

This is the Introduction to my Masters exegesis entitled Performing the Art of Life: Four Projects, which is held at the RMIT University Library.

I have included the Bibliography to the whole exegesis.

My Masters research began with a provocation about the embodied and phenomenal nature of the relation existing between myself, the computer, and the audience, in the digital art making process. It has morphed over the course of two and a half years to emerge as a practice based, theory informed, body of work that explores the potential of the art artifact to fold through, and express: relationships between life and non-life – the matter of life; and to counter the increasing attempt codify and control life at the heart of contemporary politics. Each project that I engage with in my dissertation, enacts, through a productively transdisciplinary process, a different type of intervention into this territory. Prior to embarking on this Masters, the development of my art practice had not occurred along a traditionally proscribed path - it had journeyed through 20th Century *avant garde* and electronic music composition, contemporary performance, and cultural theory. During the period of this research, it has also touched upon the fields of electronics and biology. While there are inevitable tensions in bringing together such divergent perspectives, exploring the gaps and the overlaps between them also opens up new possibilities. The difficulty involved in resolving these tensions is apparent in the projects, but so too is a lively relationship between critical investigation and art.

Like all my projects, this written presentation is also an attempt to navigate the difficult territory of interdisciplinary practice. In fact, this is the most difficult project of all. Here, I must bring together my journeys through various physical and life science laboratories, an architecture laboratory, laneways of the inner city and the bureaucracy of the Melbourne City Council, with conceptual ruminations on political and cultural theory, biology, performance art and interactive video, to name a few. In the act of weaving back through this territory, in and out of disciplinary frameworks a new artifact is produced that is not reducible to the projects themselves. In the process of drawing together this textual fabric, the written thread slips in and out of different modes, negotiating the structure of a discipline, speaking the language of each new experience. I ascribe to a belief in poetry: the way in which something is written is a fundamental part of how it means. In this sense, elements of my narrative could be allied with fictocriticism, defined here by Anna Gibbs:

“Fictocriticism ... does not illustrate an already existing argument, does not simply formulate philosophy (or anything else) in fictional terms. It is not translation or transposition: it says something which can't be said in any other way: because it is not reducible to propositional content. It is, in essence, performative, a meta-discourse in which the strategies of the telling are part of the point of the tale.”(Gibbs)

In other words, the way in which I have approached the writing of this text is no different than the way in which I engaged with the process of constructing my other projects. Everything means in a way that is specific to its particular material instantiation; language and graphic presentation are no exception. By performatively drawing attention to the texture of the language, fictocritical writing foregrounds its own materiality.

In order to understand the way in which these different modes begin to function together as a whole I have drawn upon Gilbert Simondon's concept of individuation. For Simondon, individuation is the process by which any individual comes into being. Simondon states that:

"Individuation must ...be thought of as a partial and relative resolution manifested in a system that contains latent potentials and harbors a certain incompatibility with itself, an incompatibility due at once to forces in tension as well as to the impossibility of interaction between terms of extremely disparate dimensions." (Simondon: p300)

My dissertation is just this, 'a partial and relative resolution'. Each research project represents a domain in which the acts of material investigation and philosophical reflection reciprocally inform each other. The projects are materially dense territories, germinal points, to be traversed and re-negotiated in the process of writing. The process of writing weaves the projects into a wider mesh of consequence and relation. The disparate dimensions that this system maintains manifest in constant micro-slippages and ruptures in the fabric of the text: at times, I move from an anecdotal narrative, to a theoretical elaboration and into a poetic description of the same project within the space of one paragraph, in order to capture the lively interchange between the different modes of expression at work in each piece. At the macro scale of chapter structure, the written form of the text combines in places with the style of the layout and the affective quality of the documentary images to reinforce the particular characteristics of each project.

There are four projects that I will be writing about in this dissertation. These are presented in the sequence in which they occurred over the two and a half year period of my research. *Close for Comfort* was my first project, undertaken from August to November of 2003. Ideas and issues generated as part of this work feed into the subsequent projects. *I've Got Rhythm* and *How to Turn your Solar Plexus into a Terrorist (HTTYSPIT)* were the next two works to be created. Their development overlaps in the first half of 2004. The first part of the development of *I've Got Rhythm* was undertaken in January of 2004 and its second stage was completed in June and July of that year. *How to Turn your Solar Plexus into a Terrorist* took place from February to May 2004. The final project, *Parametric Flesh*, was made in September 2004. Conceptually, *I've Got Rhythm* and *How to Turn your Solar Plexus into a Terrorist* diverged in quite different directions in response to *Close for Comfort*. Certain threads from all three works are recombined in *Parametric Flesh*.

