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UNIVERSITY OF SOUTHAMPTON

FACULTY OF LAW, ARTS & SOCIAL SCIENCES School of Art

Peeling the Body

How can art practice utilize the experience of medical events to consider the implications for the living human being of notions of the posthuman? How can this process affect an understanding of the positions of the subject / medical object within the western medical tradition and, in so doing, suggest a more empowered subject?

by

Yvonne Jones

Thesis for the degree of Doctor of Philosophy

May 2010

UNIVERSITY OF SOUTHAMPTON

ABSTRACT
FACULTY OF LAW, ARTS AND SOCIAL SCIENCES
SCHOOL OF ART
Doctor of Philosophy

PEELING THE BODY: HOW CAN ART PRACTICE UTILIZE THE EXPERIENCE OF MEDICAL EVENTS TO CONSIDER THE IMPLICATIONS FOR THE LIVING HUMAN BEING OF NOTIONS OF THE POSTHUMAN? HOW CAN THIS PROCESS AFFECT AN UNDERSTANDING OF THE POSITIONS OF THE SUBJECT / MEDICAL OBJECT WITHIN THE WESTERN MEDICAL TRADITION AND, IN SO DOING, SUGGEST A MORE EMPOWERED SUBJECT?

By Yvonne Jones

This practice based research focuses on events of the body, using the participatingobserver-researcher's experiences of medical events undertaken by her within a western medical environment to investigate her living existence as a 'unit', an 'experiencing corporeal body'. The project addresses a sharp awareness of body experienced by the researcher. It investigates this body in terms of the literal posthuman associated with Moravec, alongside the theoretical posthuman associated with Hayles where the 'defining characteristics involve the construction of subjectivity'. Using action research as the methodology and video installation as practice the project considers the position of the researcher in relationship to the medics, a situation of subject / object. With the female participating researcher as a given it becomes relevant to reference ideas from the ideals of feminism and to consider the question 'are women human?' The project produces evidence of change in the relationship of subject / object specific to this research when the researcher actively engages with attributes of the posthuman and it demonstrates how an altered emerging subject resulted from this engagement. There is a movement for the researcher from a liberal humanist subject to an emerging posthuman subject, an empowering and emancipating change.

LES N. K. (1990). How We Pecama Posthuman Chicago The

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ACCOMPANYING MATERIAL

Appendix 1 (DVD) - A Film Reel

Clips from five studio works: *X-it* (2007); *X-ist* (2008); *X-cite* (2008); *X-posing* (2009); X/701085; plus supplementary material.

PUBLICATIONS

The research has been disseminated in the following exhibitions, conferences and publications:

Group Exhibitions:

- 2009 Launch show of *Winchester School of Art Research Anthology* (X/701085)
- 2007 WSA Graduate School Conference and Exhibition (X-it)
- 2007 MULTICHANNEL ArtSway Gallery (X-it)
- 2006 WSA PhD show alongside Conference 7:7 (X-posed)
- 2005 Grounded / Memory Three Leeds Met Gallery, University of Leeds (Memory Three The Eye of the Artist)

• 2004 New Contemporaries, show in Liverpool Festival of Arts and London Barbican (*The Eye of the Artist*).

Conferences:

- 2009 *Human 2.0; researching the changing face of human identity,* University of Southampton LASS Conference, video work shown as poster (*X*/701085)
- 2008 WSA Graduate School Conference and Exhibition, video work in exhibition (*X-cite*)
- 2007 Manifesting the Corporeal in the work of Yvonne Jones paper given by Michele Waugh in Minding the Body; An Interdisciplinary Conference University of Leicester (Memory Three The Eye of the Artist).
- 2007 *Memory Three* (video presented as paper) *Mind / Body* University of Reading.
- 2006 The corporeal Body (paper) WSA Conference.

Books and Journals:

- 2010 *Peeling the Body* in LASS Doctoral Research Journal Issue 1, University of Southampton.
- 2009 701085; in Winchester School of Art Research Anthology, in response to *Private View*, an essay by Professor Tim Elliott and Anneke Lucassen; Edit. John Gillett and Beth Harland, University of Southampton.
- 2009 *Peeling the body a visual essay*, in Human 2.0 Conference Programme.
- 2006 Yvonne Jones, Corporeality by Rogelio Vallejo in Re:Imagining Wales, A Yearbook of the Visual Arts, Edit. Hugh Adams, Seren.

DECLARATION OF AUTHORSHIP

I, YVONNE JONES, declare that the thesis entitled 'Peeling the Body' and the work presented in the thesis are both my own, and have been generated by me as the result of my own original research. I confirm that:

- this work was done wholly or mainly while in candidature for a research degree at this University;
- where any part of this thesis has previously been submitted for a degree or any other qualification at this University or any other institution, this has been clearly stated;
- where I have consulted the published works of others, this is always clearly attributed;
- where I have quoted from the work of others, the source is always given.
 With the exception of such quotations, this thesis is entirely my own work;
- I have acknowledged all main sources of help;
- Where the thesis is based on work done by myself jointly with others, I
 have made clear exactly what was done by others and what I have
 contributed myself;

	contributed myself;
•	parts of this work have been published as (see publications list).
Signed	:
Date:	

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GLOSSARY

'Are women human?' arises from embedded qualities within ideas of liberal humanism. Catherine MacKinnon states that even the Universal Declaration of Human Rights fails to humanise women, that 'woman is not yet a name for a way of being human' (MacKinnon 2006)

Distributed cognition central to the posthuman is information that: 1) may be distributed across members of a social group, 2) may be from coordination between internal and external (material or environmental) structure, 3) may be distributed through time in such a way that the products of earlier events can transform the nature of the later events; that is the coming together of information from different sources.² **Inscribed body** refers to the position of Foucault who states there are only inscribed bodies; that is to say bodies marked by history and society.

Literal posthuman is the notion advanced by Moravec, that it will be possible to transfer the mind patterns of 'me' into a computer, leaving the corporeal body behind while maintaining 'me'.

Objectification means the act of seeing the subject as the object and imposing values gleaned from general information and some assumptions.

Peeling the Body refers to the idea of Moravec peeling the body away from its information pattern, and, the exploration of peeling away some objectifications and inscription from Foucault's inscribed body.

Posthuman elements 1-4 listed by Hayles are: 1) the posthuman view of privileging information pattern over material instantiation; 2) the view that consciousness is a 'upstart', a minor sideshow; 3) the view that the body is seen as the original prostheses; 4) belief that the human being can be seamlessly articulated with intelligent machines.³

Repair and Maintenance is a medical event undergone by the researcher.

Subject / medical object as used in the title and text refers to a dualistic relationship where the person as the subject is objectified into being the subject seen as the medical object.

² HUTCHINS, E. (2000) *Distributed Cognition* [online] pub University of California. Available from: http://eclectic.ss.uci.edu/~drwhite/Anthro179a/DistributedCognition.pdf [Accessed 11th march 2009]. ³ HAYLES, N. K. (1999). *How We Became Posthuman* Chicago, The University of Chicago Press.

INTRODUCTION - AN OVERVIEW

Project Starting Point and Boundaries

The participating researcher's fine art practice addresses the research question. The process uses the experience of medical events undergone by the researcher, to consider the implications of notions of the posthuman by exploring collected medical event material in a studio situation. A collection instigated by a direct and sharp experience of the researcher-body, as human in terms of being mortal, having emotions, compassion, weaknesses and imperfections, an experience resulting from physical trauma. Ideas of the posthuman that suggest immortality, proposed by the roboticist Hans Moravec, ⁴ challenged my experience of being human. Ideas proposed by Katherine Hayles in 'How we became Posthuman', ⁵ challenge Moravec's ideas and replace them by advancing the posthuman as a structured subjectivity.

The boundary of the project is the practice-based research undertaken through my studio practice and the theories that are appropriate to this in questioning the notions of the posthuman of Moravec and Hayles, while observing the process and noting outcomes. Studio practice combines the internal experience of each medical event with some idea of the external view of the event in order to increase my understanding of what happens to me during these events. Within the studio practice, consisting mainly of video installation, I use material such as my memories and observations, stills, videos, or medical leftovers, assembled from the collected material acquired during medical events that I have undergone in a western medical environment. The phrase 'Repair and Maintenance' occurs frequently in the project; it denotes the medical events. 'Repair and Maintenance' commonly references motor vehicles in such events as vehicle testing for MOTs. In the project, 'Repair and Maintenance' is a metaphor

⁴ MORAVEC, H. (1987) Dualism from Reductionism; from proceedings of the International Symposium on Al and the Human Mind, Yale University, New Haven CT. March 1-3 1986. *Truth* Volume 2, Dallas TX. ⁵ HAYLES, N. K. (1999). *How We Became Posthuman* Chicago The University of Chicago Press.

that acknowledges both the question of whether we can ever be the literal posthuman advocated by Moravec, a position that requires a surgeon to transfer the human mind into a machine, and the material presence of the evolved biology of the body working as a unit, a biological machine. The researcher's engagement with 'repair and maintenance' varies from a check up (as in a vehicle MOT undertaken to establish road worthiness), with no specific health concerns as in Repair and Maintenance 8 - hair analysis, or because something is causing concern such as the 'machine' is not functioning correctly as in Repair and Maintenance 5 - eye surgery, or because there are signs of failure as in Repair and Maintenance 2 - salmonella poison. In the context of the project 'repair and maintenance' also means 'recondition' as in Repair and Maintenance 6 - facial work. I am the participating-observer-researcher, the person that undergoes and observes the events and, through studio practice and reflection, the one who uses this material to research the project questions in this specific situation. This approach makes me the subject for the project. The meaning and significance of the word 'subject' changes as the research progresses. Michel Foucault states that he has 'dealt with three modes of objectification that transform human beings into subjects.¹⁷ These three modes are modes of inquiry, 8 dividing practices, 9 and the way a human being turns him or herself into a subject. 10 Through studio practice and reflection, the project expands to take 'the subject' to mean an objectified subject in the second of these positions 'dividing practices', in the position of the subject / object within the western medical environment. The

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⁶ MORAVEC, H. (1987)

⁷ FOUCAULT, M. (2001)1st pub 1994 by Editions Gallimard The subject and power. IN FAUBION, J. D. (Ed.) *Essential works of Foucault*. London, Penguin Group.

⁸ Foucault states that these include objectivising of the speaking subject, or the productive subject, or objectivising the sheer fact of being alive in natural history or biology.

⁹ Where, states Foucault, 'the subject is either divided inside himself or divided from others examples being the mad and the sane, the sick and the healthy, the criminals and the "good boys".'

¹⁰ Foucault gives the example 'of how men have learned to recognize themselves as subjects of "sexuality".'

project confines its field to subject and object in the context of the events; it does not engage with the full theories of psychoanalysis that include 'object relations theory' and Lacan's theory of 'object little-a' the object of desire, which are beyond the scope of the present research. 'Subject' also references social critical theory, as the researcher makes visible her initial functioning position as a liberal humanist subject, a position that alters throughout the project.

I refer to myself in different ways; depending on the context I make reference to myself as 'the subject', 'the subject body', 'the body', 'the researcher', 'she', 'I' or 'me'. The reason for this is to distance myself sufficiently to be objective in what I write, whilst recognising that on occasion the text requires the use of the first person.

Situating the Project

The first part of the project question 'how can art practice utilize the experience of medical events to consider the implications for the living human being of notions of the posthuman' is addressed by locating the project within Fine Art practice. The practice uses the notion of the posthuman to test and develop the area of fine art at the point it meets medical practice, in terms specific to this project. Through the process of studio research the project engages with ideas of the roboticist Hans Moravec, the critical theorist concerns of Hayles and the work of Foucault. Depending on the material available from the different Repair and Maintenance events, the project moves between the experience of increased awareness of the body and ideas of the posthuman, using the two different positions on the posthuman of Moravec and Hayles. This opens up a changing

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¹¹From: www.sonoma.edu/users/d/daniels/objectrelations.html. This is a psychodynamic theory where objects are both real others and internalised others. It emphasises interpersonal relationships especially mother and child. (It does not take into account social norms and constructions - Sonnette Caldwell Barr unpublished paper 2001)

¹² MALONE & FRIEDLANDER (Eds.) (2000) *The Subject of Lacan; A Lacanian Reader for Psychologists,* State University of New York. 'Object a' is the object that causes desire; Lacan speaks of four objects a, fragments of the body, the breast, faeces, the look and the voice, each related to a bodily orifice.

perspective for the researcher. Hans Moravec states in his work *Dualism from* Reductionism (1987) his belief and desire for a situation where the information pattern of a human mind is transferable into a machine, an advanced computer. Moravec argues that in this circumstance of surgery the sense of 'me'¹³ will carry across into the machine leaving the body behind; he states that under this condition the 'person' is immortal. This 'casting off' of the corporeal body by Moravec is one aspect of the project's title 'Peeling the Body'. Katherine Hayles' position is a case for the continuation of the corporeal body as the essence of human beings and their descendants, even when they are or become theoretical posthuman beings.

> It is important to recognize that the construction of the posthuman does not require the subject to be a literal cyborg. Whether or not interventions have been made on the body, new models of subjectivity emerging from such fields as cognitive science and artificial life imply that even a biologically unaltered Homo sapiens counts as posthuman. 14

Hayles' position desires that the posthuman maintain the human condition. She seeks for the posthuman to hold onto the experience of being human, of living a human life and of finitude. ¹⁵ In 'How we Became Posthuman' Katherine Hayles explains how 'information lost its body, how the cyborg was constructed in the postwar years as technological artifact and icon, and how the human being became the posthuman'. 16 She considers the thinking of the roboticists to be erroneous and, explaining how it became embedded in their ideas of the posthuman, she makes a plea that we challenge the idea of the literal post human before it is too late.¹⁷ Hayles argues that we may already be posthuman by means

¹³ MORAVEC, H. (1987) p5 (of pp 1-9)

¹⁴ HAYLES, N. K. (1999) p4

¹⁵ Ibid.p5

¹⁶ lbid.p2

¹⁷ Ibid. p 291

of our relationship with technology, and uses Bruno Latour's argument that we have never been modern, as a model to suggest that we may have always been posthuman, ¹⁸ a position that the project work leads me to disagree with.

The second and third parts of the research question 'how can this process (the process of the initial question) affect an understanding of the positions of the subject / medical object within the western medical tradition, and in so doing suggest a more empowered subject?' unfold and are addressed as the project develops.

It becomes relevant to consider some ideas of the body by referencing Foucault¹⁹ and Butler.²⁰ Reflection on combining the subject-body and the object-body of the researcher during studio research in Repair and Maintenance event 3, (cyst removal), evokes Foucault's notion of the inscribed body.²¹ Foucault held that all bodies are inscribed, that we are able to see only the inscribed body because only inscribed bodies exist. Talking of genealogy he says:

The body is the inscribed surface of events [...] Its task is to expose a body totally imprinted by history and the process of history's destruction of the body.²²

Butler argues that language does not support this; for inscription to exist there has to be something there underneath, to inscribe.²³ Here is a dilemma: what is

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¹⁸ Ibid. p 291

¹⁹ Foucault (1926 - 1984) held the Chair of the History of Systems of Thought at the College de France, wrote as a genealogist, examining how the body through vulnerability is inscribed and can create an objectified subject. Foucault is known for his work on power, and the relationships between power, knowledge and discourse

²⁰ Judith Butler is a Post-structuralist philosopher writing on power, gender, sexuality and identity.

²¹ Inscription in Foucault's sense is embedded, in the body, built from social and cultural history.

²² FOUCAULT, M. (1991 [1977]). Nietzsche, Genealogy, History p76 -100 Pub 1984 by Pantheon Books, Canada. IN RABINOW, P. (Ed.) *The Foucault Reader.* London, Penguin Group. P 83

²³ BUTLER, J. (1999 (a)) Foucault and the Paradox of Bodily Inscriptions; (Pub in The Journal of Philosophy, 86 Nov 89, 601 - 607). IN WELTON, D. (Ed.) *The Body*. Malden and Oxford, Blackwell Publishers Ltd.

the inscribed structure, what lies beneath? Focusing on the subject within the project allows the questioning of these positions, uncovering something of 'that which is beneath' (the Foucauldian inscribed body). This is the second aspect to *Peeling the Body* in the project title, peeling the inscribed subject body.

The art and the writings of Jo Spence are relevant to the project, forming part of its platform in addressing both parts of the research question. I chose this artist because there are similarities and differences in the work of the project and of Jo Spence. Both the work of Spence and the project (with its female researcher) are female-body-centred; a significant period of Spence's work and the current project began with breast disease. At the pivotal moment of breast disease Spence chose alternative medicine, while this project remains under the umbrella of western medicine. Spence's position on class and oppression is a catalyst for encouraging the visibility of the researcher's tacit knowledge and gives access to conscious awareness of the participating-observer-researcher's subject position at the beginning of this project. The process of the project alters this initial subject position. Spence recognises her position by means of phototherapy where she and others place themselves in recalled situations, with Spence as a baby, or Spence as her own mother. She writes of:

Tackling extreme forms of adversity by becoming ill. Usually after the event, I have manifested asthma, hay fever, eczema, colds, flu, bronchitis, depression, lumps and tumours [...]²⁴

She was convinced that these ailments were rooted in her social class where she claims she was socialised to neglect herself.²⁵ With some experience of the conditions Spence speaks of, and with a recognition of a socialised attitude of 'battling on', in effect to neglect oneself, there are differences of expectations of the researcher with regards to her place in society in comparison to those of Jo

²⁴ SPENCE, J. (1986) *Putting Myself in the Picture: A Political Personal ad Photographic Autobiography,* London, Camden Press. P 152

²⁵ Ibid.

Spence; the researcher saw and wanted more from education. Situating the similarities enables contrasts.



Fig. 1 - *Infantilization* (1984)

Jo Spence / Rosy Martin



Fig. 2 - Waiting Room Yvonne Jones (1995)

The incident of breast disease was common to both Spence and the researcher (see *Repair and Maintenance 1 - breast disease*). Both responded independently with creative acts (Fig. 1 and Fig. 2). The differing choices of Spence and the researcher, regarding where and how to be treated makes it relevant to consider some ideas within feminist thinking referenced in Scott's work;²⁶ work in which Scott examines a different environment (to western medical), investigating claims that it is more empowering for female subjects.

The research is situated in Fine Art; the researcher uses notions of the posthuman to interrogate the boundary between fine art and medical practice.

²⁶ SCOTT, A. (1998) Homoeopathy as a feminist form of medicine. *Sociology of Health and Illness*, Vol 20 No 2, 191-214.

Terminology

Posthuman:

The idea of the posthuman, a literal post human created from technology, evolved from cybernetics. Hayles lists the four characteristic elements of the notion of the posthuman as:

- 1) The posthuman view of privileging information pattern over material instantiation [...] embodiment is seen as an accident of history rather than an inevitability of life.
- 2) The view that consciousness is an 'upstart', a minor sideshow.
- 3) The view that the body is seen as the original prostheses.
- 4) Belief that the human being can be seamlessly articulated with intelligent machines.²⁷

In the project, the posthuman refers to a sufficiently altered human; altered either physically, with technological replacement parts taking the researcher-subject in the direction of the ideas of Moravec with his goal of a literal posthuman, or altered psychologically taking the researcher-subject in the direction of the ideas of Hayles where through interaction with and acceptance of technology a changed state of mind means theoretically one is posthuman.

Distributed Cognition:

Distributed cognition is, Hayles states, central to the posthuman. Distributed cognition defined by Hutchins in Distributed Cognition²⁸ is information:

that 1) may be distributed across members of a social group, 2) may be from coordination between internal and

²⁸ HUTCHINS, E. (2000) *Distributed Cognition* [online] pub University of California. Available from http://eclectic.ss.uci.edu/~drwhite/Anthro179a/DistributedCognition.pdf [Accessed 11th march 2009].

²⁷ HAYLES, N. K. (1999) *How We Became Posthuman,* Chicago, The University of Chicago Press.HAYLES, N. K. (1999) p2

external (material or environmental) structure, 3) may be distributed through time in such a way that the products of earlier events can transform the nature of the later events; that is the coming together of information from different sources.²⁹

Studio practice uses the four elements of the notion of the posthuman, as described by Hayles, to investigate the 'status' of the researcher-body within each event and piece of work, in terms of the literal posthuman of Moravec and the built subjectivity of the posthuman of Hayles. Distributed cognition becomes increasingly visible and potent to the researcher throughout the progress of the project, within the stated events. It is an integral part of the process, initially invisible in the respect of understanding it in terms of the posthuman. It enables the combining of external evidence of an event with the internal experience of the event. The video recordings and the collected material enable the researcher to use sources other than those from within her, in order to become more informed about the event.

The Research Process

The medical events used for the research focus on the human female subject body of the researcher. The studio practice uses these events for reflection and considers ideas that arise from them, using them to reference and 'test' ideas of the posthuman specific to Hayles and Moravec's perspectives. The researcher considers the subject / medical object as the process unfolds, noting that the relationship changes position. When both she and the objectifier experience increases of awareness of the subject there is a reduction of opposition between the subject / object; as this movement develops there is evidence of an emerging subject, one changing in terms of her starting point, that of her 'structure' of existing as a liberal humanist subject. Both these shifts of position assist the

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²⁹ Ibid.

female subject to be empowered and emancipated. It is the intervention of art practice in the western medical environment that gives rise to this process; intervention driven by a desire to understand more of the situation of the subject body in relation to the medical events.

