamer's refocusing. How can a person see a painting of a ship as a landscape laden with Greek mythology, when to me, the same painting merely depicts a boat with coloured sails? The ship may just as likely be engaged in a boat race than in serving the Greeks in their homecoming from Troy.

I have come to an important point, as this is precisely Gadamer's argument, that to understand is to understand differently than the author, or even differently to one's own earlier interpretations. Understanding is an ongoing process with no final completion or complete elucidation. Gadamer makes this point clear in his reply to Derrida as expressed in the Gadamer-Derrida Encounter (1989), where he states that,

> "[e]very reading that seeks understanding is only a step on a path that never ends. Whoever takes up this path knows that he or she will never be completely done with the text: one accepts the blow, the thrust […], that the text delivers. The fact that a poetic text can so touch someone that one ends up "entering" into it and recognizing oneself in it, assumes neither harmonious agreement or self-confirmation. One must lose oneself in order to find oneself. I believe I am not very far from Derrida when I

> stress that one never knows in advance what one will find oneself to be" (Gadamer, Derrida 1989, p.57).

The artwork, then, for Gadamer is not a stationary entity, but an opportunity to open a space in which being is able to dwell alongside the work itself. In that sense, the artwork represents something festive, that is, something into which one becomes absorbed, and that leads one away from ordinary time into 'autonomous' time.

2.6.6. The Hermeneutical Kick

I ask myself whether Gadamer attains some fulfilment that I do not acquire as I can "only" make out a boat with three sails, and in the other painting I "only" see a person standing on the shore, rather than an abandoned figure weighed down by sacrificial love. Does the person not pre-hearing Wayne Shorter's line not get fulfilment out of the same performance?

This implies that receiving fulfilment in a performance, in the Heideggerian sense, would hence necessitate the ability to understand. It would require an intellect to exist, which, one can argue turns the performance merely into a self-confirmation of one's knowledge. The listener or viewer sees or hears what he already knows. The acknowledging of this "performance intellect", then, gives the viewer or listener what I title "the hermeneutical kick".

Above question re-phrased with view to the hermeneutical kick is, does the person experiencing the hermeneutical kick, as I argued Gadamer does and the person pre-hearing the melodic line[80], receive a performance fulfilment, whereas another person's experience, in which the "emptily presumed" does not demonstrate itself as "grounded in the matter", does not lead to a performance fulfilment? A question has been posed to which solely idiosyncratic answers exist, and as I do not intend to speculate on other listeners' experiences or their attainment of fulfilment, I want to suggest something that derives from my personal listening attitude, which is that one starts "understanding" performance in a different light when layers of intentions go against each other. In this case, one gets a different kind of "kick" and fulfilment ceases to be about a bringing into balance of "intellectus" and "res". I want to suggest that when one is able to obstruct the hermeneutical kick from emerging, thus, when intentions do not coincide, and therefore an encounter of mismatches is rendered possible, in which the unpredictable can take place, that one touches, even if it is ever so briefly, upon the essence of one's Dasein. I think that performances that allow for such encounter with surprise make room for conflicting intentions, which is something I see as a vital component to any process that engages humans. It therefore situates performance as movement, as something flexible with no prior imposed ideas of how the performance should be understood. A person may be exhibiting greater relative right frontal EEG activity when "sad" music is played. However, this does not need to imply that the brain activity is mapped onto dimmed lights. I think therefore that the inherent potential for the encounter with surprise, this flexibility and openness to interpretation in a performance posits the performative act within the liminal, as something "in-between".

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[80] I acknowledge that the two examples differ greatly with view to their time-based existence. Wayne Shorter's improvisation is spontaneous and conceived in the very moment of his playing, and will therefore never occur again in the same way. On next hearing Shorter, one will pre-hear a different line. The painting, once finished, exists to be considered numerous times in a more or less stationary way; that is, the contents of the painting does not change; one's way of understanding it on second contemplation though may. And the fulfilment one receives may also vary with each time of viewing the picture.

Furthermore, the potential for a brief encounter with Dasein, its ontological significance, could make one wonder whether it is a way of escaping the hermeneutic circle. I do, however, want to accept the hermeneutic circle as an enclosure of some sort, and do not want to consider it as an inevitable imperfection. This needs to be avoided, as I bear in mind Heidegger's view in "Being and Time" which asks us not to see the circle as a vicious one, and not to search for ways of avoiding it. Heidegger suggests that otherwise one has misunderstood the art of understanding (Heidegger 1962, p.194). I do, however, want to consider the hermeneutic circle in a modified way, more specifically in an alternative geometrical light.

2.6.7. The Hermeneutic Sphere

The reason for reconsideration of the circle is that a circle offers rather limited ways of navigation and some highly predictable paths to embark upon. One can go left or right, alternatively one can go first right and then left, or one can traverse the enclosed space, if the circle encloses space in the first place (see footnote for thoughts on the enclosed space[81]). I am not aware that anybody has commented on the nature of the hermeneutic circle's enclosure and I will not endeavour it here either.

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[81] In the case of the circle enclosing space, it is possible to conceive of a possible exit; a way out of the hermeneutic circle, of an exit through enclosed nothingness. Exiting the circle would, according to Heidegger, however mean that one has ceased to be able to understand altogether. Therefore, a further possibility, one with a more positive and primordial touch, would be to conceive of the exit not as an end to understanding, but as an exit that leads to a return to what Steven Connor calls the 'infant' body: this is a body that cannot be prefigured or prescribed; a body that "knows nothing of law or language, for it has not yet received their touch or taken their print" (Connor 2004a, p.88). Exiting the empty space of the hermeneutic circle could expose one to a groundlessness, to the "space-time of something that touches before any concept or even representation". This first touch, "the traceless touching that leaves no trace" (Connor 2004a, pp.88-9); this groundlessness that exists before tradition or memory, Jean-François Lyotard identifies with the "aesthetic"; the "aesthetic […] has to do with this first touch, which touched me when I was not there" (Lyotard 1997, p.18). A Freudian reading could expose this early condition as the one of the "Id" (instinct); the condition of the "polymorphous perversity" of the infant, a condition of auto-eroticism, pre-existing the formation of the ego. The "Es" (it) becomes later replaced by the "Ich" (I), as Freud declares so famously with the following sentence "Wo Es war, soll Ich werden" (where It was, shall I be) (Klages 2004). Therefore, a Freudian reading could conceptualise the exiting of the hermeneutic circle as leading to the "polymorphously perverse incestuous desiring" infant, to borrow a string of words from Klages (2004).

So, rather than embarking on crossing the circle's enclosed space, or on entering an abyss, or returning to the infant body through the enclosed nothingness, I will extract the circle into 3D space. Other people before me have rethought the make-up of the hermeneutic circle, where it has taken on the shape of a spiral or that of an arc, as in Ricoeur's theory of the hermeneutic arc (Mallery, Hurwitz, Duffy, 1987).

I want to consider the circle as a 3D sphere, as a shape in which various diaphanous sheets, a-hierarchical in composition, of flow and dynamics exist. The reason for this is that the paths of navigation become more numerous in a sphere and the ways of possible movement become more unpredictable than in a circle. This motion within the sphere that takes place on abundant and unpredictable paths can aid in conceptualising performances in which layers of intention go against each other. In the case of intentions clashing, the hermeneutical kick does not emerge, and one has to understand the art of understanding differently. Unpredictable motion within the sphere becomes triggered by ways of *opposing* layers of intention and not through a *coinciding* of meaning. The hermeneutic sphere opens up paths that are not only more numerous than in a circle, but that are also equally valid, and with the passing of time, these paths may be equally recurrent. The hermeneutical kick is therefore not only less likely to emerge than in the hermeneutic circle, but more than that: in the 3D sphere it is *just* as likely to emerge as any other connection.

This means that any performance situation needs to open up a space in which one is able to move between an open future and an unrepeatable past. It needs to free up a space within which the listener can stand and dwell; but moreover, the listener or viewer has to be incited to transcend his horizon, he has to be able to give the hermeneutic circle the scope for existing as a 3D sphere. Inside this sphere various diaphanous sheets can become perturbed, and therefore can hinder the hermeneutical kick from appearing. Finally, only when a performance sets up such a space in which intentions can go against each other does one encounter the essence of one's Dasein.

Throughout this discussion I have intentionally steered clear of any bodily aspects; one can say that the debate was led by the body breathless. I now want to reconnect to bodily engagement and consider some practical ideas of how and whether the hermeneutical kick can be obstructed in a performance situation.

2.6.8. The Question of Technology is Nothing Technological

In order to do so, I turn towards the use of technology in a performance, and I am thinking of the use of a particular technology - the computer, an instrument that produces, that alters and modifies sounds. I will argue that this technology can aid in obstructing the hermeneutical kick, that it can aid in creating more numerous and unpredictable paths in the hermeneutic sphere.

Before continuing, however, I want to look into some of Heidegger's views on technology. It is often noted that Heidegger has a rather fatalistic view on technology; that, to him, technology is a fate either to choose for or against, and that technology is overtaking human kind. Such ideas can be found in Heidegger's essay of 1953 entitled "The question concerning technology" (1993), where he warns of the inherent dangers of technology; of the danger of technology overwhelming man, and of the fact that man is being reduced to "standing reserve" (Bestand). Heidegger says that everything, including man, is there to be on call for further use, for the technological purpose itself. On the other hand, Heidegger emphasises that technology stems from the Greek word "techne", and techne can refer to two things, the skills of a craftsman, but also to the arts of the mind and to the fine arts. As techne also belongs to "poiesis", it is always something poetic. Heidegger says that "techne",

> "reveals whatever does not bring itself forth and does not yet lie here before us, whatever can look and turn out now one way and now another", (Heidegger 1993, p.319).

Techne is a "bringing-forth of the true into the beautiful" (Heidegger 1993, p.339). This means that to Heidegger the essence of technology is no mere means but ultimately a way of revealing the totality of beings. Technology is thus closely linked to human beings, and although Heidegger's views may seem fatalistic to some, I see optimism in his writing, when he assigns to man the potential to counter the dangers inherent in technology. Let us remember that Heidegger did not see technology in itself as dangerous or demonic, he says that the,

> "threat to man does not come in the first instance from the potentially lethal machines and apparatus of technology. The actual threat has already afflicted man in his essence" (Heidegger 1993, p.333).

According to Heidegger, man, - not through his action but through reflection, (I remind that technology comprises of "techne" *and* "logos", the latter referring to thought and reason) - has the potential to counter technology's capacity, which, according to Heidegger, endangers the relation to the essence of truth. It is important to note that this reflection, according to Heidegger, needs to take place in the realm of art. He says that the essential reflection upon technology and the confrontation with it have to take place in the realm of art, since art is akin to, and at the same time different, from the essence of technology (Heidegger 1993, p.339). Heidegger understands this realm as a revealing that brings forth and makes present. Art already in ancient Greece was for the safekeeping of truth.

With this in mind, I think Heidegger gives a good justification, and certainly a reason, to examine technology in the practices of the arts. Technology, by being linked to human beings, is first and foremost a social endeavour and thus needs to be examined in such a context, and Heidegger suggests to us not to think the question of technology technologically (Kroker 2004, p.4).

Andrew Feenberg, however, argues that Heidegger separates the discussion from everyday life as, according to Feenberg, Heidegger only offers insight into the "primary instrumentalisation" of the technical object. However, as Feenberg contends, the "essence" of technique must include what he titles the "secondary instrumentalisation", which considers that technical systems turn back on themselves and their users. They are embedded in a wider social context and have thus to be examined in the context of reality (Feenberg 1996). I have to disagree with Feenberg's view, as I believe Heidegger's statement that,

> "the essential unfolding of technology gives man entry into something which, of himself, he can neither invent nor in any way make. For there is no such thing as a man who exists singly and solely on his own" (Heidegger 1993, p.337),

emphasises the "secondary instrumentalisation". Heidegger does not see the question of technology as purely technological, but rather, he suggests, that one look towards the *essential unfolding* in technology, rather than solely gaping at the technological (Heidegger 1993, p.337). To me, Heidegger's statement points towards movement and towards transition, and by saying that this unfolding reveals something to man that on his own accord he would not be able to reveal, Heidegger posits technology as contingent on social contexts.

2.6.9. Obstructing the Hermeneutical Kick

Following on from Heidegger's view on technology, I want to examine technology in the realm of art and consider a performance environment that makes use of a certain technology - a computer in this case. The relationship of computer and performer can be seen as a specific context of an essential unfolding, and I want to consider this environment as one in which the computer not only turns back on itself and on the user, but also turns the user back on himself and on the technology; as an environment of multiple unfoldings of beings.

At the beginning of this section I set out to show that a technology-informed performance environment can aid in obstructing the hermeneutical kick, that it can aid in creating more numerous and unpredictable paths in the hermeneutic sphere. I therefore will now turn towards two specific works to elucidate this argument.

The work "Music for Saxophone and Computer" by Cort Lippe (1997) uses a computer that tracks certain parameters of the saxophone, such as pitch, amplitude, spectrum, density, rests, articulation, or tempi. It, then, uses this information to trigger specific electronic events. The performer is able to interact with the computer closely as, at times, she triggers and shapes the sonic output. The sonic world of the computer stems from the composed saxophone part, as well as from sound material that is manipulated via time-stretching and granular sampling. The computer part employs, amongst harmonizing, frequency shifting, phasing, and spatialisation, FFT-based cross synthesis and analysis/resynthesis using an oscillator bank (Lippe 1997).

The listener may be familiar with the sonic world of an alto saxophone; most of us would have heard Charlie Parker before. He may, however, be less acquainted with the sounds of the computer, as well as with the sonic properties of a processed saxophone for that matter, in particular with view to the fact that it varies according to the performer's input, and that it is highly dependent on the momentary conditions of the performance. Therefore, on one level one could argue that, due to the computer's spontaneous sound production capability, because a performance of a saxophone and computer work yields many unknown sounds, the performance takes places outside the realm of a "performance intellect". The listener has no specific fore-knowledge, so to speak.

This becomes clearer when looking at the physical engagement of computer performer and saxophonist. The absence of an obvious direct physical relation of the performer and the computer, i.e. the programmed MAX/MSP patch that is partly responsible for the sounds produced, is hidden from the listener, whereas the relationship between performer and saxophone is marked by a bodily engagement that is visual to the listener. This means that there is a level of gesture perception, that, even if the sounds of the saxophone become highly unpredictable due to the sound processing of the computer, the movements of the performer may not[82]. The performer's gestural information thus constitutes one of the more stable pieces of information to which the listener can resort in attempting to retrieve the musical information presented to him. In short, what one sees is what one gets, or what one expects. In the case of the hidden software programming, the listener does not really "see" what he will get.

This means that it is more difficult to predict the outcome of the computer/saxophone sonic world, which implies that the performance ceases to be a self-confirmation of one's knowledge. It therefore must be more difficult, if not impossible, for the hermeneutical kick to appear.

This does not entail the entire elimination of a "performance intellect". One is always bound to know something as Heidegger and Gadamer have argued. I want to emphasise that through the use of the computer and its processing capabilities, more elaborate and unpredictable paths in the 3D hermeneutic sphere can be created; that a new territory of signification is opened up in which "the sign no longer consists only of representations but of hybrid signs that in turn represent other representations", as Nechvatal has suggested (2000). Therefore, navigational possibilities within the 3D sphere become more numerous and more unpredictable. The computer can be seen as a technology that is able to set up an environment in which layers of intention can go against each other more easily; an environment in which it becomes more difficult to bring "intellectus" and "res" into balance.

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[82] Thanks to Peter Nelson who emphasised the importance of gesture within this discussion.

To me, this opportunity for the creation of unpredictable paths is at the core of the Heideggerian performance. It is a performance that, since it allows for an encounter with surprise, makes room for conflicting intentions and incites one to think in different ways. It turns performance into something fluid rather than rigid, and thus posits performance within the liminal and the ambiguous; somewhere "in-between". Heidegger has in fact spoken of exactly this, that "technology makes the demand on us to think in another way what is usually understood by essence" (Heidegger 1993, p.335, where essence for him implies that which endures). I now want to examine another music work; one that employs a novel instrument, a "prosthetic conga", which, I will argue, also engages the listener in different attitudes of thinking and of being.

2.6.10. Music for Prosthetic Congas

In the work "Music for Prosthetic Congas" by Pedro Rebelo, the computer controls and models inherent properties of a conga's resonant space. (Figure 9 shows a score excerpt of the work). The resonating body of the conga, more precisely its spectrum, becomes activated through electronic signals. The conga's sound output is always tightly coupled with the articulatory modes of the input, i.e. depending on the player's strokes and touch. A loudspeaker that reinforces, damps or adds to the acoustic resonances of the conga alters the sonic qualities of the instrument. The player's input also determines modes of sound-processing of the conga's membrane, as a sensor monitors the membrane's motion. The source signal is then used to excite an altered set of resonances, and the resulting oscillations are projected back into the conga. These oscillations finally mix with the vibrations excited by the player. This means that the sonic output differs according to varying strengths of the percussionist's stroke, and that the output can vary depending on the characteristics and properties of the "prosthesis" itself.

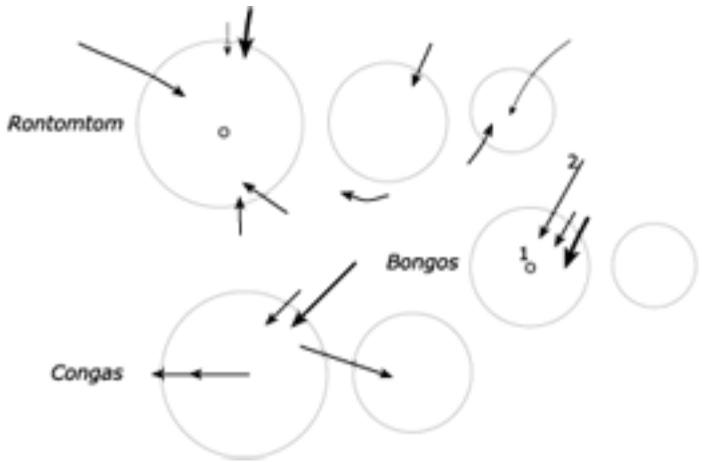

FIGURE 9: SCORE EXCERPT FROM "MUSIC FOR PROSTHETIC CONGAS" BY PEDRO REBELO
WWW.SARC.QUB.AC.UK/~PREBELO/INDEX/WORKS/PROSTHETICCONGAS/INDEX.HTM
[NOVEMBER 2005]

I argue that the listener of this work is not likely to predict the sonic world of this environment in which the sounds are always highly unpredictable. I should be able to contend that, due to the inherent unpredictability in a performance of this work, a Heideggerian fulfilment can never take place: "intellectus" and "res" cannot be brought into balance. The listener is cast into a sound world, which not only he does not know, but also which is constantly changing. The listener has to act, react and make sense of what he is hearing at every moment that is unfolding in the work.

In other words, the listener is, to borrow one of Heidegger's terms, "thrown" into the sonic world, into a world full of possibilities. I see Heidegger's concept of "thrownness", although more deeply connected with an attitude towards life than with a listening attitude in a performance, closely linked to the idea of possibility. In "Being and Time", Heidegger argues that Dasein is thrown into this world, a world that already existed before Dasein and that one is thrown into this world not as a detached observer, but as a being who has the possibility to deal with this thrownness, to relate to it and to choose *how* to grasp it[83], rather than to attempt to grasp *what* this thrownness is, or who effected it. Heidegger also suggests that one *cannot* grasp thrownness, as it is always moving. Thus, existence means to be thrown into possibility all the time.

The technological interventions (the computer, MAX/MSP software, analysis software that analyses the resonant properties of the conga, and the loudspeaker inside the conga) in the congas work demand of the listener and the performer to constantly having to re-contextualise themselves. I think that the congas work creates a performance environment, which calls for the listener and the performer to become a system open to a constant flux of inputs, in which both need to participate in a process of re-design, transformation and evolution by which the work can emerge.

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[83] For this, Heidegger introduces the concept "Befindlichkeit" (affectedness) to denote the way in which we access thrownness. "Thrownness is essentially disclosed via affect, and Heidegger specifically privileges mood", Fox suggests (1997).

Roy Ascott suggests something similar for the world of network technology, in which the individual human presence becomes “the multiple distributed presences of a set of many selves, of multi-levelled, complex, diverse personalities” (Ascott 2003, pp.264-5). In order to perform the congas work, the creation of a space is required into which new and changing possibilities are continuously input, and in which the listener is as vital an active participant as the performer. The performed work is not only brought about as a one-off entity, or one that comes forth in order to remain, but it is a work that is in a constant process of being created. It is a work that comes forth in order to proceed. This presupposes that human beings are understood as a moving process themselves.

The technological design of the congas work highlights that the listener is compelled to think or to participate more openly, or one could say to think and participate in a less informed manner, as he has less fore-understanding to shape his listening attitude. Technological intervention in this work sets up a situation that enables the emergence of the unpredictable; it creates an environment in which it becomes difficult to bring “intellectus” and “res” into balance. However, this can only be so if the technological design is also something that is in transition or in movement, not something rigid that allows for only one particular interpretation. I think Heidegger exposes technology in that way, as being in motion, when referring to the essential *unfolding* in technology (Heidegger 1993, p.337). He understands the essence of technology as something ambiguous (1993, p.338), which suggests that it is critical to examine ambiguity and to allow for notions of threshold. I thus understand technology as something that can ride on the threshold and that has the potential to allow for the encounter with diverse meaning; technology can imply ambiguity and ambivalence as well as contradiction and paradox[84].

2.6.11. New Ways of Being

An environment that is in constant flux, as found in the congas work, yields more possibilities for movement; it allows intentions to clash, and of course, it enables misunderstandings. More activity in a more complex system usually causes additional problems and more potential for breakdown. I can exemplify this best by looking at a heart condition, a certain type of supraventricular tachycardia, entitled *AV Nodal Re-entrant*

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[84] Richard Coyne suggests these characteristics for the mythical trickster figure (Coyne 2005).

Tachycardia. This is an arrhythmia or abnormal heart rhythm, due to the existence of an abnormality in the electrical conduction system of the heart.

AV Nodal Re-entrant Tachycardia is a good example in which a more complex system yields more activity than "normal", and therefore also exposes the potential for breakdown. Let me explain this condition in more detail. Normally, each heart beat starts in what is called the SA node, which is a group of microscopic muscle fibres in the upper right chamber of the heart that conducts electrical impulses (see Figure10). From the SA node, an electrical impulse travels across both upper chambers to the AV node, another group of muscle fibres located between the upper and lower chambers of the heart. Once the impulse has passed through the AV node and down to the lower heart chambers, it causes the latter to contract. The contraction of the lower chambers produces a heart beat. In AV nodal re-entrant tachycardia, the AV node, instead of one group of muscle fibres, consists of two or more groups of conductive cells. This extra-electrical pathway in the heart, a kind of "short circuit" causes an abnormally fast heart rate (Advocate Health 2005).

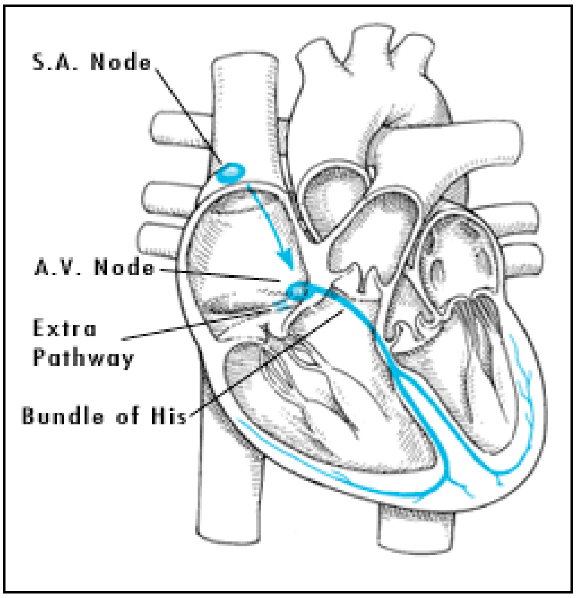

FIGURE 10: DIAGRAM OF HEART CHAMBERS
WWW.ADVOCATEHEALTH.COM/SYSTEM/INFO/LIBRARY/ARTICLES/HEARTCARE/COMMON/AVNODAL.HTML
[NOVEMBER 2005]

In a condition such as AV Nodal Re-entrant Tachycardia the operative aim is to eliminate the possibility of breakdown, to revert to the "normal" state of the heart, in which the AV node is left with one group of conductive cells only. The excessive pathway gets burned with radio-frequency ablation, reducing the unnecessary complexity in the system.