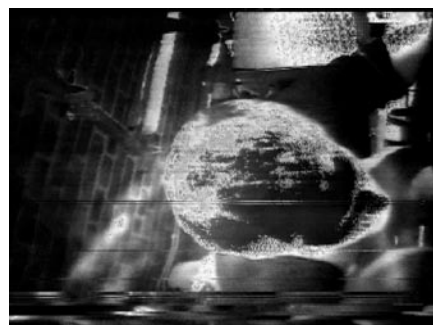
In writing about my projects, I became aware that I was repeatedly using certain terms to describe and refer to the interwoven history of material, philosophical and figurative relationships that define my work. Below, I have outlined my definitions of these terms, how they emerged in the process of thinking through my practice, and how they operate in each of the projects that I engage with in this dissertation. As you will notice, the movement between definitions is often circular in nature, describing a reciprocal and mutually informative territory of relations.

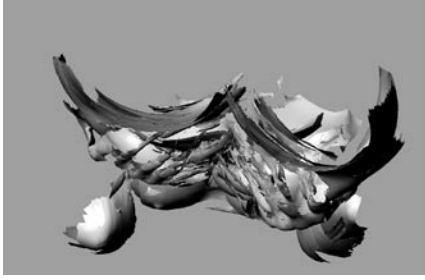
Information:

My Masters research began, primarily, as an investigation of the nature of information and its relation to embodied experience. I had come to this research from a background working in computer music and sound design for performance – you will notice the influence of this in the works I draw upon and the examples I use in my research – and I wanted to better understand how bodies (my body or the body of a performer) could be seen to relate to digital information in a material way. However, I learnt in the process of my investigation, that ‘information’ is a difficult term to define. Like all words, it accrues meaning from the various contexts that it inhabits. In the digital age, ‘information’ most often alludes to and is, more often than not, elided with ‘data’. It, thus, invests the concept of data with its semantic connection to knowledge and meaning at the same time as losing its relationship to intersubjective communication. In this regard, information becomes understood as an immaterial and context free essence. If we dig for the roots of the term, we find in the source that nurtures it, an oppositional framework of which it still bears the fruit – in-(form)-mation / (matter). It is the persistence of this opposition that continually allows the material nature of information to be obfuscated. Indeed as Hayles states, “... information in fact derives its efficacy from the material infrastructures it appears to obscure. This illusion of erasure should be the *subject* of inquiry, not a presupposition that inquiry takes for granted.” Thus, my initial research question regarding the nature of information became more specifically: What is the material nature of information?

Gregory Bateson’s famous definition of information as “a difference that makes a difference” suggests that information is not a thing, but a relation. Hence in Varela’s terms: “Information, *sensu strictu*, does not exist.” (Hayles: p155) Information is to be found in the active relations of matter. In Simondon’s terms it “represents that by which the incompatibility within an unresolved system becomes an organising dimension in its resolution”.(Simondon: p311) Information is the process of matter taking form; where form is not understood in the transcendental Platonic sense of the term but as a variable state of matter. The process of information, is embedded in the potential of matter to change.

All of my projects investigate the nature of information in different ways. *Close for Comfort*, the first project that I undertook, investigated the possibility of people informing each other through the various material transformations that occur in digital network mediated communication. My second project, *I’ve Got Rhythm*, focuses on the material nature of informational communication within the body and between the body and its physical environment. *How to Turn your Solar Plexus into a Terrorist* worked with manifesting the residues





of the interaction between the electromagnetic waves used to transmit a wireless signal, in the image that was being transmitted. Thereby, exposing the material process that was informing the appearance of the image. My final project, *Parametric Flesh*, was concerned with investigating the informational relations

involved in the construction of a digital image. It sought to understand the specific mechanisms by which the 3D scanner was able transduce the living, moving body into representational data.

Materiality:

To define information in material terms is also to conceive of matter as active and changeable substance. MacKenzie gives an account of Judith Butler's conception of matter in these terms:

"Matter', ... is [Butler's] name for a product of power, indeed for powers most productive effect: matter for Butler is *not* simply surface and/or site on which social processes inscribe themselves, but the product of a materializing process which 'stabilizes over time to produce the effect of boundary and fixity we call matter' (1993,9). In a different formulation Butler calls matter 'the sedimenting effect of a regulated iterability' (252). Butler shifts the stress from matter as inert ground to matter as ongoing and variable effect, suspended in a web of interlacing processes whose general dynamics can only be understood in terms of iteration, citation and performativity." (MacKenzie: pp36-37)