The Project Structure

Chapter 1 is a 'Literature Review' situating the theorists, scientist and artists referred to in the project.

Chapter 2 establishes 'Methodology'. Following on from this, is the section 'Methods' that outlines different practices used in the project.

Chapter 3 consists of 'Repair and Maintenance 1- an event of breast disease' that serves as a theoretical underpinning and describes 'Issues Arising'.

Chapter 4 documents the developing awareness and empowerment, referencing 'Repair and Maintenance events 2 and 3' (the human body strengths and weaknesses), 'Repair and Maintenance events 4,5 and 6' (the body and more), and 'Repair and Maintenance events 7 and 8' (the subject the object).

Chapters 1, 2, 3, and 4 present the theoretical basis and evidence arising from the use of ideas of the posthuman to interrogate the border of fine art and medical practice within the project. These chapters show the use of the subject body of the researcher in the project, how the positions of subject /object becomes noticeable, and how the subject position of liberal humanist subject moves to become an emerging posthuman female subject.

Chapter 5 reviews the studio practice and process of *Repair and Maintenance events 1-8* that forms the basis for Chapters 1, 2, 3 and 4.

Chapter 6 is a final section of 'Discussion' and 'Conclusions'.

CHAPTER 1 - LITERATURE REVIEW

The term posthuman has three roots, one in a theory, one in popular culture, and one in science. Theoretically the origins of posthumanism are a movement against humanism, a movement Badmington states began with Marx and Freud, and further through the works of Althusser and Foucault.³⁰ This anti humanism opposes philosophical anthropology's notion that humans naturally 'think, organise and act in certain ways'. 31 Badminton explains that this humanist position would mean 'society and behaviour could not be other than they are now'32 and that 'the future would begin and end with Man'.33 Anti humanism opposes the idea of an autonomous subject. In popular culture, science fiction creates characters 'after Man'. Hayles analyses Gibson's 'Neuromancer', stating it 'sparked the cyberpunk movement'; she tells us ' the writer's imagination outstrips existing technologies.³⁴ The scientific root is within robotics. The Macy Conferences of 1943-1985 laid down the arguments for enabling information patterns (of a human) to be transferable into a computer. From Shannon comes the theory of information, from McCulloch the model of neural function and from Wiener the cybernetic paradigm.³⁵ Transhumanism, associated with posthumanism, is the movement to enhance the human physically and intellectually and to end the problems of ageing by use of technology. The post human condition is viewed as a condition that leaves behind the experience of being human, of living as a human being with its inbuilt finitude. Judith Halberstam offers one idea of posthuman gender in her analyses Silence of the

³⁰ BADMINGTON, N. (Ed.) (2000) Posthumanism, Palgrave.

³¹ Ibid.

³² Ibid.

³³ Ibid.

³⁴ HAYLES (1999)

³⁵ Ibid.

Lambs. ³⁶ Halberstam puts forward Buffalo Bill as a posthuman gender; he 'does not understand gender as inherent, innate... He rips gender apart [...]'. ³⁷ The raft of posthuman ideas is large; for further reading see 'Posthumanism', ³⁸ 'Representations of the Post/Human', ³⁹ 'The Post-Human condition', ⁴⁰ and 'Transhumanism'. ⁴¹

In order to test the boundary of art and medical practice, the project engages two lines of the concept of posthuman, critical theory and robotics within the work of Hayles⁴² and Moravec.⁴³ There is a wide-ranging field of interest that includes ideas connected with the posthuman. For me, it is Hayles' work⁴⁴ that addresses the central issues and unpicks them in order to understand how the idea of a literal posthuman could be considered possible. In the evolution of the idea from cyborg to posthuman she contests

the conceptualization that sees information and materiality as distinct entities. This separation allows the construction of a hierarchy in which information is given the dominant position and materiality runs a distant second.⁴⁵

³⁶ HALBERSTAM, J. (2000) Skinflick: Posthuman Gender in Jonathan Demme's *The Silence of the Lambs p*56. IN BADMINGTON, N. (Ed.) *Posthumanism* Basingstoke UK; NY, Palgrave.

³⁷ Ibid.

³⁸ BADMINGTON, N. (Ed.) (2000) Posthumanism, Palgrave.

³⁹ GRAHAM, E., L. (2002) Representations of the Post/Human; Monsters, Aliens and Other in Popular Culture. New Brunswick NJ, Rutgers University Press.

⁴⁰ PEPPERELL, R. (1995) The Post-Human Condition, Oxford, Intellect.

⁴¹ ESFANDIARY, F. M. (1989)(known as FM-2030) Are You a Transhuman?, Grand Central Publishing.

⁴² Ibid.

⁴³ MORAVEC, H. (1987), (1988), (1997)

⁴⁴ HAYLES, N.K. (1999)

⁴⁵ lbid. p12

Reading extends to Cognitive Science,⁴⁶ the Body,⁴⁷ and references to Ductal carcinoma in situ, Spectacles and Contact Lenses, History of Dentistry, Cybernetics, Cybertheatre, Looping, Feedback, Qualia, Distributed Cognition, Feminist Theory and the Body, Human Nature, Suicide, Subjectification of the Body, Imagination and Memory, Film History, Derrida, Descartes, Lacan, Deleuze, Haraway, Grosz, Pollitt, Auslander, Baudrillard, and G.T.Huang.

Key references for the project emerged from the works of Leder, Moravec, Hayles, Foucault and Butler. The work of Leder is a basis of independent confirmation of the experience that began this project. The project uses the work of Moravec and Hayles to question the posthuman and to locate the aspect of posthuman that is the focus of this project. Areas of ideas of the posthuman suggest connections with the work of Foucault's. A position taken by Butler is essential in the research. The work of Jo Spence operates as a reference point for the project and, as such, is a key text. 'Repair and Maintenance' events examine the contrasting ideas arising in stages of the project development. In addition to Jo Spence, work of artists Gormley, Stelarc and Orlan situate my studio practice and to help to locate my perspective.

The project accepts *The Absent Body* (1990)⁴⁸ by Leder⁴⁹ as an appropriate study revealing the ways in which the body is absent in our daily lives. The work of Leder offers understanding regarding both the researcher's sudden awareness of body and the experience of a more general lack of awareness of body in *Repair and Maintenance 1*.

⁴⁶ BALCETIS, E. & DALE, R. (2003) There is no naked eye: Higher-order social concepts clothe visual perception. IN ALTERMAN, R. K., DAVID & (Eds.) *Proceedings of the Twenty-Fifth Annual Conference of the Cognitive Science Society, Boston, Massachusetts 31 July - 2 Aug. 2003.* [online] Available from: http://cia.psyc.memphis.edu/rad/confpapers/baldal.pdf [Accessed 31st March 2008], University of Memphis. ⁴⁷ WELTON, D. (1999) *The Body*, Oxford, Blackwell Publishers.

⁴⁸ LEDER, D. (1990)

⁴⁹ Leder has specialty in Philosophy of the Body and Philosophy of Medicine / Medical Ethics, he has an M.D. from Yale School of Medicine and PhD in Philosophy from State University of New York at Stony Brook. He is y at Loyola College in Maryland, teaching Western and Eastern Philosophy.

Moravec⁵⁰ prioritises information above all else. He is the proponent of the literal posthuman; his work is referenced throughout the project.

Hayles ⁵¹ follows the movement from the constraints of presence / absence of liberal humanism into pattern / randomness, which still operate on oppositions but moves away from the hierarchal and allows randomness to take priority over pattern, presenting an unknown outcome, that enables a more emancipated human. This implies the possibility of a human free from ideas of autonomy embedded in presence / absence, one not facing a future of losing the corporeal body in order for the conscious mind to be put into a machine. Hayles offers a more abstract perspective, one wrestling to avoid the literal posthuman as inevitable. Writers Toffoletti⁵² and Yakhief⁵³ reference Hayles' seminal work as a matter of scholarship.

Kim Toffoletti, in 'Transformations: Feminism and the Posthuman',⁵⁴ a text that is the basis for 'Cyborgs and Barbie Dolls',⁵⁵ uses the embodiment stressed by Hayles but places it in a position aligned with Moravec's ideas. Her posthuman figurations evolve out of ideas of cyborgs, the precursor to the posthuman. The central concern for Toffoletti is 'to create productive

⁵⁰ Moravec a Research Professor in the Robotics Institute of Carnegie Mellon University, Pittsburgh, is Co-Founder and Chief Scientist of Seegrid Corporation started in 2003.

⁵¹ Hayles is Professor in the Program in Literature at Duke University, Durham, North Carolina.

TOFFOLETTI, K. (2003) *Transformations: Feminism and the Posthuman* (PhD, Monash University). *Centre for Women's Studies and Gender Research School of Political and Social Inquiry*. Monash University. TOFFOLETTI, K. (2004) Catastrophic Subjects; Feminism, the Posthuman, and Difference *thirdspace* [online] volume three issue two, March 2004. Available from: www.thirdspace.ca/articles/3_2_toffoletti.htm [Accessed 11th Dec 2008].

⁵³ YAKHIEF, A. (2008) Towards a post-human distributed cognition environment *Knowledge Management Research and Practice*, Vol 6, pp. 287-297 pub Palgrave Macmillan from Ingenta Connect. Available from http://www.ingentaconnect.com/content/pal/kmrp/2008/00000006/00000004/art00004 [Accessed 12th July 2009] and http://www.esc-pau.fr/documents/cahiers%20recherche%2008/cahier-10-art1.pdf

⁵⁴ TOFFOLETTI, K. (2003)

⁵⁵ TOFFOLETTI, K. (2007) *Cyborgs and Barbie Dolls. Feminism, Popular Culture and the Posthuman Body,* New York, I.B. Tauris & Co Ltd.

possibilities for feminist formulations of subjectivity',⁵⁶ using the relationship between women and technology with a focus on feminism. She uses the ideas and creations that arise out of the posthuman of Moravec's theory to consider theoretical ways of positioning the posthuman 'as an in-between subject, creating the possibility for feminism to imagine subjectivity in terms of transformation, pleasures and potentialities'.⁵⁷

Ali Yakhief bases the definition of posthuman in *Towards a Post-Human Cognition Environment* on the definition of posthuman given by Hayles.⁵⁸ The paper argues that:

Knowledge context is increasingly becoming a posthuman context that lies beyond the direct control and manipulation of humans [...].⁵⁹

Suggesting that:

Emergence replaces human intentionality and the dynamic partnership between humans and non-humans, and that intelligent machines replace the liberal humanist subject's manifest destiny to dominate and control knowledge.⁶⁰

The argument that cognition does not flow from one centre but becomes a distributed cognition, challenges 'humanist thinking'⁶¹ and also uses the position and analysis of Hayles.

⁵⁶ TOFFOLETTI, K. (2003) *Transformations: Feminism and the Posthuman* (PhD, Monash University). *Centre for Women's Studies and Gender Research School of Political and Social Inquiry.* Monash University.

⁵⁷ Ibid.

⁵⁸ YAKHIEF, A. (2008) Towards a post-human distributed cognition environment *Knowledge Management Research and Practice*, Vol 6, pp. 287-297 pub Palgrave Macmillan from Ingenta Connect. Available from http://www.ingentaconnect.com/content/pal/kmrp/2008/00000006/00000004/art00004 [Accessed 12th July 2009] and http://www.esc-pau.fr/documents/cahiers%20recherche%2008/cahier-10-art1.pdf P47

⁵⁹ Ibid. P 46

⁶⁰ Ibid. P 46

⁶¹Ibid. P 46

Foucault,⁶² whose works include 'Discipline and Punishment'⁶³ and 'The Birth of the Clinic',⁶⁴ moves to free the past from 'a history whose function is to compose the finally reduced diversity of time into a totality fully closed upon itself [...]',⁶⁵ to genealogy that

is capable of liberating divergence [...] capable of shattering the unity of man's being through which it was thought that he could extend his sovereignty to the events of the past.⁶⁶

Butler⁶⁷ challenges Foucault in 'Foucault and the Paradox of Bodily Inscriptions'.⁶⁸ The position of Butler is central to the project, offering a focus upon what may be beneath the body, 'peeled' of Foucauldian inscription, and to consider whether it is possible for bodies without inscription to exist, or if by understanding inscription, is it possible for the underlying body to be known to some degree?

The choice of artists depends on their relevance to the project. There are many artists who work with the body such as Marina Abramovic. She works

Michel Foucault (1926-1984) a French philosopher held a chair of History of Systems, taught at the College de France, and at the University of California, Berkeley. He was associated with structuralism but subsequently distanced himself from it. He rejected being labelled as a poststructuralist thinker, although this is how he was often interpreted. He has a genealogical approach to history.

⁶³FOUCAULT, M. (1977b) Discipline and Punish (1st pub as Surveiller et punir by Editions Gallimard 1975), London, Penguin Books Ltd.

⁶⁴ FOUCAULT, M. (1991) The Birth of the Clinic (1st Pub 1973), London, Routledge.

FOUCAULT, M. (1997) Nietzsche, Genealogy, History in BOUCHARD, D. F. (Ed.) Language, Counter-Memory, Practice: Selected Essays and Interviews Cornell University Press. P 152
 Ibid. P 153

⁶⁷ Butler is an American Poststructuralist philosopher known for her writing on feminism and political philosophy; among her works are *Gender Trouble*, *Giving an account of oneself* and *Foucault and the Paradox of Bodily Inscriptions*. She is the Maxine Elliot professor on the Departments of Rhetoric and Comparative Literature at the University of California, Berkeley.

⁶⁸ BUTLER, J. (1999 (a)) Foucault and the Paradox of Bodily Inscriptions; (Pub in The Journal of Philosophy, 86 Nov 89, 601 - 607) IN WELTON, D. (Ed.) *The Body* Malden and Oxford, Blackwell Publishers Ltd.

with the limits of the body. Her focus is the relationship between the artist and the audience. Superficially similar, the work is not useful for the project. The project focus is the relationship of art and medicine, the artist and medic; it is not concerned with the issue of pain *per se*. The artists referenced, contrast with the project, and demonstrate other practices and their differences to the project.

Jo Spence used photography as practice. She posed herself in works to examine her situation. Her work on recording her breast disease referenced my own experience; her choice to move out of mainstream medical tradition contrasts with my intention. She used her body as a site for her argument with social oppression and with gender issues, seeking empowerment and change.⁶⁹ These issues are embedded in the project and are the reason that she is referenced in this project.

Antony Gormley⁷⁰ is a sculptor. The appearance of his work is distinctly different to mine; however the intention in his work has a resonance with the project. His website states Gormley 'has made a radical investigation of the body as a place of memory and transformation, using his own body as subject, tool and material'. His focus on the experience of the body caught my attention, giving relevance to his work for the project. There is an area of similar concern of body awareness and experiences within both studio practices. His desire 'to reinvent the body from the inside, from the point of view of existence'⁷² has a resonance when referencing the experience of the researcher who exists as the subject within the project. He tells us 'I had to start with my own existence.'⁷³

⁶⁹ Jo Spence (1934- 1992) a British photographer and writer known for her work (1986) *Putting Myself in the Picture: A Political Personal ad Photographic Autobiography*, London, Camden Press.

⁷⁰ Gormley RA is an English Sculptor with a degree from Cambridge in Archaeology, Anthropology and History.

⁷¹ GORMLEY, A. (2009) Antony Gormley, [online]. Available from: http://www.antonygormley.com/viewtext.php?textid=1&page=1 [Accessed 28th Feb 2009].

GORMLEY, A., GOMBRICH, E. H., HUTCHINSON, J., NJATIN LELA, B. & MITCHELL, W. J. T. (2003 1st pub 1995) *Antony Gormley*, London, Phaidon Press.
 Ibid.

Stelarc⁷⁴ is a performance artist. He does extreme things with his body, such as hanging himself by several hooks placed through his body. His actions go beyond the medical events within this project; he is not repairing the body he uses it for whatever ideas he develops. He documents his views on the future of the body. I contrast his work and position to my practice; this helps to position the project. Stelarc's work helps the researcher to see the posthuman elements in use in a clear direction towards Moravec's ideas. Stelarc views the body as obsolete; as something to alter and redesign.⁷⁵

Orlan,⁷⁶ a self-declared feminist artist, uses plastic surgery as a medium. She is not undergoing the procedure for repair. She is altering her appearance, a concept that arises in the project. This makes her work and intention of interest to the project; it offers comparison and contrast to the studio process of the project. 'My work is not a stand against cosmetic surgery, but against the standards of beauty, against the dictates of a dominant ideology that impresses itself more and more on feminine [. . .] flesh'.⁷⁷ As with the subject of this project Orlan remains conscious during her surgery.⁷⁸

Julie Clarke states that:

Orlan engages with rhetoric of cyberspace and the seduction of multiple personas. By redesigning her face to mirror more closely that of her imaginary self-image,

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⁷⁴ An Australian Performance Artist who holds the Chair in Performance Art, School of Arts, Brunel University, West London and is Senior Research Fellow and Visiting Artist in the MARCS Auditory Labs at the University of Western Sydney, Australia. Works include *Stomach Sculpture* 1993, when he swallowed a 'sculpture' monitoring it with a camera.

⁷⁵ STERARC (2009) Obsolete Body [online]. Available from

[:]http://www.stelarc.va.com.au/obsolete/obsolete.html [Accessed 28th Feb 2009].

⁷⁶Orlan is a French Artist. She is Professor at the Ecole Nationale Superieure des Beaux-Arts in Cergy.

⁷⁷ O'BRYAN, J. (1997) Saint Orlan Faces Reincarnation. *Art Journal*. [online] Vol. 56, No. 4, Performance Art: (Some) Theory and (Selected) Practice at the End of This Century (Winter, 1997), pp 50 -56 Available from: http://www.jstor.org/stable/777720 [Accessed 28th Feb 2009], College Art Association.
⁷⁸ Ibid.

Orlan reveals that self, like knowledge, is a shifting construct.⁷⁹

Although there is some similarity between Orlan's work and Repair and Maintenance 6, they are fundamentally different. Here is an alteration to the face that has an aspect of ideas of beauty, but entwined with the 'repair' is a physically and visual expression of the subject seeking a 'voice'.

CHAPTER 2 - METHODOLOGY and METHODS

Methodology

In order to approach the research question a methodology that privileges practice is needed. That methodology is Action Research; a term first used by Kurt Levin. ⁸⁰ The methodology is recognisable through the structure of its process of Observation, Reflection, Planning and Action, forming one or more cycles. ⁸¹ Reflection on action identified the methodology of the project. 'Action research is a form of self-reflective inquiry by participants in social (including educational) situations in order to improve the rationality and justice of (a) their own social or educational practices (b) their understanding of these practices (c) the situation in which the practice is carried out. ⁸² The methodological pattern emerged out of uncertainty inbuilt into the process of practice; it was initially a perceived predicament due to the random nature of only being able to accumulate material from 'Repair and Maintenance' events in the random fashion that it occurred. Le May and Lathlean state there is strength in uncertainty. ⁸³

⁷⁹ CLARKE, J. (2002) The Human/Not Human in the Work of Orlan and Stelarc. IN ZYLINSKA, J. (Ed.) *The Cyborg Experiments; the extensions of the body in the media age.* London, Continuum International Publishing.

⁸⁰ LE MAY A & LATHLEAN, J. (2001) Action Research: A design with potential. *Nursing Times Research* 2001;6;502.

⁸¹ Ibid.

⁸² Ibid.

⁸³lbid.

Schon writes 'reflection by the practitioner gives access to encompassing the uncertainty embedded in the swampy lowlands', 84 and states reflection-in-action:

May not be a very rapid process, it can take time, it is "action-present". 85

Within the project reflection does take time, with some repair and maintenance events existing in a short time frame others such as dental examination and repair are ongoing. The project includes the use of 'raw' material⁸⁶ generated prior to this research that becomes part of a process during the project. 'Repair and Maintenance 3' evolves from an event used to create work during a Masters programme. The project is emergent and qualitative, both characteristics of action research. *Cycles 1, 2* and *3,* where cycle 1 is an extraction from *Repair and Maintenance 1,* demonstrate the methodology of the project. All three cycles have Observation, Reflection, Planning and Action - characteristics that continue through the project and that are the structure of Action Research.

Cycle 1: From *Repair and Maintenance 1- an event of breast disease*The **observation** - the sudden heightened awareness of body uncovered a surprising general lack of general awareness of the lived body.

Reflection - how could there be such a lack?

The **plan** - is to research further, to use 'repair and maintenance' as a metaphor and to remain in the western medical environment for the project.

The **action** - is the collection of material from future medical events. *Experiential* material from awareness of sensations during the medical event, noting mentally experiences of the body, what the body sees, hears, smells, tastes, feels from touch to the body, and holding this experiential material within

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⁸⁴ SCHON, D. (1983) The Reflective Practioner: How Professionals think in action, London, Temple Smith.
p 42

⁸⁵ Ibid. p 62

⁸⁶ Raw unprocessed material from medical event material being reflected upon since the medical event.

memory. There is a requirement to find a means of creating records of such events through studio practice.⁸⁷

Cycle 2: Data Collection - material from medical events

Observation - By only using medical events of which the body remains conscious throughout, good experiential material becomes available. Good quality of engagement with the medical institutes and practioners generates the opportunity needed to create and collect physical material.

Reflection - Material is reliant on 'Repair and Maintenance' events of the participating-observer-researcher; these may be too infrequent to be of use.

Plan - collect material from other sources.

Action - to trial differently sourced material, such as medical archives and the medical events of others.