On one hand, this condition shows that more complexity, and hence more unpredictability, does not necessarily mean a better condition. The person with that condition can feel out of breath, sweaty, dizzy, and weak, and is often not able to perform ordinary tasks. In the same way that the ability to generate never heard before sounds, or the capability of creating unpredictable sonic environments do not make for a better work.

On the other hand, just as in AV Nodal Re-entrant Tachycardia, one is bound to experience something out of the "ordinary". One's heart rate is faster than usual and one's body responds in certain "new" ways[85], such as sweating, dizziness, or shortness of breath. One can therefore argue that this condition is a way of experiencing one's body in a different light, in which one becomes more sensitive towards one's limits and capacities. A person with AV Nodal Re-entrant Tachycardia always has in the back of her mind whether the hill to be climbed is going to bring on the palpitations of her heart, and it may therefore hinder her from achieving the task of climbing to the top; a consideration a person without the condition may never have. Once the excessive pathway has been eliminated, and the unpredictability in the system has been reduced, the person who now has a "normal" heart beat *all* the time obtains a very different experience; climbing the hill becomes a task of fitness rather than that of a physical compliance.

2.6.12. New Ways of Seeing

Similarly, people would have discovered new ways of seeing their eyes, or seeing *with* their eyes when the microscope was introduced. Steven Connor points to this idea in his "Book of Skin" (2004). He suggests that the introduction of microscopy did not solely show people previously 'unsee-able' things and therefore showed them the limits of their eyes, but it also taught the eyes new ways of seeing (Connor 2004a, p.249).

The point I am making is that unpredictability is not automatically "better", and that the ways in which things are conceived depend on the person with the particular condition. This applies in the same way to the congas work, whether a certain unpredictability in the work is understood as a hindrance or as a way of introducing a previously unknown matter; whether one sees the microscope as showing the eyes their limits or as teaching the eye new ways of seeing.

This is also not an argument of technology-driven performances versus performances that abstain from using new technologies. My argument is that technology, due to its ambiguous and paradoxical potential, can have the *promise* to set up the unpredictable. It has the potential to unfold and to keep one in motion (one's listening expectations for example). Therefore, it can aid in obstructing the hermeneutical kick from emerging.

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[85] "New" here means to signify that sweating, dizziness, shortness of breath would usually not constitute a person's normal state, and in that way these responses are experienced as "new".

I have suggested one way of preventing the hermeneutical kick from appearing in a performance, and my argument is not one against knowledge, or against the familiar, the known, or the expected. I solely feel that humans' existence tends to centre around the known (the familiar sound of the alarm clock, opening the same white bedroom door in the morning, showering in the white enamel bathtub with the imperfect pressure head of the shower, the smell of the soap, breakfast at the same brown table, sitting down to work at the familiar laptop...), and with the familiar enveloping one's daily existence, what I desire in a performance is for the hermeneutical kick to stay in its cosy bed behind the familiar white bedroom door. I prefer the hermeneutic sphere to come into play, and whatever aids in agitating the sheets within it, whatever can cause perturbations to take place, make opposing layers of intention spread, and allow for different connections, I welcome. This may come in the form of technology or not. It is certain though that, if intended to ride on the threshold and to perturb, technology must be designed accordingly. It has to be conceived in ways as to enable it to open up pathways, to allow for agitations within the hermeneutic sphere and for the essential unfolding of technology to come forth. The technological design, not if conceived of as mere means, but as a way of revealing the totality of beings, defines whether the hermeneutical kick can be hindered from emerging, and in this way offer what one least expects.

The Heideggerian performance is characterised by possibilities and the unpredictable and thus has to be sought somewhere "in-between". This is my reading of Heidegger, not as emphasising technology as fatalistic, but as providing a rather sanguine view on technology. After all, Heidegger suggests that, "the essential unfolding of technology harbors in itself what we least suspect, the possible rise of the saving power " (Heidegger 1993, p.337).

2.6.13. The Body Breathless - Summarised

I considered a particular way of listening to a performance that was informed by Martin Heidegger's ideas of fulfilment and intentions. I featured what I titled the body breathless as, rather than focussing on bodily aspects, I placed a large emphasis on a conceptual understanding of a performance. Heidegger's notion of fulfilment was seen as a bringing into balance of what at first was emptily presumed with the subject matter itself, as a bringing into balance of 'intellectus' and 'res'. I suggested that a performance intellect is always present in a performance and by acknowledging it one obtains what I came to term "the hermeneutical kick". I suggested that the obstruction of the hermeneutical kick allows one to encounter mismatching information, which ultimately allows one to experience performance in a different way.

I examined the idea of the hermeneutic circle as it is closely linked to understanding, and proposed viewing the circle differently; that is as a 3D sphere, as I consider the paths of navigation in a sphere to be more numerous. This in turn implies that movement within a sphere is more unpredictable than in a circle. I argued that in a performance ‘intellectus’ and ‘res’ are best kept unbalanced. One possible way of achieving this, one way of obstructing the emergence of the hermeneutical kick, lies in the application of technology, as it facilitates the encounter with surprise and thus compels the listener to be open to what he may least expect, rather than relying on his fore-understanding or particular expectation of an upcoming performance. Consideration of unpredictability, of the encounter with surprise and consequently of conflicting intentions allowed me to view performance as something flexible and open to interpretation, and thus made me posit performance within the liminal and the ambiguous; as somewhere “in-between”.

CHAPTER III

3.1. BRIEF SUMMARY

I want to recapitulate the main points of the preceding sections in which I have considered the body in performance, and thus performance itself, in diverse lights.

Section 2.1: Performance as an artificially created stimulus

Influenced by the neurobiological findings of Antonio Damasio, of the body, brain and mind as manifestations of a single organism, which were influenced by Spinoza's view of the integrity of the organism, I proposed to consider performance from the view of the body mapped, the body as an interface between the body-proper and mental patterns. I suggested considering performance as an artificially created stimulus, a trigger to a motivation that initiates a stimulus to act upon bodies. This highlighted the fact that performance, as any other kind of stimulus, always produces very physical outcomes. This can be seen to lead to a physiological alteration of one's body state, which potentially can lead to meditative states and even visionary experiences, as Aldous Huxley suggests.

Francisco J. Varela reinforces the idea of what he calls a "mind-body unity", and I argued that in order to perform one has to acquire such mind-body unity, which may aid in negotiating the Cartesian anxiety. This anxiety stems from the fact that humans grounded in Western thought tend to be too strongly anchored in foundations and are therefore inclined to crave for a fixed and stable foundation for knowledge. Important to Varela's view, and something that becomes central in the discussion of performance, is the move away from a perceiver-independent world to emphasising the sensorimotor structure of the perceiver. This led to the idea that not a simple one-to-one chain of events, or a linear way of conceiving the interaction of brain, body and mind, exist.

The section looked at a particular type of performance that brings out a specific mind-body unity, namely the Japanese Butoh dance. I showed that, in contrast to performances that have at their centre the notion of the body enhanced or extended, in Butoh the body's natural decline is welcomed; its wearing out forms an integral part of the dance. Butoh thus exemplifies a performance that brings to the fore notions of failure. The appreciation in Butoh of a debilitated body imposed by nature celebrates the body's struggles and potential for failure. By examining Victor Turner's "spillovers", the events that occur between the two brain halves, I suggested that performance be conceptualised as something interstitial, as something "in-between".

Section 2.2: The Cartesian Performance

From performances that explore a link of mind and body, I questioned performance types in which such unity would become dissolved. At the heart of the performances of David Blaine lie the notion of Cartesian dualism in which mind and body become manifest as separate substances. I argued that the testing of the body's limits in Blaine's performances underline the idea of the body governed; a body informed by the mind, in which mind over body is not only the central focus, but also becomes necessary for the survival of the flesh. This flesh is treated as something of lesser importance, as something to be conquered and controlled by the mind. However, by pushing the body to its limits and emphasising the involved risks, the performance also reveals the body's potential for vulnerability. I posited the Cartesian performance as pointing to the body as inconsistent, diverse and unpredictable, and therefore exposed performance as something interstitial or liminal.

Section 2.3: The Bergsonian Performance

From the performative acts of David Blaine I proceeded to consider performance from a Bergsonian point of view. Bergson's idea of looking not at memory and matter but at their function, and of considering the body as an instrument of action, one that functions as a mediator of realities, informed this argument.

I discussed various performances from the point of view of the body connected; a body not made up of two distinct substances, and suggested to define performance environments in terms of centres of actions (CsOA). I showed that in a Bergsonian performance, one's attention is focused towards the *use* of the centres of actions, towards their unpredictability, rather than towards their properties. This led me to consider what I entitled the 'shift': the something taking place in-between the centres of actions, a kind of flow that, by going from one centre of action to another, holds them in a state of tension.

I examined three performance situations by looking at the shift, and argued that the shift takes on the role of intermediary. It places one centre of action into the other, the body into technology, and technology into the body. I showed that the shift becomes more vital to the performance than the centres of actions themselves. The body connected as the centre of one's actions is pivotal to considering the Bergsonian performance. This performance incites one to grasp the world as a relationship between matter and spirit without any existing project or plan.

Section 2.4: The Artaudian Performance

This section examined various performance situations from the point of view of the body unattached, which is a re-imagined body; one informed by the new anatomy that the French thinker Antonin Artaud proposes.

I argued that Artaud's body is something rather new, in particular with regard to the previous conceptions of the body, as it is a body that does not fit in; one that considers failure and exposes the inherent potential for the body's breakdown. Artaud's attacks on the body led me to conceptualise this body as an assaulted body, and made me examine performances that feature the body assaulted literally, such as the onstage slaughter of animals in Alice Cooper, the attacking of the audience in the performances of La Fura dels Baus, or the gruesome torture spectacle of Damiens the regicide.

I discussed two laptop performances and contended that the visual struggles and bodily resistances that are integral to some performances are not the main focal point in those laptop performances. Here, the computer instrument suggests particular gestures, which are not as visualisable, nor as physical, as the listeners may expect. This led me to propose the necessity for a change in listening attitude.

Section 2.5: The Pontydian Performance

The Artaudian attacks led me to attribute a more pivotal position to the body; a body as informed by the writings of Maurice Merleau-Ponty. Merleau-Ponty places Artaud's assaulted body back into the centre of the world and I argued that a Pontydian performance highlights the significance of the body as a whole, as a union of body and soul. The body pivotal, as I called it, embraces a person's embodied position in the world as central. I argued that the Pontydian performance asks one to acquire a new layer in order to perform. This layer I titled the performative layer, which is a layer that needs to become folded into one's habitual and present body. The body pivotal, then, is a body that uses the performative layer, and as it looks towards the world, it also allows the world to exist for it. The Pontydian performance highlights the ever-changing nature of the environment and of the body itself. It shows that things are context-dependent, a context that itself is always subject to change. I argued that this performance, therefore, brings one's attention to ideas of change, of resistance and of difference, and allows the body to be in process, in the process of being-in-the-world, rather than to be considered in linear or unidirectional ways.

Section 2.6: The Heideggerian Performance

A way of thinking about performance was presented by examining performance primarily from the point of view of the listener for which I turned towards the writings of Martin Heidegger and his ideas of fulfilment and intentions.

This section featured what I titled the body breathless as it placed the emphasis on a conceptual understanding of performance rather than on bodily aspects.

I examined the idea of fulfilment in a performance, which was understood as a bringing into balance of what at first was emptily presumed with the subject matter itself, a bringing into balance of ‘intellectus’ and ‘res’. I argued that performance also always involves a certain performance intellect, which, by acknowledging it, gives one what I referred to as “the hermeneutical kick”. In order to experience a performance in different ways, I suggested that layers of intentions have to go against each other and that the emergence of the hermeneutical kick has to be hindered. Consequently, fulfilment in a performance ceases to be about a bringing into balance of ‘intellectus’ and ‘res’.

Heidegger’s writings, especially his emphasis on perception and apprehension being tied to a person’s fore-knowledge as well as his ideas on the hermeneutic circle led me to propose an extrusion of the hermeneutic circle into a 3D sphere. I emphasised the idea that the paths of navigation in such a sphere are more numerous, and movement within it is more unpredictable than in a circle. Hence, the Heideggerian performance aims for the obstruction of the hermeneutical kick and instead points towards abundant and unpredictable paths within the sphere. I suggested that one possible way of obstructing the hermeneutical kick lies in the use of technology as it can facilitate the encounter with surprise and thus can compel the listener to be open to what he may least expect. I placed the Heideggerian performance, due to its emphasis on unpredictability and conflicting intentions, within the liminal and the ambiguous; as somewhere “in-between”.

3.2. INTRODUCTION

This is the instant in which the film is being played backwards; the blotching paper being folded onto itself, while at the same time, this should not be seen as a symmetrical volte-face. I want to reverse the way I have been considering the body up to now. Thus, rather than looking *at* the body, *at* its assault (Artaud), or *at* the body taken to its limits (Blaine), *a*t the body that is reaching out via its extremities to the world, I want to proceed from the world to the body in a centripetal way, in the Latin sense of the word "petere", of seeking a centre. In order to penetrate into such a centre, I will have to remove boundaries and pierce the body's surface. I will have to open it up, look inside and insert. The ensuing discussion will lead me to the self-touch and to the collapse of the surface, to the displacement of the body's boundary and to the body incised into, and finally to Deleuze's body without organs, which is a body without surface, or a schizophrenic body.

The discussion of performance up to now has seen body and mind either connected or dis-connected. However, it always has focused on the body as an entity that gives rise to performance; a body that performs with certain technologies. These technologies can vary in their nature, such as the dentist's drill being a technology with which the dentist performs or the body sensor suit of Stahl Stenslie (to be discussed), which can be understood as a technological extension of the body's tactile perceptions. The body can further be seen as extended by means of a specific technology, such as a musical instrument for example. Whatever the kind of technology, this technology is understood as a communicative extension of the body itself, as a kind of transferring of the body onto the instrument, with which one communicates to the world, as a voicing of one's body, or a body drawn out of itself. Performance is seen as a transfer of information *from* the body *to* an instrument, *from* the body *to* the world, or *from* the body *to* another body. In any case, the formula *"from-to"* prevails.

3.3. THE TOUCHING OF THE TOUCH – THE BODY INCESTUOUS

I now want to pursue the idea that rather than transferring *from* the body *to* the world, performance requires the performer to touch himself. I want to stress that such self-touch is even necessary *in order to* perform. In the same way that Connor suggests the hand-mirror and lipstick become the tool for a woman to touch herself (Connor 2004a, p.234), the instrument can be conceptualised as the performer's tool for his self-touch. This almost fetishistic[86] relationship of performer and instrument has at its core what I title **the body incestuous.**

3.3.1. Performance as Extension

The instrument is often understood as a technological extension to the body; as something that "extends" (from Latin "*tendere*" = "to stretch" and "*ex*" = "out") from the body. The French anthropologist André Leroi-Gourhan proposes in his book "Gesture and Speech" that technology has made humans into a species in the process of "exteriorisation", which means that humans exteriorise technical forms, that they transfer their abilities to some kind of external support. For example, the tools humans have and that give them an advantage over other species form part of such exteriorisation process. One's memory is transferred to books, one's strength to the ox, and one's fist to the hammer (Leroi-Gourhan 1993, p.246). According to this reading, any performance involves a transfer of memory and bodily capabilities to the instrument, to one's technology. One's ability to move one's hands, and thus to touch, is transferred onto a sensor suit for example, and one's ability for refined motor movements is transferred onto the cello.

One of the pioneers of electronic music, the man often quoted as the inventor of musique concrète, Pierre Henri Marie Schaeffer, states something along those lines when talking about music making: the idea of man having to exteriorise to an external medium in order to make and to perceive music. He says,

> "that man had to cry out, that man had to sing ... but that man, probably, did not perceive music until it had passed onto an *instrument*, even if that was a stone, or a skin stretched on a gourd. Probably man needed to go outside of himself, to have another object: an instrument, a machine" (Schaeffer 1971).

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[86] The term fetish (1613: fatisso) derives from the Portuguese word fetiço, which means charm, or sorcery. Originally feitiço (from Latin "facticius") meant "made by art", "made artfully, artificial". It has been suggested that the word was introduced by Portuguese sailors and traders to refer to the talismans that were worshipped by the inhabitants of West Africa. The term fetish was later made popular by the anthropologist by C. de Brosses in his work "Le Culte des Dieux Fétiches" (1760). In 1897 Henry Havelock Ellis described fetishism as a perversion of the sexual instinct, in which "the person, part of the body, or particular object belonging to the person by whom the impulse is excited, is called the fetish of the patient" (Harper 2001).

In the process of listening to music, as one realises that somebody's abilities have been transferred to his respective technology (a cello, a laptop, a sensor suit maybe), one tends to eagerly question how things have come into being, how sounds are being produced, how the movements of the bow relate to the timbral depth of a particular note, or how the light touch on the computer keyboard produces highly complex sounds. Schaeffer reinforces this bodily connection when saying that, "while we are listening to music, we must always ask ourselves how it is made. We listen to music with our hands" (Schaeffer 1971). In this sense, the idea of reaching out, of transferring a skill onto body capabilities, is strongly linked with the idea of body "extension" and of "prosthesis". The Greek origin of the word "prosthesis" already suggest the idea of extending, of adding and of enhancing: "*prostithenai*" derives from *prostithenai*; *pros* = "to" and *tithenai* = "to put, place", which means to "add to" (Harper 2001).

3.3.2. Extension as Performance

In the performing arts there are numerous examples that deal with the extension of the body [the 2004 exhibition "Body Extensions" (Museum für Gestaltung Zürich) featuring works that deal with extension highlighted this]. Some widely known performance works that deal with the idea of extension are the works by the artist Stelarc. One of Stelarc's earlier body-extending project's, "The Third Hand" (1976-81), in which an artificial hand is attached to one of Stelarc's arms, emphasises the notion of such addition, rather than of replacement (see Figure 11). In this work, the hand's movements are activated by the EMG (ElectroMyoGraphy) signals of the abdominal and leg muscle, and even include a rudimentary sense of touch (Stelarc, 2005a). One could even say that the sounds in a performance of the "Third Hand", derived from the stimulator signals and from the hand's mechanism, are a sonic extension of the physical structure.

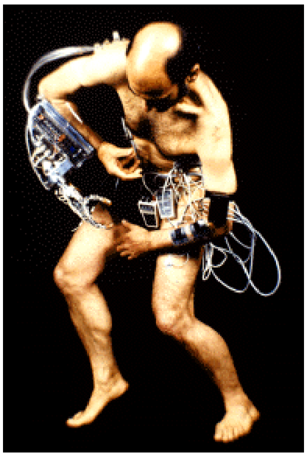

FIGURE 11: STELARC: THE THIRD HAND
WWW.MSSTATE.EDU/FINEART_ONLINE/GALLERY/STELARC/ST-2.GIF
[NOVEMBER 2005]

Stelarc's other work "Hexapod" (Stelarc 2005b) is another example that deals with extension. This is a work/installation/performance project in which Stelarc's limbs become extended into a huge insect-like mechanical structure. Stelarc is at the centre of the electrical and pneumatic mechanical structure, whose movements are controlled by Stelarc's own body weight. The divergent mapping strategies in which the movement of one his own legs can result in the movement of three of the mechanical legs poignantly highlights the incongruities often encountered in the technological workings of human-machine environments.

The last performance work that deals with the extended body that I will mention is a work by Hungarian born performance artist Istvan Kantor (Kantor 2005a)[87]; a work that highlights an obsession with extending the body's physical function in the technological space. Kantor augments the body with technology, intending to mutate it into what he calls a "robotic entity", and is thus able to "extend its dimensions" in order to be compatible with the machine (Kantor 2005b). One of Kantor's latest body-machine performance work is entitled "010100 - The Great Robotic Machinery Rebellion" (2003) and features one of the group's central themes: the intensification of the "human sensorial apparatus"; a body extended, prolonged and augmented by "electronic technological prosthetic machines", as the group advocates (see Figure 12). The body's need for augmentation is seen to be vital in order to transmit the body's orgasmic energy, its epileptic seizures and other sex related contractions. In other words, the body, in particular its genitals, is in need of extension in order to be able to function as information machinery[88].

An excerpt from the work "010100 - The Great Robotic Machinery Rebellion", reminding of Antonin Artaud, reads:

> "Long Live Permanent Ontological Orgasmic Revolution! Connect your genitals to the world-wide information system! Convulse now! Devote yourselves to the involuntary contractions of Permanent Ontological Orgasmic Revolution!" (Kantor 2005c).

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[87] Kantor is known for his work with the Machine Sex Action Group (MSAG), which he initiated in the late 90's (Kantor 2005). His performances which are pregnant with ecstatic sexual expressions, convulsions, contractions, noises, are based on "Wilhelm Reich's orgasmic formula: mechanical tension - electrical charge - electrical discharge - mechanical relaxation" (Kantor 2005).

[88] This is in line with Stelarc's idea of matching the body to the machine, rather than the opposite, of matching the machine to the body. I am grateful to Peter Nelson who pointed out the similarity to the Futurists and their obsession with the machine, as well as to the fact that both Kantor and Marinetti's works bear Fascist overtones [see Marinetti's "The Founding and Manifesto of Futurism" (Marinetti 1909)].

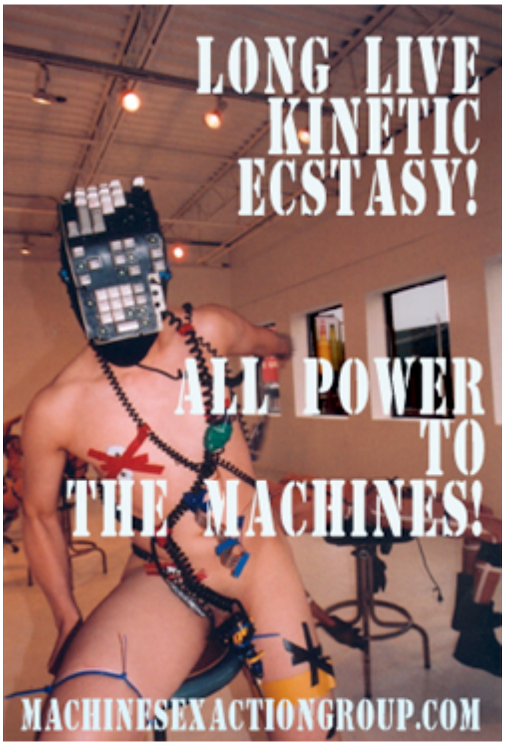

FIGURE 12: MSAG POSTER
WWW.MACHINESEXACTIONGROUP.COM/PERFORMANCES.HTML
[NOVEMBER 2005]

Above examples underline the idea of extension in various performance environments, of transferral of bodily capabilities to some kind of external support. This, one can argue, is a rather centrifugal way of conceptualising performance, in which performance is seen as a giving *from* oneself *to* the Other[89], as an activity of reaching out from the body via hand and tool to the world.

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[89] French psychoanalyst Jacques Lacan designated two "others": the other with a lower case "o", which is the "other" through which the subject in the "mirror stage" experiences his own "I", an image of the ego as an Ideal-I. Lacan proposed that the human infant goes through such a mirror stage, the primordial experience of identification, in which the infant identifies with an external image of the body (as seen in a mirror or as represented by his mother). This image, as it gives rise to the mental representation of an "I", an ideal image of him- or herself is only an *imago*, an image, which is external to the infant. It gives rise to the infant's perception of "self" while at the same time, establishes the ego as fundamentally dependent upon external objects. The foundation for all subsequent identifications is laid in this mirror stage: the "I" comes into being as the result of an encounter with an "other".
The second Other with a capital "O" represents "other people, other subjects whom the individual encounters in social life" (Zuern, 1998).

3.3.3. Other and otherness

The idea of reaching out to touch the Other makes me question not only when one reaches the point at which one touches the Other, but also what the nature of this otherness is. So, what is this point at which one touches the Other, or differently put, in order to touch the world, which part is doing the touching, the body, the hand, the instrument? If one takes Michel Serres' word, then it is the soul which resides in the fingers' ends, where it comes into being in the activity of reaching out. The soul becomes the reaching itself. The soul is the "kind of space and time that can be expanded from its natal position toward all exposures" (Serres 1998, p.31).