Matter is that through which social processes are activated. There is no mind or form that is not deeply entangled in material process. Matter moves through variable form in a constant dynamic tension with other material processes and forms. Matter is in-formed by process. Process is generated from matter in its movement between forms. Matter in movement is in-formation. The conceptual reflex springs back around fast. As I am writing now, my nerves fire, sending electrical signals that cause the muscles controlling my fingers to contract and extend in time to hit the correct keys in the right order. As you are reading this your eyes are responding to the different wavelengths of light that describe the black and white lettering, sending electro-chemical nerve impulses to your brain, which enable you to interpret what I am saying by means of other, related, electro-chemical neuronal interactions. Of course there are many complex scientific and philosophical issues involved in this process that I have skimmed over. But the basic fact remains, that this information that I am communicating to you, whether typed and read, or spoken and heard, is not separate from the material processes described. The patterns of black and white on this printed page do not 'contain' information in and of themselves, rather the information occurs as a relation between these patterns that I have created and the physiological changes in your body which they set in motion. The most important implication of the materiality of information for this thesis, is that conceived as such,

everything becomes contingent on its particular material manifestation. Materiality is about locatedness rather than abstraction. Or perhaps, abstraction only occurs through concatenated material locations. Materiality and contingency are reasons to engage in specific project based research as a mode of philosophical and artistic enquiry.

Each of the projects presented here work with the contingency of material practice. They attempt to construct meaning from specific physical, situational interactions. They assert the materiality of living bodies and of the process of digital representation. In *Close for Comfort* and *How to Turn your Solar Plexus into a Terrorist* I experienced, what anyone who has worked with digital and analogue electrical technology will know, that these devices are very definitely material, and very definitely prone to physical failures and unexpected behaviours. Initially, I found it difficult to engage in a productive way with the material specificities of each situation and I struggled to take control of them and mould them to predetermined systems of relation. As the Masters progressed I became more adept at drawing things from each particular situation and so extracting more from the material relations at work. So in *Parametric Flesh*, for example, I was able to work *with* the unexpected behaviour of the digital devices that I was using. As I re-engage with the works in written form, I have attempted to highlight the material particularities of each work and the situation in which it was created, in order to foreground the productive messiness of a practice based research process.

Transduction:

Transduction refers to the process by which energy or a message is transduced, or in other words, converted, into another form. A transducer is anything that transforms one type of energy into another. For example, a speaker transduces between electromagnetic and sonic energy. Alternating current flowing through a coil of wire causes an alternating magnetic field which causes the magnet inside the coil of wire to move back and forth which in turn moves the speaker cone in and out generating sound at a frequency equal to that of the original electromagnetic wave. Information is communicated as the transductive relations of matter. Biological life can be conceived of as a multiplicity of transductive iterations, across concatenated scales of space-time.

Simondon conceives of transduction as an essential part of the process of individuation, described above. For Simondon:

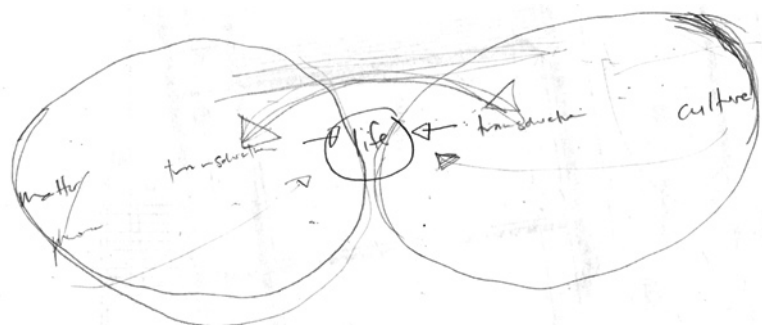
“[T]ransduction... denotes a process – be it physical, biological, mental or social – in which an activity gradually sets itself in motion, propagating within a given area, through a structuration of the different zones of the area over which it operates. Each region of the structure which is constituted in this way then serves to constitute the next one to such an extent that at the very time this structuration is effected there is a progressive modification taking place in tandem with it.” (Simondon: p313)

Thus, transduction denotes spatio-temporal processes of change. Transduction describes a change in state, which, as it changes, induces a similar change in state in the material proximate to it, thus causing the change to move outward like ripples in a pool. When one outwardly moving sphere of ripples meets another set of ripples they interfere with each other, creating a more complex pattern of ripples to occur in the space and time in which they overlap. So it is with transduction – complex patterns of matter in formation occur as a result of multiple overlapping transductive processes. This



can be related back to the example of the audio speaker. As the current moves in the wire it is causing a change in the magnetic field, which is simultaneously causing the magnet and speaker cone to move. The sound, which is generated by the speaker, moves out and interferes with other sounds in the air in a complex way. My ear captures this sound and transforms it through its own transductive processes into a neuronal signal. Transduction is a way to talk about the dynamic enfolding of matter and information. It is a mechanism by which disparate domains are brought into communication. It enables one to analyse, in a materially grounded way, the processes that are structuring, or interacting across, any particular location.