Reflection - The use of medical archives gives access to material from similar events undertaken by the researcher, for occasions when it had not been possible to collect direct material. Fig. 8⁸⁸ references an original lost image of the researcher, from an event experienced by the researcher. Apart from this single instance, archive material is inappropriate to the project.

Action - to collect material from the medical events of others with whom a close dialogue was possible in order to discuss the internal experience of the event.

Cycle 3: Data Collection - Material from other people

The **observations** - using events of calls for intimacy with the 'patient' in order to have experiences explicitly shared; ethics became a concern; reproducing an image needs permission as with Fig. 3. There is not the freedom needed to process the image within studio practice, a 'given' with one's own body material; with the researcher positioned as one person removed from the event, engagement with medics is more difficult.

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⁸⁷ The content of this cycle constitutes the basis for *Repair and Maintenance 1- Reflection on the event of breast disease* and is examined more fully in a later section of this text.

⁸⁸ Fig. 8 reproduced with kind permission of 'A'.

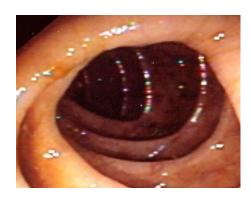


Fig. 3 - Bowel *of 'A'* (2005) (Reproduced with kind permission from 'A')

The event-image of another holds none of the intimacy of looking at material specific to a directly experienced event.

With **reflection** the image *Bowel* (Fig. 3) holds no connected memory of the medical event. It cannot contribute to the combining of my inner experience of an event with external evidence of the event to be processed in the studio.

The **plan** - is to establish the methodology for the project, to situate the project within practice with artists and with theorists.

The **action** - is to use 'repair and maintenance' material of the researcher.

Cycles 1, 2 and 3 include many of these characteristics listed by Le May and Lathlean; in its potential to facilitate experimentation, emancipation, enhancement, the project is inherently practical, it deals with real world situations, it contains reflection and participation is active. 89

Methods

Video, either as a single projection or in many cases as part of an installation, is the main method of practice. The researcher perceives the light that creates the projection as having fragility and uses it to imply and echo life force. As with

⁸⁹ LE MAY A & LATHLEAN, J. (2001) Action Research: A design with potential. *Nursing Times Research* 2001;6;502.

life, light can be interrupted or redirected. The work ceases to be once the light source of video is switched off, the viewer holds only the memory of what it was; so too with the cessation of life.

Looping is often an essential method within Studio Practice. There was a break in the loop of the sequence of *Repair and Maintenance 5* (eye surgery) during its showing in New Contemporaries 2004; the organisers inserted a title page. From my point of view as the artist, this interruption destroyed the piece. In the studio outcomes looping has reference to life force, to the rhythm of the body, to breathing. In Education, looping is when a teacher remains with a class for two or more years.

The benefits of looping for students in this context include reduced apprehension at starting a new school year, increased continuity and more in-depth relationships with the teacher and with peers (McClellan 1995). For teachers it is becoming familiar with other developmental stages of children, working with students and parents for longer periods of time (Mazzuchi & Brooks 1995)'. 90

This applies to the benefits of looping in my work, considering the educational model as metaphor; the artist and the viewer gain from looping in a way that is spoken of in terms of education. There is no inference that the studio work aims to educate, rather that from looping a greater intimacy with the work is possible, providing an opportunity for the viewer to 'remember' their body.

Feedback loops (Fig. 4 after diagram of J De Rosnay, 1997⁹¹), are loops that alter a system, and are intrinsic to the Posthuman. ⁹²

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⁹⁰ LABORATORY, N. C. R. E. Looping [Online]. Available from:

http://www.ncrel.org/sdrs/areas/issues/methods/instrctn/in5lk10.htm [Accessed 4th March 2009].

⁹¹ DE ROSNAY, J. (1997) Feedback Pub Principia Cybernetica Web. Available from:

http://pespmc1.vub.ac.be/FEEDBACK.html [Accessed 4th March 2009].

⁹² HAYLES, N. K. (1999)

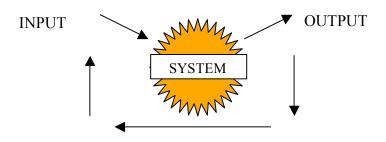


Fig.4 - constructed diagram after J De Rosnay (1997)

The input from the environment in a feedback loop alters or affects the system. Inputs are the result of the environment's influence on the system and the output is the influence of the system on the environment. This occurs in the studio practice. In *Breast Imaging* (Fig. 7), for example, the technically generated image created in the environment feeds back into the system and into the participating-observer-researcher, the subject, creating a change. Hayles writes that the feedback loop implies that boundaries of the autonomous subject are up for grabs, since feedback loops can flow not only within the subject, but also between the subject and the environment. 4

Not knowing the occasion of 'repair and maintenance' in advance makes randomness a characteristic method in the project. This laid the foundations for uncertainty and chaos. Randomness is far reaching. The project takes a risk in depending on the randomness of place and time an event requiring 'repair and maintenance' will occur. I found no other way to meet the 'repair and maintenance' constraints of the project. It is open to chaos, a chaos often experienced during the project.

Chaos could be viewed as undesirable, indicating a lack of meaning, direction, order or pattern and, along with this lack, a sense of deficiency.

⁹³ DE ROSNAY, J. (1997)

⁹⁴ HAYLES, N. K. (1999)

Current thinking has abandoned the 'straight and narrow' of presence / absence with its inbuilt assumption of movement in a specific direction towards a goal that is meaningful to the system. Current thinking has moved away from assuming a stable self, which is the basis of a liberal humanist subject. Use of chaos is a tool that assists in leaving the liberal humanist subject position of the researcher to one side. Current thinking is open to chaos in pattern /randomness. Langton and Kauffman celebrate chaos 'as accelerating the evolution of biological and artificial life'. 95 Avoiding the assumption of a stable self, and extending this to accepting a changing subject as a method, puts the practice in the realm of pattern / randomness that does not assume a stable self. It is difficult to work with, but ultimately rewarding when a non-prescribed meaningful pattern emerges. Hayles states that pattern / randomness came to supersede presence / absence in the posthuman position. Presence / absence has qualities which support the traditional values of God, Logos, teleology and include ideas of desire / lack; 96 this pairing is associated with a liberal human subject and indicates thinking 'within the box' (Fig. 5). John Phillips explains presence and absence:

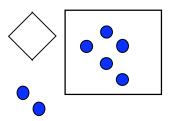
Presence, we assume, describes an original state, a state that must have come first [...] the world is present to my observing eye [...] my observing consciousness must be present to my own self-reflection [...] *meaning* as conscious thought, must be present [...] a second moment of presence invades consciousness as **absence--**the disappearance of the world behind the veils of language. In this way gaps, absences and deficiencies [...] are subordinated to a principle of **presence.**⁹⁷

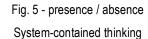
⁹⁵ HAYLES, N. K. (1999) *How We Became Posthuman,* Chicago The University of Chicago Press.

⁹⁶ Ibid.

⁹⁷PHILLIPS, J. W. P. (2002) *Introduction to Derrida* The Website of John Phillips. National University of Singapore. Available from http://courses.nus.edu.sg/course/elljwp/derriduction2.htm. [Accessed 16th Feb. 2009].

Pattern / randomness offers both working in and out of the box. Randomness and chaos have a positive effect.





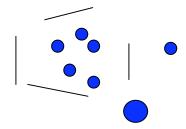


Fig. 6 - pattern / randomness System-uncontained thinking

'Randomness is not simply a lack of pattern, but is seen as the creative ground from which pattern can emerge', 98 giving an openness with no given end goal that has to satisfy the closed system, a move away from teleology. Presence / absence, Hayles states, is replaced by pattern / randomness in the realm of the posthuman. 99 Pattern / randomness has its origins in information theory, where information equates to a pattern that can move between receptors; it situates the subject as different to the assumed autonomous and stable self of the liberal humanist subject, offering thinking 'outside of the box' (Fig. 6). A move from presence / absence, to pattern / randomness offers chaos and confusion; it also offers a different outcome.

Negotiation occurs throughout the project in different situations and should be taken for granted as part of the project process. It is initially present in arranging the site for the events; all involved need to be as one in the matter of facilitating any recording using either stills or video or both, also in the collecting and keeping in an appropriate manner any medical debris required by the researcher. Negotiation is constantly present in studio practice where

⁹⁸ HAYLES, N.K. (1999). P 286.

⁹⁹ Ibid.

reflective negotiation between researcher and material is vital to the creative process. It is further present in studio outcomes, not only in the acquiring of a space to present the work but also in negotiation between the work and the space acquired.

I have already introduced the idea of engagement or access. The ability to engage is important to research as a general requirement. Professionals in medicine are given access to my research and the needs of the project are spoken of; it is this access that captures their interest and is the beginning of negotiation and engagement.

CHAPTER 3

AWARENESS OF THE BODY

Repair and Maintenance 1 - an event of breast disease

Occurring prior to the research project this event remains 'action present' throughout the studio research effecting ideas often locating back to this experience. The event forms the cornerstone for the concerns of the project and *Repair and Maintenance events 2-8*; it opens dialogues on body experiences, traditional medical environment and use of information from beyond the body.

Event Overview

This event begins to address the question 'how art practice can use medical events...'. In the tradition of her fine art process, the researcher mentally observes and analyses the happenings as the events unfold. There are two parts to the event, mammogram and surgery. At this point in time, with no idea of a project, no external medical material was collected. The event began with a body

¹⁰¹ SCHON, D. (1983) *The Reflective Practioner: How Professionals think in action,* London, Temple Smith. P62

¹⁰⁰ BIRK, D. (2009) Engagement lecture at WSA.

signal, a swelling, the living 'flesh and blood' was developing in a different way than it had previously presented. This 'different behaviour' makes body visible to the attention of the subject through the fact of the change; a change that triggered examination of the breast and the production of technologically generated mammograms. One mammogram resulted in the attending medics taking a decision to proceed with breast surgery. This was the only event of the project for which the researcher was intentionally unconscious. The mammogram (similar to Fig. 7) indicated a potential cancer situation. A lumpectomy was carried out. The surgical procedure disclosed two pieces of information, the white spots on the generated image (similar to Fig. 7) were not life threatening; and an area of cells near to the site, but not showing on the mammogram as a suspect area, was a pre pre-cancer that if left in place would have become cancer.

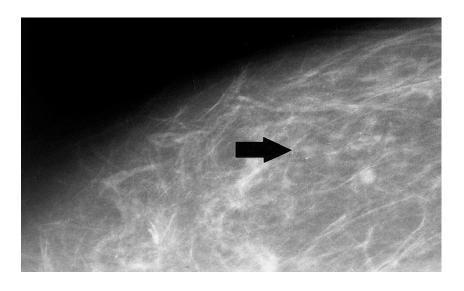


Fig. 7 - Figure 16c, Sickles EA. Breast Imaging: from 1965 to the present. Radiology 2000; 215:1. (Similar to lost material - breast 1995 - Yvonne Jones)

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¹⁰² A lumpectomy is surgery to remove an area of breast tissue.

The corporeal body was failing and disease was present. Intervention 'repaired and maintained' the body enabling the continuation of life, the continuation of the subject.

The Subject's Response

Due to the subject knowing no other choice, she surrendered the body as the medical object for the procedure. At this point in life the researcher was a submissive (to medical professions) subject allowing objectification without any sense of a possible different position. The researcher experienced heightened awareness of the body, an understanding of a general lack of awareness of the body, vulnerability, fear of her human mortality and a desire to survive. She experienced giving attention to, and having respect for, the corporeal flesh of being; knowing life to be dependant on the living breathing body, knowing the subject is somehow body. The event gave a focus for the conscious mind, a focus on the subject body; the researcher-subject experienced embodiment.

The Studio

Material from the event:

This event has limited amounts of physical material, consisting of recalled images and responses such as trauma held in memory, plus an archive sourced image Fig. 7¹⁰⁴ similar to the subject's record, lost within the hospital archive. The flesh in Fig. 7 has possible disease not felt immediately, not experienced directly but known only via a technically generated image. The white dots at the arrowhead could signify ductal-carcinoma-insitu.¹⁰⁵

104 Fig. 7 reproduced with kind permission of Radiological Society of North America

¹⁰³ This is stated from the subject's experience.

¹⁰⁵ Having ductal-carcinoma-insitu means the cells lining the milk ducts (the channels in the breast that carry milk to the nipple) are cancerous, but remain contained within the ducts without growing through into the surrounding breast tissue. From: CANCERBACKUP Ductal carcinoma in situ [online].Cancerbackup.

Process:

Studio research in this instance is ongoing, throughout the project and beyond. It is abstract in so much as the breasts have become a 'tool', existing as a constant reminder and connection to embodiment, allowing the subject to continue observing, experiencing the changes with ongoing recall, engagement and reflection on the event. This event begins the research, while it also prevails as a constant reference throughout.

Studio outcome:

The researcher is the studio outcome, the participating-observer-researcher existing as a corporeal being, as the subject, as *Work in Progress* (ongoing) is in a sense the studio outcome. By this, I mean that while the medical event itself has the physical affect of maintaining life, the art practice aspect of the research facilitates a change of awareness and understanding resulting in the researcher becoming an emerging (posthuman) subject. The researcher is the ongoing outcome, existing in whatever space she occupies.

Observations

- Of being human with human vulnerability and mortality, accompanied with a desire to survive.
- Of a sudden heightened and direct awareness of body.
- Of the realisation of general lack of awareness of body.
- Of a sense of embodiment.
- Of an engagement with technology to gain information beyond the scope of human senses.
- Of the need of human expertise to translate technically generated information.
- Of the subject becoming an observer of her body.

Available from: http://www.cancerbackup.org.uk/Cancertype/Breast/DCISLCIS/DCIS [Accessed 27th May 2009].

- Of the subject seeing the position of the body as one of submission.
- Of the subject noting the body appears to be seen by medical professionals as the medical object, ignoring the subject as a presence.

Reflections

Human 'Being' - The Body Experienced:

In becoming an observer of her body, the researcher chooses to increase attention to the body in a counter action to the absence generally experienced and explained by Leder. ¹⁰⁶ By means of this attention she notices and records high awareness of direct experience, gross events ¹⁰⁷ and pain, noting that direct experience of more subtle events, such as a rumbling belly and even breathing are less immediately experienced, only made known through directed focusing of attention. Silent events, such as the growth of cancer cells, are outside of direct experience existing in nullpoints ¹⁰⁸ (until such a time as the disease is advanced sufficiently to cause symptoms). Direct experience of some body events in some body areas is not available, as in the instance of the 'silence' of the diseased breast. Leder states about this 'silence':

The corporeal depths have their own phenomenological nullpoints [...] regions that are almost entirely insensitive [...] [...] regional gaps that cannot be somesthetically perceived. 110

¹⁰⁶ LEDER, D. (1990) *The Absent Body*, University of Chicago Press.)

¹⁰⁷ Meaning events of the body that are glaringly obvious such as breaking wind, sneezing etc.

¹⁰⁸ Nullpoints described and explained by Leder. LEDER, D. (1990) (ditto)

¹⁰⁹ Sensory data derived from skin, muscles, and body organs in contrast to that derived from the five special senses. (Definition taken from mondofacto.com an education company who exclusively license the Online Medical Dictionary, originally developed by Dr Graham Dark; users include health professionals, medical and biomedical students, medical secretaries and academics.)

¹¹⁰ LEDER, D. (1990) *The Absent Body* University of Chicago Press.

Leder acknowledges the common absence of the body, ¹¹¹ explaining it as the need for a lived body to be self-effacing. ¹¹² He employs 'a broad notion of the lived body, equating it with the embodied self that lives and breathes, perceives and acts, speaks and reasons'. ¹¹³ This description coincides with the experience of the researcher during this event of *Repair and Maintenance 1*.

Despite the commonalities of bodies, body experiences can be very difficult to communicate from one subject to another, with some experiences such as smell impossible to convey. 114 Jackson, among others, refers to these impossible-to-convey experiences as Qualia. He once stated Qualia are non-physical, arguing against physicalism, against the statement that 'all (correct) information is physical information', 115 this has an echo of the posthuman position of Moravec whereby information is claimed to exist as itself in a non-instantiated pattern. 116 Jackson states 'that nothing you could tell of a physical sort captures the smell of a rose'. 117 The concept of Qualia not being physical is controversial because, as does Moravec, it promotes Cartesian dualism. Jackson has since altered his point of view, 'although I once dissented from the majority, I have capitulated [...]'. 118 While recognising the existence of the inability to communicate some experiences between subject bodies, this researcher does not accept it as evidence of dualism, proposing instead a simpler possibility - that of

¹¹¹ Common absence referring to the disappearance of the body from awareness as explained by Leder and as observed and guestioned by the researcher following trauma.

¹¹² Ibid. P69

¹¹³ Ibid. P6

¹¹⁴ JACKSON, F. Epiphenomenal Qualia [online] Available from

http://instruct.westvalley.edu/lafave/epiphenomenal_qualia.html [Accessed 13/02.2009], first appeared in *Philosophical Quarterly*. 32 (1982) also Eckert, Maureen *Theories of the Mind* 2006 Rowman & Littlefield Publishers Inc. Maryland USA and Oxford p102 -115. pp102-115)

¹¹⁵ Ibid. p1

¹¹⁶ MORAVEC, H. (1987)

¹¹⁷ JACKSON, F. (1982) http://instruct.westvalley.edu/lafave/epiphenomenal_qualia.html p

¹¹⁸ JACKSON, F. (2003)Mind and Illusion pp251-271 IN O'HEAR, A. (Ed.). *Minds and Persons* Cambridge University Press. P251

the limitation of language, offering the view that sometimes music, poetry and visual art may be more successful in communicating an experience that eludes straightforward prose. If it is the limit of language that causes a difficulty, I suggest it is desirable to push those limits to make such experiences more accessible. The method of the project moves to do this, and to reduce the boundaries of communication from '*impossible* to communicate' spoken of by Jackson, to '*very difficult* to communicate', offering visual art as a tool in the communication vehicle of that experience. In becoming more aware, the researcher experienced a sense that 'me'¹¹⁹ includes her vulnerable body - she is not separate or different to body, she is subject-body.

Posthuman 'Being' - Experiencing Technology:

In experiencing being mortal and human during this event, in experiencing a sense of embodiment, what relevance does the notion of the posthuman hold? Moravec imagines a literal posthuman, a mind consisting of information patterns without a corporeal body. How can the body be felt and experienced as essential by the subject, while contemplating the possibility of being a literal posthuman? Are we, can we actually be posthuman in Hayles' terms where she reconstructs the literal posthuman in theoretical values? Or can we ever become posthuman in Moravec's terms?

Technology and the knowledge of the medics gave access to the information needed for *Repair and Maintenance 1*, making visible the unseen body; as such it is an example of 'distributed cognition' central to the posthuman; ¹²⁰ it includes information available from beyond the body, information sourced outside of 'the skull and the skin'. ¹²¹ Hutchins speaks of distributed cognition that need not be:

¹²¹ HUTCHINS, E. (2000) *Distributed Cognition* [online] pub University of California. Available from: http://eclectic.ss.uci.edu/~drwhite/Anthro179a/DistributedCognition.pdf [Accessed 11th march 2009].

¹¹⁹ Moravec refers to 'me' as continuing when mind is transferred into a machine. Dualism through Reductionism (1987)

¹²⁰ HAYLES, N. K. (1999)

Encompassed by the skin or skull of an individual [...] cognitive processes may be 1) distributed across members of a social group, 2) from coordination between internal and external (material or environmental) structure, and 3) may be distributed through time in such a way that the products of earlier events can transform the nature of the later events ¹²²

A decision to use technology was taken (already) for granted, subsumed into the western medical environment and the researcher's life. The accepting of and reliance on technology by medics continued during surgery, monitoring information regarding the condition of their medical object body. The subject accepted the use of technology as a 'normal' part of her 'repair and maintenance'. While having no experience of being posthuman during this event there are, on reflection, in fact some elements of the posthuman.

Elements of the posthuman, as listed by Hayles, 1) privileging information and 4) humans seamlessly articulating with intelligent machines, are present to some degree during surgery when the subject had to rely not only on the skills of the medics, but also on monitoring machines (measuring oxygen, anaesthetic levels, heart rate) to render an unconsciousness but alive subject during surgery. Engagement with these elements of the notion of the posthuman support, to some extent, a position in the direction of Moravec's desired goal for the transference of human consciousness across into a machine, while leaving the corporeal body aside. ¹²³

However, the subject's desire to survive alive and as body, for her to continue embodied, is a different sentiment to that held by Moravec, it is a position (from this perspective) that is more in line with Hayles who states 'the constraints and possibilities (of the body) have been formed by an evolutionary history that intelligent machines do not share.' She acknowledges the

¹²² Ibid.

¹²³ MORAVEC, H. (1987)

¹²⁴ HAYLES, N.K. (1999) p284

symbiotic relationship with intelligent machines while stating a limit to seamless articulation, claiming embodiment as the difference between humans and machines. ¹²⁵

Hayles does not denigrated technology, rather she has a preference that such technical elements can be used to better the human situation; close engagement with technology improved the researcher's situation.

Human / Posthuman

Using the notion of the posthuman as a tool is already altering the subject within the project; by this I mean the subject assumed at the start that she was human and in no respect posthuman, with a sense that she was an autonomous corporeal body. There is now an understanding for the researcher that a human can action a connection between body and technology (with the use of posthuman elements 1 and 4 as listed by Hayles) and that this is a move to thinking like a posthuman.