In this reading of reaching out, I make contact with the world, which may occur by means of the most external entity of my performing mechanism, i.e. my fingertips, the bell of my instrument, or the membrane of the loudspeaker. Specifically, reaching out with my voice establishes something particular about my own orientation and position. In the act of speaking, my speaking voice seems to be in front of me and I therefore feel that I am behind it, which, as Connor argues, establishes me as a being with a perspective (Connor 2000, p.5). Conceptualising performance as reaching out therefore implies leaving myself somewhere behind.

However, I want to see performance as a reciprocal encounter with the Other that not solely constitutes a giving *from* one *to* the Other. For this, I want to suggest that in order for such encounter to take place, the performer first and foremost needs to know how to touch herself. In the first instance, however, one can argue that for this encounter to occur, otherness has to be there to be touched, something that Jean Baudrillard argues is lacking in this era. He suggests, rather than devouring or seducing, rather than facing, loving or hating the Other, humans are first of all producing the Other (Baudrillard 1995). This implies that otherness would first have to be produced before the encounter can take place. I believe that something needs to be added, which is that otherness only seems to be lacking as one may be *integrating* the Other into oneself, thus making it seem a lack, which in turn is needed to be produced.

Such fusion with the Other has been criticised by the French thinker Luce Irigaray (Irigaray 2004). She elaborates on humans' habit towards the Other, in which, according to her, they not only *reduce* the Other to themselves, but humans (men in particular) tend to *reduce* the Other to an "object" of study, to an "object" of knowledge, or an "object" of love

(Irigaray 2004, p.24)[90]. Irigaray argues that this reduction of the Other may facilitate the encounter with another as the encounter becomes reduced to one with oneself. The meeting becomes not an exchange with the unknown or the invisible in the Other, but solely a confirmation of one's own weary wisdoms. Thus, in order to move away from one's own weary wisdom, for performance to be a reciprocal meeting with the Other, otherness needs to be allowed to exist. Both, Baudrillard and Irigaray point towards preserving this differentiation in an encounter with another[91].

3.3.4. Performance as Self-Touching

For a performance encounter I believe the performer first and foremost has to know how to touch herself. The necessity for such self-touch is the integral element in a performance. A performance can be seen as an encounter in a space in which, as both Baudrillard and Irigaray emphasise, differences and the valuing of the Other as a "not I" or a "not me", to use Irigaray's expression (2004, p.26), is valued.

However, one of the central things is that in order for the performer to enter into this space of otherness, in order to touch the Other in his or her otherness, the performer first needs to know how to caress herself. I therefore want to posit performance, rather than seeing it as a "reaching out" or a "touching of the Other", as what Steven Connor calls itching and scratching, which, as well as belonging to disease, belong to self-touching (Connor 2004a, p.232). The performer's self-caress becomes a major concern, as long as it does not refer the performer back to her own image. Baudrillard warns of this, that in taking oneself as a focal point [*comme point de mire*], as an object of care and of desire, one becomes condemned to one's own image. He says that in taking oneself as a focal point, there is the danger of losing the Other, of denying strangeness and difference, of having to produce the Other in his absence, and therefore to be referred back to one's own image (Baudrillard 1995)[92].

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[90] Irigaray asserts her female otherness by critically dissecting three male thinkers who, so she argues, tend to eradicate the subjectivity of the Other in sexual relations; thinkers that do not see the encounter through the caress as a subject-subject, but as a subject-object one: First, there is what she calls Merleau-Ponty's "pessimistic phenomenology", his gaze of the lover that reduces the Other to a body-object. Then there is her disapproval of the idea of enchantment as voiced by Sartre, for whom the caress becomes a means of appropriating the liberty of the Other. To Irigaray, Sartre's body of the Other is facticity, while Sartre's fulfilment of desire implies possession of the Other (Irigaray 2004). She argues that caressing does not happen through a subject-object relation, not by appropriating, dominating and possessing the Other. And finally, Irigaray pulls up Levinas by his male parts for starting from "himself, a man, and not in two or reciprocity between them". Levinas' caress is a desire to violate; it is the caress of a man that "searches, forages". It aims at neither a person nor a thing; Levinas' caress seizes upon nothing, so Irigaray finds (2004, p.19).

[91] In the same way that Baudrillard says not to reconcile with oneself, nor with the Other, but to recognise strangeness and otherness, Irigaray emphasises the need for a 'you' that resists possession or fusion. She favours the cultivation of a meeting-ground that consists of two different subjectivities. Thus, Irigaray's insistence on the "two" is a move away from the Hegelian reduction of all to a "One" (Irigaray 2004, p.3).

[92] Jean-François Lyotard also warns of the Self's temptation for annulling the Other (Lyotard 1997, p.111).

It does, however, imply that, for the performer to touch herself, there has to be a body made into an ideal object, which is a body that is used, "in a desperate attempt at identifying oneself", as Baudrillard puts it. It is a body turned into the object of a "quasi-incestuous manipulation", while at the same time it also has to remain a place of otherness [*alterite*] (Baudrillard 1995). In this incestuous relation, in the body made into a fetish object, the performative body that I call the body incestuous thrives. It is important to note that in touching oneself a reconciliation with the body incestuous should not occur, since the strange attraction lies, so Baudrillard, in the fact that,

> "[w]e must not be reconciled with our own bodies or with our selves. We must not be reconciled with the Other. We must not be reconciled with nature. We must not be reconciled with femininity (and that goes for women too)" (Baudrillard 1995).

For a performer this implies that she also needs to make the object with which she performs into a fetish object, and it is worth noting that this incestuous engagement with one's fetish object takes part to the exclusion of others. Incest is indeed closely related to the idea of taboo, an inappropriate act prohibited by society, something that has to be carried out in secret if one was to engage in an incestuous relation.

A contemporary understanding reveals the fetishist as somebody who is sexually and sensually aroused by objects, or by body parts that do not have to, but can be, related to sexual intercourse[93]. The engagement with the fetish can be solitary, a view the Fetish Diva Midori subscribes to. She says, "I can have a perfectly wonderful and mesmerizing time, alone with a pair of gloves, and a fur coat..." (Midori 2005, p.129). For Midori "tight leather gloves, lush fur and leather clothing… [as well as] fine pairs of high heels and boots" constitute fetish objects (Midori 2005, p.131).

For a performance context this means that the performer needs to explore this quasi-incestuous relation with her fetish object to the fullest, while at the same time she needs to endeavour not to become reconciled with the object, or with her own body, or with the Other.

3.3.5. Possess, Assault and Dominate

For the prospering of this incestuous relation of performer and fetish object, the performer needs to reduce, she needs to dominate and be dominated. She wants to possess. She needs to possess. She wants to dominate and assault. While at the same time she wants to be possessed! She wants to be dominated and assaulted by the fetish-object itself.

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[93] Freud sees fetishism as a pathological aberration, particularly "when the longing for the fetish passes beyond the point of being merely a necessary condition attached to the sexual object and actually *takes the place* of the normal aim, and … when the fetish becomes … the *sole* sexual object" (Freud 1905/1953, p.153).

It is worth noting that possession and domination do not imply notions of control but that they form part of the process of making one's body into an ideal object, of allowing the performer to itch and scratch herself, and yes, Steven Connor has to be right in saying that itching is closely connected with masturbation. If in masturbation, through the hand that comes in touch with the body, the hand that multiplies itself and the body, one becomes two, one turns into a multiplicity, as he suggests (Connor 2004a, p.232), then this is what the performer needs in engaging with her fetish object. The performer requires this itching in order to become a place of otherness, as itching and scratching reveal the boundaries of her own body and let otherness come into being. Through itching and scratching the performer is able to acknowledge strangeness and difference.

In the same way that in touching oneself one can always feel oneself, and one can feel oneself feeling, which turns one simultaneously into "an object in the world *and* a subject giving rise to itself as it advances to meet the world in that object" (Connor 2004a, p.41, my emphasis), in itching and scratching the performer becomes acquainted with the "thing" at hand. She is able to test boundaries, negotiate subtleties and uncover threshold conditions.

This line of thinking posits performance technologies (the drill, the sensor suit, or the cello) not as an addition to, as a seamless merging with, or as an extension aiming away from the body, but re-contextualises them as instruments that turn back towards the performer's own body, and thus allow for the discontinuities between the instrument and performer to come to the forth[94].

3.3.6. The Erotics of Performer and Instrument

In the context of playing an instrument, David Moss supports the idea of experiencing strangeness and difference, of uncovering threshold conditions. When reflecting on playing the drums, he says that,

> "when I touch the rough, textured surface of a drum-skin (which was once a cow's skin!) I feel the story of time in the tiny (im)perfections, edges, ridges, and anti-gravity veins of former life" (Moss 2000).

Pedro Rebelo's description of the relationship of instrument and performer as an erotic one supports my argument for the need to possess, and in turn to be possessed by one's fetish object; for the body incestuous to come into being (Rebelo 2006). Rebelo first of all suggests that the action of performing a musical instrument, something he considers as an entity rather than a tool, is multimodal. This implies the idea that one sensory modality always has the ability to modulate and/or influence the other. Rebelo defines the relationship between a performer and an instrument as “a multimodal participatory space”, rather than one of control. This is a Deleuze-ian and Guattari-an type of sensory space, which is “navigated by constant reference, by constantly acting on feedback from an immediate environment” (Rebelo 2006, p.30).

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[94] This discussion could be expanded so as to embrace Freudian notions of narcissism; the understanding of investment of libidinal energy in the ego, in particular forms of narcissism in adults, in which libidinal energy is oriented towards objects (object-libido) (Freud 1957, pp.73-102).

Rebelo, then, puts forward the idea that the haptic relationship of performer/instrument can become an erotic one. By drawing on the writings on eroticism by Georges Bataille, Rebelo argues that for this relation to become an erotic one, there needs to be difference. For this, he places the instrument, rather than as an extension to the body itself, in-between the performer and a desired state, and disposes of any hierarchy between subject and object, between the performer and instrument, in the same way that in an erotic relationship for Bataille subject and object disappear. Bataillle says,

> “[t]here is no longer subject-object, but a ‘yawning gap’ between the one and the other and, in the gap, the subject, the object are dissolved”. [Rather,] there is a passage, communication, but not *from* one *to* the other (my emphasis): *the one* and *the other* have lost their separate existence” (Bataille 1986, p.23).

In this “yawning gap”, in Bataille’s “most dramatic realisation of difference, the gap that makes us discontinuous beings” (Bataille 1986), Rebelo situates the instrument. Rather than regarding the instrument as a seamless merging with one’s body, the discontinuity between the performer and the instrument is highlighted. This discontinuity is indispensable for the erotic to emerge.

I argue that any type of performance engagement requires the body incestuous; a fetish relation with one’s performing tool, and one can argue that a performer’ s actions are always marked by a sort of self-touch, that is by tactile awareness *and* a tactile engagement with her “tools”. In a similar way, when speech is taught to a deaf person, it becomes important for that person to *see* the workings of the vocal apparatus, the position of the tongue, lip and teeth, as well as to *feel* the sound of the voice proprioceptively in him or herself, as Connor suggests (Connor 2000, p.343). Regardless of the nature of the performer’s self touch, be it gently erotic or possessively violent, I believe it to be an often-neglected aspect in performance and one that deserves more careful consideration.

The performer who has become acquainted with her fetish object can then enter into the encounter with the Other, into a space of two different subjectivities, or a kind of “Irigarayan space”, as I refer to it. Here she can meet the Other not as an act of what Irigaray calls “ensnarement, possession or submission of the freedom of the other enchanted by [her] in their body" (Irigaray 2004, p.20), not as an act of giving *from* her *to* the Other, but, as Irigaray might say, as an act of giving the Other to himself.

3.3.7. The Demands of the Performer

The body incestuous, that is the performer who knows how to negotiate subtleties and uncover discontinuities in her performance technology, has one specific demand on the Other. She desires something of that Other, an Other that also needs to exist as an un-reconciled Other made up of strangeness and otherness in order to be able to be touched. The body incestuous wants to be touched back, in any way, smooth or rough. This is because one always experiences the world in reciprocal engagement. Steven Connor notes that just as the world is represented to a person as a surface, and she experiences the world by touching the surface, - the palm of the hand touching the hardness of a wooden table -, the world imprints itself at the same time on the person (Connor 2004a, p.36). Connor talks about this in terms of touching, retouching and touching-back and poignantly puts it when saying that, "we depend upon the world to gives us the shape which we present to it, in order to feel it" (Connor 2004a, p.36), and in encountering the world through one's hands, the world always puts on "its own gloves to touch back" (Connor 2004a, p.35). The performer's expectation of the Other lies in the Other being this world, to give the performer the shape that she presents. The performer wants to be touched back, and this touching back can be rough, grainy, … it does not need to be gentle or kind; it can be painful and exhausting….

3.3.8. Self Touch

So, let me look at a performance that deals with self-touch in a literal sense, one that also highlights the idea of being touched back; a performance that will allow me to situate performance as something ambiguous. The "cyberSM" performance project, a kind of cybersex performance, by Stahl Stenslie is a performance in which tactile stimuli are transmitted in real time in the world of cyberspace via a sensor suit. Stenslie's cybersex, real-time, multi-sensory, stimuli and tactile feedback communication system for two performers features the body incestuous rather literally. The performer engages in a quasi-fetishistic relation with his instrument, the sensor suit in this case. In the work "Inter_skin", two participants wear suits made of rubber and latex that have various stimulators and effectors, including electrical stimulators and heat pads, mounted in and on it (see Figure 13). The suits, connected over international telephone lines, are placed on the bodies of the performers, covering in particular erogenous zones like breast and genitals. After building their own 3D virtual identity from a body data bank the performers sent remote tactile messages to each other via their suits. By touching oneself, one touches the other and one can also be touched back. The body in this performance becomes the interface, an “interskin to convey, exchange and receive information” (Stenslie).

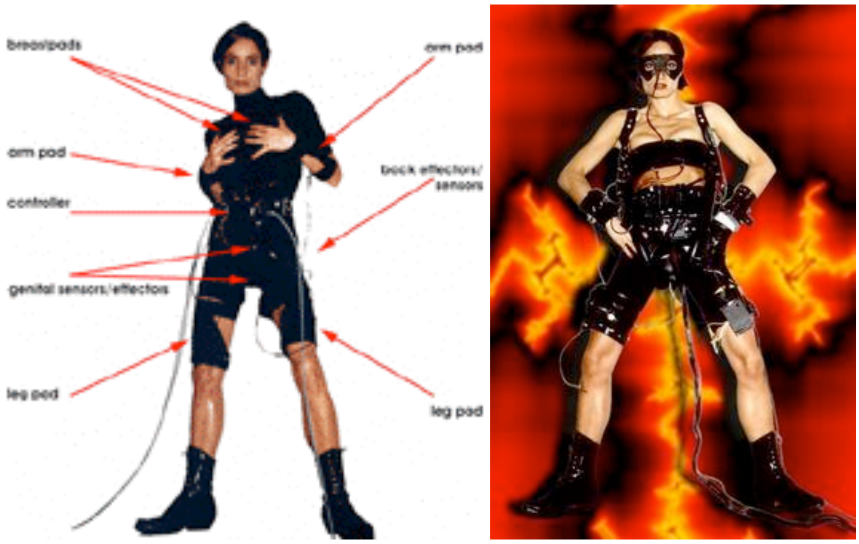

Figure 13: The first generation Inter_Skin Suit
Left: www.stenslie.net and Right: www.medienkunstnetz.de
[November 2005]

A remapping of touch is employed where, the shorter one performer touches herself the lighter the touch becomes for the other. This stands in opposition to a more linear mapping in which a strong touch would be transmitted to the other person in the same way. In this performance though, in order to touch strongly, a longer touch is required. Another re-mapping is allowed for, in which a touch on one performer’s leg can become a caress of the other’s breast. Such re-mappings, which were also explored in Stelarc’s work “Hexapod” (the movement of one of his legs is mapped to moving three prosthetic legs), highlight issues of cross-dress, cross-touch and cross-identity that one constantly encounters when navigating the world of digital technologies.

By allowing for a touch by another, the performance environment removes the performers’ control over their own assumed bodily reception of tactile stimuli, thus widening the performers’ expectations with regard to the uncertainty of their own bodily responses. I think that the tactile messaging brings into focus the border between one performer’s body and the body of the Other, which causes the performance to become what Becker calls “a constant balancing act between drawing up borders and crossing the borders”; a process through which “the decentered self re-contours itself again and again” (Becker 2003). I see this as a kind of performance environment that, by allowing for the discrepancy between the self and the Other to emerge, puts into question any linear pre-conceptions of the body. This is a performance that gives space to accident and caprice in the same way the Heideggerian performance does; such a performance is open to opportunities of conflict and clash, and even pain – the tactile messages in Stahl's performance can be painful. The design of divergent mapping strategies, which allow for unexpected tactile messaging, also situates this performance as something fluid. The body becomes placed outside of itself in order to perform with and onto the Other, since by touching one's breast via the suit, one's breast ceases to be one's breast, and thus refocuses one's tactile sensations. The suit displaces the performer's border of his self (his skin) and makes him sense his own body through the object of the suit inflicted through the touch by the Other. Hence, this is an encounter of two incestuous bodies that can become simultaneously subject (by means of touching or self-determination) and object (by means of being touched or determination from outside)[95]. Here are bodies that are constantly engaged in the crossing of self and Other as well as in the questioning of self and other. One can say that this encounter takes place on,

> "the threshold between the self and the other, that is, it is action and reaction in one. Activity and passivity, traditional dichotomies, melt into one another, as does the line between one person and another […]. As a physical being, in the action of touch one is always simultaneously suffering and active, simultaneously identical with oneself and influenced by the other: every touch is a reaction of the body to that questioning atmosphere, which the opposite in each case exudes" (Becker 2003).

This is a performance in which the body is not merely translated onto the technology (the sensation in one of the performer's leg does not necessarily replicate as a sensation in the other performer's leg), nor is the body seamlessly merged with the technology (a touch on the breast is not a touch on the breast, but always a touch on a breast *pad*). However, by leaving this gap between technology and body, by opening up this space in which the discontinuities between the performer and the instrument (the suit) and between performer and performer can become highlighted, this performance environment is one that shows up individuals as existing in "the chiasmus between action on [their] own initiative, and exposure to outside forces" (Becker 2003). It shows the body incestuous as existing on the threshold, and thus makes me conceptualise this performance as situated "in-between".

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[95] Bernhard Waldenfels talks about touch being this mixture of autonomy and heteronomy, of self-determining and being determined from the outside, (Waldenfels 2000).

3.3.9. The Virtual Touch

Another performance environment that deals with touch, in this case with the virtual touch, is a work in which one touches and also becomes touched back: this is Christa Sommerer's and Laurent Mignonneau's 2002 invisible, interactive sculpture called "Nano-Scape" (Sommerer, Mignonneau 2002)[96]. This environment attempts to provide access to the nano-world by way of a virtual touch, in which the user, wearing a magnetic ring interface, manipulates a wireless magnetic force-feedback interface (see Figure 14). The user's movements affect changes of an invisible sculpture placed on a table. The sculpture is created by different force fields, which, according to the artists, are felt "as elevations, hollows, and as soft and hard parts" (Iglhaut 2004). The nano-sculpture's shape and its properties can become altered according to one performer's interactions with another person, in particular according to the hand position and frequency of the hand's movements. Due to the force of repulsion, the performer is not able to touch the table of the work itself. When he moves his hand with the magnetic ring interface over the table, he is able to feel magnetic forces that are created in the process of his movements. In the interaction with others, the performer can feel strong - while at the same time invisible - attractions and repulsions.

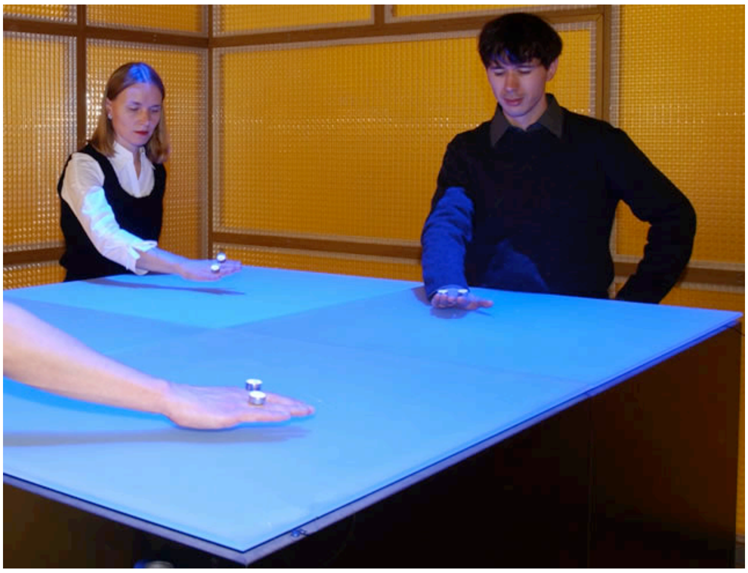

Figure 14: Christa Sommerer's and Laurent Mignonneau's NANOSCAPE
www.interface.ufg.ac.at/christa-laurent/WORKS/FRAMES/FrameSet.html
[January 2006]

In the same way that the instrumental performer is asked to explore and celebrate the discontinuities between herself and her instrument, in Nano-Scape, the interaction with the Other first of all requires the performer to engage in a quasi incestuous relation with her own body in order for her to negotiate and uncover the threshold conditions as suggested by the invisible work.

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[96] The work was developed for the exhibition "Science+Fiction" at the Sprengelmuseum Hannover and the ZKM, Karlsruhe.

This is a performance environment in which the performer, who is solely relying on her sense of touch, is asked to constantly situate herself within varying and new encounters, as the work is partly created by the performer's own mental image, by her imagination and expectation of the sculpture, which can continually reorganize itself. Thus, in performing Nano-Scape, the performer is asked to participate in a process of constant re-design, transformation and evolution by which the work continuously emerges.

While the performer is in a constant process of having to redefine her expectations and imaginations, the encounter with the Other takes place mostly virtually. The performer's virtual touch virtually touches otherness in a virtual realm.

3.3.10. The Body Incestuous - Summarised

This section considered performance in ways that questioned the transferral *from* a performer's instrument *to* the world, and suggested to think of the performer-instrument relation as a quasi-incestuous relation, one marked by the self-touch.

I argued that, in order to perform, the performer first and foremost needs to know how to touch herself, and that performative action can be enriched by steering away from ideas of the body drawn out of itself, from transferring the body onto tools, or from extending *from* the body *to* the world. I argued that performance needs to open up a space between performer and instrument, in which the performer is able to itch and scratch her quasi-incestuous object, in which, through exploring the inherent discontinuities, she can become acquainted with her fetish object. This type of thinking ultimately turns performance into a multimodal participatory engagement, and, by positing performers as beings that are engaged in this constant cross-over of self and other, highlights the body incestuous as existing on the threshold, as something ambiguous.

This section therefore steered away from looking *at* a body that reaches out *to* the world, and instead proceeded *from* the world *to* the body in a centripetal way, in which the performer turns towards her own body. In order to continue on this centripetal journey, I now want to pierce and ultimately remove boundaries of the body.

3.4. REDESIGNING THE BODY – THE BODY SKINNED

or:

”What I am is what I make myself into” (Stenslie 1996).

This section examines performances that make use of what I title **the body skinned**. After having examined performances that feature the body and mind on one side, followed by performances that celebrated the body connected or the fetishised body, a body engaged in the process of self-touch, I now continue investigating performances by proceeding from the world to the body. On this centripetal journey, the performer turns *towards*, and eventually *into* her own body. Thus, this section pierces and ultimately removes the boundaries of the body. Hence, the body skinned must be understood as a body incised into: a body opened up by technology. This is a body re-designed and re-made for being in a certain performance environment, in a computer gaming environment for example, or a body where the process of its re-design constitutes the performance, cosmetic surgery as a performative act, for instance.

In the following section, I look at performances that, by re-designing the body - not solely in order to suit a particular technology, or to translate the body onto a specific technology, but as a kind of self-portrayal and self-questioning - explore the paradoxical and the ambiguous within the body. These particular performances expose threshold conditions that the body highlights and incite one to question the body’s role and place in technologically informed performance environments.

3.4.1. The Skin: From Covering to Expressive Screen, from Border Site to Meeting Place

As previously mentioned I consider the body here in a centripetal way, reversing previous ways of examining the body where I looked *at* its assault, or *a*t the body that reaches out to the world.