The concept of transduction is central to this Masters research, in the sense that all my works deal with the active relations between matter, information and life, and it has also been an important concept for me in thinking about the process of making artwork. An artwork is a transductive device. It is a particular, located change in the structural relationships of materials that sets in motion other structural changes in the context in which it operates. Understanding the nature of the changes that you wish to generate and how to set them in motion is an important part of the skill of making art. This involves negotiating the transductive processes that span the interval in which a work is produced. Ideas, techniques, materials go in at one end of a work and are transformed through smaller scale transductions over the period of production to emerge as another, complexly patterned, form of energy. The process of writing this dissertation, is one in which the physical and remembered residues of each project are transduced into a new energetic pattern that is specific to the medium of the text. The micro-transductions of my



body remembering intersect with the rhythm of my typing, the interval of the project, and the texture of the time in between, to determine the form of this patterning. In Chapter 3, the text is patterned to focus on the transductive relationships that exist between *How to Turn your Solar Plexus into a Terrorist* and the urban, political, media saturated context in which it is situated. In Chapters 2 and 4, the text emphasises the processes by which *I've Got Rhythm* and *Parametric Flesh* operate to produce work that foregrounds itself as a residue of transduction. In Chapter 1, *Close for Comfort* is written about in terms that frame the processes of transduction as the subject of the work itself.

Rhythm:

Rhythm pertains to an organisation of elements over time, to recurrent points of emphasis within a flow. It denotes a pattern that has a temporal dimension. Rhythm implies a repetition of some kind, a repeated gesture or movement. Rhythm can be regular or irregular; it can repeat exactly the same organisation of elements at certain intervals of time or it can change constantly. Rhythm expresses and organises the temporal structure of transduction. Rhythm is also related to ideas of resonance and vibration. Resonance is the reciprocal reinforcement and amplification of a rhythm that occurs when two systems are vibrating together. In order for energetic transductions to occur, the systems or domains across which the energy moves need to engage in a rhythmic relation. Take the example of the audio speaker; in order for electromagnetic energy to be converted into the mechanical motion of the speaker cone, the two systems must resonate in time with each other, they move in rhythm. Machines are designed to take advantage of the physical properties of matter which enable this inter-systemic resonance to take place. Life informs itself through rhythmic transductions of matter and energy.

The importance of rhythm to my work derives from my background in sound design and music composition. This carries over quite obviously into the focus of my first two Masters projects. In *Close for Comfort* I conceive of the interplay between the audience and performer in rhythmic terms. To express this, the video that was generated through this performative interplay was designed to have a pulsing rhythmic feel to it. My second project, *I've Got Rhythm*, was developed as a comment on the nature of the rhythmic-transductive relationships that inform the structure of life – life emerges as rhythmic iterations of matter. Hence, rhythm is key to my understanding of the relationship between life and non-life. In this sense, it also informs *Parametric Flesh* and *How to Turn your Solar Plexus into a Terrorist* in their investigations of the interface between life and the matter of representation.

Life:

In 1971 theoretical biologists Maturana and Varela came up with the term autopoiesis “to designate the organisation of a minimal living system.” (Varela: p2) In a paper entitled ‘Autopoiesis and a Biology of Intentionality’, Varela defines an autopoietic

system as “one that continuously produces the components that specify it, while at the same time realising it (the system) as a concrete unity in space and time, which makes the network of production components possible.” (*ibid*) Life is a self-informing phenomenon. Indeed, in MacKenzie’s reading of Simondon, he states that: “Since living entities individuate continuously, rather than being formed once they *are* information. They are continuous variable processes of matter-taking-form.” (MacKenzie: p50) The mechanism of life’s self-informing is the rhythmic process of transduction – a series of structural changes which circle back on themselves to continually reproduce the initial impulse. This can be demonstrated, for example, in the reciprocally informative relationship between DNA and cell function. DNA exerts its structural influence by coding for proteins. Protein synthesis occurs through a transcription-translation process – DNA is first transcribed into RNA, which is then in turn translated into a protein. Certain activation enzymes (proteins) are required to set this process in motion. These activation enzymes must themselves first be synthesised through the transcription-translation pathway. Transductive self-information occurs through rhythmic material processes. Complex multicellular forms of life exist as ever widening loops of self-information over concatenated scales of space-time.

“Characteristic times of processes range from $<10^{14}$ s for resonant energy transfers between molecules to 10^7 s for circannual rhythms. The spatial extent of processes, similarly spans at least ten orders of magnitude from 10^{10} m for intramolecular

: p98)

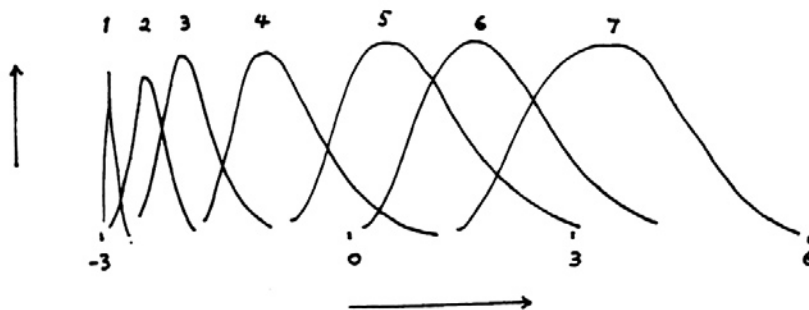


Figure 3.2 The catenation of living processes in time. The vertical axis represents the magnitude, or amplitude, of change; the horizontal axis is time in seconds in logarithm to the base ten. The amplitudes are represented as equal for all the processes, but in reality, they may be progressively amplified or diminished at longer and longer time scales see text.