Issues Arising

Female 'Being':

With the given female subject-body of the project, the research question has an embedded implication of a position that is open to some feminist ideas and thinking. These areas of the research primarily have their roots in the lived experience of the female subject of the project. Because the body part is gender specific, it amplifies 'being female' within the project. The silent disease of the participating researcher was also the case for photographer Jo Spence; as with the researcher, Spence experienced personal disempowerment in the western medical regime. During such a medical process, assumptions may be made. The medical mediator, an integral part of the medical environment, can form

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¹²⁵ Ibid.

¹²⁶ SPENCE, J. (1986) *Putting Myself in the Picture: A Political Personal ad Photographic Autobiography,* London, Camden Press. P 150 -171 'the picture of health 1982 onwards'

decisions and attitudes that contain objectification and perceived inscription¹²⁷ of the body when considering available choices and attitudes towards the subject. Inscribed bodies are a claim of Foucault, ¹²⁸ bodies viewed through social and historic layers, each body carrying its 'labels', constructed by external forces. This position promotes normalising ¹²⁹ descriptions such as female, Welsh, Catholic, married, imposing culture and society in order to place the body in a suitable position (for the society or institution) and to maintain that position by seen and unseen power and directives, expectancies and responses. The issue of normalising raises ideas and potential engagement from within feminism, with specific regards to medicine; feminism holds that 'medicine can be used to construct and enforce normative ideas of femininity and appropriate patient behaviour'. 130 With such perceived inscription from a medic, decisions may be affected, for example with regards to the form of disclosure to the subject, or about what happens next, or indeed what is best for the body object.

Anne Scott explains 'how medicine has been identified as a site for the production and maintenance of social power and how, for many commentators including feminist health activists and theoreticians, biomedical discourse assumes and enforces a normative femininity.'131 Foucault includes medicine as one of the disciplinary networks arising from the institute of the prison. 132 He includes medicine in a series.

> Of the 'carceral' mechanisms which [...] all tend, like prison, to exercise a power of normalization [...] In this

¹²⁷ Inscription in the Foucauldian sense is inevitable, built out of social and cultural history.

¹²⁸ FOUCAULT, M. (1991 [1977])

¹²⁹ Normalisation is traditionally viewed in feminism as being inbuilt in medical practice to reinforce the female position in a patriarchal society.

¹³⁰ SCOTT, A. (1998) Homoeopathy as a feminist form of medicine. Sociology of Health and Illness, Vol 20 No 2, 191-214.

¹³¹ Ibid.p192

¹³² FOUCAULT, M. (1977b) Discipline and Punish (1st pub as Surveiller et punir by Editions Gallimard 1975), London, Penguin Books Ltd. P306

[...] instrument of complex power relations [...] we must hear the distant roar of battle. 133

Although a current concern for medicine in the UK includes the possibility that the increase of female practioners will result in the profession losing power and influence, neither Spence nor I experienced a corresponding contrasting increase of power. In 2004, Dame Carol Black warned of the domination by women in the profession ending in power loss. 134 The article points out that the top positions remain male dominated. Implicit in Black's utterances is the accepted state of powerlessness for women even now, to hold influence and social sway for a profession, such as medicine, which is perceived to be one of the 'incarceration' tools of Foucault. Even with this transformation of increased female medics, both Spence and I experienced the lack of our own power in a western medical environment; one possible explanation could include elements of the findings of Scott; that even in the empowering situation of homeopathy there is some difficulty when this is considered as a social encounter. A few homeopaths can model their clinical approach on the most elitist types of biomedical practice. 135 Extending this, if women medics continue to use the elitist practice model, there will be little change for the end user. Spence said 'no' to western medicine, 136 stepping out from the disempowerment of the medical 'incarceration' in her choice of an alternative approach to her disease, she found a 'delightfully bolshy socialist feminist naturopath', 137 finally choosing traditional Chinese medicine. Alternative medicine has the potential to escape the perceived patriarchal arena with its normalisation. Scott's work claims 'contemporary feminist homeopathy' does this and is a 'feminist form of medicine.' She

¹³³Ibid. p308

¹³⁴ BOSLEY, S. (2009) The future is female - how women are transforming the face of the health service. *The Guardian.*

¹³⁵ SCOTT, A. (1998)

¹³⁶ SPENCE, J. (1986)

¹³⁷ Ibid p152

¹³⁸ SCOTT, A. (1998)

concludes that 'contemporary feminist homeopathy addresses the concerns relating to dualism and power raised by the health-activists of second wave feminism.¹³⁹ Spence reacted against the western medical environment by making a choice to reject it; she chose an alternative treatment one that is not directly 'feminist' in the vein of feminist homeopathy, in order to negotiate and contribute to decisions about her own body. I subscribe to the ideas that there are issues of power dynamics within a clinical encounter and that social and environmental issues are incorporated within medical diagnosis and treatment. ¹⁴⁰ Alternative medicine may have much to offer, but there is a difficulty that this position negates the real skills and experience of traditional western medicine when choosing this solution. I perceive there is a risk in erasing either one approach, alternative or traditional western, and would prefer the position where they act jointly. Moving into such a different environment as Spence did means that there are characteristics of separatism¹⁴¹ present. In contrast to Spence the researcher remained within the western medical environment. Initially this was not out of choice rather it was from the position that the researcher-subject, deeply inscribed with a powerless female medical objectified position, perceived there was only this one way. An embedded expectation of subservience to the power of the medics is demonstrated in my belief of the necessity that I stay in the western medical environment; it did not occur to me to consider any other possibility in order to change the experience of exclusion from the decisionmaking about my body.

The 'issue of 'being female' raises areas of 'disempowerment', and 'objectification and inscription of the body' that open the project to the ideas of Anne Scott and Michel Foucault and to the work of Jo Spence.

While endorsing Spence's desire for empowerment, rather than removing oneself from the mainstream I hold a preferred hope of a situation in a

¹³⁹ Ibid.

¹⁴⁰ Ibid.

¹⁴¹ Choosing not to seek treatment in an alternative medicine where empowerment is easier to achieve, but to look for empowerment with out separating herself from traditional medical means

mainstream environment where healing was precisely this, without the reinforcement of inscription underlying socially constructed values. There was a wish for an environment where being seen without inscription was possible, so that being seen primarily as woman or man, white or black, religious or secular was no longer the case. Michele Waugh asked the researcher during an interview if 'experiences are particular to her gender'. The reply, quoted in part, situates the researcher at the beginning of the project; it acknowledges the starting point as the subject within the negotiations and engagement with medical personnel. The reply to the question at that juncture was as follows:

I do not know if my experiences are particular to my gender. What I know is that my work has in the past been referred to as feminist and possibly post-feminist, but I am not consciously working as such. However I may be such by nature. I was / am a human being who was born Female, Welsh, Catholic and with a sense of irrepressible curiosity about myself, about fellow human beings, and the world around us. There came a moment in my life when I had to acknowledge that, through 'nurture', I was so firmly buried in the patriarchal map of life that I denied all ideas of a different map existing. I was taught well, I was invisible with an internal war raging between acceptance of my (safe) invisibility and an unconscious (it dared not be heard) struggle against the death of my inner lively self. My body is me; I want it to reflect me, my enjoyment in being. 143

The researcher's choice for this project is that the body remains sited within western medicine environments, to observe, reflect, plan and act, in order to research her situation and position.

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¹⁴² JONES, Y. (2008) The Corporeal Body: Awareness of Body in the Twenty-First Century. IN LYLE CAROLYN D., KNOX SIMONE & MICHELE, W. (Eds.) *Making up Bodies* proposed book.
¹⁴³ Ibid.



Fig. 8 - From putting myself in the picture (Camden Press) (1986)

Jo Spence and Terry Dennett

Spence charted her disease in her studio practice (Fig. 8).¹⁴⁴ She was due to enter hospital in 1982 for a mastectomy and wanted a talisman to remind her that she had some rights over her own body.¹⁴⁵ Spence inscribed her body making her claim on it. Her action could be perceived as referencing Foucault's ideas on the inscribed body, her literal inscription as an act of defiance that I consider combats the medical objectifiers and inscribers.

Subject / Object:

The notion of 'lived body', used by Leder to refer to 'the embodied person witnessed from the third-person and the first person perspective alike', ¹⁴⁶ offers the opportunity, to consider the placement of the researcher. By looking for the positions within this event, the opportunity arises to consider comparisons of positions throughout the project.

Examining available visual material (Fig.7), and images from memory gives rise to two questions; they are:

¹⁴⁴ Reproduced here with kind permission of Terry Dennett

¹⁴⁵ SPENCE, J. (1986) *Putting Myself in the Picture: A Political Personal ad Photographic Autobiography,* London, Camden Press.

¹⁴⁶ LEDER, D. (1990) The Absent Body University of Chicago Press. P7

- How does the subject perceive herself (the subject perceiving herself as the subject)?
- How does the subject perceive her position in terms of the medical institution (the subject perceiving her situation, as she is positioned by the medics)?

The Subject perceiving herself as the subject: recognising the liberal humanist subject

Accepting Leder's explanation of body absence¹⁴⁷ does not satisfactorily explain the 'surrender' of body to surgery; something different is occurring in this situation, to surrender something one has to have possession of it. As a woman situated in a western medical environment, the experience of disempowerment and a sense of handing over the body (to professionals) is in keeping with ideas within feminism, as stated by Scott¹⁴⁸ that women receiving treatment in western medicine are disempowered and disenfranchised. At this point in time while achieving some sense of empowerment in general terms of her life (choosing ongoing education), there is a sense of the subject positioned both by others and herself as a subject within the patriarchal map and as part of a liberal humanist culture.

Feminist theorists have pointed out that it (the liberal humanist subject) was constructed as a white European male, a universality that worked to suppress and disenfranchise women's voices.¹⁴⁹

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¹⁴⁷ Ibid.

¹⁴⁸ SCOTT, A. (1998)

¹⁴⁹ HAYLES. N.K. (1999) P4

This positioning is supported by evidence of the subject in a culture so deeply inscribed (onto the subject) that she dismissed all notions of feminism, while enjoying some of the freedoms made available by feminists. The notion of a culture of possession, where the 'individual is the proprietor of his own person or capacities, owing nothing to society for them' 150 and 'freedom from the will of others' is the mantra. 151 Understanding the subject's position, both at the beginning and during this event, at this early point of the project as a liberal humanist subject, where the 'locus lies in the mind not the body', 152 is an explanation for the experience of the surrender of the body in the event. It was an expectation by the medics with regards to the subject and an expectation that the subject had of herself. Hayles states that posthuman ideas challenge and alter the liberal humanist position by means of an effect of distributed cognition, which results in any single entity of 'self-will being indistinguishable from the will of others', 153 but notes that, despite its altering capabilities, the posthuman of Moravec's position has a similar facet to liberal humanism, one of disembodiment; in both situations body is subordinate to mind. This thinking is openly declared in liberal humanism; it is more hidden in the roboticist posthuman thinking, but ultimately for the liberal humanist the subject does still 'have' a human body. 154 Hayles hopes that through her challenge and restructuring of roboticist posthuman values there is space for an alternative, for the position conducive to the long-range survival of humans and of other life forms, biological and artificial, with whom we share the planet and ourselves. 155 In 1997 Moravec stated 'it would be better to by-pass all the sensory processing, and insert the message from the computer directly into the thinking part of your

¹⁵⁰ Ibid. P3 Hayles recalls the definitive text of C.B Macpherson, The Political Theory of Possessive Individualism: Hobbs to Locke (Oxford University Press 1962. P3)

¹⁵¹ Ibid. P3

¹⁵² Ibid. P5

¹⁵³ Ibid. P4

¹⁵⁴ Ibid. P5

¹⁵⁵ Ibid P 291

brain.'156 While there may be an advantage in Moravec's idea, as there are unpleasant sensations that it may be good to avoid, for me the avoidance of enjoyable sensations would be a 'human' loss. However, whatever the structure of Qualia talked of by Jackson, some experiences seem non communicable, 157 so could machines do any better in communicating such sensual experiences or would this be information without sensation, and again a loss? Nevertheless, the researcher's experience of embodiment and the desire for ongoing life makes Hayles acceptance of finitude less than attractive, and so Moravec's idea necessitates consideration. While appreciating the advantage of technology and the information it generates and relates, the researcher desires to be biological and not mechanical, even with the prospect of immortality offered by Moravec. With heightened awareness of body and the usual (and explained) lack of awareness of body experience by the researcher, with the experience of a sense of embodiment a state argued for by Hayles and Leder, the subject perceives herself as embodied, with the subject body enlisted as a liberal humanist subject.

The Subject perceiving her situation as positioned by medics: objectification and inscription:

During the trauma of breast disease, as with other procedures, it is customary for medical professionals to mark the body. This marking can be in different forms such as arrows but often with an 'X', and the acceptance of being marked with an 'X' is significant. Jo Spence had a reaction to this labelling that she captured in 1982 with the photograph *Marked Up for Amputation* (Fig. 9). 158

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MORAVEC, H. (1997) The Senses Have No Future, Der Sinn der Sinne International Congress [online].
 Kunst und Ausstellungshalle der Bundesrepublik Deutschland, Bonn Germany. KurzweilAl.net May 15
 2001. Available from: http://www.kurzweilai.net/articles/art0185.html?printable=1 [Accessed 28th Nov. 2008].
 JACKSON, F. (2006 1st pub 1982)

¹⁵⁸ Reproduced with kind permission from Terry Dennett



Fig. 9 - Marked up for Amputation Jo Spence / Terry Dennett (1982)

'X' marks the subject, a powerful tool that objectifies the presenting body, inscribing it to create a map (for the medics), positioning body as object to be acted upon through medical treatment, body as medical object.

The researcher's known breast was different from the technically generated images from the medical event; the tidy pattern of little dots on the X-ray (Fig.7), a black and white mass of no familiar texture or shape; the three biopsy locating needles inserted prior to surgery, standing up out of the breast reminding one of the appearance of birthday candles on a cake. The known breast had a volume; it formed its familiar shape seen in the mirror experienced through touch, familiar. How unfamiliar this breast became, handled by the medics, inspected and wondered about as bits and pieces are sliced out for experimenting on and for closer inspection.

Following the researcher's breast surgery 'X' is frequently part of the labelling denoting the thinking within studio research. Titles are used to reference the body, a subject body not known to the medic-viewer who foregrounds it as the medical object while the subject remains unseen, superseded by the medical object. 'X' is integrated into work-titles as in Fig.10,

X-posed 2004 (an early studio work with X-rays and the foundation for *Repair* and *Maintenance* 7).

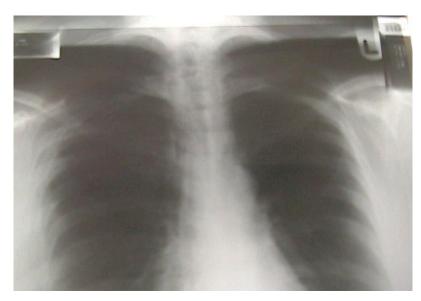


Fig. 10 - still from *X-posed* (2004)(1.04 mins looped)

Yvonne Jones

With such work executed in the studio outside of the boundary of the medical situation (both in place and time), the researcher becomes aware of her positioning of being objectified by the medical professionals (as the medical object) when medics mark the body as they did with Spence, and aware that medics assume their empowerment to inscribe.¹⁵⁹

Subject / Object - a starting point

Through discovering a sense of embodiment, the subject can begin to understand that she is not a self-sufficiently autonomous corporeal human being. The subject uses studio practice in such a way that 'X' does not remain the label and inscription given by the objectifier, the subject reclaims the situation and places it into the external studio output, that is to say, out into the environment. A

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¹⁵⁹ Inscribe here is literal - the 'X' mark, however it begins a reference to the ideas of Foucault and 'inscribed bodies' where inscription refers to cultural and historic social inscription.

dualism exists where there is the subject body and the objectifier. A position of subject / object (Fig. 11) exists.

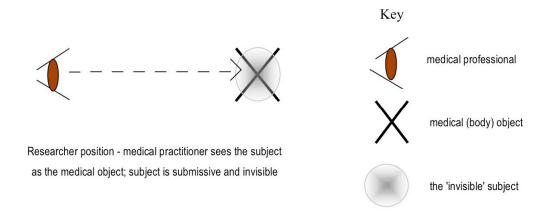


Fig. 11 - subject / object in Repair and Maintenance 1- breast disease

This event, 'Repair and Maintenance 1', begins to address the research question. It shows the underlying structure of the project, with observation, the seeking out of material and ongoing reflection; art practice and action research are present. Emerging from the process comes an understanding of the position of subject / object, in addition there is developing understanding of the researcher beginning the project as a liberal humanist subject and that the process of the project is opening up a movement away from this position.

CHAPTER 4

DEVELOPING AWARENESS AND EMPOWERMENT

Strengths and Weaknesses of the Corporeal Body

Hayles writes about years of sedimented biological evolution of the body. ¹⁶⁰ The process of studio research continues to show how art practice uses medical experience to consider the implications of the posthuman with the use and processing of material from *Repair and Maintenance 2* (poisoning).



Fig. 12 - a series of still images from *Repair and Maintenance* 2 (poisoning) leading to *X it* (2007) Yvonne Jones

This event demonstrates the 'evolved body' rushing to its own defence as frenzied diarrhoea over took it, ridding itself of toxic waste (Fig. 12). The complexity and power of the corporeal 'machine' is clear as it activates to overcome harmful elements ingested into it.

Here the juncture of fine art and medicine practice raises questions for the researcher with regards to the need for a new technological unit desired by Moravec. With all the evolved sophistication and intricacies present in the human body over an extended period, would it be possible to achieve a replacement unit as sophisticated as the corporeal body 'machine'? Moravec says 'senses, and the instincts using them, are increasingly liabilities, demanding

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¹⁶⁰ HAYLES, N.K. (1999)

entertainment rather than providing useful services'. ¹⁶¹ This event owed a good diagnosis to one of the senses that Moravec so readily dismisses. It offers an example of an un-communicable element that Jackson called Qualia, ¹⁶² the odour of salmonella poisoning excretions, an odour instantly recognisable by staff, a very human, corporeal moment. Elliott uses the account of the Human Genome Project by Kevin Davies, 'it would take an entire lifetime to listen to an unedited recital of the genome sequence'. ¹⁶³ How will a new literal posthuman unit compare to this complexity? The subject knew her corporality but longed for more help than her body could provide; a transferring of 'me'¹⁶⁴ into a new machine would be a solution, an excessive step that may result in an existence with different difficulties.



Fig. 13 - Image from *Repair and Maintenance 2* (2004) - machine administering fluids at a given rate.

Yvonne Jones

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MORAVEC, H. (1997) The Senses Have No Future, Der Sinn der Sinne International Congress [online].
 Kunst und Ausstellungshalle der Bundesrepublik Deutschland, Bonn Germany.KurzweilAl.net May 15
 2001.Available from:http://www.kurzweilai.net/articles/art0185.html?printable=1 [Accessed 28th Nov. 2008].
 JACKSON, F. (2006 1st pub 1982) Epiphenomenal Qualia, first appeared in Philosophical Quarterly 32
 (1982) pp127-36 IN ECKERT, M. (Ed.) Theories of the Mind Maryland USA and Oxford, Rowman
 &Littlefield Publishers Inc.

¹⁶³ ELLIOTT, T. A. L., A. (2009) Private View IN Winchester School of Art Research Anthology.

¹⁶⁴ MORAVEC, H. (1997)

Loss of sensation appears to be a high cost to pay for 'immortality'. Intervention less dramatic than transfer can offer survival (see Fig. 13). The machine aids the body in its drive to repair by providing needed fluids to replace those expelled by the body in its effort to rid the body of harmful agents.

The research is experiential in part. That is to say, as studio work unfolds the researcher experiences the revisiting of an event and new insights into the event. As the project develops, there is a changing perspective with regards to the researcher's position on her view of Hayles' work, and that of Moravec dependent on the nature of the medical event and insight experienced. There is not an assumed position that prioritises the ideas of Hayles or Moravec. The project uses the ideas of both in order to address the research questions in the studio. It is a process that creates artworks as a way to consider the implications of notions of the posthuman on the living human being.

Hayles makes a good case for life without the body being based on erroneous¹⁶⁵ thinking and makes the point that immortality, a suggested quality of the literal posthuman, is not a human attribute. However, with the evidence of the strong drive to survive experienced by the researcher, together with an evolving relationship between the body and the technological means of improving the survival of an individual human, it is not too difficult to lean towards the immortality suggested possible by Moravec.¹⁶⁶ Hayles' response to Moravec's idea seems to disregard the strength of the survival wish, a drive that could, in the future, take one to the point of agreeing to mind being placed into a machine without a body (if such a thing were possible).

In *Repair and Maintenance 2* (poisoning), the posthuman element of 'consciousness being an upstart trying to claim the whole show when in actuality it is only a minor sideshow'¹⁶⁷ is evident, referring here to the foregrounding of information within the body that, without conscious decision, sees the body act

¹⁶⁶ Ibid.

¹⁶⁵ Ibid.

¹⁶⁷ HAYLES, N.K.(1999)

in its own defence. The subject was 'absent 'as the body worked hard to recover. There is not a clear-cut either / or position with regards to the posthuman position of Moravec or Hayles. The project recognises the argument made by Hayles that the roboticist camp formed their beliefs on immortality from erroneous thinking; however it also recognises that some of Hayles' hopes rely on the human drive to survive being intellectually side stepped in order to fulfil the idea of finitude of a human life. The subject experiences the attachment to non-corporeal machinery (Fig. 13) and dependence on technology for recovery. The readiness to 'hand over' the continuum of the subject to a machine is a surprise to the researcher, it is a 'me' survival move, and aligns to some extent with Moravec's ideas.