I now proceed from the world to the body, in which the skin will become perforated in order to open up the body. Before doing so I want to consider the skin itself for a moment. Steven Connor in his elaborate writings on the skin (Connor 2004a) reminds us of its importance, and I therefore do not merely want to dissect it and rush past it blindly. If it is the skin that, according to Connor, allows one to keep in touch with oneself, I cannot simply dismiss it with a swift incision of a blade; the skin surely needs a little respectful touch.

The reason for being able to keep in touch with oneself is that one has developed a sense of self in the first place. Connor, taking his cue from the psychoanalytical interpretation developed by Daniel Anzieu, reminds us of the importance of this development of the self through skin contact in early childhood. The first skin contact of the infant with the carer, with the one who strokes, cuddles and feeds the newborn, is integral for the development of the self in later life. Hence, there is often talk of the "peau-moi" or the skin-self; the skin as a border between self and not-self. While at the beginning of the infant's development there is a symbiotic relationship with the carer, in which the skins of both infant and carer merge together, the infant soon distances itself from others, and the process of individuation commences. This takes place during what Lacan titles the "mirror stage", as already explicated above. In this stage at which the baby looks at something external and starts perceiving itself as a separate being, the skin takes on "a function of individuation for the self, which transmits the feeling to the self that it is a single being" (Anzieu 1991).

The skin is therefore essential to the perception of self, and for centuries the skin has been subject to tender fascination and caressing obsession. For a long time, however, there existed an inattention to the skin, as Connor explains. The skin was mainly seen as a kind of covering that kept the body together; a covering that maintained the integrity of the body and therewith also brought forth and emphasised the notion of inside and outside.

Through the medieval period the skin was seen as an organ of interchange, a permeable membrane, not something to cut into in order to get past, to the inside. However, the skin was understood to be "traversable in two directions" (Connor 2004a, p.21). When the taboo of cutting the skin in the European Renaissance was released it was primarily to gain access to the interior of the body; the skin was something one needed to get past. Jonathan Sawday refers to this moment of early-modern Europe as the "culture of dissection" (1995, p.3), particularly triggered by the Belgian physician Andreas Vesalius (1514-1564) and his publication entitled "De humanis corporis fabrica" (1543). Prior to this moment, the medical profession relied on inferences from animal dissections as no dissection of the human body had been possible (Sawday 1995).

If the skin at first was seen as a covering, it was consequently thought of more as an expressive screen. The writings of Michel Serres (1998) finally expose the multiplying functions of the skin, where the skin is seen as the most various of organs, and rather than understood as surface, membrane or interface, it is thought of as an entire environment. The skin is a meeting place for the other senses; it is what Serres calls a *milieu* of the other senses, the "milieu of the milieux" (Serres 1998, p.97). The skin is also integral to Michel Serres' 'philosophy of mingling'. He says that,

> "in the skin, through the skin, the world and body touch, defining their common border. Contingency means mutual touching: world and body meet and caress in the skin. I do not like to speak of the place where my body exists as a milieu, preferring

> rather to say that things mingle among themselves and that I am no exception to this, that I mingle with the world which mingles itself in me. The skin intervenes in the things of the world and brings about their mingling (Serres 1998, p.97).

Connor further suggests that the skin is not only the medium in which the other sense organs are located, or solely a means for connecting the other senses, but more than that, the other sense organs exist as "convolutions or complications in the skin", such as the scooping out of the mouth for example (Connor 2004a, p.34). I think it slowly becomes apparent that the skin has been exposed to various views and treatments.

3.4.2. Changes for the Performative Body – The Embodied and Disembodied Body

The skin's changing role - first mainly considered from the outside as a simple covering for the body, then seen in its multiplying functions, where it was understood as an entire environment, a milieu - similarly highlights the changes in the treatment of the performative body in technologically mediated environments. This means that the body ceases to be considered solely from the outside in, as something covered by the skin, but also from the inside out, more akin to a milieu, like the skin itself.

In parallel to this changing treatment of the body, one can see the changing role of performance technology and its relation to the body. Performance technology is not used only for attaching onto the body from the outside anymore (sensors that are attached to the body), but also for the opening up of the body (technological insertions into the body).

This transgression of the body's border by means of performance technology delineates particular preoccupations with the "border" itself, in particular with its absence. This shift of the border has in turn led to new ways of conceiving of the bodily interior and exterior. The cyberspace theoretician Derrick de Kerckhove talks of a borderless tactility and of physical borders dissolving in global cyberspace (Becker 2003). In this borderless view, the technologically transformed body is often highlighted as one in which the individual is no longer tied to a certain place, and no longer is his touch dependent on the actual contact with another person (Becker 2003).

The change in the conception of the body becomes particularly reinforced through performance technology that is designed not solely to suit or mimic the body (a technological extension of the legs as in Stelarc's work "Hexapod" for example), but through the body being made and re-made *in order* to suit the performance technology. Such alteration and reconfiguration of the body through technological means brings one's focus to ideas of embodiment and disembodiment or de-bodiment. What does it mean to be embodied or disembodied, or when does the body cease to be embodied and start to be disembodied?

Allow me a brief venture into notions of embodiment and disembodiment. On a literal level "embodied" means to have a body, whereas "disembodied" or "debodied" implies that one is apart from one's body. One could argue that the body can be regarded as embodied in performances that feature a physical or actual body, and that rely on knowing the body's physical limits (as in the Artaudian body assaulted). I exposed the becoming conscious of the body's potential for breakdown down in the performances of La Fura dels Baus and in the nothing-to-do of the works by John Cage or La Monte Young, which revealed the body's potential impotence. In those performances, there is a strong identification with one's Self, which in turn makes one realise that one will not escape unharmed from La Fura's performative tortures.

On the other hand, one could argue that technology-mediated practices such as telematic arts, interactive arts and computer-gaming can be regarded as "disembodied", in that here one becomes apart from one's body. In those performance environments, an actual body always features alongside a virtual body, and experiences are built on illusionary identities and a detachment from one's Self. The strong identification with one's Self in those spaces becomes replaced by a constant need for reinventing and reconfiguring one's Self.

In computer gaming for example, the physical body is no longer one entity, but a dissipated and disembodied body that becomes the vehicle for being in the virtual world. The wish for identification with one's avatar leads to a kind of disembodied Self, where the performing body is always in constant flux; there is no more a set behaviour that serves as reference point for oneself. The Self becomes a split Self, in a way that the avatar always incorporates parts of my own Self, while at the same time my Self always has a need for integration with the Other. This means that a virtual and an actual body exist either side by side, or in a constant tug of war of recognising, of appreciating, of improving or even of rejecting the other body.

This suggests that a complex set of behaviours and concepts of the performing body exist in those environments, for example the MUD (multi-user dungeons or dimension) performer may detach himself from his own body and attempt to merge with his virtual identity. In a kind of self-exploration, if not self-reconfiguration of his real life person, which Taylor calls "Ratava" (avatar read backwards), (Taylor 2002, pp.15-7), he projects himself into his mimetic flesh in order to explore his inner Self and expects to be made real via it, or he may see his avatar from a third person perspective to understand how others see him in VL (virtual life).

Frank Biocca has argued that there exists a "tangled mix of bodies online and offline", bringing out three kinds of bodies: the virtual body, the physical body, and the phenomenal body. He contends that one's phenomenal body is unstable to an extent that a VW (virtual world) experience can not only radically alter the concept of one's body, but also reshape one's body sense and the sense of one's Self. "The result is a tug of war where the body schema may oscillate in the mind of the user of the interface" (in Taylor 2002, p.18).

This complex mix of bodies highlights the idea that embodiment or disembodiment go hand in hand with recognition of Self or loss of Self, showing that "embodiment can be in excess of the [physical] body, perhaps even leave the body behind while carrying forward the residue of what it means to be embodied" (Bench 2004).

In that way, embodiment can mean more than having a body, while disembodiment implies more than being detached from one's body[97]. This polarisation of embodied and disembodied fails to take note of the existence of a "constantly shifting cross-over", something of which Becker has asked us to be cautious. She suggests that,

> "a complete embodiment of the person, which would embed him or he in the laws and rhythms of nature, is as impossible as a complete debodiment or removal of the body, which would allow him or her to step outside of nature and would degrade this to the mere material of our ideas and actions" (Becker 2003).

The body skinned, by being opened up and incised into, highlights those bodily borders. In particular, the body's 'border site', the skin, brings one's attention to the bodily in- and exterior, as well as to the border condition of the Other (we become bodily aware of another person through touch). The skin, one can say, highlights ideas of the threshold, and I now want to look at particular performances that investigate the threshold condition that the skin exposes.

3.4.3. Stelarc's Performances as Exposing Threshold Conditions

In the early 1970s, Stelarc commenced performances in which he suspended his body with a harness, which was then followed by suspending his body in various locations in the air from hooks that pierced his skin (see Figure 15). In those performances the skin not only becomes highlighted as part of the body, and as the thing that delineates a certain bodily border; but the skin *is* the pre-requisite for the performance. If in the past the skin was seen as a surface and as a boundary for the self, Stelarc's performances highlight the attention towards the skin itself. In contrast to Stelarc's stomach sculpture, in which the skin is penetrated and becomes obsolete as an interface, the suspension of one's body by one's own skin reinstates the skin as pure interface, as the surface that forms the common boundary between inside and outside. The "Suspensions" elicit the body skinned, in which the body's boundaries become emphasised, thereby giving rise to the body in the way Stelarc sees it, as an "impersonal" and "objective structure" (Atzori, Woolford)[98].

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[97] Elsewhere I have also suggested (Schroeder 2004) to move beyond the embodied/disembodied polarisation of the body and to conceive of the body in technology-mediated performance environments as a virtual body merged with an actual body, leading to what I have termed the 'virtactual' body of performance. I think of performances in which the Self, rather than my Self or another Self, becomes an emergent property propelled by the technology within. There no longer is the question of embodiment or disembodiment as the 'virtactual' body is a body in which not only extensions become implants, but also illusionary identities of the virtual environment reshape into parasitic identities seated within the Self. The virtactual body is however not one that strives for amalgamation of notions of embodiment and disembodiment; but rather, the virtactual body resides on the threshold and thrives on boundary conditions, for it is a body that Massumi refers to as "immediately abstract as [..] concrete; its activity and expressivity extend, as on their underside, into an incorporeal, yet perfectly real, dimension of pressing potential" (Massumi 2002, p.31).

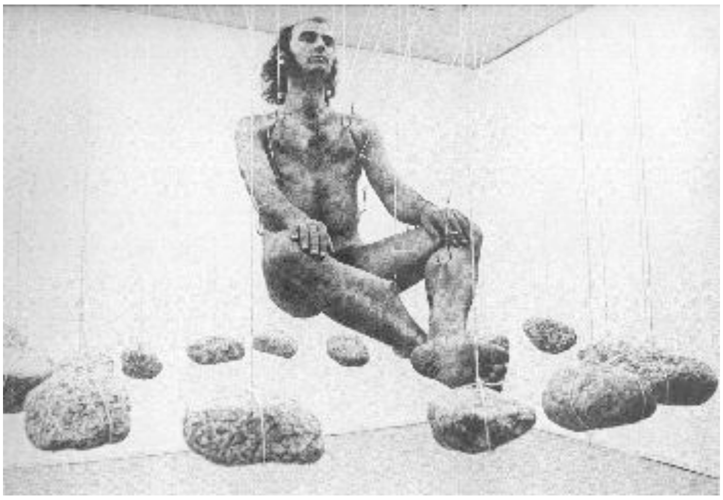

FIGURE 15: STELARC'S SUSPENSION, 1976 – 1989
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The "Suspensions" performances also display the body in the process of flying and floating, underlining the idea of the body being displaced, not being quite part of this earth. The body is elevated; it hovers above the surface, out of touch with the earth's surface on which the audience stands. The body of the viewer is in closer contact to the earth than the suspended body. As the body is removed from its customary place, it becomes more and more untouchable, further relocated and dissipated, more like a body in a virtual world.

In this reading, Stelarc's performances can be seen as a testing ground for possible degrees of the body's re-making, for its potential for expansion and re-location. To me, the "Suspensions" point towards one of humanity's most primordial desire; that is the desire for modifying and redesigning one's body. It points towards man's urge to investigate and alter his own physique, which is an urge that has existed, as Lewis Mumford points out in "The Myth of the Machine" (Mumford 1967), ever since man came into this world.

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[98] The highlighting of one's bodily border in this performance stands in stark contrast to peoples' common need for the covering up of, or enhancing this border - make-up is used to cover up or change this border, cosmetic surgery is used to alter, mostly to enhance, it. One tends to consider oneself to be *in* a body that is presented to the outside world, fronted by the skin, and I would argue that people commonly conceive of themselves from the inside out rather than from the outside in. Sayings, such as "I feel bad or comfortable *in* my skin" support this. There is no saying that states "I feel well or bad outside of my skin"; being is being *in* one's skin, and according to the familiar saying, one only jumps "'out of one's skin' and not into one's skin (which would imply a jump from the outside to the inside).

3.4.4. A Redesigned and Upgraded Body

The urge for re-design, in particular in technology-informed performance environments, is born out of the view that the body is biologically ill-equipped, inefficient and fragile; that the body is no longer able to cope with the affluence of complex information and technology (Atzori and Woolford). Stelarc has long suggested that the body is no longer able to absorb and process all available information. Hence, believers in a post-human[99] condition see the need for the body's redesign. They understand the post-human condition as one of "superiority, which can be achieved by means of certain technologies, including genetic engineering, drugs or surgery" (Wilson 2002, p.154). Believers dedicated to the improvement of the human condition often refer to themselves as "Post-humans" or "Extropians", a term coined in 1988 by T.O.Morrow[100].

An example of a redesigned body is the Human Body Version 2.0 of human-improvement-visionary Ray Kurzweil, in which all physical and mental systems become upgraded. This is a body designed for superlongevity, which features,

> "a metabrain for global-net connection with prosthetic neo-neocortex of AI interwoven with nanobots; smart skin that is solar protected with biosensors for tone and texture changeability, and high-acuity senses" (Kurzweil 2003).

In his book "The Age of Spiritual Machines" (Kurzweil 2000), Kurzweil outlines a future of immortal humans, in which the human race is redesigned in ways so as to integrate with robotic technology. Kurzweil's work reawakens the debate of whether the human body may face extinction in the process of becoming succeeded by technology, as Drexler discussed in "Engines of Creation" (1986), or Hans Moravec in "Robot" (1998)[101]. For such a re-designed body, Kurzweil envisions the upgrading of the body's physical and mental systems through the use of nanobots, tiny blood-cell-sized robots that augment and ultimately replace the body's organs. This body is intended to have an augmented heart, a more stable, and self repairing skeleton, enhanced eyesight and significantly improved hearing through cochlear implants that allow for frequency discrimination beyond the current "normal" hearing[102.] One of the possibly most known persons who commenced upgrading his own body in order to join with machines, to become a cyborg, is Professor Kevin Warwick (Warwick 2002, 2005).

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[99] It seems to me that the hyphenation of the word points towards a divide over what the post-human condition entails, whether ties with the human are to be kept as in "post-human", or whether the new human condition implies a supplanting of the human, as the non(-)hyphenation "post human" or "posthuman" would indicate.

[100] Morrow coined the term "Extropy" to mean "the theory that cultural and technological development will expand indefinitely and in an orderly progressive manner throughout the universe, the tendency of systems to grow more organized" (Webster's New Millennium™ Dictionary of English 2005). An extropy institute dedicated to the improvement of the human condition has existed since the late 1980's. The institute's main principle is to provide "an evolving framework of values and standards for continuously improving the human condition". Theirs is a "doctrine of self-transformation, of extremely advanced technology, and of dedicated, immovable optimism" as the Wired magazine has put it (Regis 1994). The Principles of Extropy say that extropy is a continual ethical, intellectual, and physical self-improvement, and it means "designing and managing technologies not as ends in themselves but as effective means for improving life. Applying science and technology creatively and courageously to transcend "natural" but harmful, confining qualities derived from our biological heritage, culture, and environment" (Transhumanism's Extropy Institute 2005).

[101] Kurzweil's optimism about humans' benefits from technology is heavily questioned by the scientist Bill Joy. Joy, even with a joyous name as his, paints the dystopian picture of the potential for knowledge-enabled mass destruction (KMD). He fears the control of the machine over the human race, of man being at the mercy of the machines; of man reduced to the status of a domestic animal. He fears that man may become so intrinsically linked to the machine that he will not be able to turn it off without causing his own death (it has to be said that some life saving machines, such as pacemakers, already highlight man's eternal link to the machine). Joy's deepest anxiety is anchored in notions of control of a few over others, in which the abuse of machines in the hands of a few will render man's biologically or psychologically engineered life quasi-purposeless. Also, Joy warns of the dangerous power of self-replicating species (he refers to this as the "gray goo problem"); a theme explored in Michael Crichton's novel "Prey" (Crichton 2002), and urges man to protect himself from himself (Joy 2000).

The artist Natasha Vita-More conceptualised and devised such a redesigned body and titled it "Primo Posthuman 3M+" (see Figure 16).

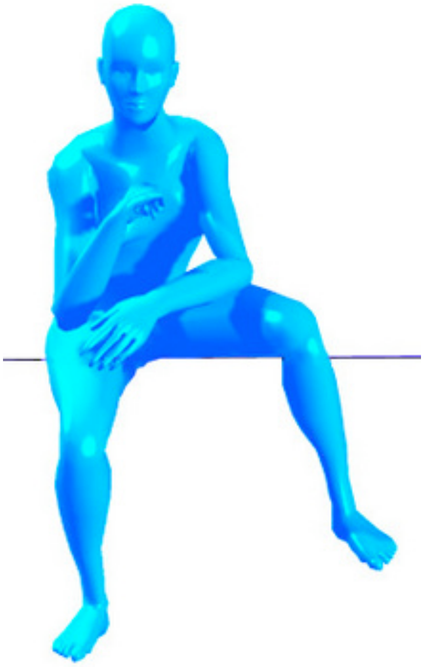

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FIGURE 16: NATASHA VITA MORE, «PRIMO POSTHUMAN 3M+, 2000
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[102] In this body, Kurzweil wants to separate human actions from their biological function, i.e. sex will become separated from its biological function and eating from the function of delivering nutrients to the body. Kurzweil considers the current metabolic system outdated and in need of replacement, where to him every unnecessary calorie is held onto. This evidently raises the issue of who defines what is necessary or essential to the body, of what can and should be replaced and enhanced. According to Kurzweil the answer is simple: everything! The bodies' red blood cells become replaced with artificial "respirocytes", enabling one to hold one's breath for hours rather than minutes. Kurzweil imagines that white blood cell replacements (nanorobotic microbivores) will be able to download software to destroy specific infections in the body. In short, this is a re-engineered body that is fully programmable, one that renders humans more non-biological than biological. It is conceivable that in the re-designing process concepts of personality become entirely superfluous, as one's technological wiring to the world and others will allow access to other personalities. Kurzweil's technological future sees the possibility of beaming one's sensory-emotional package and experience to another person. One indeed wonders whether recognition of an individual experience or emotion would still be possible in a future in which experiences and emotions are wildly and widely beamed across platforms, and personalities exchanged as randomly as computer data.

The trend towards the body being designed according to each individual's likings was strongly advocated by the "Body Modification Movement" in the mid 1980s. This movement rejects the Western notion of ownership over another body. In quasi-ritualistic performances, without the use of sophisticated technical equipment, they engage the body in a kind of "body play". In an act of re-enacting indigenous body rituals, members of the Body Modification Movement suspend, tattoo, pierce or contort the skin. The skin is sculpted and branded for personal expression and spiritual exploration. In this way, the right of access to one's own body, which the medical and scientific professions have been trying to seize since the 19th century, is to be reclaimed, as Wilson argues (2002, p.174).

The trend in reclaiming ownership over one's body also becomes evident in the design of certain performance environments with new technologies, particularly in gaming environments, where the body is not only considered free to be redesigned, but it *has to be* redesigned *in order to* perform. A good example of this is described in a possible game called "eXistenZ", as portrayed in David Cronenberg's 1999 film of the same name. Here, a computer game lives inside a biotechnological organism and is transferred to the body of a person through a "bioport" or "game port", a kind of living umbilical cord that needs to be implanted into the person's lower back in order to play the game. The body that is physically redesigned or incised into in order to perform, in which performative content/intent shapes the body - for instance, in MUDs or other virtual environments one's body/identity becomes morphed according to a particular situation - is a move away from the body that shapes the performance by means of its given and relatively unchangeable nature. Of course, one could also argue that even a laptop performer's body has to become redesigned in order to perform.

The desire for the body's redesign as a performative act, in which the design process of the body becomes the performance work, leads me to performances that adhere to the posthuman motto of "what I am is what I make myself into", reflected in the surgical performances of the French performance artist Orlan.

3.4.5. Orlan – (Wo)Man as a Performing Animal

Orlan, in what is probably the ultimate, if not one of the most extreme, form of the body skinned, undergoes surgery on her face in order to resemble various faces from the history of art. Orlan, in a kind of self-portraiture, a self-perfection, even a self-questioning of her identity, transforms into the face of Mona Lisa, into that of Psyche, Europa or Venus (see Figure 17). Her performances bring to light the idea of the body redesigned; the body as both a subject and an object, a body that takes centre-stage in which the surgical performances give rise to the body. Orlan's actions represent a "Theatre of the Self" as David Moos has described them (1996). At the same time, they also bring one's attention to the schism of external and internal appearances which Orlan's incisions into the skin are attempting to reduce, as well as to the fact that the skin is deceiving. Orlan says that in life,

> "…one never is what one has. I have the skin of an angel but I am a jackal… the skin of a crocodile but I am a poodle, the skin of a black person but I am white, the skin of a woman but I am a man; I never have the skin of what I am […]. I am never what I have" (Orlan 1994).

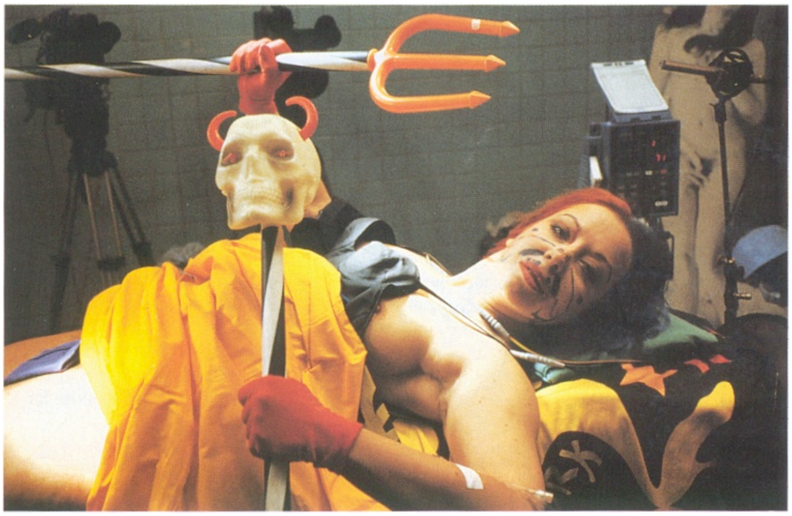

FIGURE 17: ORLAN
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Her performative interventions on her own body are accompanied with texts drawn from the work of Eugenie Lemoine Luccioni, the Lacanian psychoanalyst. Orlan's performances have been criticised by some as a narcissistic act as well as committing violence towards the body. Others see her surgical interventions as giving, even if bizarre and strange, directions in knowledge and understanding, rather than as a kind of advancement in the medical or scientific disciplines (Wilson 2002, p.180).

One of the most interesting aspect in these performances for me is that they illustrate and act upon what I pointed to above, that is, man's urge to investigate and alter his own physical body. Mumford explains that from early on, in possibly unfamiliar or peculiar ways, man would tend to his body by cutting, braiding, piercing, removing of foreskin, enlarging ears, extending lips, or lengthening his skull (Mumford 1967, p.110). In this light, Orlan's performances re-instate man as a *self-making* individual, and, as Mumford argues, man should be regarded not as homo sapiens or homo ludens, but as homo faber, as man the maker; not just maker of tools, but maker and designer of his own self. He says,

> "[M]an is pre-eminently a mind-making, self-mastering, and self-designing animal […]. Until man had made something of himself he could make little of the world around him" (Mumford 1967, p.9).