(Ho: p27)

The organism iteratively defines itself in space and time and so constitutes a life-world relation that exists both at the micro level of molecular interactions and at the level of the sensory apparati. Iterative rhythms articulate relationships, and generate boundaries, between matter and life.

The Body/Embodiment:

It is through these rhythmic relationships between life and world that the

interpersonally situated, culturally aware self, emerges. Raw biological life and socio-cultural life are articulated through the rhythms of the living body. The emergence of consciousness, and the sense of one's own body, is both facilitated and limited by the rhythmic interplay of matter and life. 'I' am an artifact of the contrapuntal relation between the rhythms of my own sensory delay and the rhythms of the physical phenomena that I perceive. My body's ability to engage with sensory information is band limited by the time that it takes to return to each activation threshold. Roads gives the fastest repetitive human gestures as being ~12Hz. (Roads: p5) The time it takes for my body to act, perceive itself acting, and act again. The fastest rhythm that I can hear is at 8Hz. The time it takes for my body to hear and process the sound of each attack. The highest pitch I can hear is close to 20kHz. My eardrum, my bones, my cilia are not able to vibrate faster than this. I can see myself typing because the eye is sensitive to the vibration in time of certain frequencies of light. What is the latency of my ability to feel myself seeing? To feel myself thinking. To feel myself thinking in order to form words. To type. To repattern myself.

To see.

To read.

To understand.

To think.

To type....

The thickness of the present in human consciousness is understood to be about 600 milliseconds, or just over half a second. Beyond that is the immediate past or the immediate future. I can only remember the past and anticipate the future, thus I am only able to feel myself thinking in the present moment. 'I' am constituted fundamentally within my own space-time. 'I' beat time and resonate space at 1/600ms or 1.66667Hz. 'I' emerge constantly in rhythm.

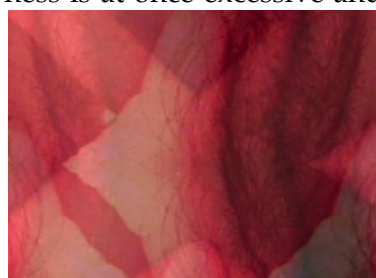
Stern describes the sense of emergent self as "experiencing being alive while encountering the world ... at any given moment, an awareness of the process of living an experience." (Stern:pxviii) Referencing Damasio (1994) he calls this the 'pulse' of 'the living self'. (*ibid*) According to Stern this sense of self in the world is dynamically contoured by 'vitality affects' which are feelings or qualities of experience that have a particular intensity envelope over time. He gives as example " 'surging', 'fading away', 'fleeting', 'explosive', 'crescendo', 'decrescendo', 'bursting', 'drawn out' and so on." (Stern: p54) The sense of emergent self is formed partly in the act of organising these vitality affects by a cross modal synthesis of experience. Hence, a burst of taste can be allied with a burst of sound. 'I' come into being as a drawing together of experience. 'I' collect myself - in a burst and a decrescendo over a pulse - polyrhythmically.

These rhythms of being describe some of the characteristics of embodiment that

Katherine Hayles defines, contra 'the body', in these terms:

"In contrast to the body, embodiment is contextual, enmeshed within the specifics of place, time, physiology, and culture which together compose enactment. Embodiment never coincides directly with 'the body', however that normalised concept is understood. Whereas the body is an idealised form that gestures towards a Platonic reality, embodiment is the specific instantiation generated from the noise of difference. Relative to the body, embodiment is other, elsewhere, at once excessive and deficient in its infinite variations, particularities and abnormalities." (Hayles: p197)

I would like to add to this schema the idea of bodyness, which connects representations of 'the body' with embodiment. A sense of bodyness emerges when the idealised form of the body is modulated by the rhythmic irregularities, and specificities of embodiment. Like embodiment, bodyness is at once excessive and deficient, it generates a particular sense of body which is both more than and less than a body, but it does not represent the body. It is an expression of body-likeness, which operates to encourage a contemplation of ones own state of embodiment. It may do this, for example, by localising certain cultural representations of the body and subjecting them to spatial, temporal and physiological variation, such that they prompt an investigation of the link between the represented body and ones own experience of being embodied.