You are in an operating room. A robot brain surgeon is in attendance. By your side is a potentially human equivalent computer, dormant for lack of a program to run. Your skull not your brain is anesthetized. You are fully conscious. The surgeon opens your brain case and peers inside [...]¹⁶⁹

He suggests that, through a series of connections and disconnections, the mind 'me' is safely and without trauma transferred into the 'human equivalent computer'. The researcher can recognise, with reservations, some attraction for Moravec's option, given the unpleasant circumstance of the salmonella poison. Moravec's response to those who state that a new unit is a different-to-original unit is ' that they misunderstand, that while the jelly like body may end, the pattern (me!) continues'. For Moravec there is no balanced unity between mind and body; mind is for him, the ultimate existence. The subject's desire not to be a suffering body is not a desire to be an information pattern leaving the body to be placed into a machine, a move that would end the sense of corporeal

¹⁶⁸ MORAVEC, H. (1987)

¹⁶⁹ MORAVEC, H. (1987) Dualism from Reductionism; from proceedings of the International Symposium on Al and the Human Mind, Yale University, New Haven CT. March 1-3 1986. *Truth* Volume 2, Dallas TX. ¹⁷⁰ Ibid.

embodiment with valued body experiences of sight, hearing or taste. It is a desire for the subject body to be well and comfortable. Moravec claims that in the future an original event will be rare.¹⁷¹ This case was an original physical event for the subject, and although relief from physical discomfort is attractive, it is only relief that is desired not literal permanent removal from the body or from experiencing 'original events'.

During this event, technology enabled support of the living body. A distancing from body enabled the interconnection between machine and the subject body, a distancing for which Leder has an explanation, 'when body is rendered opaque through loss of function, we become aware of it as alien presence.' This explanation realigns the subject and the body through the understanding of the functioning of embodiment.

This increasing attention by the researcher to the medical events reinforced the understanding of surrender of the body to medics. The body is, (again), perceived by the subject as being a medical object for the medics. The perception of the subject by medics, as primarily the medical object so strongly objected to by Spence continues to exist. Antony Gormley tells us that he 'is all that is on the other side of appearance'. Leder wrote something similar in 1990 that 'the very possibility of objects as we know them, of science, of world, refers us back to that body on the other side of things, the body-as-experiencer.

The words of Gormley and Leder come close to describing the experience of the researcher during the processing of the event of surgery on the breast *Repair and Maintenance 1*, a distinct sense of being beyond a boundary of appearance, even as that boundary is within body (as is the situation during surgery). These cases are describing an experiencer.

¹⁷² LEDER, D. (1990) *The Absent Body* University of Chicago Press.

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¹⁷¹ MORAVEC, H. (1987)

¹⁷³GORMLEY, A. (2004) Re-imagining the Body IN KENNARD, G. (Ed.). *The Winchester Festival of Art and the Mind; How art effects the human brain, Winchester 5 - 7th March 2004.*.

¹⁷⁴ LEDER, D. (1990)

Leder writes of 'the intertwining of self and other, of body subject and object', ¹⁷⁵ stating that 'it is intrinsic to lived embodiment to be *both* subject and object available to external gaze'. ¹⁷⁶

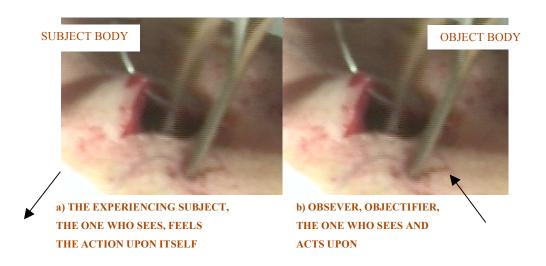


Fig. 14 - One Body in Two Positions; Stills from cyst video (2006)

Yvonne Jones

This raises understanding in the project that body has a complex meaning, at this point understanding ¹⁷⁷ that it is not only the experiencing body (so 'suppressed' by the medical professionals and institution in this event), it is simultaneously the body-object for those who are in control; that is to say, the body is also the medical (body) object. This dual aspect situation unfolded during studio work *Repair and Maintenance 3* - cyst removal, and is seen in Fig 14.

The first position, Fig. 14 (a), is the experiencing body, the **subject-body** experienced as present within and during the medical procedures, the subject as the experiencer, on the other-side of appearance.¹⁷⁸ The second position, Fig. 14 (b), is the body viewed by another, the body that is 'performed upon' by another,

¹⁷⁵ Ibid. P6 Leder is reflecting on the work of Merleau-Ponty in support of his stance.

¹⁷⁶ Ibid.P6

¹⁷⁷ Understanding from experience of the event and theory offered here by Leder.

¹⁷⁸GORMLEY, A (2004); LEDER, D. (1990)

the medical **object-body** that becomes visible through studio practice and theory, the body that the researcher now understands as the objectified body.

The position of the subject as one of being 'labelled' is evident in *Repair* and *Maintenance 2* and 3, not only labelled as a medical object but also in terms of social lifestyle, recent activities, employment status, travel habits, family constitution, all towards making the inscribed body¹⁷⁹ of Foucault visible in the medical situation. *Repair and Maintenance 3* (see Fig. 15, 16 and 17) offers a visual metaphor for Foucault's inscription and for Butler's challenge.



Fig.15 - cyst still (2004) Yvonne Jones

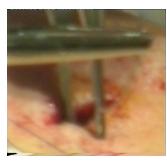


Fig.16 - cyst still (2004) Yvonne Jones



Fig. 17 - cyst still (2004) Yvonne Jones

The body carries an inscription with it. Foucault refers to stock or descent as

the ancient affiliation to a group, sustained by bonds of blood, tradition, or social class [...] involving a consideration of race or social type [...] It seeks [...] subtle, singular and subindividual marks.

Foucault tells us finally 'descent attaches itself to the body', ¹⁸¹ that it has an insidious effect on the body inscribing every part of it. Butler recognises that 'the

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¹⁷⁹ The inscribed body as meant by FOUCAULT

¹⁸⁰ FOUCAULT, M. (1991 [1977])

¹⁸¹ Ibid.

position that the body is constructed is associated with Foucault¹⁸² and that he presents the body as the place where social power is implemented through inscription. However, she raises the point that, in stating it this way, there is an implied underneath, something that power is used upon, something already there that is then inscribed upon.¹⁸³

Reflection on the pain and vulnerability of the corporeal body considered within studio practice reinforces the notion of Foucault that inscription is only possible because of the corporeality of body, it experiences pain (as in Repair and Maintenance events 2 - poison and 3 cyst) and death (a possibility in events 1 and 2), making it open to threat. The project enables an understanding of the body as inscribed.

The idea of Foucauldian inscription further explains and supports the experience of Spence and the initial experience of the researcher when being disempowered and objectified. It explains the mechanism in western medical environments of the medic that looks for inscription and objectification of the subject, leaving little space for the medic to see the subject. As Scott states:

Throughout both second wave and post second-wave periods, feminist health activists have argued that orthodox biomedicine imposes passivity, ignorance, and powerlessness on patients, and particularly on female and non-white patients.¹⁸⁴

The subject's insistence on intervention in events, by taking images of *Repair* and *Maintenance 2* and in negotiating a means of videoing *Repair and Maintenance 3*, opens up a small sense of her presence to medics. This begins to indicate that it may be possible for a situation that begins to free the inscribed body, and to lessen objectification, in a western medical environment. This

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¹⁸² BUTLER, J. (1999 (a)) Foucault and the Paradox of Bodily Inscriptions (Pub in The journal of Philosophy, 86 Nov 89, 601 - 607) IN WELTON, D. (Ed.) *The Body.* Malden and Oxford, Blackwell Publishers Ltd.

¹⁸³ Ibid.

¹⁸⁴ SCOTT, A. (1998)

intervention is different from Spence marking her own body 'property of Jo Spence'. The response from Spence, and the researcher's response to seek more than that which is on offer by the medics, are both forms of resistance to the prevailing medical situations. Butler draws a comparison between Foucault and his referencing of Nietzsche in conceiving of the body as a surface and set of subterranean 'forces' that are repressed and transmuted by a mechanism of culture. 185 She states that 'Foucault appears to identify in a prediscursive and prehistoric 'body' a source of resistance to history and culture.' The process of change for the researcher, within a western medical environment, begins to reference some ideals of the second wave feminists' intention for the women's health movement in that they 'created a feminist discourse of resistance to biomedicine that was orientated towards mainstream biomedicine. The knowledge women gained was to arm them to demand what is needed not what someone thinks they should get from medical professionals', 187 this failed 'as major reforms and delivery of the health services were unachievable without general political power.' 188

As the medical object-body becomes more clearly visible to the subject-body as the objectified, inscribed body, a process begins to 'peel' away the 'created' body. Conscious employment of posthuman-values with use of distributed cognition instigates change. The subject is able to become aware of itself as-medical-object; this potentially enables incorporation of this new knowledge into itself-as-subject. With distributed cognition, boundaries are no longer so easily definable and rigid, and it is less clear where the subject ends and the environment begins. The reduction in rigidity of boundaries in *Repair and Maintenance events 2* and *3* through discussion and negotiation initiated by the researcher, extends the potential of the project to include the enabling of the medical practioner to view the female body not solely as medical object, but also

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¹⁸⁵ BUTLER, J. (1999 (a))

¹⁸⁶ Ibid.

¹⁸⁷ SCOTT, A. (1998)

¹⁸⁸ Ibid.

to gain access to understanding the medical body object as also being a living existing experiencing subject-body. The female subject of the medical event shares in the power base; this blurs the boundaries between human and environment, between human and human, permitting easier information flow. Further to the subject / medical object being a little less distinct, a fundamental change of the subject is occurring, the emergence of a female subject who uses the notion of the posthuman as a tool (Fig.18).

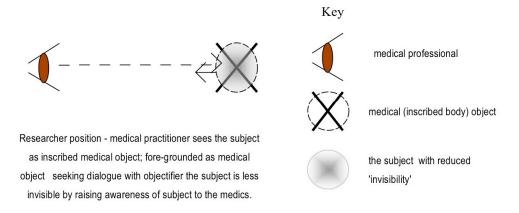


Fig. 18 - subject / object change developed within Repair and Maintenance events 2 and 3

Using the posthuman to investigate the evidence in the studio process of *Repair* and *Maintenance 2* and *Repair and Maintenance 3*, demonstrates some difficulties of the positions both of Moravec and Hayles.

The Corporeal Body with Non Corporeal Add-ons, Replacement Parts and Reconditioning

Using the medical evidence available, studio research from *Repair and Maintenance 4* and *Repair and Maintenance 5* evoke the idea of add-on and replacement parts. This continues the response to the research question; it demonstrates how art practice can use medical events to consider the implications of the posthuman for the living human being. In accepting body

modification, one accepts a small step towards the ideas of Moravec. The human endeavour to improve either the body or the environment may be an obvious part of an overall evolution of techniques to aid the body; however, it raises Moravec's goal as a natural conclusion, a consequence of human desire to improve. The subject body has long accepted intervention and add-ons. Dentistry is a long time intervention, whether for health or adornment. Society accepts simple artificial add-ons to the body, such as those in *Repair and Maintenance 4 dental care*, add-ons, replacement parts that are practical and / or appearance enhancing (Fig. 19 and 20), in general an inconsequential acceptance.



Fig. 19 - image of *gap* (2006)
From *Repair and Maintenance 4*Yvonne Jones



Fig. 20 - image of a bridge (2007)
From Repair and Maintenance 4
Yvonne Jones

As with dentistry, ophthalmology has a long history; eyesight deteriorates with age, making aids to seeing clearly a desirable goal for many.¹⁹¹ The result of the evolution of ideas is the vision aid moving from being an external one, to one sitting on the eye ball to the introduction of a replacement part positioned inside the eyeball (replacing the natural lens) as in *Repair and Maintenance 5*. The

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¹⁸⁹ For further reading see WYNBRANDT, J. (2000) *Excruciating History of Dentistry*, N.Y, St Martin's Griffin.

¹⁹⁰ Add-on means an extra new or replacement part that is not part of the original corporeal body, varying from simple dental fillings to replacement body organs such as a heart from a donor.

¹⁹¹ For further reading see OPHTHALMOLOGY, T. F. O. T. A. A. O. *The History of Spectacles*[online] Available from http://www.aaofoundation.org/what/heritage/exhibits/online/spectacles/ [Accessed Sept 2008].

human desire for sight constructs an evolution of technological solutions to a problem of the body (poor or failing sight). Cataracts in the elderly equate to a reduced quality of sight that is difficult to address by traditional means of spectacles. The more extreme intervention of destroying the biological lens, and replacing it with an artificial lens (Fig. 21), is a significantly more difficult replacing of a part compared to general dental repair. A procedure which when used to restore lost sight would seem justified.

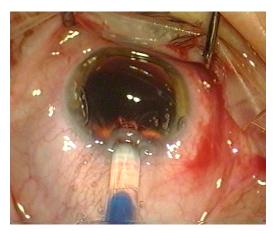


Fig. 21 - still from *Memory Three* (2004)
From *Repair and Maintenance* 5

Yyonne Jones

However, to use it, as in *Repair and Maintenance 5*, in conditions where strictly speaking spectacles would suffice, represents an increasing willingness to accept and conduct difficult procedure and non-corporeal replacement part in order to address a poorly functioning, but healthy, corporeal body part. This is a small move in the direction of a literal posthuman, seeming to be a natural development in an evolving scenario. Steps to 'want more' continue, from the first heart transplant carried out by Christiaan Barnard in 1967 to the use of completely artificial hearts.¹⁹²

¹⁹² JOYCE LD, J. K., PIERCE WS, DEVRIES WC, SEMB BK, COPELAND JG, GRIFFITH BP, COOLEY DA, FRAZIER OH, CABROL C. (1986) Summary of the world experience with clinical use of total artificial hearts as heart support devices. *J Heart Transplant* 1986 May-Jun:5(3):229-35.

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The position of altered appearance is raised in the studio process of *Repair and Maintenance 6*. Altering the body appearance is similarly on an evolving path, from a situation where dental improvement (Figs. 22 and 23) for health holds an incidental improvement in appearance, to specific changes either to alter or to recondition in order to recapture lost attributes as in *Repair and Maintenance 6 - facial* (Figs. 24 and 25).



Fig. 22- still from dental examination (2000)

From Repair and Maintenance 4

Yvonne Jones



Fig. 23 - dental repair (2004)
From Repair and Maintenance 4
Yvonne Jones

Repair and Maintenance 4, 5 and 6 have some aspects of 'adornment', and some aspects of improving appearance.



Fig. 24 - before



Fig. 25 - after

Stills from body outcome from Repair and Maintenance 6 (2008)

Stelarc says of his work *Stomach Sculpture* (1993) (Fig. 26), ¹⁹³ where he swallows 'a self illuminating, sound emitting, extending and retracting capsule structure activated by a servomotor and logic circuit', ¹⁹⁴ that 'the hollow body becomes a host, not for a self or a soul, but simply for a sculpture. ¹⁹⁵

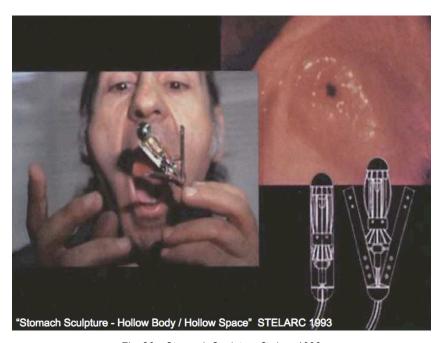


Fig. 26 - Stomach Sculpture Stelarc 1993

Figs. 3 and 26 have an initial similar appearance; however, the background of the internal imaging in is very different. Instead of concern for the corporeal existence (represented in Fig.3), Stelarc explains that the technology (in Fig.26) invades and functions within the body, not as a prosthetic replacement, but as an

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¹⁹³ Fig. 9 - Reproduced with kind permission from Stelarc Feb 2009

¹⁹⁴ STERARC (1993) Stomach Sculpture [online] Available from

http://www.stelarc.va.com.au/stomach/stomach.html[Accessed 28th Feb 2009].

¹⁹⁵ Ibid.

aesthetic adornment'. ¹⁹⁶ Stelarc is a living enactment of Hayles's 'nightmare'. He appears to use this extreme form of adorning his body to support his position that that the 'body is obsolete', ¹⁹⁷ a statement that aligns him with Moravec. Stelarc's view is that the body is inefficient and nondurable, that replacement of organs is made difficult due to its lack of modular design. ¹⁹⁸ He states:

THE BODY IS OBSOLETE. We are at the end of philosophy and human physiology. Human thought recedes into the human past. 199

Given the available evidence, from examining the border of fine art and medical practice with questions of the posthuman, the project does not support Stelarc's statement that the body is obsolete. Stelarc goes on to acknowledge a difficulty in his statement when he takes up a position that appears to be one of fear of a missed opportunity, rather than a sense of certainty regarding the statement when he writes, 'while it might be folly to consider the body obsolete in form and function, it might be the height of human realisations'.²⁰⁰ There is an aspect of the idea repair-for-appearance in *Repair and Maintenance 4,5 and 6* that is a step in understanding Stelarc's view of 'the need for a map of post-evolutionary strategies'.²⁰¹ He makes an assumption that there will be a post-evolution condition, as if he sees no other option. Evolution has managed thus far and although it is slower than many developments in technology, it may in fact continue to serve us well if allowed to develop at its own pace. While Stelarc's position of using the body for adornment would seem to be part of Hayles' nightmare, it is less aggressive than the goal of Moravec. Stelarc is in a position

¹⁹⁶ STERARC (1993) Stomach Sculpture [online] Available from

http://www.stelarc.va.com.au/stomach/stomach.html[Accessed 28th Feb 2009].

¹⁹⁷ STELARC (2009)

¹⁹⁸ STERARC (2009) Obsolete Body [online]. Available from

[:]http://www.stelarc.va.com.au/obsolete/obsolete.html [Accessed 28th Feb 2009].

¹⁹⁹ Ibid.

²⁰⁰ Ibid.

²⁰¹ Ibid.

between those of Moravec and Hayles. He acknowledges our position, and voices a *need* to consider the future direction for body, a future, I suggest, that may not be as he states, one of 'post evolutionary'. ²⁰² In making society aware of the position of body, he offers hope for Hayles' wish to open this issue up for discussion:

To contest what the posthuman means [...] before the trains of thought it embodies have been laid down so firmly that it would take dynamite to change them.²⁰³

There is still time to choose between maintaining the corporeal while understanding the posthuman as a constructed subjectivity and accepting becoming a machine (if it is ever possible).

Material from *Repair and Maintenance 6* contains facial adjustments that are at the edge of the position of Orlan in her critique of ideals of beauty. Waugh stated to the researcher that 'repair and maintenance' seems frequently to focus on women²⁰⁴ and sought a response to Tincknell's paper.²⁰⁵ The researcher stated:

I feel there is no doubt that if one is socially active one is looked at by others. While appearances are not the only criteria, they do have an effect and judgments are made. However, I too make judgments of myself (or are they responses to my mirror image of myself?) I want to enjoy my body, feel well be healthy. I do not want my 'untouched' appearance to dictate or control my life. If I did not wash that would have an effect on the responses of

²⁰² Ibid.

²⁰³ HAYLES N,K. (1999) p 291

²⁰⁴ JONES, Y. (2008b)

²⁰⁵ TINCKNELL, E. (2007) Tears at Bedtime IN LSE, B. L. (Ed.). New Femininities Conference.

others. So there is a continuum along which we can situate our body, our self.²⁰⁶

The effect on others is the aspect of 'beauty' consciously woven into *Repair and Maintenance 6*. Emotional expressions have a mimicking effect on others,²⁰⁷ the face of the researcher could imply sadness, an expression of sadness suggests loss, bereavement, discomfort, pain, helplessness; it effects those one is in contact with. Altering this (Figs. 24 and 25) meant having the opportunity to present as not needing support, help or sympathy, not to present the past but more of the present. 'My body is me; I want it to reflect me (now), my enjoyment in being.'

The facial adjustment in *Repair and Maintenance 6 - facial work*, entwine with a social positioning in an additional way to the concern of beauty. As a 'repair', it is physical, but is also a visual expression of seeking a 'voice'. That is to say, while the material injected *repairs* the loss of body mass that is part of the ageing process, there is also a search for a 'voice'. This is referencing two issues, a personal historic one²⁰⁹ and empowerment in keeping with the ideals of feminism. This outward sign of seeking a voice reflects the changing position of the researcher, evidence of the breaking down of the liberal humanist subject within the process of the research.

The researcher increasingly understands and accepts distributed cognition as a tool within the process of the project, a tool that increases the ability to incorporate the external into the subject as in *Repair and Maintenance 4*.

Only through watching the external evidence of the video does the nature of the needle used to inject the subject become known to her.

²⁰⁶ JONES, Y. (2008b) 26th 2007.

²⁰⁷ FISCHER, A. H., ROTTEVEEL, EVERS & MANSTEAD *Emotional assimilation: How we are influenced by others' emotions*[online] available from: home.medewerker.uva.nl/a.h.fischer/.../FischeretalCPCfinal.doc [Accessed 14 march 2010].