Orlan's performative "self-portraits" not only show the boundaries of the body that becomes altered by technology. They are not only performances to be conceived from the outside in, as incisions into the skin, but also, technology is used for the opening up of the body and for establishing the body as a meeting place for others. Some of her operations are live-broadcast for a public audience. Her performances feature the body skinned, a body re-made, re-interpreted and intervened into. If on the one hand, Orlan's performances recall something primordial, that is man's ancient desire for self-deformation and self-intervention, they also underline something much more contemporary, and that is man's ability to exert power over his own body. As Mumford suggests, those acts of self-emancipation emphasise man's first step in his emancipation from the complacent animal (Mumford 1967). In this way, Orlan's performances, as inhuman as some may consider the surgical interventions to be, clearly demonstrate what in fact makes us human: our ability to exert power over our own bodies.

The reason why man pursues such "attacks", "improvements", or "refinements" on his body is to establish himself as a human being, to,

> "impose his [man's] own conditions, however ill-conceived, upon nature. Yet, what they point to even more significantly is a conscious effort towards self-mastery, and self-actualisation; and even - though often exhibited in perverse, irrational ways - at self-perfection" (Mumford 1967, p.110).

Orlan's performances expose man as homo faber, man as maker of his own self. They emphasise the endeavour of man to understand his own body. In this way, they have to be seen as a reflexive act, an act allowing man to reflect on himself. Victor Turner suggests that is in this act of understanding himself that man has to be seen as a performing animal, as "homo performans", since "in performing, [man] reveals himself to himself" (Turner 1987, p.81).

Orlan's performances, then, not only point towards the schism of external and internal appearances as delineated by the skin, they also emphasise man, apart from homo sapiens, homo ludens, or homo faber, as homo performans, as *a performing animal*!

Both Stelarc and Orlan, through their performances, point towards ideas of bodily interior and exterior and thus expose the threshold conditions, which the body highlights. In the process of the body's re-design by technological means, e.g. the hooks that extend the body's skin and the scalpel that re-shapes facial features, the performances show how a performative act is able to highlight the transgression of the body, where the body has to become re-designed and re-made in order to take part in the performance, or *to be* the performance. By intervening into the body, the body becomes exposed as that ambiguous structure that has the capacity of being both actual and virtual, physical and dislocated.

However overall, the performances emphasise the right of access to one's own body by ways of redesigning and altering one's body.

Stelarc explored this right of access when he inserted a stomach sculpture into his body in 1993 (see Figure 18).

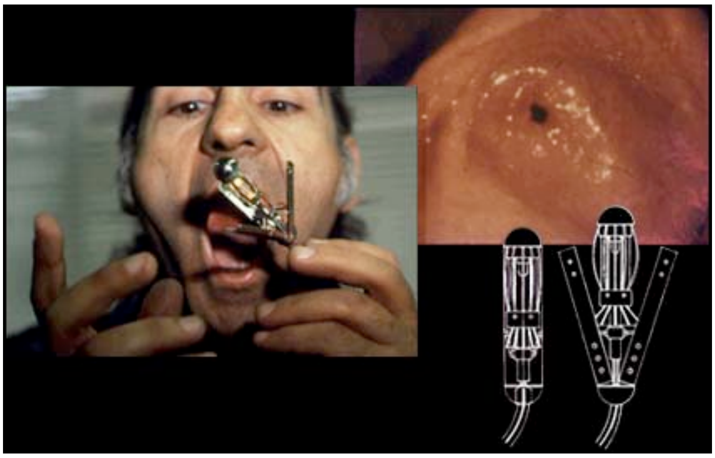

FIGURE 18: STELARC'S STOMACH SCULPTURE, 1993
WWW.STELARC.VA.COM.AU/STOMACH/STOMACH.HTML
[NOVEMBER 2005]

One can argue that the insertion into the body renders the skin obsolete and displays the body not purely as a host for a prosthetic implant but as a site for artistic display. The body does not perform or look at a work of art, but the body *is* the performance itself. The insertion of the sculpture into the body gives rise to the body as the performative work in the same way that the plastic surgery on the body gives rise to the body as the performative piece. The body becomes man's tool for self-exploration and experimentation. This move towards a new design of the body implies that, rather than designing machines to match body capabilities, one now designs the body that is supposed to match the machine[103]. Stelarc repeatedly expresses this challenge that the body is facing, the body's need for redesign.

All of above performances highlight something vital; that is, they bring to the fore ways in which man as a performing animal is able to choose the metaphors according to which he uses technology as a means for artistic expression of Self, or artistic configuration of Self. These metaphors derive from the artist's conception of their own body and according to the social requirements by which they have been made to understand the concepts of body and Self in the first place. Thus, Orlan not only reconfigures or perfects her Self, but in redesigning her body where technology's potential for allowing such transformation is highlighted, she also puts into question her own identity. Stelarc's idea of the body's redesign seems to be derived from metaphors of extension and prosthesis, by which he makes one aware of technology's capacity for addition, such as having a third hand for example, or enhancement, such as one leg being able to move three mechanical legs. In short, each artist derives metaphors that are informed by the ways in which she sees her body, and in ways in which she posits her body with regard to her social surroundings.

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[103] Katherine Hayles' view, elaborated in "How We Became Posthuman" (1999), may be beneficial to this discussion, as she proposes to think in different terms and contexts when thinking of equating humans and machines in new ways. She points towards the need for re-conceptualising both man and machine in order to facilitate their interaction, and argues that the human body has wrongly been articulated in a way as to enable its seamless configuration with the machine; whereas the "demarcations between bodily existence and computer simulation, cybernetic mechanism and biological organism, robot teleology and human goals" (Hayles 1999) have been overlooked.

It want to suggest that it is important for an artist who works with technologies to conceive of these technologies in ways that are unconstrained by her own personal perception and understanding of Self. For this I want to propose looking towards a different body; one that has been publicly contested for a long time and has thus, one could say, not been able to intimately determine a view of itself: this is the body of the transsexual.

3.4.6. The Transsexual body – Correcting the "Wrong"

I consider the body of the transsexual an interesting body that may aid in examining the use of technologies and the metaphors that are applied in the process. In particular when considering that the transsexual was forced to re-think his or her body in terms of a vocabulary imposed from the outside, that is, by the medical profession[104]. This is especially true for the 1980s when transsexualism was declared an "official disorder" (Stone 1987), and the ownership over the transsexual body was taken by the "gatekeepers for cultural norms", as Stone refers to the staff in the clinics, who, in order to allow for the transsexual's sex change to be performed, would reassign a person's gender on the basis of an individual sense of the "appropriateness of the individual to their gender of choice" (Stone 1987). Thus, one can say that the transsexual was denied the right of access to his body, or to an intimate determination of Self; a right that ironically the Extropians so strongly advocated during the same time period. This means that the transsexual must literally subscribe to the "wrong body" syndrome. He or she must feel that s/he is in the wrong body; a body, which becomes laid bare to the medical profession that has the power not only to yield the surgical knife, but also to affirm somebody's appropriate gender[105]. Stone finds that "[u]nder the binary phallocratic founding myth by which Western bodies and subjects are authorized, only one body per gendered subject is right. All other bodies are wrong" (Stone 1987).

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[104] Already the medical term for a transsexual, "gender dysphoria syndrome", forces one to think of one's body in a particular way: dysphoria stems from the Greek word "dysphoros": "dys" = bad, hard, unlucky, + "pherein" = to bear. A gender that one is unlucky to have, that is "hard to bear".

[105] According to Stone, men who wanted to be female had to learn to behave like women and were therefore trained accordingly in "grooming clinics" or "charm schools" (Stone 1987).

It is fair to say that a genetic "natural" or "GG" [the actual meaning of "GG" is a transsexual slang term and stands for "genuine girl", also "genny" – (Stone 1987)] is not made to question his/her body in terms and ideologies that are strongly imposed from the outside[106], and thus the GG's relationship to technology is informed by the ways her body primarily appears to her and not to others, and by the ways in which her body serves in her daily doings.

For the transsexual body, however, technologies, in particular technological intervention, are informed by metaphors of "correction" or "replacement", those that serve to make the transsexual able to conform to the social "norm". In a similar way, one can say that for an amputee, technology derives meaning with regard to the way in which it fulfils a certain function in relation to the "missing" part, which does not necessarily mean that technology serves to *replace* the limb. It is true, however, that most technological usages are pregnant with metaphors such as *replacement* or *substitution* and aim towards a *correction*: the amputee is seen to be *missing* a limb; the transsexual is seen to be in the *wrong* body.

These are states that technology can "correct". The robotic arm is designed to *substitute* for the human arm, speech synthesis technology is used, as by Prof. Stephen Hawking, to *replace* the missing voice, and surveillance technology *substitutes* the absence of a physical presence. This highlights the body of the transsexual or of the amputee as being somewhere between, between genders, female or male, or between states of correct and wrong, two arms versus one arm, or having a voice as opposed to not having a voice.

In contrast to this "correction" metaphor, artists often preoccupy themselves with the metaphor of extension: Stahl Stenslie's body suit works as an extension of bodily sensation, the data glove extends movements of finger and hand movements, the sounds created with the aid of music software is seen to be extending the range of traditional sounds or instruments, and so forth.

When thinking of performances that feature the body skinned, of performances that make use of technologies to design or re-design the body, I not only want to question the usefulness of those metaphors, such as extension; but more importantly, I want to emphasise the need for considering different ways of conceptualising the body in relation to technology, as the body of the transsexual or the amputee have incited me to do. I believe that the amputee or the transsexual have long engaged, and were *made* to engage, in a discussion that illuminates issues of contradiction and polyvocality; a discussion that deals with inter-, trans-

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[106] Unless of course one argues that a caretaker's engagement with the infant child already constitutes an imposition from the outside that determines the infant's view of her body. I do however believe, that once the child learns to understand and accept her biological makeup, s/he will also accept that s/he is female/male, that is, in a female/male body, which is somehow also the "right" body for her/him.

and cross-, as well as with difference and the refigured and re-inscribed body. This is a discussion that a majority of GG's, who engage in the design of technological informed environments, have yet still to confront.

3.4.7. The Body Skinned - Summarised

In this section, I have described performances that have at their centre the body skinned, which is a body that brings to the fore the urge for redesign and relocation of the body, and thus makes one question the body's place and meaning in a performance environment. The performances that I described steer clear of any linear conceptions of the body. By engaging in a process of questioning and by making room for new relations to enter, not only bodily borders but also future application of technologies and their impact on the human body become re-defined. The performances described highlight the ambiguous nature of the body; a body that resides on the threshold and thrives on boundary conditions. It is a body that is immediately abstract as it is concrete, incorporeal, yet perfectly real, and by revealing this indefinite nature, it posits those performances as situated "in-between", as something ambiguous.

I have examined several types of performances for which I looked at the body in various ways. To shed light on these performances, I considered for instance the body's assault, the body pushed to its limits, and the body that extends from itself to the world. I examined performances that celebrate the body/mind unity, or that highlight mind over body, and also considered performances with view to the neurobiological findings of Antonio Damsio; that is as a learned arousal of bodily responses. I, then, proceeded in a more centripetal way, in which, rather than looking at the body and how it turns towards the world, I adopted a perspective that moved from the world into the body for which I first gently touched the skin, then suspended and pierced it, and am now moving towards the body opened up.

The following body is the body without organs, one that can also be conceptualised as a schizophrenic body. This body is informed by possibly the most radical move away from the Cartesian idea of the body as machine, or the body that is informed by the higher order rationality of the mind. In the next chapter, I therefore examine Deleuze's and Guattari's "body without organs".

CHAPTER IV

4.1. THE DELEUZE-IAN/GUATTARIAN PERFORMANCE: PERFORMANCING AT N-1 DIMENSIONS – THE BODY WITHOUT ORGANS

or:

> "[…] you are already on it, scurrying like a vermin, groping like a blind person, or running like a lunatic" (Deleuze, Guattari 1988, p.150). "Let's go further still, we haven't found our BwO yet, we haven't sufficiently dismantled our self" (D&G 1988, p.151).

4.1.1. The Body without Organs

From the body in need of redesign I move to another body; a body remade to the point of completely having to be re-conceptualised. This is a body that is always open for new forms to take shape; a body that eschews hierarchical organisation of itself: Deleuze's and Guattari's (D&G) body without organs (BwO).

In looking at the BwO I endeavour to incite the reader to think in different ways; similarly to what I think D&G urge us to do, that is, to think differently, to open the body to new connections, to look at things in a more sideways fashion, which is in an unusual and, at times, crazy manner.

I see that D&G instruct us (although they would possibly never "instruct" us, in the sense of "teaching" us; but instead they might show us a plateau of multiple opportunities) to favour the unpredictable, to oppose notions of control. Therefore, I appropriate D&G in order to think about performance in particular ways and to reflect on the use of technology in new media performance environments in ways that are more akin to vermin scurrying or a lunatic running How does a lunatic run, one may wonder? D&G constantly make one ask such questions, always urging one to dismantle one self.

The following quotation represents well the ways in which D&G ask us to be in flow, to be open to movement and change, to consider a whole "diagram" rather than "subjective programs" (1988, p.161). D&G tell us to lodge our self,

> "on a stratum, experiment with the opportunities it offers, find an advantageous place on it, find potential movements of deterritorialization[107], possible lines of flight, experience them, produce flow conjunctions here and there, … have a small plot of new land at all times." (1988, p.161).

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[107] Deterritorialization is a specific term used by D&G; see (1988, p.508) for possible meanings.

So, what is the body without organs, the BwO? Deleuze and Guattari suggest that it is no longer a body subordinated by the mind, no longer an organic system, no longer a vessel that contains organs, but the BwO is an assemblage of parts and organs, of actions, and flows. It is a state that can never be reached, and it is "what remains when you take everything away" (1988, p.151). Thus, the BwO must be seen as something dynamic and experimental, as always in a process of becoming[108], rather than as a finished object. More so, it is something practical. It is not a notion or a concept, but a set of practices, characterised by desire.

The D&G body is conceived in ways that question the hierarchical and systemic organisation of the organs; in short, the organism. The BwO is conceived in ways that open up to new connections; a body that is occupied and populated by intensities, flows and gradients. However, only those intensities that are neither negative nor opposites can pass and circulate. The BwO is not space nor in space. It is intense matter that occupies space and is, "defined by axes and vectors, gradients and thresholds, by dynamic tendencies involving energy transformation and kinematic movements" (1988, p.153). It is more than that; the BwO is a "component of passage" that not only causes intensities to pass, it also produces and distributes them. It is marked by "sedimentations, coagulations, foldings, and recoilings" (1988, pp.158-9). In the BwO the organs become organised into that unwanted relations of composition, the one known by the name of 'organism'. It is upon recognising this imposed state that the body protests about having been made an organism, of having had its body stolen. The body howls: "They've made me an organism! They've wrongfully folded me! They've stolen my body" (1988, p.159). One can argue that the elimination of the body in the BwO must project it, if taken literally, which we also must be careful not to do, towards a body without organs *without Body* - **a BwOwB**.

The lunatic running wonders what if I was to posit performance here; as a process of constructing a body without organs without body (a BwOwB)? One may wonder whether such a BwOwB would still be able to cause intensities to pass, to produce and distribute, and whether it is indeed the BwOwB, rather than the BwO, that remains when you take everything away. If, according to Deleuze and Guattari, the BwO is a limit that one is forever reaching out to (1988, p.159), having a BwOwB would imply that one will have ceased to be signifier and signified, interpreter and interpreted all together: all that remains is pure consciousness. Therefore, it can be argued that pure consciousness cannot produce and distribute; that it cannot signify and subjectify.

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[108] Becoming is a D&G term; see chapter 10 "Becoming-intense, becoming-animal, becoming-imperceptible… in "A Thousand Plateaus" (1988).

4.1.2. De-stratify and De-subjectify

A D&G reading exposes that the destruction of the body cannot be implied, as destroying the body means death (1988, p.162). The BwOwB can only exist if a destratification[109] of the BwO has not taken place too abruptly, as “every destratification must observe concrete rules of extreme caution: a too-sudden destratification may be suicidal” (1988, p.503). The BwOwB cannot make the BwO into a body of nothingness.

Indeed, one has to proceed with extreme caution if negating the body, so that it may not purely be a way of differently organising the BwO. The body cannot die but it must exist as unformed matter, as “matter-movement” (1988, pp.511-2). D&G want to move away from organisation, from function and development towards notions of speed, slowness, movement and rest (1988, p.255).

So, let me keep moving. Let me desubjectify, destratify, and seek a D&G performance in elements and particles, not in organised and functioning, or non-functioning bodies. The D&G performance does not annul the organs but makes room for new relations to enter. The BwOwB is one such relation. The D&G performance asks one to see one’s Self (Moi) as a threshold, “a becoming in between two multiplicities” (1988, p.249).

By this D&G reading, performance must be understood more akin to contagion; as a mode of expansion and propagation introducing disruptions into systems of exchange. In addition, performance must not be guided or judged by that epidemic called production. Rather, a D&G reading must expose performance in terms of becoming; not becoming as progression or regression along a series, not as evolution, but as involution, as something creative. D&G incite one to discover the task of performance as what I call “performancing”, that is performance as a rhizomatic activity[110], an activity with multiple, non-hierarchical entry and exit points, in which the diagonal can break and free itself, an activity in which multiplicities become constituted, constitutions multiplied and becomings constitute multiplicities.

To me, performancing is entering the smooth space of the sea, a directional space, rather than a “dimensional or metric” one; a space with continuous variations, with no distinct forms, but a “space of affects”, as D&G may call it (1988, p.479). It is a space filled by events rather than properties (Bergson already urged us not to look towards properties, or the thingness of a thing). It is a space in which new forms (the BwOwB is such a new form) are continuously being developed. Let performance not be a becoming-sound, a becoming-instrument, a becoming-technology. “Becoming is never imitating”, so D&G tell us (1988, p.305). It is, as all becomings, “becomings-elementary, - cellular, -molecular, […] -imperceptible”, (1988, p.248) and “all becomings are already molecular” (1988, p.272).

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[109] Destratification can be understood as “going beyond the organism, plunging into a becoming” (1988, p.503). Destratification is linked to strata, an important D&G concept. D&G see three great strata, the organism, significance, and subjectification (1988, p.159), and strata is linked to stratification, which is “like the creation of the world from chaos, a continual, renewed creation” (1988, p.502).

[110] D&G develop the theme of the rhizome in the introduction to “A thousand plateaus”. A rhizome can take on very diverse forms. Very simply put, it is something that establishes connections; a thing (or an animal, even weed) in which any point can connect to any other (1988, p.7).

Performancing is performance freed from its respective code. It extracts “particles between which one establishes the relations of movement and rest, speed and slowness that are *closest* to what one is becoming, and through which one becomes” (1988, p.272).

The D&G performance urges one to see beyond units and consider molecular and individuated multiplicities, as apparent unity in a set, such as found in the Mandelbrot set for example, also always exposes multiplicities. In that way, the periphery in the Mandelbrot set “is filled with a halo of tiny copies of the entire set, each of which is surrounded by its own halo of still tinier copies, and so on, on smaller and smaller scales, without end” (Yale University 2005).

Dispersed and Transfinite Schizophrenia!

Let me celebrate performancing where “masses and flows are constantly escaping, inventing connections that jump from tree to tree and uproot them: a whole smoothening of space, …” (1988, p.506).

The creation of the not-yet!

4.1.3. Hardware Hacker Nic Collins

The sonic activities of hardware hacker Nic Collins provide a good illustration of performancing. In Nic Collins works sounds are drawn out of the hacking of various hardware items, a process that abides by the rule of “if it sounds good and doesn’t smoke, don’t worry if you don’t understand it” (Collins). These are new, weird and wacky sounds derived out of ordinary everyday electrical appliances. There is soldering, scratching and scraping, twisting and pounding of devices until distorted, sweet, entirely unexpected and out-of-this-world-kind-of sounds emanate from very much in-this-world-kind-of devices. Collins opens our eyes to see and hear the simple; yet not the simplistic. His lo-fi music allows for “a perpetual multiplication of significance creating hybrids of inferences”, which in turn produce “hybrid decoded and deterritorialized phantasmagorical meanings” to borrow a phrase by Joseph Nechvatal (2000). To me, these are sonically de-stratified bifurcations that rejoice in the Schizophrenic Transfinite!

4.1.4. Live converter Kaffe Matthews

FIGURE 19: KAFFE MATTHEWS
WWW.GRACIA-TERRITORI.COM/IMG/LEM2002/K.MATHEWS.JPG
[SEPTEMBER 2005]

The not-yet world of Kaffe Matthews' laptop performances opens one's senses to another type of performancing. While bearing the self-assigned description of 'live converter', Matthews creatively 'involves', rather than progressively evolves, sonic materials. Matthews' performancing is a navigation of the smooth space of the sea [the title of her CD "eb+flo" - (Matthews 2003) - may suggest the sea's inherent continuous variations]. It is not solely a making of sounds in themselves, that too, but also the making of their texture, density, colour, grain, and shape, which all aid in blurring the point, freeing the line, a sculpturing of sounds that deterritorialises rhythm and makes bifurcations possible.

Matthews' performancing is a making of the not-yet. By focusing on the qualities of sounds themselves, by looking towards sine tones - the smooth sound, the completely pure sound - and by commencing sonic activity with nothing, not even with one's own preconceptions of how it should sound, but with pure energies of a particular space, Matthews not only gives room for the not-yet to appear, but she is also constantly in the process of returning to the molecular. This is a molecule from which she then builds; one that has the potential to increase the number of sonic connections, to push towards bifurcations and multiplicities.

FIGURE 20: KAFFE MATTHEWS
WWW.WOMENINMUSIC.ORG.UK/FRAMED/HERNOISE.HTM
[NOVEMBER 2005]

"I'm responding to the resonance and the energy of a space", she states (in Montgomery 2003). The 'work' (a word I will henceforth use for the lack of a more appropriate one; one which would entail notions of process, and not necessarily reek of concepts such as 'result') "Weather Made", a collaborative project (Matthews 1999-2001), is one such that exposes performance as a becoming; one in which weather data picked up from strings of a kite turns into planes of sonic activity, multiplicities of sounds. Whereas Matthews prepares an instrument with laptop computer and software, it is the weather that plays it. Sound becomes "a central mixing pot" accessible to all (in Montgomery 2003), and sound is continuously sculpted by movements of the smooth space of the sea, incessant variations are exposed, new forms developed. The energy of each sound is dispersed, transfinite schizophrenia awaiting to partake in the not-yet!

4.1.5. Infra-Instrumentalist Phil Archer

Nic Collins' staunch follower Phil Archer presents performancing activities with modified, mis-interpreted, re-examined familiar music appliances, such as the CD player. Archer intervenes and appropriates familiar objects, those that have become so intimately known, in order to re-situate them as either totally new objects or, by referring to the known objects, as some that reminisce of the known (Archer 2004, p.19). Objects are made to reflect upon themselves, while one's perspectives of the familiar become radically altered.

Archer's 2001 work "CD err" (Archer 2004, p.9) for example makes sonic multiplicities apparent. "CD err" is a collection of sonic snippets derived from recordings of others. Sounds become extracted, then randomly layered in order to free up coincidental new materials; imprinted onto CD-R and replayed on Archer's modified CD walkman (see Figure 21), with which he can intervene into the playback behaviour of the materials themselves (making audible skips and distortions as well as the CD's inherent mechanical noises). Archer's sonic improvisations not only put into question categories of compositional and improvisational activities, but also re-shape the act of music making into one of pure performancing. Sounds are freed during the rhizomatic processes of Archer's sound making. This is a process that considers both compositional and improvisational sculpturing, as well as the building, deforming and programming of devices, in which sounds are not created within a framework of rigid forms and structures, but rather, by the making of relationships, by exposing the sounds' inherent tendencies and combinatory possibilities, and by allowing for redefinitions and repurposing of internal sonic relations. New connections are constantly being formed, materials re-structured and re-worked. "[D]ense, phantasmagorical forces develop", and "things [are] heard only from the depths of [an] inclusive ecstatic density - withdrawn into itself, perhaps - adumbrated and darkened by its obscurity - but bound tightly together and inescapably grouped by the vigor that is hidden in virtual depth", to appropriate Nechvatal's language a ultimate time (2000).