One of the key points that I come back to in all my projects is the idea that the living body, in which concepts of life and the embodied self combine, is inherently indeterminate, and hence can never be entirely codified or controlled by the contemporary mechanisms of power that are so heavily invested in its management. I am influenced, in this perspective, by Brian Massumi's idea of incorporeal materialism. Massumi states:

"When a body is in motion, it does not coincide with itself. It coincides with its own transition, its own variation. The range of variations it can be implicated in is not present in any given movement, much less any position it passes through. In motion, a body is in an immediate unfolding relation to its own nonpresent potential to vary. ... This is an abstractness pertaining to the transitional immediacy of a real relation – that of a body to its own *indeterminacy* (its openness to an elsewhere and otherwise than it is, in any here and now)." (Massumi: pp4-5)

Life always has the potential to inform itself in new ways.

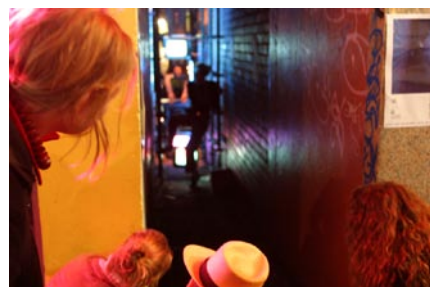
My projects all move in and around these ideas of the body, embodiment, bodyness and the indeterminacy of the living body. *Close for Comfort* deals directly with creating a sense of bodyness and works with the experience of embodiment in relation to the presence of another body, drawing strongly on Stern's concept of the

'vitality affect'. *I've Got Rhythm* expresses the living body's capacity for motion in new and different ways and hence prompts us to consider our own living processes. *How to Turn your Solar Plexus into a Terrorist* expresses the living body's resistance to codification and *Parametric Flesh* captures residues of the living body in motion, in a specific situation, so as to disrupt the traditionally normalising process of representing the body.

Performance:

The idea of performance surfaces in many places in my work and the thinking that I have constructed around it. A notion of performance is an important part of Butler's conception of materiality, which I adopt. It is used to describe the style of writing that I employ in this dissertation, and all the projects presented in the context of this Masters involve a performative dimension. Again, this developed out of my background in music and sound design for theatre as well as a previous involvement in sound performance practice. However, the way that I use the word here refers to a broader understanding of performance than that which takes place on a stage, or even that which involves an audience, in the traditional sense of the word. The most basic definition of performance signifies an action, a doing of something. It also infers a kind of presentation of this doing. To perform something is to highlight it, to place an emphasis on that doing – an artwork performs its status as artifact. In that performance signifies action, it also implies movement of some kind. But how can a performative piece of text, or an artwork displaying its artifactual status, be said to move? To answer this requires a return to the concept of transduction. An artwork is transductive, in the sense that it organises the structure of materials in new ways, in order to precipitate movement in the context in which the artwork is displayed. However, the period of movement involved is at once slower – the interval of creation – and faster – the interval of perception – than that which we are able to consciously perceive when we are experiencing the artwork or reading the text. Anything that attempts to expose these movements in its own structuring can be deemed performative. This text performs the movement of its own composition by self-reflexively reflecting on the act of writing and by using language that draws attention to its own structure, thereby encouraging the reader to become present to the perceptual movement of reading.

A performance is a relational act – it connects domains together through movement and it also draws together the act of doing with a witness. To place emphasis, or to highlight something in a performative way, begs the question – for whom is this emphasis placed? To perform something is necessarily to construct a position for a witness in that performance. This applies whether it be the simple performance of a task, or a theatrical performance. The position of the witness is



always included in the performative act. Thus, the witness is not at an observational remove from the performance in the same manner as a traditionally conceived audience or a spectator. Tim Etchells talks about the position of the witness in this way:

“... to witness an event is to be present at it in some fundamentally ethical way, to feel the weight of things and one’s own place in them, even if that place is simply, for a moment, as an onlooker.” (Etchells: p17)

Many contemporary performance art practitioners work with the position of the witness by self-consciously constructing situations that cause the witness to become aware of their own complicity in the event. I have witnessed myself performing the act of writing this dissertation, such that I feel the weight of responsibility for the relationships that it creates.

Thinking through how each project engages with performance is a crucial part of my drawing together relations in the act of writing. It was also an important part of the development of each work. The way in which the performative dimension of each project positioned the witnessing audience was a central consideration. Each project employs a slightly different notion of performance, and hence, constructs this position along different lines. *Close for Comfort* and *How to Turn your Solar Plexus into a Terrorist* engage with more traditional notions of performance, in that they both involve live bodies in the interval of the work’s presentation. However, they differ significantly in scale and type of involvement that they demand from the audience. In *Close for Comfort*, the audience is literally responsible for shaping the performance, whereas in *HTTYSPIAT*, the audience are framed as onlookers to a challenging event. *I’ve Got Rhythm* and *Parametric Flesh* move away from a focus on live performance to foreground instead the performance involved in generating the artwork. Performance, in this sense, can be understood as a self-conscious engagement in the processes of material transduction. Performance draws together the contrapuntal rhythms of matter, information and life in the act of generating an artifact. The artifact draws an audience outside of the space and time of the performance into the position of witness.