²⁰⁸ Ibid.

²⁰⁹ The anecdote of what the delivering GP said to my mother, regarding the researcher 'that God has forgotten to give her a mouth', a tale that is deeply etched into the perception of myself.



Fig. 27 - a) still image from *dental work* (2005)

Yvonne Jones



Fig. 27- b) Red line indicating the angled needle used to access the roof of the mouth

In injecting the roof of the mouth, the dentist used an angled needle (not a regular needle extending in a straight line from the syringe) (Fig. 27 a) and b)). The subject had imagined the out of sight needle as a straight one, 'joining up the dots' to fill in the missing parts within the imagination and arriving at a wrong image.

Distributed cognition increased the subject's knowledge of herself. Similarly, what occurred externally during eye surgery became known through the video. Leder states 'with the exception of a protruding tongue or nose I cannot gaze upon most of my face. I cannot gaze upon large potions of my back, side, especially from the waist up.²¹⁰ He states this as part of his argument for embodiment. Areas of the body are not available within our line of sight, we 'do not see the eyes, they are the prototype of the vanishing point of a Renaissance painting they are an implicit omnipresence nowhere to be seen'.²¹¹ Leder continues 'we can understand neither the origin, orientation, nor texture of the perceptual field without reference to the absent presence of the perceiving body.²¹² He states of the absence 'it is intrinsic to the perceptual nature of

²¹⁰ LEDER, D. (1990)

²¹¹ Ibid.

²¹² Ibid.

embodiment'. ²¹³ It would seem he is saying that presence / absence is important to a sense of embodiment experienced by the subject. There is a contradiction in that, although distributed cognition overcame presence / absence with information-pattern from the external material, and the researcher continued to experience embodiment, there was a sense of being the living body even with the extra knowledge.

Awareness of the posthuman values of Moravec and Hayles allows change, bringing about dialogue, negotiation and finally, engagement with the medic as in *Repair and Maintenance 4,5 and 6*. The researcher experiences empowerment in the environment and in the presence of the medic; the empowered subject is able to ask questions and openly consider the possibilities put forward by the medic. Through engagement with the objectifier, the subject is visible within the position as the subject-present within the object. This 'reduction' in objectivity allows the 'raw' subject body to become more visible underneath its inscription. While agreeing with Foucault that bodies are inscribed, it may be there is the possibility of change. By means of the subject being more aware of this inscription, it appears that she is able to weaken the 'depth' of the inscription and offer some transparency in a 'peeling' away of parts of this a move that disrupts the inscription.

The subject has information that the objectifier and inscriber have no direct access to. For example, when seeing the external record of *Repair and Maintenance 5 - eye surgery*, the subject matched up sections with the internal experience. There are no means to record physically the patient's visual experiences during surgery, as they are internal and non photographable, only the body perception with its imaging and 'seeing' through an eye injected with local anaesthetic and without a lens. Fig. 28 is an image taken from a still of the eye surgery and manipulated on a computer to best represent an example moment, from memory, what the researcher 'saw' from the inside.

²¹³ Ibid.

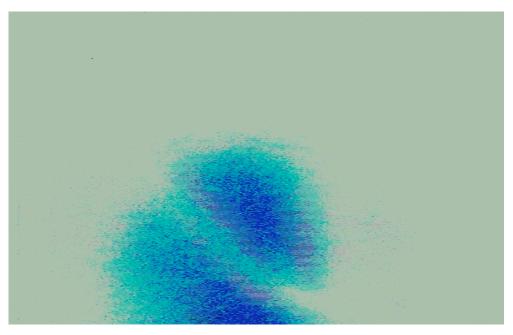


Fig. 28 - Manipulated Image to reflect *internal* view of eye surgery (2008)

Yvonne Jones

The body is an engaging negotiating medical subject, now a less inscribed medical object, in dialogue with the objectifier; an agreed medical object engaged with and in dialogue with the medic (objectifier). She knows she is the medical object infused with the subject. The body is in two 'movable' positions of the engaging negotiating subject and the less objectified, less inscribed medical object. The body cannot be anything other than the medical object for the procedure and, surprisingly, to some extent, the subject objectifies herself in looking at the subject body from the outside, to see her appearance. This back and forth movement further frees the relative duality of subject / object; the positions are 'movable'.

In accepting and using elements of the notion of the posthuman, including distributed cognition and seamless articulation with intelligent machines, the subject continues to change, becoming less rigid, more empowered, more emancipated, living without an automatically assumed trajectory, accepting the attributes of pattern / randomness as well as the

existence of presence / absence. By the end of the process of *Repair and Maintenance 6*, the two positions of subject / object are interacting and the relative dualism alters, it is more fluid than at the beginning of the research (Fig. 29).

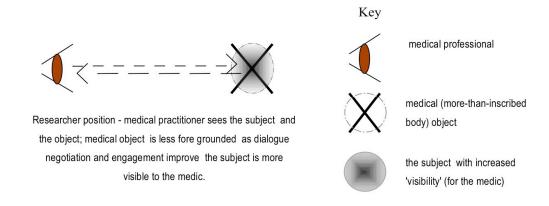


Fig. 29 - subject / object a change developed within Repair and Maintenance events 4, 5 and 6

Questions regarding situating the body in terms of add-ons, replacement parts and reconditioning, are evoked within practice, when the collected material is examined and reflected upon. The project further evokes reference to the work of Stelarc (initially from Fig. 3), and the work of Orlan, when questions of contrasting intent are evoked in *Repair and Maintenance 6*. Unexpectedly, there is a change to the subject at this juncture in the project, the observing-participating-researcher moves from existing as a liberal humanist subject to an emerging (potential posthuman) female subject.

Subject / Object: The Subject

With this stated change, the researcher experiences herself as less inclined to assume presence / absence, with its inherent sense of desire and loss with its built in trajectory, inclining towards accepting more easily the prioritising of pattern / randomness with its sense of adventure and an unknown possibility;

where she is an emerging subject, a possible emerging *posthuman* female subject, with no need to address the question 'are women human?'. Post feminist, Katha Pollitt, says for her 'to be a feminist is to answer the question 'Are women human?' with a yes'.²¹⁴ She goes on to state:

(To be a feminist) is about justice, fairness and access to the broad range of human experience. [....] women judged as individuals rather than members of a class with one personality, one social function, one road to happiness. It is about women having intrinsic value as persons than contingent value as a means to an end for others: fetuses, children, 'the family', men'.²¹⁵

This position of Pollitt creates a gap, for the researcher, at this juncture of the project. Out of the project comes a speculative question, why not side step the question 'are women human?', a question generated by the state of liberal humanism, leave it aside as no longer relevant. This allows emerging posthuman women enjoyment of the emancipation and empowerment denied them in the 'human position'.

The studio process offers the facility to work freely on medical material from events without the researcher experiencing objectification or inscription. The studio enables resistance (to the mechanisms of the western medical tradition) and change. Change occurs both in the assumed foregrounding of the subject as medical object, and in the liberal humanist subject herself.

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²¹⁴ POLLITT, K. (1995) *Reasonable creatures: essays on women and feminism,* NY, Vintage Books. ²¹⁵ Ibid.

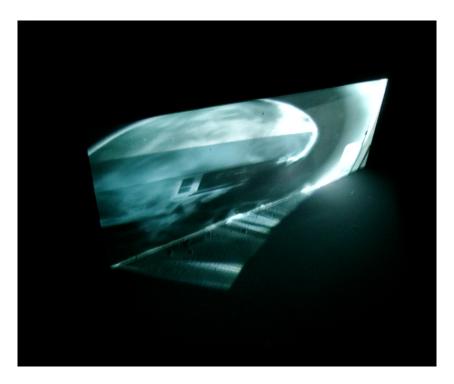


Fig. 30 - from Repair and Maintenance 7 - X-rays (2009) Yvonne Jones

Fig 30 shows an example piece *from Repair and Maintenance* 7, the studio work entitled *X-posed* (2009) fore grounds the subject. In this studio work, the original position of 'invisible subject and fore grounded medical object' of Fig. 11 is reversed.

This is an awareness raising moment, understanding that duality values can be altered. A moment to be acknowledged and used as a part of distributed cognition in order further to enable emergence. The questioning of fine art and medical practice within the studio, in terms of notions of the posthuman, show how the boundary of fine art and medical practice is pushed to create and enable change. Standing within the installation of *Repair and Maintenance 7* evokes, for the researcher, an embodied subject who engages increasingly more easily with the notion of the posthuman of both Hayles and Moravec. The subject may be said to have posthuman qualities, an emerging 'posthuman', but she continues as a subject-(corporeal)-body with the long biologically evolved sensations,

emotions, compassions, imagination and dreams of the humankind, not wishing to exist as the cold data of a Moravecian posthuman.

The subject is fore grounded in *Repair and Maintenance 7*, a presenting subject, the medical object standing with significantly disrupted inscription when present as an artwork. Subject and object are fluid, a position of subject / (almost absent) object, as in Fig. 31, can exist.

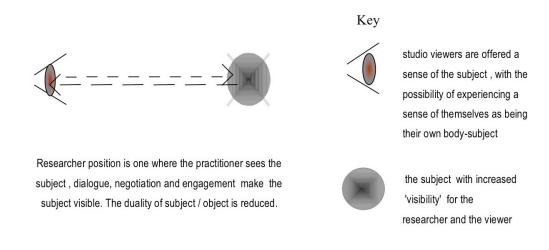


Fig. 31 - subject /object change from Repair and Maintenance 7 - X-rays

The ongoing medical event of X-ray is a means of accessing a sense of subject, foregrounding it through studio research in opposition to the original assumed position by medics, that of foregrounding the medical subject. Showing a further step addresses the research question.

Subject / Object: The Object

With her increased knowledge of the weight given to the positions subject / object that have developed during the process of the project, the researcher uses art and medical practice to place herself as medical object in her own line of vision so to speak. *Repair and Maintenance 8 - hair analysis* does this when the

researcher becomes the 'medic'²¹⁶ the objectifier of her body-as-subject. The western medical environment is, for practical reasons, given breadth here to include a testing laboratory. It maintains the model of repair and maintenance in terms of check ups. Through dialogue, negotiation and engagement with the laboratory analyst (the once assumed to be 'objectifier'), the researcher is in the position of participating and following the process of her hair analysis in partnership with the 'medic'.²¹⁷ This rich environment resulted in significant freedom.

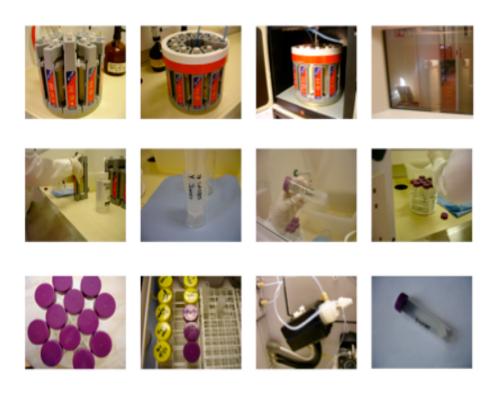


Fig.32 - Images - hair analysis (2007) Yvonne Jones

²¹⁶ The term medic is used here to show alignment with an objectifier, it does not suggest hat the researcher has qualifications in medicine.

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²¹⁷ Here medic indicates the laboratory scientist and is used for continuation.

The four elements of the posthuman, cited by Hayles,²¹⁸ are in evidence in *Repair and Maintenance 8*. Fig. 32 indicates parts of the process that include the cutting of the researcher's hair, the treating of hair as an object, the dissolving and microwaving of hair. The end stage of the process is that the 'product' is submitted to a machine with an outcome in the form of letters and numbers (Fig. 33). Here it is easy to come nearer to referring to the researcher as a posthuman subject in Hayles' terms.

	Your Results	Recommended Values	Units
Calcium	1075	400	mg/kg
Magnesium	85.5	40	mg/kg
Potassium	1487.5	75	mg/kg
Iron	49.5	38	mg/kg
Chromium	2.62	1.20	mg/kg
Cobalt	0.31	0.23	mg/kg
Copper	38.4	22.0	mg/kg
Manganese	4.92	1.70	mg/kg
Nickel	1.50	1.10	mg/kg
Selenium	1.04	2.25	mg/kg
Zinc	154	185	mg/kg
		Threshold values	
Aluminium	2.55	2.00	mg/kg
Cadmium	0.17	0.12	mg/kg
Mercury	0.08	0.14	mg/kg
Lead	1.66	1.40	mg/kg
Molybdenum	0.08	0.18	mg/kg
Vanadium	0.24	0.18	mg/kg
Arsenic	0.019	_	
Sodium	12657.7	94	mg/kg
Sulphur	53600	-	
Phosphorus	165.4	-	
Antimony	0.064	55-75	
Tin	0.365	-	

Fig. 33 - Hair Analysis 2007

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²¹⁸ Privileging information over instantiation, consciousness as an upstart, the view that the body is the original prostheses and a sense of the human being seamlessly attached to a machine.

Throughout the project, an ongoing desire to continue corporeality and embodiment has become clear. While the researcher is moving away from the characteristics of the liberal human subject, they are not erased completely. Throughout the project, 'presence' of the subject has often initiated a move forward for the subject to change; presence / absence is a value of liberal humanism. However, posthuman values are increasingly embraced with the reservation of Moravec's end game. The use of information flow (as distributed cognition), along with conscious awareness of the elements of the posthuman, is disturbing. It dismantles the liberal posthuman subject, the researcher, who existed at the beginning of this project, enabling an emerging subject who is female, for who the issue of gender is significantly reduced. In putting the characteristics together, the researcher begins to perceive herself, not only as an emerging female subject who uses the notion of the post human as a tool, but as an emerging posthuman female subject.

Repair and Maintenance 8 (hair analysis) disrupts the issues of objectification and inscription during studio research. This is because of the position of the subject as a colleague and co-worker, a position that effects the potential action to objectify and isolate; it is now a position with a sense of equality rather than disempowerment. The relative positioning is not so dualistic as subject / object. With the subject comfortable in sharing the act of objectification, and with the 'analyst' engaging with the subject in this act, there is the flow of a fluid positioning of subject - object. The subject contains the medical object and the medical object contains the subject. A position of subject - object seen in Fig. 34 exists, with freer and more fluid information there exists an engaged, negotiating subject (containing ideas of being the object) and a negotiated object (infused with the subject).

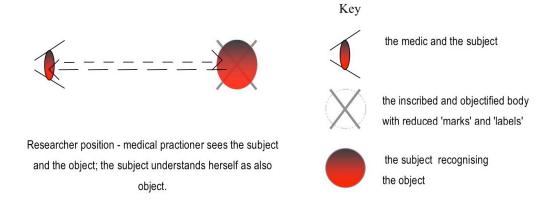


Fig. 34 - subject / object change from Repair and Maintenance 8 - hair analysis

In the project, art practice uses medical events to consider the implications for the living human being of the notions of the posthuman. This event, as with all events of the project, continues to show how this can be achieved, the process brings out the possibilities of change. It further demonstrates how the process can affect an understanding of the positions of subject / medical object, and how it can suggest a more empowered subject.

CHAPTER 5

REVIEW OF STUDIO WORKS AND PROCESSES

REPAIR AND MAINTENANCE EVENTS 1 - 8

The outcome for events 2, 3, 6, 7 and 8 is five finished works *X-it* (2007), *X-ist* (2008), *X-cite* (2008), *X-posing* (2009), *X/701085* (2009); events 1 and 4 remain as processes.

The project develops throughout the studio processes of *Repair and Maintenance* events 1- 8. *Repair and Maintenance 1* is the source for the section of text on 'Awareness of The Body', bringing to light issues of 'Female Being', the western medical tradition, positioning of subject / medical object and the researcher as a human liberalist subject.

Repair and Maintenance 2 and 3 are the sources for the section of the text 'Developing Awareness and Empowerment; Strengths and Weaknesses of the Corporeal Body'. They develop the observations on positioning of subject / object and on noting a shift for the researcher away from existing as a human liberal subject.

Repair and Maintenance 4,5 and 6 evolve the idea of a less than pure corporeal body in the section of the text 'The Corporeal Body with Non Corporeal Add-ons, Replacement Parts and Reconditioning'; they develop the observations on position of subject / object and of the subject in relation to her as a liberal humanist subject aware of the post human.

Repair and Maintenance 7 is the basis for the section of the text 'Subject / Object: The Subject'. It is an accumulated position in the project and focuses on the position of existing as the subject, and notes the continuing emergence of a posthuman subject out of the once liberal humanist subject.

Repair and Maintenance 8 is the source for the section of the text 'Subject / Object: The Object'. It uses the position of the project at this point that allows the subject to position herself as the object. This work concludes the project.

Each *Repair and Maintenance* event contributes to making visible, through art practice, the implications of notions of the posthuman for the living human being; in this specific instance this is the researcher. Unexpectedly, the process highlights the position of subject / object within western medical tradition and, in so doing, affects an understanding of it; from this understanding and the work within the project, a more empowered subject is suggested.

Repair and Maintenance 1 - breast disease

Process

Repair and Maintenance 1 - breast disease, serves as a cornerstone in the project. Using material from memory and archive, this event brings several concerns to the attention during the studio process of observation and reflection. It gives the researcher some experience of the elements 1 and 2 from Hayles' list of posthuman elements. It begins to highlight the point that ideas of the posthuman are already integrated within our existence of today. This event is the source of the discussions addressed earlier. Issues that become visible in this event are awareness of the body, the human attribute of mortality (so important to Hayles and all too apparent here), and the general acceptance of technological intervention, recognised and seen as a part of the final position of Moravec. This event draws out the difficulties within the western medical environment; the project acknowledges and discusses them.

It is from here that the project begins to unfold answers within studio practice to the question 'how art practice can use the experience of medical practice to consider the implications for the living human being of notions of the posthuman?' It is from here that the position subject / medical object is noticed. The content of breast disease within the event generates specific reference to the female and so, associated issues and concerns regarding the position arise; the initial positions for the researcher are that of the subject seen as medical object. It is here that the subject understands and acknowledges herself, at this point, as a liberal humanist subject. The event raises issues of the subject's experience of empowerment.

²¹⁹ The prioritising of information over material instantiation seen in the use of information sourced in technology, and a sense of the human being seamlessly attached to a machine.

In Summary

- Posthuman elements 1 and 4²²⁰ from Hayles' list are observed to some degree in the event.
- The subject is fore-grounded as the medical object. The position of the subject is invisible subject / medical object (Fig.11).
- The subject recognises herself as a liberal humanist subject.
- The subject experiences embodiment, but feels disempowered.

Repair and Maintenance 2 - salmonella poisoning

Studio Work 1 - X-it (2007) (see Appendix 1)

This work, as with all studio research, demonstrates the use of fine art practice in the project to address the research question. The studio process is combined with the experience of medical practice and questioned with notions of the posthuman. The process changes the researcher. This event, as with all events, is undertaken from a painter's perspective, that is to say in considering the video content, or in this case the still images taken by the researcher, takes into account the values of painting, colour, line, form and composition. Video projection is used to 'break out' from a canvas, to be able to move the constraints of size with ease; 'painting with light' evokes the fragility of the living body. Figs. 35 and 36 are still images from *X-it* (2007).



Fig. 35 - still from *X-it* (2007) Yvonne Jones



Fig. 36 - still from *X-it* (2007) Yvonne Jones

²²⁰ Privileging information over instantiation, and a sense of the human being seamlessly attached to a machine.

X-it (2007) addresses the presentation of the corporeal body and it makes clear the subject exists as a living human being. In the studio, the collected material is offered in such a way within the work that it evokes the power of the corporeal body in its drive to eliminate toxic material. There is a constant 'filling up' within the image as it expands from a small amount of textured material to an almost full screen of textured material with a return to the starting point, only to fill up again as the work continues to loop. It operates in order to suggest the constant workload of the body in its response to this event. This filling and emptying has echoes of the work undertaken by the nursing staff to empty the collecting vessel, so making room for the next round of evacuation by the body. The ceaseless looping holds insight into the automatic and ongoing corporeal response in its effort to repair itself. It also evokes the sense of a living body referencing the continual rhythm of breathing and heartbeat.

The work is comprised of two video projections placed side by side. The 'filling' times are set on different time scales; in one video, the still images are on a two-second slide, in the second video, the images are on a three-second slide. The effect is a visual disruption created by the ongoing set of changing relationships between the two. The visceral flow contains within it a time-lapse disruption sufficient to hold a sense of distress referencing the experience of the event. The circular form within the images holds the piece in a cyclical process working in tandem with the continuous looping. The motif of circle, with its widening and narrowing area of textural material, references the anal sphincter and its protracted and continuous physical work during this event.

This research reinforces understanding for the researcher and the viewer of the complexity of the evolved 'machine' that is the corporeal body. It accesses the complexity of the body spoken of by Hayles²²¹ and by Elliott.²²² However, the continual movement forwards of the still images, one image dissolving into the next, holds an implied reference to the machine shown in Fig. 13, with its

²²² ELLIOTT, T. A. L., A. (2009)

²²¹ HAYLES, N. K. (1999)

timed intervention of dripping fluids into the body to replace the volume of lost fluid. This machine highlights the fact that, although complex, the body is not a perfect 'machine'. The still images hold the idea of the single drips fed into the body set on a timed flow on the machine. From this visual work comes a sense of the position of the powerful corporeal body, an evolved machine, as it responds unconsciously to an invasion. Embedded in the piece is the conclusion that the body, however complex a 'machine', is a 'machine' that ultimately needs help from outside itself in order to survive, that the body has limitations that machines can address.