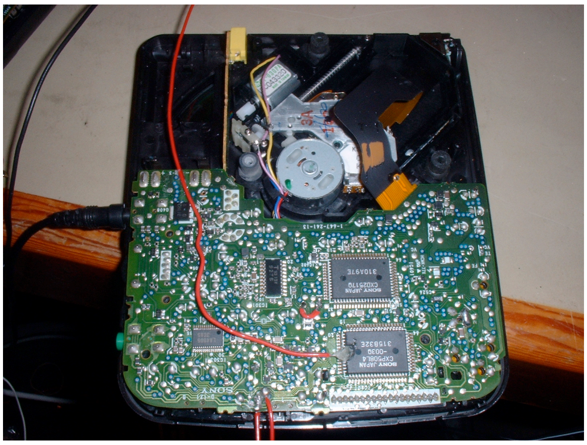

FIGURE 21: MODIFIED SONY DISCMAN D-121 I
AS USED IN ARCHER'S WORK "CD ERR"; RED WIRES INDICATE ARCHER'S MODIFICATIONS
(COPYRIGHT: PHIL ARCHER)

The inkjet printer in Archer's work "Latin" has ceased to be a pure imprinter of textual information, for the motors no longer carry paper and ink, but now cause the movements of pencils and pens, creating percussive sounds (see Figure 22). The supercollider patch spurts out samples of a steel drum at random pitch (Archer 2004, p.17), partaking in the making of assemblages that open and multiply connections. The inkjet printer turns into what Bowers and Archer call an "infra-percussion kit" (Bowers, Archer 2005) that, to me, allows for performancing while feeding on notions of mis-, ir-, inter- and re-.

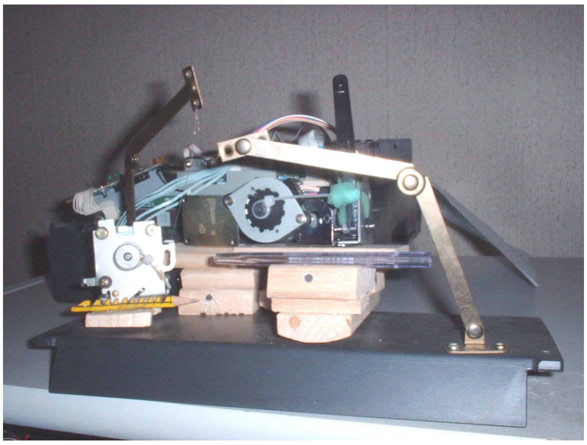

FIGURE 22: PHIL ARCHER'S INKJET PRINTER
AS USED IN THE WORK "LATIN" (COPYRIGHT: PHIL ARCHER)

Archer's performancing is one of negation, not only a negation of sounds, but also of agendas of in- and ex-tension (of tension, too), of notions of hyper-, meta-, and cyber-. The instrument "in-tends" rather than "ex-tends" beyond the semi-romantic notion of instrumental virtuosity to involve into the constrained, into the simple and few rather than the many, into the reduced and restricted, into infra- rather than the super-. Conventional notions of virtuosity and expressivity become restricted to rejoice in "simple musics", as Bowers and Archer call it (2005), leading to a music in which the performer does not seem to be the cause of the production of sounds anymore. The instrument seems to play itself without interference from the performer - a true virtuosity of restriction[111].

These performers urge us to celebrate the instrument within the non-instrumental; an instrument that comes "from beneath"; one that is below the standards expected of traditional instruments (Bowers, Archer 2005). However, do not think that sounds are random, coincidental or unpredictable, lacking form or structure. What one finds in Archer is performancing at n-1 dimensions; a performance in which the multiple is made, not by adding but by subtracting "the unique from the multiplicity to be constituted" (D&G 1988, p.6). In addition, Archer's work is exploding with uttermost sonicality, the latter relating to sound just as musicality tends to refer to music.

4.1.6. Can technology create a rhizome?

I now want to question whether technology can drag performance into an activity of performancing; whether it can, wants to, and knows how to, create a rhizome; whether technology can blur the point, aid in abandoning coordinates, free the line and the diagonal, deterritorialise rhythm, and favour nonpulsed time. In short, can technology bifurcate? If so, how is it, can it, and should it, be involved in the making of the not-yet?

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[111] Japanese improviser Toshimaru Nakamura's no-input mixing board that also celebrates notions of the restrained must be mentioned here as well. Nakamura is an icon of what Meyer has called the "international fluorescence of lowercase sound art" (Meyer 2003).

One thing technology can do is to bring out individuated elements, like sounds. It allows one to travel inside them, stretch and condense them, touch or leave them untouched. Technology has the potential to signal a return to a basic element; it can constitute the promise of a return. This is, however, not a return understood as a regression. The inherent potential for a return to the elementary unit is also not a question of the unpredictable, which, at times, can be implicit in the use of technology. No. It is a question of the demonic animal, of forming a multiplicity, a becoming. There is no need for the Oedipal sentimental family pet, such as “my” violin, “my” trumpet, or “my” laptop. The use of technology is not about getting rid of the instrument, of the human being becoming replaced by machines, and finally it is not about technology either. At its most basic, the D&G performance is, what I see as the basis of human life, a question of a return to the unit, to a unit *without* the aid of technology. The unit here is not a single element, or item; it is not to be regarded as the lowest subdivision of a whole. What is the whole in a performance, let alone in life, anyway? The unit is an individual but at the same time, it has the potential for increasing the number of connections, as the unit is already in itself a multiple.

I am not interested in the extension of that unit with technology, nor am I interested in extension at all. The instrument is not your puppet! In the same way that the Deleuze-ian puppet strings are not tied to the will of the puppeteer, but to a multiplicity of nerve fibres, forming another puppet in other dimensions, which again is connected to the first (D&G 1988, p.8), one does not manipulate one’s instruments, the saxophone, the faderbox or the keyboard, in a tool-like manner. One’s instruments are not strapped to one’s extremities; they are not instrumental prostheses. However, one’s instrument is tied to a multiplicity of nerve strands, connective tissue and previously formed, expanding into newly formed, bodily connections.

Performancing is about being able to involve into a unit *without* technology. It is only after the return to the basic element constituting one’s practice that one can resort to technology, in order to take that unit into a different dimension.

The creation of such new dimension does not imply that one can pick up one’s Oedipal family pet and be closer to the demonic animal. It is not about killing the family pet in order for it to be replaced by the demonic animal. There is also no need for merging the two kinds, for forming an alliance with the family pet and the demonic animal, as, in order to make a rhizome, one cannot make two out of adding one to one. This is not a way of forming a multiplicity. In order to form a rhizome, one cannot simply add one (n+1) after the other (n+1+1), and thus form a multiple.

D&G urge us to think of dimensions or “directions in motion” (D&G 1988, p.21) rather than units. One is asked to subtract “the unique from the multiplicity to be constituted”, and always write at n-1 (D&G 1988, p.6). To form a rhizome, one needs to performance at n-1 dimensions. Finally, for technology to aid in forming a multiplicity, to find ways of detaching, connecting, reverting, and multiplying that unit, and for it to steer toward a rhizomatic performance and make one discover the not-yet, technology, first, has to become rhizomorphous itself. It has to become a non-hierarchical system, in which anything can be connected to anything other. Then the performer, who is in between two multiplicities herself, having entered into new, non-hierarchical relations (such as the BwOwB), is able to rejoice in performancing at n-1 dimensions.

Dispersed and Transfinite Schizophrenia!

The not-yet!

Performancing with the BwOwB at n-1 dimensions!

4.1.7. The Body without Organs - Summarised

Informed by my understanding of Deleuze and Guattari, I examined three particular performances, those of ‘hardware hacker’ Nic Collins, of ‘live converter’ Kaffe Matthews, as well as the sonic interventions by ‘infra-instrumentalist’ Phil Archer. I looked at the BwO, which is a body that not only questions hierarchies, but also one that opens new connections, one such being the BwOwB. I showed that those performances, in sculpturing sounds that make sonic bifurcations possible and in pushing towards multiplicities, reflect what I term the Deleuze-ian/Guattarian performance. I scrutinised the role of technology in the act of what I call “performancing”, which is performance as a rhizomatic activity, and questioned whether technology aids in working towards the creation of multiplicities and towards making sonic bifurcations in performance possible. This led me to suggest that for technology to aid in forming such multiplicity, it has to become rhizomorphous itself. The Deleuze-ian/Guattarian performance becomes exposed as a performance that rejoices in the schizophrenic transfinite and in the opening up of connections.

4.2. THE VOICE AS TRANSCURSIVE INSCRIBER - THE BODY PERFORMED

I now move into the concluding section, in which I again want to position one of my own performance works. I want to elaborate on what has been closest to me over the last years, which is the act of preparing a work in order to perform it publicly and the processes involved in doing so. The discussion of the body that features in this section, the **body performed**, ties together all of the bodies so far scrutinised. It is a body that also always contains the **body mapped**, as it involves physical actions that can be understood as initiating a stimulus that acts upon the body. The body performed also contains the **body governed** in that the practising of an instrument always highlights to the performer her body's potential for vulnerability, and shows the body's limits and risks. In particular, the body's mismatches and inconsistencies that the performer needs to conceal become highlighted in this process. Also intrinsic to the body performed is the **body connected**, in which the relation to its surroundings is of central concern. It can also be argued that the act of rehearsing and performing has to allow for an unpredictable unfolding of things, rather than for the pursuit of a predefined course; something the body connected celebrates. I find the **body assaulted** literally in the hours of repetition to which the body performed becomes subjected, and in which notions of failure and the body's inherent potential for breakdown become exposed. The **body pivotal** forms part of the body performed as it highlights the body as context-dependent and reminds the performer to be open to a constant flux of changes. I also see that the body performed contains aspects of the **body breathless**, as this body makes room for the encounter with surprise and asks the performer to be open to flexible ways of interpretation; to see her activity as something that is more akin to the in-between or the liminal. The **body incestuous** and the **body skinned** both shape the body performed, as they highlight the performative act as a multimodal participatory engagement. Both bodies asks for exploration of the inherent discontinuities between performer and instrument and show the performer the ambiguous nature of a body that resides on the threshold and thrives on boundary conditions. Finally, the body performed must also contain the **body without organs**, as it is a body that shows the performer to be continuously engaged in the act of becoming, and to be constantly questioning categories (categories of all kinds: performative, design, technological, social, or political), which in turn allow the performer to rejoice in the schizophrenic transfinite of performance.

I now will examine the body performed by looking at the particulars of performing the work for solo saxophone by Hans-Joachim Hespos entitled “IKAS” (1982). This work to me is of special interest, as I believe it requires the performer to monitor her body’s working in very particular ways. “IKAS” focuses the performer’s awareness on the role of the voice in playing a musical instrument. In playing this work, the performer is confronted with the vital threshold conditions that occur during the interplay of voice and instrument. One can argue that an awareness towards one’s voice is required of any wind instrumentalist for the performance of any work. In Hespos’ work, however, by asking the performer to use her voice in various ways, he asks the performer to speak, scream, shout, as well as to make vocal sounds, the performer’s attention needs to be focused not only towards the voice itself, but also towards the *workings* of the voice (a performer usually does not have to think about the workings of her vocal apparatus). Hespos, thus, forces the player to think again about how to play her instrument, or how to play *with* her instrument. I want to underline that part of the process of learning to play an instrument is always forgetting how to play it to a certain extent.

The other aspect of “IKAS” is that it is almost completely devoid of pitches, markings and performance guidelines in a traditional sense. Therefore, one must understand the work more as an incitement to action, rather than as instructions for a performance execution. This, then, implies that the performer has to find *other* ways of realising this work - other here meaning different ways than the ones she may follow when playing a more traditional score. In performing “IKAS”, the performer cannot resort to any documentation of performance traditions other than listening to the work as played by others, or questioning players about their approach to the piece. However, I opt for approaching the work without using other players’ influences, preconceptions and ideas.

Instead I turn to a different body of literature and consider Deleuze’s ideas of the workings of a machine and a machine’s relation to a “flow”, in particular a machine’s functions with a view to the break in the flow, in order to gain an understanding about the body performed in this work. I suggest that it can be helpful to perform a work, such as “IKAS”, by considering Deleuze’s concepts of a machine, rather than by pursuing a traditional analysis of the work, such as a Schenkerian or a paradigmatic music analysis. To me, a work such as “IKAS”, in particularly since it is more timbre- than pitch-based and uses a non-traditional form of notation, requires not only a different conceptual approach, but also a different performance vocabulary. By turning towards something like the concept of Deleuze’s machine, one is able to gain a conceptually different understanding of what can be said about the work's meanings and methods of performance. "IKAS" is, in any case, an unusual work.

As discussed in Chapter III, a performer's engagement with her instrument is often marked by the idea of extension. One thinks of the performer, the voice and the instrument as existing as a dynamic whole, where the instrument is understood as an extension of the body. When a saxophonist produces a certain note, she thinks of the air that has been breathed in as building or emanating from 'below'. The diaphragm is the 'starting place', which pushes the air upwards into the lungs. The air then gets pushed from the lungs through the vocal tract into the mouthpiece of the instrument. For this passage from vocal cavity to instrument to be successful in the production of the desired sound, the vocal cavity, which includes various parts, such as the larynx, the uvula, the soft and hard palate, as well as throat, tongue, teeth and lips, has to be shaped to match the specifics of the instrument (the reed on the mouthpiece, the size of the instrument's neck and bell for example). Once this has taken place, the sound can become voiced, so to speak.

In that way, when sounding a note on an instrument the performer thinks of the voice, or the shaping of the sound, as preceding the instrument. It is an essential concept to grasp for playing an instrument that produces sounds with the aid of the human breath. Indeed, the beginner instrumentalist is constantly reminded to 'open and relax her throat', in order for air to freely travel *from* the body *into* the instrument; a continuous flow of air *from* the body that becomes transferred *to* the instrument is wished for[112].

Through this type of visualisation, the performer is exposing her voice that eventually becomes voiced through the instrument, as coming from inside her body and going into an exterior space, one that extends beyond her body. The voice becomes an "extended reach", similarly seen in the newborn baby whose voice is a way of reaching the carer's attention. The infant reaches out by means of its cry, so Connor suggests (2005). Already Marshall McLuhan stated that the voice is one of the principal 'extensions' of man (1964). Thus, one thinks of the instrument as an extension, the object with which one makes sounds.

4.2.1. The Workings of a Machine

For performing a work such as "IKAS", this idea of the instrument as an add-on, of the instrument as going out from the body performed into the instrumental prosthesis, has to be re-thought.

"IKAS" exposes the voice not as the predecessor of the sounds, but as a disturbance to the instrument and to the performer's body. To argue this proposition I want to think of the performer-voice-instrument "continuum" as a specific technology, what one could call a Deleuze-ian machine. I propose a Deleuze-ian approach to the workings of a machine to understand the intricate relationship of voice, performer and instrument in a different light.

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[112] I have questioned the formula "from-to"; the idea of the instrument as extension in a separate paper (Schroeder 2005).

Deleuze and Guattari (D&G) suggest that machines are real and that they are everywhere. According to them, one machine drives another machine, while machines are also being driven by machines. What is more important is the fact that every machine is coupled and connected to another machine (D&G 1984, p.1). For example, the breast is a machine that produces milk, while the mouth is a sucking machine that is coupled to it. There is, however, more to the workings of machines: their networks can be defined in terms of interruptions or breaks (*coupures*), which means that every machine is related to a flow, and,

> "every machine functions as a break in the flow in relation to the machine to which it is connected, but at the same time it is also a flow itself, or the production of a flow, in relation to the machine connected to it" (D&G 1984, p.36).

For the performer/instrument relation this means that the voice can be theorised as a machine. The performer is a machine, and the instrument is a machine, and all are connected through flows and breaks in the flow. "Everywhere there are breaks-flows", D&G suggest (1984, p.37). Indeed, the breaking-down of the machine constitutes an integral part of the machine's functioning. It is the interruption that "conditions this continuity: it presupposes or defines what it cuts into as an ideal continuity" (D&G 1984, p.36). Just as the mouth cuts off the milk and the flow of air, the penis interrupts the flow of urine as well as the flow of sperm, we are told (D&G 1984, p.36).

I believe that this 'machinic' view becomes essential in approaching the work "IKAS". What happens if one thinks of the voice as cutting into the instrumental space, rather than as shaping itself in harmonious accordance with the instrumental prosthesis? This occurs in a similar way with the mouth and breast machines: the mouth not only sucks the milk out of the breast, but it also *cuts off* the milk *from* the breast. What if the voice is thought of as interfering with, or distorting the instrument? When the voice cuts into the instrument, it distorts not only the flow of air that produces a sound, but it also cuts into the flow of one's voicing oneself. The voice that gives rise to one's being, to the voicing of oneself, cuts back at the performer, and also turns back upon itself as some kind of feedback. This sort of interference of the voice into the instrument can be found throughout the entire work of "IKAS".

For example, the performer is asked to voice the consonants of "t" and "z" in combination with an (any) instrumental sound (see Figure 23). Looking at this more closely, it seems an almost impossible endeavour, as those consonants affect a rather harsh closure of the throat, hindering the air from traveling through to the instrument. It becomes physically impossible and conceptually startling to produce an instrumental sound with those consonants. The "t" and "z" interfere with the shaping of one's vocal cavity. How is one meant to play this? A similar gesture occurs just before the "t/z" consonant gesture. A "w" which has a "u" added in brackets underneath is supposed to be produced. Similarly, the consonant "w" restricts the airflow in the throat, making it hard for air to pass through (see Figure 23)

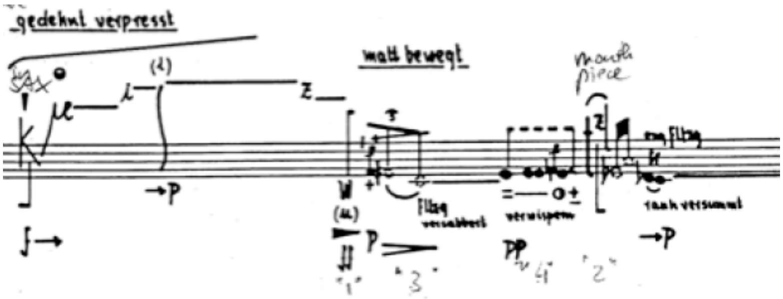

FIGURE 23: IKAS, LINE 2, H.J. HESPOS

I refer to these gestures as 'consonant interferences' of the instrumental sound in the machinic workings of "IKAS". They constitute one type of fragment in the work. Another type of fragment that effects breaks in the workings of the performer-voice-instrument-machine occurs when a stable sound, such as the sustained multiphonic sound (in itself already a rather unstable sound in terms of air column vibration!) becomes interrupted by a "Flutterzunge" (a flutter of the tongue) that somehow seems to cut into the latter's sonic stability (see Figure 24).

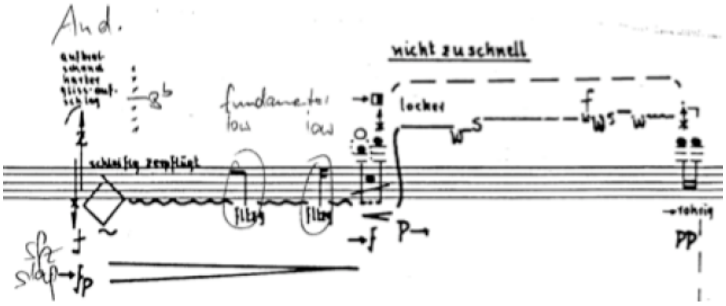

FIGURE 24: IKAS, LINE 3, H.J. HESPOS

Consider the high "f" in Figure 24 for example. It is held quietly, while at the same time it becomes 'disturbed' by the consonants "w" and "ws": as above gestures, these "w" or "ws" gestures are far from physically possible. The added marking of “locker” (light or loose) seems to deepen this paradox (see Figure 24).

In a similar way of cutting off sustained elements, Hespos indicates the cutting off of a sustained “e” by the consonants “t/k” (see Figure 25).

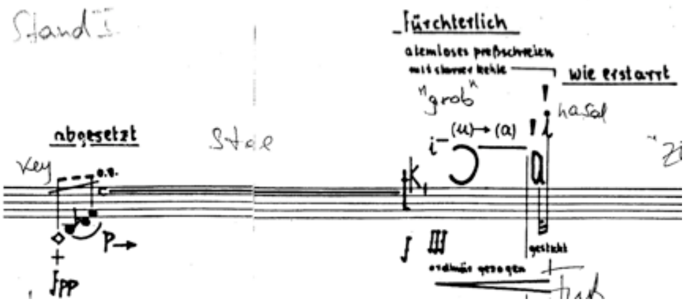

FIGURE 25: IKAS, LINE 3, H.J. HESPOS

This interruption is then followed by a series of vowels. (Note that this is the first and only time in the work that vowels are used!) The series of vowels constitutes a kind of primordial, violent, breathless (“atemlos”), loud scream (“fff” is the marking!). Hespos marks “fürchterlich” (horrible or fearsome), and “mit starrer Kehle” (with rigid throat). This in itself makes for another paradox, as for the first and only time in the work in which vowels are used the performer is *not* asked to open up, to be free and loose, but rather is asked to close off her throat. At the only moment where the performer would physically be able to open her throat (“u” and “a” are in general produced with an open throat); at a moment where she would be able to let the sound come out freely, she is asked to voice herself as rigid and tense. This scream constitutes the climax of the work, even if it is rigid and tense.

A third type of fragment in “IKAS” is the performance of vocal sounds *away* from the instrument. Whereas the other two fragments, the consonants that interfere with the shaping of the vocal apparatus, and the consonants that are employed to cut off musical gestures, are used in combination *with* the instrument, the third layer consists of sounds to be made *away* from the instrument. One sees this exemplified in the climactic primordial scream just mentioned, and also in example 3.1, in which the consonants “z” and “t” are produced away from the instrument (see Figure 26).

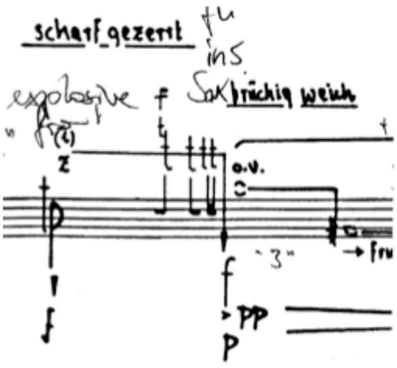

FIGURE 26: IKAS, END OF LINE 3, H.J. HESPOS

Without going into a more detailed analysis of the work, what can be said in general is that the work has a slightly schizophrenic nature. Throughout the performance of “IKAS” both performer and listener are constantly ‘on edge’: musical fragments are never maintained, sustained notes always become interrupted, or interfered into.

A Deleuze-ian reading exposes such interruptions not as negative, however, but as something productive:

> “the breaks in the process are productive, and are reassemblies in and of themselves. Disjunctions, by the very fact that they are disjunctive, are inclusive” (D&G 1984, p.42).

Indeed, interruptions are not to be understood as the opposite of continuity; interruptions condition continuity, as pointed out above. In approaching a work such as “IKAS”, the implication is that, rather than thinking of the voice-machine as extending *into* the instrument-machine, one needs to think of the voice-machine as cutting *off* the instrument-machine, just as Deleuze tells us that the anus cuts off the flow of shit.

For the performer this entails that, rather than thinking of the air as it comes from the diaphragm, proceeds to the lungs and then to the vocal cavity where a consonant such as “w” is produced, she needs to think of the threshold that marks the space between the mouth/lips and the saxophone reed. The performer needs to consider how the sound of a “w” can make a sound *with* the instrument, rather than thinking of the “w” as the sound that comes from inside and goes through the instrument. This space, the ‘in-between’, then becomes of major concern. It is this space, gap or junction between the machines, the part where the machines connect, to which one’s focus should be directed. In fact, it is this space where the breaks most commonly occur, or where at least they become visualisable. It is here, at the intersection of the two machines, when the mouth cuts off the milk, that one “sees” the milk dripping out of the mouth.

These “inter-ruptions” in Hespos’ work imply a variety of things. In particular if bearing in mind the etymology of “interruption” not only as “to break” or “to break into”, but also as to “gape apart”[113], “IKAS” not only widens expectations but also stretches notes, as well as the physically possible. Further, the work constantly pushes to their limit the performer’s abilities, in particular with a view to her physical and conceptual engagement with the work. In this way, “IKAS” can be seen to widen the performer’s understanding of her own body, and of her instrument, as well as of their respective connections or dis-connections.

4.2.2. A Paradoxical Resting Closure

Right at the end of the work, the cutting off of the flows seems to come to a rest (see Figure 27). The machines wind down, as a trill starting from very quiet (“pp”) diminuendo-ing into even less, into nothing, suggests. The marking reads “rauschig verblasen”, a rather un-Hespos-ian gesture? No interruption, just a pure fade-out to silence?