Artifact:

Artifact has two meanings: firstly, it is an object made by humans that often has some cultural or historical significance attached to it; secondly, it can be defined as the unintended result of a transductive process, a residue in the outcome due to relations inherent to the process. For example, pixelation in digital images is an artifact of the way in which a continuous domain of light is encoded in discrete units. In both these definitions an artifact allows us to discern something about the process (physical and cultural, historical and technological) that created it. An artifact attests to the fact that information is never context free and is always processual in nature. It is the residue formed from a particular transduction/set of rhythmic relations. Once formed it goes on to function as the basis for a new set

of relations to arise. An artifact is a moment in the transductive ripple, a certain density that we are able to perceive. When we encounter an artifact, we are able to engage in a synchronic analysis, or experience, of the constant polyrhythmic fluctuation of life. As such, an artifact is a point at which raw life and cultural life are articulated together. In fact, the etymological basis of the word is that of joining – coming from the Latin “*ars*... orig[inally] skill in joining or fitting” and “*factum* to make”. (Ultralingua). Hence, in the act of creating an artifact there is the potential to construe new relations between these spheres of existence, to generate novel resonances and contrapuntal relationships, to understand life in new terms. Art is a conscious framing of the transductive process by which artifacts are generated. But artifacts themselves are generated at every interface, every crossing point between life and world, and in turn, come to define the very domains that constitute the same - ‘life’ and ‘world’.

Each of my works deal with their artifactual status in different ways. As I have already mentioned, *Parametric Flesh* and *I’ve Got Rhythm* both present as residues of the performative processes by which they were generated. In this manner, they operate as portals to these performances, relics by which a certain history of relations can be accessed. *Close for Comfort* is structured in such a way as to investigate the processes by which an artifact, or a set of relations, comes into being. *How to Turn your Solar Plexus into a Terrorist* draws the relationships of a site and the images of the media into a densely woven moment in time. As I write about these works I retrospectively reconfigure the material-cultural transductions that in-form them. This process of writing, in turn, creates a new artifact that is structured through the articulation of these projects together but which is, at no point, reducible to them. The interval over which I write traverses the interval of each project. Within these projects there are again many smaller transductive intervals. The writing of this work is informed by a complex rhythm, that beats in counterpoint to the clatter of my fingers typing, my nerves firing, my body remembering. This dissertation is sedimented as an artifact of a tightly meshed coupling between lifeworld and art.

As I have discussed, each of the four projects that make up my Masters research are informed by and inform the concepts outlined above in various ways. Despite the differently inflected perspective that each project contributes to this reciprocal process of information there is a certain territory that is comprehensively reinforced. The iterative rhythm of each project moving through this common territory forms the structural basis of my dissertation. As the title of my Masters suggests, ‘performance’ and ‘life’ find themselves at the centre of the terrain. Ideas of performance define the approach that I take to making work. Performance is used as a mechanism for highlighting the transductive materiality of life. Life, as a continual emerging phenomenon, manifested through transductive iterations of non-living matter, is at once uncanny, and, because it is always rife with ‘other’ potentials, is beyond

codification. The art artifact, understood as a residue of transductive processes, and framed in the act of performance, has the capacity to draw us into a contemplation of the strangely excessive qualities of life. A good work of art should always contain a sense of living potentiality. Each of the projects presented below, investigate the nature of performance, and the ability of the art artifact to engage with and express contemporary experiences of the matter of life. Each of these investigations is focused on different technologies that, in combination with particular political and cultural contexts, manage, manufacture and represent life and the living body.

Agamben, Giorgio. *Means without End: Notes on Politics*. Trans. Vincenzo Binetti and Cesare Casarino. *Theory out of Bounds*. Ed. Michael Hardt Sandra Buckley, Brian Massumi. Minneapolis: University of Minnesota Press, 2000.

Agamben, Giorgio. *The Open: Man and Animal*. Trans. Kevin Attell. Stanford, California: Stanford University Press, 2004.

Avery, John. *Information Theory and Evolution*. Singapore: World Scientific Publishing Co, 2003.

Brighton, C.T., J.Black, and S.P Pollack, eds. *Electrical Properties of Bone and Cartilage: Experimental Effects and Clinical Applications*. Grune and Stratton Inc, 1979.

Case, Jo. "The Pen Is Mightier Than the Bomb." *The Big Issue*, Australia 01/08/05-16/08/05 2005: 31.

Erard, Michael. "Immigration by Shibboleth: Should a Refugee Be Judged by What He Says or How He Says It?" *Legal Affairs* 2003.