As in all events, the studio research seeks to investigate and combine two areas, one of internal experience and one of external evidence of the event. The process allows space away from the medical environment to consider the experience of this event. Part of the process is to evaluate and select material from what is available. Memory is the source of the internal experience, and a small set of photographs, taken by the researcher following a request for a camera during a lucid moment, is the available external physical material. Figs. 12 and 13 are examples from the external material.

The event begins to expose a way of addressing the research question and to show the process within fine art of 'how art practice can use the experience of medical practice to consider the implications for the living human being of notions of the posthuman'. It makes it possible to observe further the nature of 'awareness of the body' spoken of within *Repair and Maintenance 1* - breast disease. The event *Repair and Maintenance 2* is initially unknown within the body; when the body experiences pain and discomfort as the poisoning progresses, the event is noticed, the subject becomes aware of the body in this uncomfortable condition, it is a gross²²³ event for the body.

The helplessness of the researcher is highlighted when no amount of conscious determination has an effect. The subject as medical object is reinforced until the action of the researcher taking digital images operates as an

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²²³ Means events of the body that are glaringly obvious such as breaking wind, sneezing etc.

intervention, and a small change is brought about. The realisation that no amount of conscious determination lessens the severity of the illness or the persistent action of the body working to eliminate the toxins, sits comfortably with the attribute of the posthuman that states that consciousness is an upstart.²²⁴ In this event, it is the silent parts of the body without any conscious decision that acts to recover, whatever the discomfort of the action. In the studio, the researcher is acutely aware of an element that cannot be sensed directly in the work, the smell of the eliminated product; this references back to Jackson²²⁵ with his idea of qualia. Colour is used in the piece to evoke a sense of unpleasantness.

The medical event is embedded in the work and gives access for the researcher to elements 1, 3 and 4 from Hayles' list, ²²⁶ as well as element 2 already mentioned. ²²⁷ Aspects of the ideas, both of Hayles ²²⁸ and of Moravec, ²²⁹ are evoked, and points that favour both are highlighted. The complex evolved corporeal body with embodiment and mortality that Hayles ²³⁰ champions, is present, but also the need for something more. Its situation needs a technological intervention to replace the amounts of fluid eliminated by the body, without which the body would ultimately fail. The event holds within it the very human drive to survive that takes us towards Moravec²³¹ in the acceptance of technological intervention. There is an embryonic idea within the subject, an idea instinctively left aside that, given such distress, a new computer 'body' may not

²²⁴ This is element 2 in Hayles' list of the 4 significant elements of the posthuman.

²²⁵ JACKSON, F. Epiphenomenal Qualia[online] Available from

http://instruct.westvalley.edu/lafave/epiphenomenal_qualia.html [Accessed 13/02.2009] ,first appeared in *Philosophical Quarterly*. 32 (1982) also Eckert, Maureen *Theories of the Mind* 2006 Rowman & Littlefield Publishers Inc. Maryland USA and Oxford p102 -115.

²²⁶ HAYLES, N. K. (1999)

²²⁷ Privileging information over instantiation, consciousness as an upstart, and a sense of the human being seamlessly attached to a machine.

²²⁸ HAYLES, N. K. (1999)

²²⁹ MORAVEC, H. (1987)

²³⁰ HAYLES (1999)

²³¹ MORAVEC, H. (1987)

be such a nightmare. This event progresses the research question, showing how practice, utilizing the experiences of medical events, can consider the implications for the living human being of the notions of the posthuman. It is a progress that continues with each successive event.

It is here that the process begins to 'affect an understanding of the positions subject / medical object'. This is because part of the process of the project is an intervention in the medical procedure, an intervention of dialogue, negotiation and engagement, creating conditions suitable to collect project material. The researcher's actions in recording images of this event presented the medics with the subject existing as more than the medical object, the researcher became aware that such an 'art based' intervention in the medical event (arising from the need to collect material for the project) made a change to the subject / object position, with the subject a little less invisible than in the previous event. The studio research makes visible a movement both of the position of subject / object and the existence of the subject, who is now a disrupted liberal humanist subject. The liberal humanist subject now understands there are benefits of working with material beyond the limits of the body and to existing as something different to an autonomous being, both elements of the notion of the posthuman.

In Summary

- Posthuman elements 1, 2, 3 and 4^{232} from Hayles' list are all observed in the event and embedded in the work.
- The subject is understood to be fore-grounded as an inscribed medical object (Fig. 37).

²³² Privileging information over instantiation, consciousness as an upstart, and a sense of the human being seamlessly attached to a machine.

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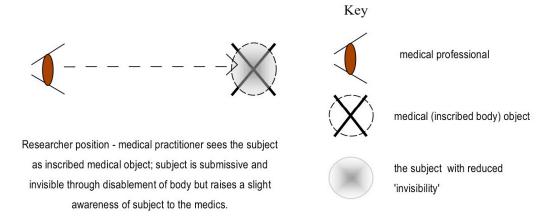


Fig. 37 - subject / object in Repair and Maintenance 2 - poisoning

- From this work, the subject sees she is a liberal humanist in flux.
- The subject knows that she is embodied; she experiences a degree of empowerment from the action of using a camera.

Repair and Maintenance 3 - cyst removal

Studio Work 2 - X-ist (2008) (see Appendix 1)

This studio research work continues to address the research questions. It develops the means to demonstrate how the boundary of fine art and medical practice can be pushed forward in a new way when set to answer questions around notions of the posthuman. The work evolves from an event of cyst removal in 2004, when the event produced different thinking and a different work during my M.A research programme, shown in Fig.17. The new work *X-ist* (2008) developed out of revisiting the whole event during a reflection period within the studio process.

The section of video recording of the event that now 'jumps out' is where the surgeon marks the body in preparation for surgery, a marking carried out during casual conversation. It reinforces work from *Repair and Maintenance 1* - breast disease and ideas surrounding this, and begs a further reference to Foucault and his work on inscribed bodies; this work performs to access these ideas

The work is projected in landscape format, seen in Fig. 38. The image is wide but not tall, it evokes the idea of a label, an identity badge. It is projected low on a wall in an appropriate position that calls for any viewer to walk between the projector and the image, at which moment the image is directly placed on the viewer. The viewer is the subject of the act of marking, and is visible as an inscribed body at this moment.



Fig. 38 - still from *X-ist* (2008) Yvonne Jones

Only the tip of the surgeon's pen making marks is visible, a series of dots that form an oval. Within the mark making there is a sense of creativity as the pen pauses and, with what can be interpreted as an almost joyous movement, adds a few extra dots here and there. The work holds within it the automatic assumption of the right to mark and of the acceptance of being marked, building on the earlier expressed experience. In the work, the surgeon metaphorically carries the historic, cultural and social weight of inscription so important to Foucault. This piece contains Foucault's view, where the tools of society, inscribe the body.

Once the oval is created in the work it is erased, as it returns to an unmarked body and the process begins again. The work is continuously looped offering a continuous marking, erasing and remarking. The erasure within the piece evokes the sense of resistance. It references the resistance of Spence in moving out of mainstream western medicine; the body resistant to history and culture that Butler states is a 'prediscursive and prehistoric body that is implied by Foucault', and the resistance of the subject to be seen only as the medical object. While this marking of the body could be seen as *only* a practical part to the medical procedure, the work contains more than this obvious position.

The work, and within it the decision to loop, holds expressions of power of the corporeal machine, of a life force. This event again demonstrates the body machine is complex but limited. It needs medical intervention to keep it in best condition. When 'waste' material gathers within the cyst it stays there without any expulsion mechanism. The medical intervention of the surgery, implied by the marking in this event, is in part executed to diagnose the nature of the material within the cyst, so reflecting the knowledge of possible significant disease that could lead to death. This would seem to highlight a general preference in society for life and not an automatic acceptance of mortality, a desire to avert life-threatening situations. This challenges Hayles' desire that we accept our mortality. This simple event helps to demonstrate a human desire to survive, to continue a life.

Reflection during studio research gives rise to the idea of transferring Foucault's idea, that we are inscribed by history, onto this work to take into account the earlier work seen in Fig.17. This brings to mind for the researcher the implied act contained within *X-ist*, that is the surgery itself. In the surgery, the surface is cut and the underneath revealed. *X-ist* infers the argument offered by Butler against Foucault, in which she states that for there to be inscription there has to be something to inscribe, something beneath.²³⁴ The 'erasing' of the

²³³ BUTLER, J. (1999 (a))

²³⁴ Ibid.

marks shows what is beneath without the invasion of surgery. The implied invasiveness of the surgery (within *X-ist*) holds a sense of the degree of difficulty in 'seeing' beneath the inscription.

The coming together of inner experience and outer evidence is not dramatic within the creating of the piece, noting a sensation as the anesthetised skin is acted upon by the surgeon making marks, cutting and pulling in different directions. It is only during studio process that the full inner experience is known, that is to say, the meaning within the procedure made visible in the work.

The project intervention in the form of discussion and negotiation, instigated by the researcher, engaged the surgeon who then made specific arrangements to enable the videoing of the event.

The process of addressing the initial research question presents the researcher with two continuing unexpected effects. As the issues of subject / medical object, and the subject existing as a liberal humanist subject, become increasingly visible, a developing change in both is apparent. Empowerment of the subject increases in this event because of the art intervention. In this work, the position of subject /medical object is again disrupted, this time to a greater degree than in *Repair and Maintenance 2*; here due to the increased level of engagement between the surgeon and the subject.

This event further increases empowerment and emancipation for the researcher through her understanding that she is not an autonomous unit. This, and the use of notions of the posthuman as a tool (for example using distributed cognition as a means of accumulating information by collecting an external video account of the event), offers the researcher a changing position. She is beginning to emerge out of existing as a liberal humanist subject and is using elements of the posthuman.

In Summary

- Posthuman element 1²³⁵ is seen here in the sense that, in the studio, the researcher relies on and accepts the information collected in the recording, as Leder states, the back is not visible, it is one of the body areas out of reach of vision.²³⁶ This information is accepted from 'outside of the skull', a phrase used by Hutchins to describe distributed cognition.²³⁷
- The subject is now seen to be in two positions with reduced dualism (see Fig. 18).
- The subject is now a liberal humanist subject with awareness of the posthuman.
- The subject has a sense of embodiment and some empowerment.

Repair and Maintenance 4 - dental

Process (see Appendix 1)

This event did not become a finished studio work. Nevertheless, reflection on the material during the studio process serves to explore further how art practice can consider implications of the posthuman on the living human being.

Engagement with the dental surgeon allowed for the collection of a great deal of material for examination throughout the research. A studio installation of medical leftovers consisting of x-rays, an extracted tooth and moulds, seen in Figs. 39 and 40, gave much to reflect on. This research shows a step away from a fully corporeal body; non-corporeal add-ons lean in the direction of Moravec.

²³⁵ Privileging information over instantiation.

²³⁶ LEDER, D. (1990)

²³⁷ HUTCHINS, E. (2000)

These added prostheses open the notion of the posthuman by referencing the third element of the posthuman as listed by Hayles, that the body is seen as the original prostheses, now with extensions. This is in addition to the fact, already stated, of the use to the researcher of distributed cognition making visible information from 'outside the skull' (Figs. 27a and 27b).



Fig. 39 - tooth *X-tract* (tooth 2006) Yvonne Jones



Fig 40 - dental moulds (2007) Yvonne Jones

Dialogue, negotiation and engagement with the medic in order to give access to material for the project, continues to affect an understanding of the positions of subject / medical object, making the subject visible to her objectifier. With increasing understanding and use of the notions of the posthuman, the subject movement away from existing as a liberal humanist subject also continues.

In Summary

• Posthuman elements 1 and 3^{238} are seen in the events.

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²³⁸ Privileging information over instantiation and the body as the original prostheses.

• The subject is in the position of subject / object where the subject is more visible to the medic (Fig. 41).

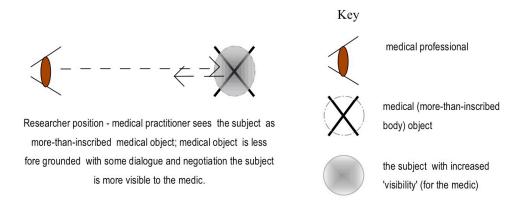


Fig. 41 - subject / object in Repair and Maintenance 4 - dental

- The subject is an emerging subject aware of her change from a liberal humanist subject, accepting some posthuman values.
- The subject experiences embodiment and increased empowerment.

Repair and Maintenance 5 - eye surgery

This event resulted in a work, *Memory Three* (2004 / 2005), that straddles the M.A research and the early research for this project. It is discussed but not used as part of the studio exhibition (see Appendix 1).

Work arising from this event has been widely shown and referenced between 2004 -2007.²³⁹ It was still an active work at the beginning of this research. The

²³⁹ New Contemporaries 2004 in Liverpool Festival of Arts (2004) and London Barbican (2005); *Grounded* Yvonne Jones and Helen Sears, Leeds Met (2005); *Mind/Body* Conference, presented as a paper,

finished piece is eye surgery played in real time, plus a created audio. The work evokes repulsion in the viewer, and sometimes withdrawal from the work either through a body gesture or a literal walking away from the work. The image is projected on a large-scale and shows a highly invasive procedure in close-up. The corporeality and vulnerability of living flesh is known through the work and can be experienced by the viewer.

This event, as stated earlier, gave the researcher understanding of the importance that looping holds in the project. The interruption of the loop to incorporate the title and the researcher's name²⁴⁰ in one installation, served to draw attention to the need for continuous visual access to the work.

The internal memory of the event is worked into the piece as audio. It was a surprise for the researcher to hear something other than the human voice; a metallic computer voice speaking the words 'Memory Three', which registers information for the surgeon this, is referenced in the audio track. Experiencing the 'voice' gave the researcher the sense of a three-way interaction, patient, surgeon and an intelligent machine. This evokes element 4²⁴¹ from Hayles' list.

Material gathered from this event gave unexpected insights for the subject of 'seeing' the event from both sides, inside and outside. The eye was anesthetised in preparation for surgery. A blue material covered the whole face except the, immobile, unseeing eye, leaving one un-anesthetised, seeing eye to look around under the blue cover. Told she would 'see' nothing, except a bright light, it was startling to see the shape of what appeared to be the surgeon's head; choosing trust and staying still the researcher used the time to focus on the experience and on what she could 'see' and hear.

Throughout the procedure, there were different 'sights' from the unseeing eye, all in blue often moving shapes, for example of bubbles, a vastness. The video of the external event correlated with the internal experiences, for example

University of Reading (2007); *Manifesting the Corporeal in the work of Yvonne Jones -* Michele Waugh in *Minding the Body* Conference University of Leicester 2007.

²⁴⁰ New Contemporaries 2004

²⁴¹ A sense of the human being seamlessly 'attached' to a machine.

the bubbles described above correlated with a liquid spray across the eye forming bubbles; the vast expanse correlated with the removal of the natural lens.



Fig. 42 - still from *Memory Three* (2004)

Yvonne Jones

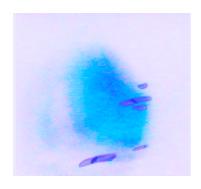


Fig. 43 - manipulated image (2006) Yvonne Jones

Through the acceptance of distributed cognition, the researcher is in possession of the inside and outside evidence and experiences it as more direct than any other event; this may well be due to the visual centricity of the event. Fig. 42 shows part of the recording, Fig.43 is an interpretation of the internal experience.

This work gave the researcher awareness of current general, and an increasing, acceptance of non-corporeal replacement parts. It takes the notion of add-on parts seen in *Repair and Maintenance 4-* dental a stage further with an idea of replacement parts, and so a step further towards the ideas of Moravec's dream.

It continues to address how art can consider the implication of the notions of the posthuman. It advances the understanding of subject / object, the medic engaged with the project and, in so doing, the subject is more visible and less fore grounded as the medical object. As the subject becomes more visible, both in this position and in understanding the change that is born out of accepting and using elements of the notion of the posthuman, the subject continues to emerge out of liberal humanism.

In Summary

- Posthuman elements 1, 3 and 4^{242} are contained within the work.
- The subject positions are reduced in their dualism (Fig. 44).

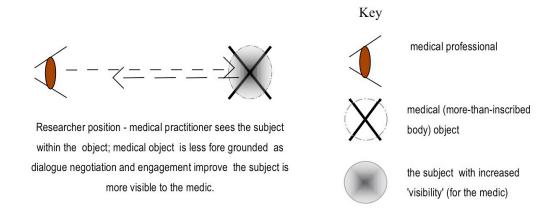


Fig. 44 - subject / object in Repair and Maintenance 5 - eye surgery

- The subject is an emerging subject, different-to-liberal-humanist-subject accepting posthuman values.
- The subject experiences embodiment and some empowerment.

Repair and Maintenance 6 - facial work

Studio Work 3 - X-cite (2008) (see Appendix 1)

This work is two video projections. Both small-scale images of approximately 14 inches width, both are looped. The scale aids the potency of the imagery in

²⁴² Privileging information over instantiation, the view that the body is the original prostheses and a sense of the human being seamlessly attached to a machine.

reflecting the real size of the body. The cool colours indicate the idea of a removal from human warmth and a more mechanical way of thinking. The videos are positioned away from, and ideally opposite to, each other creating a 'gateway'. When the viewer turns from one to the other the work evokes a trap for the viewer, who is caught in this enforced viewing of what is clearly not a life saving procedure but a body altering procedure.

Each work is overlaid and has cut-into images. In the first video, the image is contained within a hard frame, in the second video the images do not comply to a rigid, hard form frame, they act visually in such a way that each has its own existence but also an existence within the other. The size of the cut-in is different in both, with Fig. 45 having a smaller cut-in than Fig. 46.

Both videos have an audio track that, for most of the time, is almost inaudible. At intervals a metallic click is clearly audible. The low sound calls for the viewer to pay close attention in order to hear the majority of the track; this provokes the human to use awareness to focus onto something of choice. The click serves to magnify the procedure, and it is timed to coincide with the movement and withdrawal of the needle.



Fig. 45 - still image from *X-cite* (2008) Yvonne Jones

The click references the intervention of the needle into the corporeal body and evokes experience of a sense of the vulnerability of the body when 'challenged' by a piece of medical equipment.



Fig. 46 - still image from *X-cite* (2008)

Yvonne Jones

Although the separation of the two parts in Fig. 45 is distinct, there is some overlap and visual continuation. This is seen in the directional line of the lip continuing on in the line of the upper edge of the printed text. In this video work, as in the second work, the colour and tone sits comfortably across both sections. The colours differ in the two works. They are cool in Fig.45. Fig. 46 contains more of an overlapping and visual mixing of the two sections, the sections merge visually with one another and the colour is warmer.

The work begs reference to Orlan; however, the comparison made earlier indicates the different goals of the work. It also raises the question of Stelarc's view of using the body as an adornment; the work does lean towards his position but can also be viewed, as already stated, as giving the subject her 'voice', a mouth to speak with. *X-cite* contains a view of the body today; the body changes

shown here are not a particularly extraordinary idea. Add-ons and replacement parts (seen in *Repair and maintenance 4* and 5, are not only acceptable, so too are reconditioning, enhancement and body change. There is some notion of a literal posthuman in having extra material put into the body for its own sake, referencing Stelarc and his *Stomach Sculpture* (1993). This places the project in a position of acknowledging the acceptance and presence of a step in the direction of Moravec.

X-cite offers a clearer view on the positioning of subject / object. The movement of the bag in both videos represents the subject; she is visible in her breathing beneath the bag and is the cause of the movement. The subject, as the medical object, is contained in both videos, seen in the cut-in containing the image of the subject body being processed. The video image in Fig. 45 evokes a separate existence of the two parts, whereas the parts overlap and visually merge in the image in Fig. 46, presenting a change of positions for the subject as medical object - a position where subject and the medic facilitate a change through engagement with each other, creating a position in which the subject is more empowered. There is an increased sense of a coming together between the subject and the objectifier. Specifically, Fig. 46 offers an interpretation of the object being perceived by the objectifier as containing the subject, and a sense that the subject is more able to understand and incorporate how she is also the object. It holds the sense in which the subject / object is disrupted. This visibility allows more clarity for the subject to consider what is beneath her objectified and inscribed existence.

The researcher is in partnership with the medic; this allows for video and still image records to be made. The work presents the implanting of non-corporeal material into the corporeal. The idea of a change in the composition of the living human is drawn from the event. Understanding this change, and using distributed cognition, contributes to the continuing movement for the researcher away from a liberal humanist subject towards an emerging posthuman subject, able to question her situation and to see her existence as part of something more than an autonomous unit. With the idea of existing as posthuman comes the

realisation that the question of whether or not women are human²⁴³ is becoming less relevant

The content of the work and the studio process continue to demonstrate art practice use of medical events to consider the implications of notions of the posthuman. The understanding of the subject /object position continues to develop, as do the beginnings of the suggestion of a more empowered subject.

In Summary

- Within this work there is some experience of posthuman element 3^{244} from Hayles' list. In this event the enhancement to the lips suggests that they are prostheses.
- In the position between the subject and the medic, the dualism is seen in flux, the position for the subject is not so much subject /object as subject - object. (See Fig. 29)
- The subject is an emerging subject, different-to-liberal-humanist-subject using posthuman values.
- The subject experiences embodiment and some empowerment with a sense of being a less inscribed female body.