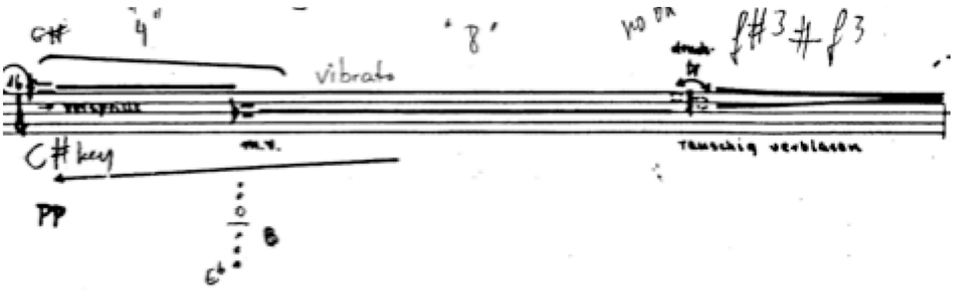

FIGURE 27: IKAS, RESTING CLOSURE, H.J. HESPOS

However, it is not quite that simple. One must only examine the indicated markings more closely to discover another of Hespos’ paradoxes; a tongue-in-cheek gesture maybe? The marking “verblasen” uses the German prefix “ver-“, indicating “mis” or “wrong”, as in the words “ver-kehrt” (wrong), “ver-ändert” (changed), or “ver-kommen” (degenerated). In “verblasen” the idea of “mis-blowing” is implied - something most performers are not accustomed to doing, or often do not know how to do. So, even in an apparent resting moment, in which the sound for once seems to fade away uninterruptedly, the notion of mis-, of interruption, of interference is implied.

“IKAS”, then, is a schizoid work par excellence; a work that continuously reminds one of the schizophrenic at work, in particular of the voice as disturbance in itself. The performer is made to see the voice not simply as an “emission of the body”; but, as Connor suggests, as a

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[113] (Dictionary 1960).

"straining of air". The voice is a "striving, and a disturbance", one that "subjects the world to strain" (Connor 2005).

Thus, to me "IKAS" is a work that,

> "brings about transverse communication, transfinite summarization, polyvocal and transcursive inscriptions on its own surface, on which the functional breaks of partial objects are continually intersected by breaks in the signifying chain, and by breaks effected by a subject that uses them as reference points in order to locate itself" (D&G 1984, p.43).

"IKAS" exposes the breaks in the workings of the performer-voice-instrument machine, and by laying bare those workings demands a re-orientation on the part of the performer towards searching for conceptual ways of playing that may not be readily at hand.

4.2.3. The Body Performed Summarised

I examined the body performed by looking at ways of preparing for the performance of the work by Hans Joachim Hespos entitled "IKAS". To approach this work, I suggested one turn towards Deleuze's idea of the workings of a machine and of the machine's relation to flows and breaks in the flow. This metaphor led me to examine the particular threshold between the performer's body, more specifically her mouth, and the instrument. I showed that it is this space, the 'in-between', or the junction between the machines, that should become the performer's major focus, as this gap, or the intersection of the two machines, exposes the breaks in the machines most clearly.

5.1. CONCLUSION

In this section, I want to draw together the motivations and stimuli that led to this thesis and indicate possibilities for further work.

This thesis is constituted by the specific commitments of a practising performer. I believe that a performer's main concern is always a deep and sincere dedication to a certain cause, such as playing a score, improvising, interacting with new technologies, or thinking about performative actions. There are evidently many forms this dedication can take, and this thesis has demonstrated a commitment to thinking in diverse ways about performance that were inspired and/or triggered by the writings of various thinkers. By employing specific theoretical frameworks, I am able to reflect critically on performance contexts and practices of the last 20 years in a manner that provides insights into different ways of thinking about performance. This critical approach in turn informs my own perspectives, and therefore allows me to propose various combinations of interpretive stances. I want to provoke enquiries about the meanings and practices of performances by turning towards writings that do not explicitly deal with performance issues, in order to apply ways of thinking that are derived from other disciplines. I believe that by turning towards this type of literature and these systems of thought I am able to bring about cross-perspectival insights and engender a potential for creative energy, perhaps to encourage a rhizomatic practice of thinking and ultimately a better understanding of performative practice.

This thesis does not attempt to construct or recreate a philosophical discourse. My writing and thinking are grounded in my practice as a performer, and the theories of embodiment that I draw on allow me to posit performance as a mode of thinking while at the same time furnishing me with an interdisciplinary vocabulary for conceptualising the body in specific performance environments. I have chosen very particular writers, since they not only generate specific ideas that I explore in the individual chapters, but there are also significant intertextual connections between them: Deleuze builds on Artaud, Merleau-Ponty recalls Bergson, and Deleuze turns towards Bergson, while also being very close to Heidegger; closer "than is usually believed and than he [Deleuze] no doubt believed himself to be", so Badiou suggests (2000, p.20). Martin Heidegger features in my work specifically because he is an often-critiqued thinker and I see potential in addressing his work from a performative point of view. Steven Connor plays a role in my work due to his writings on the body, the skin, and the voice. Thus, while the choice is personal rather than schematic, it is not in any way arbitrary.

One can thus say that I have endeavoured to open up trajectories for the performance discourse that would allow one to think about performance in different ways. These different trajectories align with Deleuze and Guattari's concept of a 'map', a concept that stands in contrast to a 'tracing'. Whereas the map "fosters connections between fields" (1988, p.12), a tracing creates redundancies. Deleuze and Guattari argued that, for example, psychoanalysis made tracings of the unconscious and linguistics made tracings of language (1988, p.13). Thus, this thesis offers a performative *map*, a rhizomatic structure, which is,

> "open and connectable in all of its dimensions; […] detachable, reversible, susceptible to constant modification. [A map] 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" (1988, p.12).

This thesis does not set out to define the act of performance in one way or another and abstains from presenting a unique critical perspective. Rather, it explores different creative possibilities and intends to make the reader, and myself, look at the body and at performance environments in a "sideways" fashion, in unusual and perhaps unconventional ways. Such different ways of looking at things not only shape our experience but also always open up new aspects of phenomena that otherwise would be hidden. I set out to question conventional frameworks and ways of thinking about performance, and intended to open up ways that I feel are still under-explored in the majority of current music and performance texts. Therefore, rather than describing technical and/or practical aspects of a particular performance, I have engaged in a rigorous examination of particulars rather than generalities of performance. The works of writers, such as Heidegger, Bergson, or Deleuze & Guattari, serve as a tangent with which I intersect my knowledge of performance. The interstitial space between these two lines of thinking is thoroughly investigated with an understanding that such theory is still distanced from the embodied knowledge that a practicing performer holds. In bringing together thoughts on the body and liminality that provide an integral bearing on performance, and by focussing on notions of difference and hybrid conditions, a different type of thinking practice can emerge that I see as being most conducive to theorising performative action.

This thesis clearly has touched upon quite a few areas, but it has only commenced outlining possible ways for a more detailed investigation into the application of theories of embodiment to the performance discourse. I believe that this thesis has shown that it is valuable to think of a performance in terms of a machine for example, or to think of technological applications in performance environments in terms of the hermeneutical theories as proposed by Gadamer or Heidegger, or to reconsider one's performance activities as liminal acts, as things that thrive on boundary conditions. These ways of thinking constitute a lever with which to push forward the discourse of performance practice and performance theory.

This thesis not only serves to position my own performance work, but it also provides a step towards opening up a new territory in performance discourse, and will hopefully stimulate further investigation in the area of performance theory. I believe the practice and theory of performance can benefit from systems of thought provided by writers that offer wide cultural, social and philosophical perspectives.

I see the type of rhizomatic inquiry pursued in this thesis as a platform for future theoretical and practice-led research in performance. This type of inquiry renders systems of thought open to modification, reversal, adaptation, tearing, reworking, and ultimately aids in questioning conventional ways of thinking. Possible avenues exist in exploring different writers' thoughts and in testing how their ways of thinking could be applied to other modes and ways of performing. It would be valuable to see how others who are concerned with performance pursue such paths, and I would like to see ideas of more contemporary philosophers and thinkers such as Bernard Stiegler or Alain Badiou tested in this way. In particular, the ideas of the thinkers discussed above and the various corporeal metaphors that I have considered have impacted immensely on my ways of thinking about my own performance work. The writings discussed in this thesis have not only helped to alter my own views on performance on a more general level, but also have shaped my thinking about sounds, about listening attitudes, about the body, about instruments and instrumental bodies, and about design aesthetics, amongst many other matters. Finally, they have fashioned my ways of being a performer, while most certainly preparing a labyrinth into which to venture further. As Foucault puts it, it is a labyrinth,

> "in which I can move my discourse, opening up underground passages, forcing it to go far from itself, finding overhangs that reduce and deform its itinerary, in which I can lose myself and appear at last to eyes that I will never have to meet again" (Foucault 1972, Introduction).

REFERENCES

ABRAMOVIC, MARINA and ULAY, *biography* [Homepage of Medien Kunst Netz], [Online]. Available: Abramovic, Marina; Ulay [December, 2005].

ADORNO, T., 1977. *Music and Technique*. *Telos,* 32, pp. 79-94.

ADVOCATE HEALTH, 2005-last update, *AV nodal Re-entrant tachycardia* [Homepage of Advocate Health Care], [Online]. Available: www.advocatehealth.com/system/info/library/articles/heartcare/common/avnodal.html [November, 2005].

AGAWU, KOFI, 1996. *Analyzing music under the new musicological regime*. http://societymusictheory.org/mto/issues/mto.96.2.4/mto.96.2.4.agawu.html#Beginning edn. [November, 2005].

AHRC 2005-last update. *Research Review Specification - Practice-led Research in Art, Architecture and Design.* Available: www.ahrc.ac.uk [July 2006].

ANZIEU, D., 1991. *Das Haut-Ich*. Frankfurt am Main: Suhrkamp Verlag.

ARCHER, P., 2004. *Intervention and Appropriation: studies in the aesthetics of the homemade in real-time electroacoustic composition*. PhD Thesis. Norwich: University of East Anglia.

ARCOS, J.L., LOPEZ DE MANTARAS, R., AND SERRA, X., 1997. *SaxEx: A case-based reasoning system for generating expressive musical performances*, *Proceedings of the International Computer Music Conference ICMC,* 1997, International Computer Music Association, Thessaloniki.

ARIADA, *Advanced research in aesthetics in the digital arts* [Homepage of Electroacoustic Studio of the University of East Anglia, Norwich], [Online]. Available: www.ariada.uea.ac.uk [December, 2005].

ARTAUD, A., 1977. *The body is the body*. *Semiotext(e) / Anti-Oedipus,* 2(3), pp. 59.

ARTAUD, A., 1976a. *Theatre of Cruelty*. In: SUSAN SONTAG, ed, *Selected Writings, Oeuvres completes*. New York: Farrar, Straus and Giroux.

ARTAUD, A., 1976b. *To Have Done With The Judgement of God*. In: SUSAN SONTAG, ed, *Selected Writings, Oeuvres completes*. New York: Farrar, Straus and Giroux.

ARTAUD, A., 1958. *The Theater and Its Double*. New York: Grove Press.

ARTAUD, A., 1947. T*o Have Done with the Judgment of God, a radio play*. In: S. SONTAG, ed, *Selected writing*. 1988 edn. Berkeley: University of California Press, pp. 570-571.

ASCOTT, R., 2003. *Telematic Embrace - Visionary Theories of Art, Technology, an*d Consciousness. US: University of California Press.

ATTALI, J., 1985. *Noise: The Political Economy of Mus*ic. Minneapolis: University of Minnesota Press.

ATZORI, PAOLO AND WOOLFORD, KIRK. *Extended-body: interview with stelarc* [Homepage of Academy of Media Arts], [Online]. Available: www.stanford.edu/dept/HPS/stelarc/a29-extended_body.html [July, 2005].

AUSLANDER, P., 1999. *Liveness: Performance in a Mediatized Culture*. London, New York: Routledge.

AUSLANDER, P, ed., 2003. *Performance: Critical Concepts*. Routledge.

AUSTIN, J. L., 1962. *How to do things with Words*, Cambridge, Mass.: Harvard University Press.

BADIOU, A., 2000. *Deleuze: The Clamor of Being,* trans. Louise Burchill. University of Minnesota Press.

BARBER, S., 1999. *The screaming body*. Creation Books Publication.

BARDEN, G., 1999. *Method in Philosophy*. In: J. MULLARKEY, ed, *The New Bergson*. Manchester University Press, pp. 32.

BARTHES, R., 1985 (1975). *Rasch in Music's Body (Part II of The Responsibility of Forms)*. Berkeley: University of California Press, pp. 299-312.

BARTHES, R., 1977. *Image, Music, Text*. London: Fontana.

BATAILLE, G., 1986. *Eroticism: Death & Sensuality*. San Francisco: City Lights Books.

BAUDRILLARD, J., 1995. *Plastic Surgery for the Other*. www.ctheory.net edn. Victoria, BC, Canada: University of Victoria.

BECKER, B., 2003. *Marking and crossing borders: bodies, touch and contact in cyberspace* http://people.brunel.ac.uk/bst/home.htm edn. UK: Department of Performing Arts/Brunel University.

BENCH, H., 2004. *Virtual Embodiment and the Materiality of Images* www.wac.ucla.edu/extensionsjournal/index.htm edn. US: UCLA Dance and New Media Project.

BENJAMIN, W., 1935. *The Work of Art in the Age of Mechanical Reproduction. Zeitschrift für Sozialforschung (originally).*

BENSON, B.E., 2003. *The Improvisation of Musical Dialogue*: *A Phenomenology of Music*. Cambridge University Press.

BERGSON, H., 1911. *Creative Evolution*. New York: Henry Holt and Company.

BERGSON, H., 1896/1991. *Matter and Memory*. 7th edn. New York: Zone Books.

BIRRINGER, J., 2001. *Suite Fantastique: Architecture and the Digital*. www.location1.org/ossa/birringer_suite_fant2.html: Location One.

BOAL, A., 1995. *The Rainbow of Desire. The Boal method of Theatre and Therapy*. New York: Routledge.

BOHMAN, J., 2005-last update. *Critical Theory*. [Homepage of The Stanford Encyclopedia of Philosophy], [Online]. Available: http://plato.stanford.edu/archives/spr2005/entries/critical-theory [June, 2006].

BOWERS, J. and ARCHER, P., 2005. *Not Hyper, Not Meta, Not Cyber but infra-Instruments*, *Proceedings of the 2005 International Conference on New Music Interfaces for Musical Expression,* 26-28 May 2005, NIME05.

BOWERS, J., 2003-last update, *Improvising machines: ethnographically informed design for improvised electro-acoustic music* [Homepage of ARiADA], [Online]. Available: www.ariada.uea.ac.uk. [February, 2005].

BRENTANO, F., 1874/1995. *Psychology From an Empirical Standpoint*. 2nd edn. London: Routledge.

BROADHURST, S., 2000. *Liminal Aesthetics;* http://people.brunel.ac.uk/bst/home.htm edn. UK: Department of Performing Arts/Brunel University.

CADOZ, C. and WANDERLEY, M., 2001. *Gesture-Music. In Trends in Gestural Control of Music*. Paris, France: IRCAM.

CAMURRI, A. ET AL., 1997. *Towards Kansei Information Processing in music/dance interactive multimodal environments*, CAMURRI A. (ED.), ed. In: *Proceedings of the Intl. Workshop on Kansei - the Technology of Emotion,* 1997, DIST-University of Genova, Italy.

CAMURRI, A., COGLIO, A., COLETTA, P. and MASSUCCO, C., 1997. *An Architecture for Multimodal Environment Agents Proceedings of the AIMI Intl. Workshop on Kansei – The Technology of Emo,* 1997, DIST-Univ. of Genova.

CAMURRI, A., HASHIMOTO, S., SUZUKI, K. and AND TROCCA, R., 1999. *KANSEI analysis of dance performance Proceedings of the 1999 IEEE International Conference on Systems Man and Cybernetics SMC'99,* 1999, Tokyo, New York: IEEE Computer Society Press.

CARIOU, M., 1999. *Bergson: the keyboards of forgetting*. In: J. MULLARKEY, ed, *The New Bergson*. Manchester University Press, pp. 99.

CARVIN, A. and CARVIN, S., *Bali's kecak dance* [Homepage of Andy Carvin; Susanne Carvin], [Online]. Available: http://www.edwebproject.org/bali/gallery/kecak.html [December, 2005].

CHANNEL 4, a, *David Blaine above the below* [Homepage of Channel 4], [Online]. Available: http://www.channel4.com/entertainment/tv/microsites/D/david_blaine/thebox.html [December, 2005].

CHANNEL 4, b, *David Blaine above the below* [Homepage of Channel 4], [Online]. Available: http://www.channel4.com/entertainment/tv/microsites/D/david_blaine/danger.html [December, 2005].

CLIFTON, T., 1983. *Music as Heard: A Study in Applied Phenomenology*. New Haven: Yale University Press.

COHEN, R.A., 1999. *Philo, Spinoza, Bergson: the rise of an ecological age*. In: J. MULLARKEY, ed, *The New Bergson*. Manchester University Press, pp. 18.

COLLINS, N. and OLOFSSON, F., *Klipp AV*. Available: www.klippav.org [November, 2005].

COLLINS, N., *Hardware hacking* [Homepage of i10], [Online]. Available: www.i10.org.uk/POOLED/articles/bf_newsart/view.asp?Q=bf_newsart_136009 [June, 2005].

CONNOR, S., 2005. *The strains of the voice*. (English text of an essay written to accompany the exhibition phonorama: eine Kulturgeschichte der Stimme als Medium, curated by Brigitte Felderer at the Zentrum für Kunst und Medientechnologie, Karlsruhe, 18 September 2004 - 30 January 2005). Available: www.bbk.ac.uk/english/skc/strains/ [February, 2005].

CONNOR, S., 2004a. *The Book of Ski*n. New York: Cornell University Press.

CONNOR, S., 2004b. *Topologies: Michel Serres and the Shapes of Thought*. Anglistik, (15), pp. 105.

CONNOR, S., 2003-last update, *Ears have walls: on hearing art*. (talk given in the series bodily knowledges: challenging ocularcentricity at tate modern). Available: www.bbk.ac.uk/english/skc/earshavewalls [February, 2005].

CONNOR, S., 2000. *Dumbstruck: A cultural history of ventriloquism,* Oxford ; New York: Oxford University Press.

CONNOR, S., 1999-last update, *Michel Serres's five senses*. (paper originally held at Birkbeck College, 1999). Available: www.bbk.ac.uk/english/skc/5senses.htm [March, 2005].

CONTACTMUSIC 2003. *Blaine: above the below, 2003*. Available: www.contactmusic.com/new/xmlfeed.nsf/mndwebpages/blaine.s%20security%20tightened [September, 2005].

COOK, P.R., 2001. *Principles for Designing Computer Music Controllers*, *NIME2001,* April 2001.

COYNE, R., 2005. *Cornucopia Limited: Design and Dissent on the Internet*. MIT Press.

CRICHTON, M., 2002. *Prey*. HarperCollins.

D'ESCRIVAN, J., 2006. *To sing the body electric: instruments and effort in the performance of electronic music*. Contemporary Music Review, Volume 25:1/2, pp. 183-191, Routledge.

DAMASIO, A., 2003. *Looking for Spinoza, Joy, Sorrow and the Feeling Brain*. London: William Heinemann.

DAVID B., 2005-last update, *Magic around the world* [Homepage of MagicDirectory.com], [Online]. Available: www.davidblaine.cjb.net [December, 2005].

DAVIDSON, J.W., 2002. *Understanding the expressive movements of a solo pianist. Musikpsychologie,* 16, pp. 9-31.

DAVIDSON, J.W., 2001. *The role of the body in the production and perception of solo vocal performance: A case study of Annie Lennox. Musicaie Scientiae,* 2, pp. 235-256.

DE LA CROIX DE LAFAYETTE, M., *History of the cabaret, the very beginning*. Available: www.worldartcelebritiesjournal11.netfirms.com/history_of_the_cabaret.htm [December, 2005].

DELAHUNT, M., 2005-last update, *ArtLEx art dictionary*. Available: www.artlex.com [December, 2005].

DELANDA, M., 1992. *Nonorganic Life*. In: JONATHAN CRARY and SANFORD KWINTER, eds, *Zone 6: Incorporations*. New York: Urzone, pp. 129-167.

DELEUZE, G., 1999. *Bergson's conception of difference*. In: J. MULLARKEY, ed, *The New Bergson*. Manchester University Press, pp. 42.

DELEUZE, G. and GUATTARI, F. 1994. *What is Philosophy?* Trans. G. Burchell and H. Tomlinson. Verso, London.

DELEUZE, G., 1992. *The Fold: Leibniz and the Baroque*. University of Minnesota Press.

DELEUZE, G. and GUATTARI, F. 1988. *A Thousand Plateaus: Capitalism and Schizophrenia*. Minneapolis: University of Minnesota Press.

DELEUZE, G. and GUATTARI, F. 1984. *Anti-Oedipus; Capitalism & Schizophrenia*. Athlone Press.

DENORA, T., 2000. *Music in everyday life*. Cambridge University Press.

DERRIDA, J., 1978. W*riting and Difference*. University of Chicago Press.

DERRIDA, J., 1974. *Of Grammatology*. John Hopkins University Press.

DESCARTES, R., 1986. *Meditations on First Philosophy*. Cambridge: Cambridge University Press.

DESCARTES, R., 1984. *The philosophical writings of Descartes*. Cambridge: Cambridge University Press.

DEWEY, J., 1997. *How We Think*. Dover Publications.

DICTIONARY, 1960. *Chamber's Twentieth Century Dictionary*. Edinburgh: W.&R. Chambers, Ltd.

DIETZ, S., 2005-last update, *Electroland's "Enteractive"* [Homepage of Medien Kunst Netz], [Online]. Available: www.medienkunstnetz.de/works/enteractive [December, 2005].

DIPASQUALE, S., 2001. *The Liveness of the Live: Musical Performance in the age of Technicity*, 2001, University of British Columbia.

DREXLER, K.E., 1986. *Engines of Creation: The Coming Era of Nanotechnology*. Anchor Books.

DUNCAN, M., 2000-last update, *Gunter Brus & Hermann Nitsch at white box - Art in America* [Homepage of Brant Publications, Inc. and Gale Group], [Online]. Available: www.findarticles.com/cf_dls/m1248/9_88/65069546/p1/article.jhtml [February, 2005].

EBERT, R., 1997-last update, *Sick: the life & death of bob Flanagan, supermasochist* [Homepage of rogerebert.com], [Online]. Available: http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19971205/REVIEWS/712050301/1023 [December, 2005].

EFRON, D., 1941. *Gesture, Race and Culture*. 1972 edition edn. Hague, Paris: Mouton.

EKMAN, P. and FRIESEN, W., 1969. *The repertoire of nonverbal behaviors: Categories, origins, usage and coding*. *Semiotica,* **1**, pp. 49-98.

EMMERSON, S., 2000. *Music, electronic media, and culture;* Aldershot: Ashgate.

FEENBERG, A., 1996-last update, *Heidegger, Habermas, and the essence of technology* (Sept. 2005). Available: www-rohan.sdsu.edu/faculty/feenberg/kyoto.html [September, 2005].

FLYNN, B., 2004-last update, *Maurice Merleau-Ponty* [Homepage of Stanford University], [Online]. Available: http://plato.stanford.edu/archives/sum2004/entries/merleau-ponty [December, 2005].

FORTE, A. and GILBERT, S., 1983. *Introduction to Schenkerian Analysis: Form and Content in Tonal Music*, W.W. Norton & Company Ltd.

FOUCAULT, M., 1995. *Discipline & Punish: The Birth of the Prison*. New York: Vintage Books.

FOUCAULT, M., 1972. *The Archaeology of Knowledge*. Routledge.

FOX, R.G., 1997. *On Throwness*. After Post-Modernism Conference. Available: www.focusing.org/apm_papers/fox.html
[October, 2005].

FREUD, S., 1957. *On Narcissism: An introduction*. Standard edition, XIV. 1914 edn. London: Hogarth.

FREUD, S., 1905/1953. *Three essays on the theory of sexuality*. London: The Hogarth Press.