Etchells, Tim. *Certain Fragments: Contemporary Performance and Forced Entertainment*. London: Routledge, 1999.

Foucault, Michel. *The History of Sexuality: Volume 1 an Introduction*. London: Penguin, 1978, c1990.

Frankel, David. "Review: Cornelia Parker." *Artforum* 37.September (1998).

Frauenfelder, Mark. *Cam Girls*. June 2002. Available: <http://boingboing.net/camgirls.html> 22/07/05.

Freud, Sigmund. "The Uncanny." *Collected Papers Translated from the German: Papers on Metapsychology. Papers on Applied Psychoanalysis*. 1924. Vol. Vol 4: Hogarth, 1919. 1971.

Gibbs, Anna. "Bodies of Words: Feminism and Fictocriticism - Explanation and Demonstration." *Text*. Queensland: School of Arts, Griffith University, 1997. Vol. 2.

Grosz, Elizabeth. *The Nick of Time: Politics, Evolution, and the Untimely*. Durham: Duke University Press, 2004.

Haraway, Donna J. *Modest-Witness@Second-Millennium.Femaleman-Meets-Oncom Ouse: Feminism and Technoscience*. New York: Routledge, 1997.

Hardt, Michael, and Antonio Negri. *Empire*. Cambridge, Massachusetts: Harvard University Press, 2000.

Harrison, Charles and Wood, Paul (eds). *Art in Theory 1900-1990: An Anthology of Changing Ideas*. Cambridge, Massachusetts: Blackwell, 1992.

Hayles, N. Katherine. *How We Became Posthuman*. Chicago: University of Chicago Press, 1999.

Henderson, Tom. *The Physics Classroom: The Human Ear*. 2004. Available: <http://www.glenbrook.k12.il.us/gbssci/phys/Class/sound/u1112d.html>. 08/08/05 2005.
Hijikata, Tatsumi. "Inner Material/Material." *TDR: The Drama Review* 44.Number 1 (T 165) (1928): 36-42.

Ho, Mae-Wan. *The Rainbow and the Worm: The Physics of Organisms*. 2nd ed. Singapore: World Scientific, 1998.

MacKenzie, Adrian. *Transductions: Bodies and Machines at Speed*. London; New York: Continuum, 2002.

Massumi, Brian. *Parables for the Virtual: Movement, Affect, Sensation*. Durham: Duke University Press, 2002.

Morris, David. "Gothic Sublimity." *New Literary History* 16.Winter (1985).

Nyman, Michael. *Experimental Music*. London: Macmillan, 1974.

Panhuysen, Paul (ed). *Echo: The Images of Sound*. Eindhoven: Het Apollohuis, 1987.

Parker, Ann. "Mighty Small Dots." *Science and Technology Review* 2000.

Pasquinelli, Matteo. "Warporn Warpunk: Autonomous Videopoesis in Wartime." *Sarai Reader.Bare Acts* (2005): 492-99.

PiezoSystems. *History of Piezoelectricity*. Piezo Systems Inc. Available: <http://www.piezo.com/tech4history.html>. 15/08/05.

Rabinow, Paul. *Making Pcr: A Story of Biotechnology*. Chicago: Chicago University Press, 1996.

Roach, Michael. *Lateline Transcript*. 2005. ABC. Available: <http://www.abc.net.au/lateline/content/2005/s1428699.htm>. 04/08/05.

Roads, Curtis. *Microsound*. Cambridge, Massachusetts: MIT Press, 2001.

Simondon, Gilbert. "The Genesis of the Individual." Trans. Mark Cohen and Sandford Kwinter. *Incorporations. L'individuation psychique et collective*, 1989. Eds. Jonathan Crary and Sandford Kwinter. New York: Urzone Inc, 1992.

Southworth, H. N. *Introduction to Modern Microscopy*. London: Wykeham Publications Ltd, 1975.

Spadaro, Joseph A. "Bioelectrical Properties and Response." *Bone*. Ed. Brian K. Hall. Vol. Vol 3. Caldwell, New Jersey: Telford Press, 1991.

Stern, Daniel N. *The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology*. New York: Basic Books, 1985.

Ultralingua. *Ultralingua Dictionary*. Vers. Macintosh Version 4.2. Computer software, 2003.

Varela, Francisco. "Autopoesis and a Biology of Intentionality." *Autopoesis and Perception*. Ed. Barry McMullin. Dublin, 1992.

Waldby, Catherine. *Revenants: The Visible Human Project and the Digital Uncanny*. 1996. Murdoch University. Available: <http://wwwmcc.murdoch.edu.au/ReadingRoom/VID/Uncanny.html>. 20/02/04.

Wikipedia. Piezoelectricity. Wikimedia. Available: <http://en.wikipedia.org/Piezoelectricity>. 30/07/05.