Repair and Maintenance 7 - X-rays

Studio Work 4 - X-posing (2009) (see Appendix 1)

This piece infers a position of the researcher and evokes a position for the viewer, an experience of being the subject. It is an accumulative position from

²⁴⁴ This is the view that the body is the original prosthesis.

²⁴³ The guestion associated with liberal humanism.

the ideas that have arisen in the project during studio research into *Repair and Maintenance events 1 - 6*. Figs. 47 and 48 are examples of the video parts of the installation *X-posing* 2009, the outcome for *Repair and maintenance* 7.



Fig.47 - *X-posing* (2009) Yvonne Jones



Fig. 48 - *X-posing* (2009) Yvonne Jones

The work is made up of four projected videos. They are presented in a contained, enclosed and darkened space, ideally a space painted completely black so that the images are projected onto black and are surrounded by black, so absorbing bounced light. The video pieces are placed to create a sensation for the viewer of being centred within an active environment. The activity contained in the pieces is evocative of the living being, with the sense of different rhythms of life movements such as breathing, heartbeat and intestinal movements. The size and height placement of the pieces vary to offer a surround experience reflecting the 'confusion' of differing sensations within the body. It references and evokes the idea of Gormley speaking of existing 'on the other side of appearance'. 245 It enfolds the viewer, structured to enable an experience of being within existing as

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²⁴⁵ GORMLEY, A. (2004) Re-imagining the Body. IN KENNARD, G. (Ed.) *The Winchester Festival of Art and the Mind; How art effects the human brain, Winchester 5 - 7th March 2004.*

the subject. This studio process strips the body back, attempting to recall what lies beneath, the prehistoric body that Butler states must exist if we accept Foucault's view of inscription. It offers an opportunity to approach an experience of what it is like to exist before inscription or objectification. The work fore grounds the subject, it 'asks' the viewer to recall the memory of 'being'.

The once still images of X-rays offer an inner life experience with a continuous set of differing movements, movement created by either moving the X-ray sheet in a certain way, or keeping it still and creating movement with the action of the camera. There are differing approaches to the uses of the material. The black and white of the work echoes the inner darkness spoken of by Gormley when he describes his experience of sitting with eyes closed at the end of the day and knowing this is he.²⁴⁶ The darkness of the installation moves to focus on the inner life of being the subject.

The medical material contains a disregard for the corporeal in that X-rays, the means of harvesting this information, are highly invasive and can damage the structure of body cells. The X-ray passes right through the body, it is more invasive than the eye surgery; it appears less invasive than surgery because when X-rays are undertaken there is no visual gore. The idea of disregard for the body references both Moravec and Stelarc. It is a procedure carried out daily in our hospitals. This studio research material is a longitudinal collection of X-ray films. In the studio process, it gives access to a sense of the existence of the subject, both for the researcher and for the viewer in the studio output. With the embedded longitudinal element comes an implied reference to Hayles in her idea that the posthuman need not be literal but instead a construction, a temporally constructed posthuman subject. Throughout the progress of the studio research the researcher goes through a gradual emergence, a change over time, as awareness of the implications of notions of the posthuman are acknowledged. There is a movement for the researcher towards existing as a posthuman subject.

²⁴⁶ Ibid.

In Summary

- Element 1²⁴⁷ from Hayles' list is the main posthuman element observed here. X-ray is an invasive procedure that captures information from otherwise unseen parts of the body; here this information is used to offer an experience of existing as the subject.
- Studio practice has pushed its boundary to combine with medical practice, to be interrogated by notions of the posthuman. The process raises awareness of the implications of the posthuman on the living human being and creates unexpected effects on the positioning of subject / medical object within the western medical tradition, so that the subject becomes highly visible. The starting point seen in Fig.11 is reversed, presenting in the studio, in the form of an artwork, there is now a fore grounded subject / almost absent object (see Fig. 31).
- The subject is an emerging posthuman female subject, more aware of her changing positions and accepting posthuman values.
- The subject experiences embodiment, empowerment, emancipation and a sense of a significantly less inscribed female body.

Repair and Maintenance 8 - hair analysis

X/701085 (see Appendix 1)

Having focused on the subject in *Repair and Maintenance* 7, the event of *Repair and Maintenance* 8 addresses how the subject is now able to place herself as the object.

The work is the outcome of the event of hair analysis. It is two pieces.

One piece is a video played on a monitor. This is placed in front of and to the side of the second piece; large-scale projection of the same video offering an image five feet in width. Both videos are looped. The video shows the glass door

²⁴⁷ Privileging information over instantiation.

of an industrial microwave oven with reflections of the laboratory visible. Behind the door, a turntable with locked compartments housing the hair is seen turning first in one direction and then in the reverse direction as the machine systematically breaks down the hair. Both turning directions are shown for roughly the same length of time. The audio of ambient sound includes a strip of music; it has a light cheerful tone, its rhythm and timing accentuates the visual back and forth movement of the video. The persistent to and fro references the continual inscription and resistance contained within the work of Foucault. Fig. 49 is a still from the process in creating *X*/701055 (2009).



Fig. 49 - X/701085 (2009) Yvonne Jones

The door reflects the world outside of the machine and allows us to view the ongoing 'life' inside it. An audio track of incidental music played in the laboratory is a component of the video, sound that represents the presence of human beings; it is repetitious, its timing coincides with the motion of the machine.

This is the only piece that it is comfortable to present on a monitor that serves as a distancing mechanism, it equates to the subject placing herself as the object. The frame of the monitor reinforces the separation. In contrast to this, the

projection keeps alive the notion of the researcher continuing to exist as the subject. The construction of the work evokes the experience of the subject placing herself as the object while continuing to hold the subject as part of the object, a flow between subject and object. The laboratory assistant cuts and weighs the researcher's hair. The researcher maintains a connection between her and the separated 'body part', using her awareness of the nature and source of the 'body part'. The researcher plays close attention to the process of analysis, standing close to her body part at all times. The laboratory analyst, who in ordinary situations would be the objectifier, brings the subject into his 'field of vision', into his mind; the approach of the researcher to the lab process, a weekly process very familiar to the analyst, surprises him, he states he finds it refreshing.

Awareness, dialogue, negotiation and engagement resulted in significant freedom to work with the analyst. As well as the facts and figures generated from the process (Fig.33), the researcher recorded numerous images and videos of both the environment and the procedure. The series of images in Fig. 32 show part of the laboratory process. The researcher 'sees' situations that the analyst had previously not focused upon, the circular frame of so much of the process, round tops, set out in circles, the bubbling of liquid through one of the machines, the automatic (mechanical) actions of the laboratory workers echoing the mechanism of the machines. Some of these images reference earlier images, for example in *Repair and Maintenance 2, 3 and 5*, reinforcing the ideas associated with them; the strengths and weaknesses of the corporeal body in salmonella poisoning, the extra technical help needed for the body and the acceptance of new non-corporeal body parts in eye surgery.

This work has a mechanical character, embedded with the contradiction of the fragility and vulnerability of the power source needed to make the work visible (light from the projector, electricity to power both the projected image and the image on the monitor). In this work the corporeal body is sidestepped, it is out of view held as a body part in the machine and within the subject now operating as the 'objectifier'. It evokes a sense of being posthuman in a way that

references Moravec. The contradiction is that the process of hair analysis has the goal of describing the condition of the corporeal body, to indicate any difficulties in order to address them. This acknowledges corporeality so important to Hayles in her desire to maintain the corporeal human being. Throughout the project, there is a back and forth movement between Moravec and Hayles, a movement reflected in the turning movement in the work. As the project unfolds to this point neither of the positions of Moravec or Hayles hold up completely. There is something of both positions supported within the project.

This work evokes the experience of the subject as objectifier, an experience for the subject of understanding herself as the object. Engagement of the analyst offers the added perspective of the usual objectifier, the analyst, understanding the living existence of the subject even as she is objectifying her 'body part'.

In Summary

- Posthuman element 1, 2, and 4^{248} are touched on in this event.
- The subject position is now, an absent subject / object, seen by both subject and objectifier (here one and the same). (See Fig. 34)
- The subject is an emerging-posthuman-female-subject accepting and using posthuman values.
- The subject experiences embodiment, empowerment with a sense of reduced inscription on a female body.

²⁴⁸ Privileging information over instantiation, the view that the body is the original prostheses and a sense of the human being seamlessly attached to a machine

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CHAPTER 6

SUMMARY, DISCUSSION AND CONCLUSIONS

Summary

Practice research raises awareness of the implications of the posthuman by using the notion of the posthuman to question the boundary between fine art and medical practice. The process offers evidence regarding the extent to which I may consider myself to be posthuman; it brings about an unexpected effect and alteration of two positions for me as the researcher.

The first unexpected change is the movement regarding subject / object. In accepting evidence of the external event, the researcher is using distributed cognition, initially not connecting this to the posthuman. It opened a means of approaching the experience of being objectified, whereby she, the subject, is the medical object for the medic. It moves through stages as studio research increases understanding that enables intervention in this pairing; there is also a movement from discussion, dialogue and negotiation, into engagement. Comparing Figs. 11 and 34 brought together here reveals a change, showing the researcher positioned at the beginning and at the end of the project.

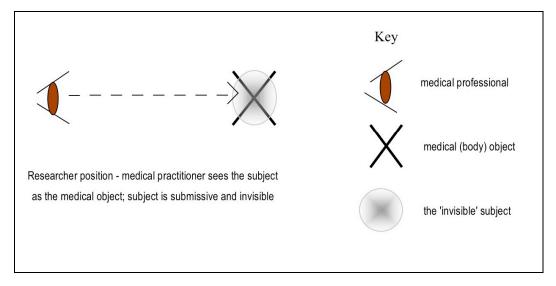


Fig. 11 - subject / object at Repair and Maintenance 1- breast disease

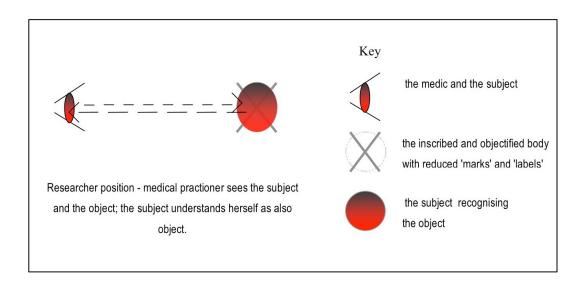


Fig. 34 - subject / object change at Repair and Maintenance 8 - hair analysis

The second unexpected change is the movement of the researcher's understanding of herself as the subject. A move from one of a liberal humanist subject accepting the difficulties of gender, to one engaged with the notion of the posthuman (both the ideas of the literal post human and the theoretical construction of the posthuman), prepared to accept the uncertainty of not being autonomous along with the freedom from the question 'are women human?' - an emerging posthuman female subject.

Discussion

When I began this research, the term *posthuman* was new to me; it came to my attention at the conference that began my quest.²⁴⁹ I believe the debate that Hayles desires²⁵⁰ is needed. Not having a debate could give a future that we do not desire. When the technological advances reach a point where it may be possible to put a 'human' mind into a machine, it may be too late for choices. It is

²⁴⁹ Networked Narrative Environments as imaginary spaces of being, FACT Liverpool 23rd May 2003 in association with MIRIAD/ Manchester Metropolitan University.

²⁵⁰ HAYLES (1999)

raises ethical questions; for example, whether or not at such a point, life continues or ceases. Whether the choice is to go down the path that Moravec describes, or to avoid that path, or to find a satisfactory compromise, debate would raise awareness and understanding of the possibilities.

Through using art practice to research the 'Repair and Maintenance' events of the researcher-body, it is evident that fine art practice accesses information that raises awareness. Through studio research and reflection, it becomes clear that there is a directional move towards an increasingly artificial body as we accept add-ons and non-corporeal replacement parts. Moravec holds that our information pattern can, one day, be transferred to a machine and that there will be very few original events; for me, through my studio research there is evidence of weakness in his position. Moravec's notion of information pattern being transferred into a machine and maintaining its identity as 'me', is at odds with Hayles' argument of how the thinking of the roboticists is erroneous and overlooks the fact that information patterns can not exist without being substantiated.²⁵¹ Further to this, is the fact of the development of the mind, from birth to maturity, within a human body. ²⁵² The information patterns of humans develop in the living sensual body. Does Moravec mean this transference is only available to adult humans, who have developed sufficiently for information patterns to be transferred, or does he expect a whole new existence to be devoid of evolved human abilities? Moravec says the senses are no longer required.²⁵³ Without senses, there exists only, information patterns gleaned and developed by another once living sensual human. If that were the case, then would it be like having a massive catalogue of repeats on TV? Moravec says as much in stating his view of the powerful computational abilities of the future; he states that 'the expanding bubble of cyberspace²⁵⁴ will store and recreate everything of interest, including 'geological wonders', ²⁵⁵ and suggests:

²⁵¹ HAYLES, N. K. (1999)

²⁵² Contained within Child Development theories including Piaget.

²⁵³ MORAVEC, H. (1997)

²⁵⁴ Ibid.

Those entities may continue to live [...] oblivious to their new status as simulations in the cyberspace [...] living memories in unimaginably powerful minds.²⁵⁶

There is an inbuilt difficulty when Moravec says 'geological wonder' - the difficulty is this, without human senses how can wonder be recognized? The sensation of wonder would have no meaning. I consider the idea of 'rarely experiencing original events' to be a loss. The *Repair and Maintenance* events demonstrate the use of the senses, showing that even something unpleasant such as the excrement from Salmonella poison is valuable.

Hayles' view of using the developments of the roboticists' posthuman to improve the human whilst continuing to accept mortality is at odds with the human drive to survive that was experienced by the participating-observer-researcher during the events.

The project highlights deficiencies in the positions of both Moravec and Hayles regarding the posthuman. With ever more complex non-corporeal repair and maintenance events becoming increasingly available, the question arises will there come a point of no return, and if so what will that point be? The project is closest to the position of the artist Stelarc, while disagreeing with him that the body is obsolete, his idea of a conscious consideration the future would open discussions. Given the extent and speed of technological development and the view that we may already be or are becoming posthuman, addressing the future and our possibilities seems desirable in order to make the choices clear. My disagreement with Stelarc extends to include his assumption that the future will be a post evolutionary one, where the body is unimportant. It would seem a better option to me, to use both positions. A position where we accept that

²⁵⁵ Ibid.

²⁵⁶ Ibid.

²⁵⁷ Ihid

²⁵⁸ STELARC (2009) Obsolete Body

²⁵⁹ Ibid.

²⁶⁰ STELARC (2009)

technology can significantly alter our way of being a 'human' but not to overthrow our evolved and complex corporeal bodies, or human emotions, compassion, weaknesses and imperfections. We could continue to evolve our existing path of articulating with intelligent machines and using distributed cognition (to enhance understanding and widen the information sources), while recognising the power of the evolved corporeal body; repairing, maintaining and improving it rather than working towards setting it aside for some untried machine. Maybe life can be extended; maybe some will wish to be immortal while others may reach a moment when they decide that they have lived long enough, a life with sensation not a digital reading of what an experience once was. Hayles suggests 'that we have always been posthuman'261 because of 'the seriated history of cybernetics - emerging from networks at once materially real, socially regulated and discursively constructed'. 262 I would argue that we have always been a species that seeks improvement to our lot, be it improved shelter, comfort or medical intervention. There is an entanglement of meaning; if we have always been posthuman how do we explain the human disempowerments between gender that is embedded in social inscription, and values of the liberal humanist subject who, in ignoring the inequalities, imposes disempowerment.

Conclusion

The research question asks 'how can art practice utilize the experience of medical events to consider the implications for the living human being of notions of the posthuman'. The question is answered by the unusual use of art practice within the studio, of bringing together fine art and medical practice seen in *Repair and Maintenance* events 1-8. Along this boundary, studio process pushes fine art practice further, as it operates to draw together internal and external evidence of the medical experience. This juncture is closely investigated and reveals how ideas of the posthuman are situated in the context of the participating-researcher's experience of her medical repairs in the western medical tradition.

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²⁶¹ HAYLES, N. K. (1999) p291

²⁶² Ibid.

Each *Repair and Maintenance* event contributes to the process by means of the symbiosis between practice and theory. Each studio investigation builds on the previous, creating a new video outcome. All studio work references and debates theory, the video outcome is questioned and developed in the next studio investigation. By the end of the process, the outcomes, seen overall, offer their findings. Through the studio research, *Repair and Maintenance* events become art works in the form of video projections (see Appendix 1). They are available for viewers to explore and reflect upon, to discover the implications that are contained within them, the implications that notions of the post human have for the living human being.

The research question further asks 'how can this process affect an understanding of the positions of the subject / medical object within the western medical tradition'? The studio process unexpectedly affects an understanding of the positions of the subject / medical object within the western medical tradition, a movement observed within the artwork and written up in the foregoing text.

The final part of the research question asks how the process of the project can suggest a more empowered subject. The early stages of the project make known the initial position of the researcher as a liberal humanist with all its embedded restrictions. Working within the project affects the perception of the researcher. As the researcher becomes more familiar with notions of the posthuman, she is increasingly able to use them as tools. For example, in accepting that she is not an autonomous self she is able to see herself from the outside, from 'beyond the skull', ²⁶³ and appreciate the posthuman position of the centrality of distributed cognition. External evidence for the events becomes a means to accept and understand distributed cognition. This is transferable, experienced in a repositioning of the researcher, with a subsequent movement away from liberal humanism towards an emerging posthuman subject, a subject stated as desirable by Hayles. ²⁶⁴ The project gives access to experience of

²⁶³ HUTCHINS, E. (2000)

²⁶⁴ HAYLES N, K (1999)

notions of the posthuman; the process of this allows the project to suggest a more empowered subject.

Through art practice, the project reveals some of the implications for the living human being of the notion of a literal posthuman advanced by Moravec, against the notion of the theoretical position of Hayles.

The findings of the research are that fine art can be used, in this different way of the project, to create a situation that can be questioned by notions of the posthuman. The result, seen in the artwork outcomes and the text, is a position that argues with both Hayles and Moravec, showing that while both have some validity and relevance, for the living Homo sapiens of today, both have shortcomings that weaken their positions. Out of this research project comes a position that does not fully adhere to Hayles' and that disagrees with Moravec, while acknowledging a degree of advancement in the direction of his goal.

The art outcomes are statements of the project findings. In order to position them, I refer to Hayles. Hayles analyses three Virtual Reality artworks, *Traces* - Simon Penny, *Einstein's Brain* - Alan Dunning, and *nOtime* - Victoria Vesna. The works differ from the artwork of the project. The project works are not virtual reality works; they are works that use the living body as it exists.

Hayles states about art:

If art not only teaches us to understand our experiences in new ways but actually changes experience itself [...] ²⁶⁶

The artworks of the project give access for us to 'understand our experiences in new ways'²⁶⁷ and the opportunity to 'change experience itself'.

She says of her three chosen works 'the works teach us what it means to be posthuman in the best sense'. ²⁶⁸ The project does not prejudice the posthuman

²⁶⁵ HAYLES, N. K (2002) Flesh and Metal: reconfiguring the mindbody in virtual environments.

Configurations, 10.2 (2002) 297 - 320.

²⁶⁶ Ibid.

²⁶⁷ Ibid.

²⁶⁸ Ibid.

with a 'best sense', ²⁶⁹ it exposes its true position for a living human being and in so doing 'teaches us' some of the implications that the notions of the posthuman have for a living human being.

With specific reference to the works she analyses, she states:

These artworks engage us in ways that make vividly real the emergence of ideas of the body and experiences of embodiment from our interactions with increasingly information-rich environments.²⁷⁰

The studio research is offered to 'engage us [...]'²⁷¹ in the ways spoken of by Hayles, the difference is that it contains experience of the positions of both Hayles and Moravec. The artworks of the project 'make vividly real the emergence of ideas of the body and experiences of embodiment from our interactions with increasingly information-rich environments',²⁷² in a way that is different from the three artworks discussed by Hayles. They are the means that answer how art practice can utilize the experience of medical events to consider the implications for the living human being of notions of the posthuman.

The research makes contribution to knowledge in its distinct and original use of fine art studio practice. The studio process is the means that makes visible how the research affects an understanding of positions of the subject / medical object within the western medical tradition and, in so doing, suggests an empowered subject. It contributes by raising awareness of the potential futures of living Homo sapiens. This awareness may well facilitate the debate that Hayles desires, not necessarily with the outcome she makes a plea for;²⁷³ it may well facilitate the development of a strategy for the future that Stelarc suggests, although the project challenges his assumption of a post evolution future by its acknowledgement of the complexity of the body. From the project comes the

²⁶⁹ Ibid.

²⁷⁰ Ibid.

²⁷¹ Ibid. See quote above 'these artworks engage us [...] '

²⁷² Ibid.

²⁷³ A future where we accept the human condition, for example, of mortality.

knowledge that examining, understanding and applying some elements of the notion of the posthuman creates changes in position for the researcher; that elements of the notions of the posthuman can be productively used as tools of empowerment.

The project offers a new perspective on how the boundary of fine art can be extended to contribute to theories of the posthuman, to understanding the positions of subject / medical object, while suggesting an empowered subject.

APPENDIX 1

A Film Reel showing clips from five works:

X-it	(2007)	Repair and Maintenance 2
X-ist	(2008)	Repair and Maintenance 3
<i>X-cite</i>	(2008)	Repair and Maintenance 6
X-posing	(2009)	Repair and Maintenance 7
X/701085	(2009)	Repair and Maintenance 8

Plus supplementary material that includes material from:

Repair and Maintenance 4

Repair and Maintenance 5

DVD A film reel

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