FRITH, S., 1996. *Performing Rites: Evaluating Popular Music*. Oxford University Press.

GABRIEL, U. and O KANE, B., 1994. *Terrain_01, interactive solar robot installation*. Rotterdam: V2_Institut for the Unstable Media.

GADAMER, H., 1997. *Reflections on my Philosophical Journey*. In: LEWIS EDWIN HAHN, ed, *The Philosophy of Hans*. Chicago: Open Court.

GADAMER, H., 1989. *Truth and Method*. 2nd Revised edition edn. New York: Continuum.

GADAMER, H., 1986. *The Relevance of the Beautiful and other Essays*. New York: Cambridge University Press.

GADAMER, H. and DERRIDA, J., 1989. *Dialogue and Deconstruction: The Gadamer-Derrida Encounter*. Albany: State University of New York.

GERHARDT, S., 2004. *Why Love Matters: How Affection Shapes a Baby's Brain*. Brunner-Routledge.

GODLOVITCH, S., 1998. *Musical Performance*. London: Routledge.

GOFFMAN, E., 1959. *The Presentation of Self in Everyday Life*. New York: Doubleday: Garden City.

GOODMAN, R., 2005-last update, *William James* [Homepage of The Stanford Encyclopedia of Philosophy], [Online]. Available: http://plato.stanford.edu/archives/win2005/entries/james [October, 2005].

GRAVER, D., 2000. *Antonin Artaud and the Authority of Text, Spectacle, and Performance* In: J. HARDING, ed, *Contours of the Theatre*. University of Michigan Press, pp. 43-58.

GRAY, C. 1996. *Inquiry Through Practice: Developing Appropriate Research Strategies*. In: Fibreculture Journal Issue 7, ISSN: 1449 – 1443. Fibreculture Publications, Australia. Available: http://journal.fibreculture.org/issue7/issue7_armstrong.html [July 2006].

GREGORY, A., 2004-last update, *Mind and body in the seventeenth century 1*. Available: www.ucl.ac.uk/sts/gregory/215/handouts/h10_rd.doc [March, 2005].

HARAWAY, D. 1991. *A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century*. in Simians, Cyborgs and Women: The Reinvention of Nature. New York, Routledge. pp.149-181.

HARPER, D., 2001-last update, online etymology dictionary. Available: www.etymonline.com [December, 2005].

HARRINGTON, A., 2000-last update, *The interdisciplinary advantage: what's different about our approach to trance*. Available: http://mbb.harvard.edu [January, 2005].

HAYLES, K., 1999. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press.

HEGEL, G.W.F., 1812/1989. *Science of Logi*c. Prometheus Books.

HEIDEGGER, M., 1953. *The Question Concerning Technology*. In: *Basic Writings*. Routledge, London.

HEIDEGGER, M., 1993. *Basic Writings*. Routledge, London.

HEIDEGGER, M., 1985. *History of the Concept of Time: Prolegomena*. Bloomington: Indiana University Press.

HEIDEGGER, M., 1962. *Being and Time*. Oxford: Blackwell Publishers Ltd.

HORKHEIMER, M. and ADORNO, T., 1997. *Dialectic of Enlightenment*. London: Verso.

HOROWITZ, N.H., 2005-last update, *Roger Wolcott Sperry* [Homepage of The Nobel Foundation], [Online]. Available: http://nobelprize.org/medicine/articles/sperry [December, 2005].

HUIZINGA, J., 1950. *Homo Ludens. A Study of the Play Element in Culture*. Beacon edition.

HUNT, A. and KIRK, R. 2001. *Mapping Strategies for Musical Performance* in: Trends in Gestural Control of Music. Paris, France: IRCAM.

HUXLEY, A., 1994. *Heaven and Hell.* London: Flamingo.

HYDE, L., 1998. *Trickster makes this world: Mischief, Myth and Art.* New York: North Point Press.

IAZZETTA, F., 2001. *Meaning in Music Gesture* in: Trends in Gestural Control of Music. Paris, France: IRCAM.

IGLHAUT, S., I*f we knew what it was we were doing, it would not be called research, would it?* . Available: www.scienceandfiction.de/en/04/pdf/010_Som_Mign_interview.pdf [February, 2005].

INSTITUTE FOR RESEARCH/CREATION IN MEDIA ARTS AND TECHNOLOGIES, interactive textile research, Montreal/Canada. Available: www.hexagram.org [December, 2005].

IRIGARAY, L., 2004. *Key Writings.* London, New York: Continuum.

IRIGARAY, L., 1999. *The Forgetting of Air in Martin Heidegger.* University of Texas Press.

JACOB, P., Fall 2003-last update, *Intentionality* [Homepage of The Stanford Encyclopedia of Philosophy], [Online]. Available: http://plato.stanford.edu/archives/fall2003/entries/intentionality [November, 2005].

JAMES, W., 1884. *What is an Emotion? Mind,* 9, pp. 188-205.

JAMES, W., 1907/1979. *Pragmatism.* Cambridge, MA: Harvard University Press.

JAMESON, F., 2000. *Brecht and Method.* Verso.

JARRY, A., 1902. *Barnum. Revue Blanche 206,* 8, pp. 47-49.

JOHNSON, R., 2003-last update, *EEG brain cap detects musical creativity* [Homepage of EE Times], [Online]. Available: www.techweb.com/wire/story/TWB20031023S0004 [April, 2005].

JOY, B., 2000. *Why the future doesn't need us. Our most powerful 21st-century technologies - robotics, genetic engineering, and nanotech - are threatening to make humans an endangered species. Wired Magazine,* 8(04),

KAHN, D., 1999. *Noise Water Meat.* MIT Press, Cambridge, MA.

KANTOR, I., a, *Istvan Kantor home page*. Available www.istvankantor.com [December, 2005].

KANTOR, I., b, *Machine sex action group (MSAG)*. Available: www.machinesexactiongroup.com [December, 2005].

KANTOR, I., c, *Machine sex action group: 010100 - the great robotic machinery rebellion*. Available: www.machinesexactiongroup.com/current.html [November, 2005].

KASAI, T., 2000-last update, *A note on butoh body*. Available: www.ne.jp/asahi/butoh/itto/kasait/kasait.htm [October, 2005].

KASAI, T. and PARSONS, K., 2003-last update, *Perception in Butoh dance*. Available: www.ne.jp/asahi/butoh/itto/kasait/kasait.htm [October, 2005].

KELLY, T., 1999-last update, I*gor Stravinsky's the rite of spring* [Homepage of National Public Radio/Performance Today Program], [Online]. Available: www.npr.org [February, 2005].

KERMAN, J., 1980. *How We Got Into Analysis and How to Get Out. Critical Inquiry,* **7**(2), pp. 311-331.

KIVY, P., 1995. *Authenticities - Philosophical Reflections on Musical Performance*. New York: Cornell University Press.

KLAGES, M., 2004-last update, *Psychoanalysis and Sigmund Freud: (lecture)*. Available: www.colorado.edu/English/ENGL2012Klages/2004freud.html [July, 2005].

KOHLER E., KEYSERS C., UMILTÀ M.A., FOGASSI L., GALLESE V., RIZZOLATTI G., 2002. *Hearing sounds, understanding actions: action representation in mirror neurons. Science,* 297(5582), pp. 846-48.

KOOLHAAS, R., 2004. *Junk Space*, in Koolhaas "Content: Perverted Architecture", Taschen.

KRAMER, L., 1992. *The Musicology of the Future. Repercussions: Critical and Alternative Viewpoints on Music and Scholarship,* **1**(1), pp. 5-18.

KROKER, A., 2004. *Will to Technology, The Culture of Nihilism*. University of Toronto Press.

KUNIYOSHI, K., 2004. *Dance in Japan: New wave in dance and butoh after the 1990s*, (a background article prepared under the auspices of U.S./Japan Cultural Trade Network for the 2004 U.S. tour of Akira Kasai). *edited by Autumn Patterson.*

KUNIYOSHI, K., 1991. *Butoh in the late 80s. Maandblad over theaterdans en mime,* **6**(11), pp. 11-17.

KURZWEIL, R., 2003-last update, *Human body version 2.0*. Available: www.kurzweilai.net [December, 2004].

KURZWEIL, R., 2000. *The Age of Spiritual Machines: When Computers Exceed Human Intelligence*. Penguin Putnam.

LABAN, R. and LAWRENCE F.C., 1947. *Effort*. 2nd edition edn. London: Macdonald & Evans Ltd.

LAKOFF, G and JOHNSON, M., 1980. *Metaphors We Live By*. The University of Chicago Press.

L A U T, 2004. Available: www.lautnet.net [January, 2006].

LEGO, Lego mindstorms [Homepage of Lego.com], [Online]. Available: http://mindstorms.lego.com/eng/community/games/default.asp [December, 2005].

LEPPERT, R., 1993. T*he Sight of Sound: music representation, and the history of the body*. University of California Press.

LEROI-GOURHAN, A., 1993. *Gesture and Speech*. Cambridge: MIT.

LÉVI-STRAUSS, C., 1969. *The Raw and the Cooked*. New York: Harper&Row.

LIEBERMAN, J.L. and BUTCHART, R., 1995. *You Are Your Instrument: The Definitive Musician's Guide to Practice and Performance*. New York: Huiksi Music.

LIPPE, C., 1997. *Program notes to music for saxophone and computer*. Available: www.music.buffalo.edu/lippe/music4/sax/sax.pdf [July, 2005].

LOPEZ DE MANTARAS, R. and ARCOS, J.L., 2002. *AI and music from composition to expressive performance. American Association for Artificial Intelligence*.

LYOTARD, J., 1997. *Postmodern Fables*. London: University of Minnesota Press.

LYTTLE, T. and MONTAGNE, M., 1992-last update, *Drugs, music, and ideology: a social pharmacological interpretation of the acid house movement*. Available: http://mdma.net/acidhouse/acidhouse.html [December, 2005].

MALLERY, J.C., HURWITZ, R. and DUFFY, G., 1987. *Hermeneutics: From Textual Explication to Computer Understanding?* In: STUART. C. SHAPIRO, ed, *The Encyclopedia of Artificial Intelligence*. New York: John Wiley &Sons.

MALONE, S.A., 2000. *The New Performer. SWITCH new media art journal,* (13),

MARINETTI, F.T., 1909. T*he Founding and Manifesto of Futurism. Le Figaro*, Paris.

MASSUMI, B., 2002. *Parables for the Virtual: Movement, Affect, Sensation*. Durham&London: Duke University Press.

MATTHEWS, E., 1999. *Bergson's concept of a person*. In: J. MULLARKEY, ed, *The New Bergson*. Manchester University Press, pp. 118.

MATTHEWS, K., (1999-2001). *Weather Made*. Collaborative project as part of the Syzygy Project.

MATTHEWS, K., 2003. *cd eb + flo* AWcd0005-6: Annette Works.

MAUSS, M., 2001. *The Gift: The Form and Reason for Exchange in Archaic Societies*. Routledge.

MCCARTHY, J. and WRIGHT, P., 2004. *Technology as Experience*. Cambridge: MIT Press.

MCLUHAN, M., 1964. *Understanding Media: The Extensions of Man*. New York: McGraw Hill.

MCMAHON, M., 2005. *Difference, Repetition*. In: C. J. STIVALE, ed, *Gilles Deleuze: Key concepts*. Montreal: McGill-Queens University Press. pp. 42-51.

MERLEAU-PONTY, M., 1963. *The Structure of Behaviour*. Boston: Beacon Press.

MERLEAU-PONTY, M., 1962/1999. *Phenomenology of Perception*. Routledge Classics.

MEYER, L.B., 1956. *Emotion and Meaning in Music*. Chicago: Chicago University Press.

MEYER, W., 2003. *Interview with Toshimaru Nakamura. Perfect Sound Forever - The online music magazine with warped perspectives*. Available: www.furious.com/perfect/toshimarunakamura.html [January 2006].

MIDORI, 2005. *Wild Side Sex: The Book of Kink: Educational, Sensual, And Entertaining Essays*. Daedalus Publishing.

MIRANDA, E.R., 2003-last update, *Essay in 12 paragraphs: sounds of the brain: Digital music online tutori*als. Available: http://neuromusic.soc.plymouth.ac.uk [June, 2005].

MIRANDA, E.R., SHARMAN, K., KILBORN, K. and DUNCAN, A. *On Harnessing the Electroencephalogram for the Musical Braincap*. Computer Music Journal, 27:2, pp. 80–102, Summer 2003. Massachusetts Institute of Technology.

MONTGOMERY, W., 2003. *Kaffe Matthews. WIRE magazine,* (235),.

MOOS, D., 1996. *Memories of Being: Orlan's Theatre of the Self.* Art + Text 54 edn. pp. 67-72.

MORAN, D. and MOONEY, T., 2002. *The Phenomenology Reader*. Routledge.

MORAVEC, H., 1998. *Robot: Mere Machine to Transcendent Mind.* Oxford University Press, Inc.

MOSS, D., 2000. *A Performer's Lexicon of Synasthesia or (have I got some noodles for you, boys!) Leonardo Electronic Almanac,* 7(12),

MULDER, A. and POST, M., 2000. *Book for the Electronic Arts* De Balie, Amsterdam and V2 Rotterdam.

MUMFORD, L., 1967. *The Myth of the Machin*e. London: M. Secker & Warburg Limited.

MUSEUM FÜR GESTALTUNG ZÜRICH, *Body Extensions, alternate interfaces exhibition* [Homepage of Museum für Gestaltung], [Online]. Available: www.museum-gestaltung.ch [July, 2005].

NARMOUR, E., 1990. *The Analysis and cognition of basic melodic structures: the implication-realization model.* University of Chicago Press.

NECHVATAL, J., 2000. *Towards a soundly ecstatic electronica.*

NEDKOVA, I., 2004. *Designer Bodies: Towards The Posthuman Condition.* Edinburgh: Stills Scottish National Gallery of Modern Art.

ORLAN, 1994. *Intervention-Orlan. Artist's manuscript.*

PATERSON, D. L. and WEINBERG, M., 1996. *An interview with Augusto Boal about the Theatre of the Oppres*sed. *High Performance,* 72(1).

RADIN, P., 1956. *The Trickster: A Study in American Indian Mythology*. New York: Schocken Books.

REBELO, P., SCHROEDER, F. and CARNEIRO, P., 2005. *A-Synk for Percussion, Saxophone, Internet Audio Chat Client and Live-Electronics*. UK.

REBELO, P., 2006. *Haptic Sensation and Instrumental Transgression*. Contemporary Music Review, Volume 25:1/2, pp. 27-35, Routledge.

REBELO, P., MCALLISTER, G., 2005-last update, *Sonic Constructs: robotics and the residue of sound*. Available: www.sarc.qub.ac.uk/~prebelo/sarc/sonicconstructs.pd [May, 2005].

REGIS, E., 1994. *Meet the Extropians*. Wired Magazine, Issue 2.10/October 1994 Available: http://wired-vig.wired.com/wired/archive/2.10/extropians.html [January 2006].

REYNOLDS, J., 2001-last update, *Maurice Merleau-Ponty.* [Homepage of The Internet Encyclopedia of Philosophy], [Online]. Available: www.iep.utm.edu [June, 2005].

RINK, J., ed. 2002. *Musical Performance: A Guide to Understanding*. Cambridge: Cambridge University Press,

ROBBINS, B.D., 1999-last update, *Maurice Merleau-Ponty.* Available: http://mythosandlogos.com/MerleauPonty.html [June, 2005].

ROSAND, E., 1995. *The Musicology of the Present.* http://www.ams-net.org edn.

ROWE, R., 2001. *Machine musicianship.* MIT Press.

SAWDAY, J., 1995. T*he Body Emblazoned: Dissection and the Human Body in Renaissance Culture*. Routledge edn. London and New York.

SCHAEFFER, P., 1971. *A propos des ordinateurs. La Revue Musicale*, trans. Peter Nelson, pp. 214-215. Paris.

SCHECHNER, R., 1988. *Performance Theory*. London/New York: Routledge.

SCHROEDER, F., REBELO, P. and NELSON, P., *Oscillation: work for saxophonist, 3D animation and real-time sound processing controlled by motion capture data*, Proceedings of the AISB 2004 Convention, COST287-ConGAS Symposium on Gesture Interfaces for

Multimedia Systems (GIMS), pp.64-69. In: "The Society for the Study of Artificial Intelligence and the Simulation of Behaviour". ISBN 1 902956 37 4.
Available: www.leeds.ac.uk/aisb/gims [January 2006].

Also published in the 2004 Proceedings of the International Conference on Music and Gesture, University of East Anglia, Norwich, UK.

SCHROEDER, F., 2005. *The Touching of the Touch – performance as itching and scratching a quasi-incestuous object*
http://www.wac.ucla.edu/extensionsjournal/index.html edn. US: UCLA Dance and New Media Project.

SCHROEDER, F., 2004. *The Old and The New and the New Old – a conceptual approach towards performing the changing body*. New Forms Festival, International Festival of Media Arts Vancouver, BC, Canada: www.newformsfestival.com.

Revived version, December 2005 in Hz, Fylkingen's net journal.
Available: www.hz-journal.org [January 2006].

SCIENCE BULLETINS, 2004-last update, *Earth without oxygen* [Homepage of American Museum of Natural History], [Online]. Available:
http://sciencebulletins.amnh.org/earth/f/rise02.20040301/essays/2_1.php [October, 2005].

SEALE, C. (ed), 2004. *Social Research Methods – A Reader*. Routledge, London.

SEARLE, J., 1983. *Intentionality: An Essay in the Philosophy of Mind*. Cambridge University Press.

SENELICK, L., 2000. *Text and Violence: Performance Practices of the Modernist Avant-Garde* . In: J. HARDING, ed, *Contours of the Theatrical Av*. University of Michigan Press, pp. 15-42.

SERRES, M., 1998. *Les Cinq Sens*. Paris: Hachette.

SHAWVER, L., *Greek Dictionary*. Available: www.california.com/~rathbone/greek.htm [September, 2005].

SHELDRAKE, R., 1981. *A New Science of Life: The Hypothesis of Formative Causation*. London/Los Angeles: Blond & Briggs, J.P. Tarcher.

SIEGEL, L.J., 2003. *The Rise of Oxygen. Astrobiology Magazine*. Available:
http://astrobio.net/news/modules.php?op=modload&name=News&file=article&sid=541&mode=thread&order=0&thold=0 [December 2005].

SIEWERT, C., 2003-last update, *Consciousness and intentionality* [Homepage of The Stanford Encyclopedia of Philosophy], [Online]. Available:
http://plato.stanford.edu/archives/fall2003/entries/consciousness-intentionality [March, 2005].

SMALLEY, D., 1992. *The Listening Imagination: Listening in the Electro-acoustic Era*. In: PAYNTER, HOWELL, ORTON and SEYMOUR, eds, *Companion to Contemporary Musical Thought*. London: Routledge, pp. 514-554.

SMALLEY, D., 1986. *Spectro-morphology and structuring processes.* In: S. EMMERSON, ed, *The language of electroacoustic music*. London: Methuen.

SNARRENBERG, R., 1987. *The Play of Differance: Brahms's Intermezzo Op. 118, No. 2. Theory Only,* 10, pp. 1-25.

SOMMERER, C. and MIGNONNEAU, L., 2002. *Nanoscape*. Japan: IAMAS.

SOUTHWELL, G., 2003-last update, PhilosophyOnline [Homepage of Southwell, Gareth], [Online]. Available: www.philosophyonline.co.uk [December, 2005].

SPARACINO F., PENTLAND A. and DAVENPORT G., 1998-last update, *wearable performance* [Homepage of MIT Media Lab], [Online]. Available: http://ic.media.mit.edu/Publications/Conferences/WearablePerformance/HTML [September, 2005].

SPINOZA, B., 2000. *Ethics*. Oxford University Press.

STELARC, 2005a. *Third hand.* Available: www.stelarc.va.com.au/third/third.html [December, 2005].

STELARC, 2005b. *Hexapod.* Available: www.stelarc.va.com.au/hexapod/hexapod1.html [December, 2005].

STENSLIE, S., 1996. *Wiring the flesh: towards the limits and possibilities of the virtual body* [Homepage of Stahl Stenslie], [Online]. Available: www.stenslie.net [November, 2005].

STONE, A.R., 1987-last update, *The empire strikes back: A posttranssexual manifesto*. Available: www.actlab.utexas.edu/~sandy/empire-strikes-back [January, 2006].

STREET, A., 1989. *Superior Myths, Dogmatic Allegories: The Resistance to Musical Unity.* Music Analysis, 8(i-ii), pp. 77-123.

SUDNOW, D., 1978. *Ways of the hand – a rewritten account*. 2001 edn. London/Massachusetts: Cambridge, MIT Press.

SUNDAY TIMES, 2005 (December, 5th). *Pilgrims trek to worship a boy they believe is Buddha*. Raekha Prasad.
Available: www.timesonline.co.uk/newspaper/0,,170-1904708,00.html [January 2006]

TAYLOR, T.L., 2002. *Intentional Bodies: Virtual environments and the designers who shape them.* The International Journal of Engineering Education, pp. 25-34.

THE INDEPENDENT, 2003. *Dangling Man.* The Independent Newspaper, Arts.

THE HACKTIVIST.COM, 2004-last update, *Hacktivism & Technopolitics.* Available: http://thehacktivist.com/hacktivism.php [December, 2005].

THOMPSON, E., 1999. *Empathy and Consciousness.* Talk for the Fetzer Institute, Kalamazoo, MI edn.

TOWSEN, J.H., 1976. *Clowns.* E P Dutton.

TRANSHUMANISM'S EXTROPY INSTITUTE, 2005-last update, Extropy Institute. Available: www.extropy.org [December, 2005].

TSCHUMI, B., 1994. *Architecture and Disjunction.* Cambridge, Mass.: MIT Press.

TURNER, V., 1987. *The Anthropology of Performance*. AJ Publishing Company.

TURNER, V., 1982. *From Ritual to Theatre: The Human Seriousness of Play*. New York: PAJ.

TURNER, V., 1967. *The Forest of Symbols: Aspects of Ndembu Ritual*. Ithaca, NY: Cornell University Press.

VARELA, F., THOMPSON, E. and ROSCH, E., 1991. *The Embodied Mind, Cognitive Science and Human Experience*. Cambridge, MA: The MIT Press.

VINK, A., 2001. *Music and Emotion, Living apart together: a relationship between music psychology and music therapy. Nordic Journal of Music Therapy,* 10(235), pp. 144-158.

WALDENFELS, B., 2000. *Das leibliche Selbst: Vorlesungen zur Phänomenologie des Leibes* . Frankfurt am Main: Suhrkamp Taschenbuch Verlag.

WANDERLEY, M. and BATTIER, M., 2001. *Trends in Gestural Control of Music,* Paris, France: IRCAM.

WARBURTON, D., 2001. *The Sound of Silence: the music and aesthetics of the Wandelweiser Group. SIGNAL to NOISE Magazine.*

WARR, T., 2000. *The Informe* Body http://people.brunel.ac.uk/bst/home.htm edn. UK: Department of Performing Arts/Brunel University.

WARWICK, K. 2002. *I, Cyborg*. Century Publihser, UK.

WARWICK, K. 2005-last update, *Professor Kevin Warwick Homepage*, Available: www.kevinwarwick.com [December 2005].

WEBSTER'S NEW MILLENNIUM™ DICTIONARY OF ENGLISH, 2005-last update [Homepage of Webster's New Millennium™ Dictionary of EnglishLexico Publishing Group, LLC], [Online]. Available: http://dictionary.reference.com/search?q=extropy [December, 2005].

WIKI WEBPAGE, November, 2005-last update, ruccas.org. Available: www.ruccas.org [December, 2005].

WILSON, S., 2002. *Information Arts: Intersections of Art, Science, and Technology.* Cambridge, London: MIT Press.

WINKLER, T., 1998. *Composing interactive music: Techniques and ideas using Max*. MIT Press.

WORMS, F., 1999. *Matter and memory on mind and body: final statements and new perspectives*. In: J. MULLARKEY, ed, *The New Bergson*. Manchester University Press, pp. 88.

WRAY, S., *Electronic Civil Disobedience*. Available: www.thing.net/~rdom/ecd/EDTECD.html [December, 2005].

YALE UNIVERSITY, *The Mandelbrot set and Julia sets* [Homepage of Yale University], [Online]. Available: http://classes.yale.edu/Fractals/MandelSet/MandelDef/MandelDef.html [December, 2005].