Aesthetics and Hyper/aesthetics: Rethinking the Senses in Contemporary Media Contexts

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Certificate of Authorship

I certify that this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. I certify that all information sources and literature used are indicated in the thesis.

Signature of Candidate

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Abstract

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This thesis addresses the escalation of interest in the senses, across a range of media technological contexts, dating from the mid 1990s. Much of this discourse has focussed on the experiential, particularly intense, multi-sensory experience of the present. As there are numerous discourses on the senses, technology and affect individually, my concern is to examine some of the intersections between these, in order to reconsider the contemporary significance of aesthetics in media contexts.

I develop a 'hyper/aesthetic' approach to try to think about aesthetic relations with technology in a nuanced way, opening up a space from which to investigate a variety of relations with technology. Walter Benjamin's work on the senses and modern technology is useful in this, as is that of two of his commentators, Susan Buck-Morss and Miriam Hansen. In providing the outlines of a hyper/aesthetic approach in this thesis, I am, in particular, seeking to complexify understandings of audience reception and meaning-making, to return some ambivalence to conceptions of the sensory encounter with technology.

Hyper/aesthetics is a term that draws together ambivalence, doubling, virtuality, unfamiliarity, innervation, and moving beyond, all concepts that are relevant to the senses and subjectivity.

In close readings of case studies drawn from the areas of advertising, computer gaming practices, and new media art, I argue that as well as critiquing their claims to newness, it is also important to attend to the ways in which particular relations with technology exceed or refuse the logic of instrumentality. In particular, these cases consider the emerging aesthetic experiences that technologies of computer gaming and new media art facilitate, and the new subjective possibilities that follow from each.

Approaching these studies hyper/aesthetically enables me to go beyond other accounts in appreciating the more experimental character of some of these relations with technology. I particularly focus on the effects and affects generated by encounters with the unfamiliar, including that which is considered strange, 'unnatural' or 'inhuman', and critically appraise the significance of encounters such as these for the manner in which subjectivity is conceived.

...the paid reviewer, manipulating paintings in the dealer's exhibition room, knows more important if not better things about them than the art lover viewing them in the gallery window. The warmth of the subject is communicated to him, stirs sentient springs. What, in the end, makes advertisements so superior to criticism? Not what the moving red neon sign says – but the fiery pool reflecting it in the asphalt.
-- Walter Benjamin[1]

[1] Walter Benjamin (1997 [1925-26]) "One Way Street", Edmund Jephcott, Kingsley Shorter, trans., *One Way Street and Other Writings*, London, New York: Verso, pp. 89-90.

I

Introduction: Why a Hyper/aesthetic Approach?

In the mid 1990s, it became evident that a new attention was being paid to the senses. Reminiscent of earlier decades' fascination with language and with 'the' body, the intensity of interest in, and the range of discourses circulating about, the senses suggested that this moment might constitute the cusp of a 'decade of the senses'. In hindsight, Richard Carp's provocative claim to the 1993 meeting of the Semiotic Society of America that, "In thinking about ourselves, overemphasis on 'text' creates ignorance of other important factors," not only provides a very interesting semiotic perspective on this historic juncture; it also turns out to have been prescient regarding the shifts that were to follow. Amongst the "important factors" Carp nominated were the enculturation and historic specificity of the senses, as well as the ongoing association between, and the privilege enjoyed by, text and vision. Furthermore, and perhaps most significantly for this project, he argued that the "current obsession with textuality" adds to the "lack of interpretation of the emerging dominant media…electronics."[2]

While the attention being paid to the senses at this moment came from many quarters, a great deal of it was also concerned with technology, particularly media technologies and especially – though not exclusively – newer media technologies. A significant number of claims about the senses emerged out of the fascination with, and early attempts at theorising the implications of, newer media technologies. Commentators from across the spectrum evidenced a high degree of interest in the sensory possibilities of new media. Often these discourses concerned the direct, unmediated sensory experiences such technologies were said to provide, including those resulting from processes of technical convergence. Some also managed to heighten awareness of the sensory aspects of technological engagement. An important spur to interest during this time was the emergence of digital multimedia technologies, which were quickly pronounced to be 'multi-sensory'. It was frequently claimed that the reason why multi- media was so terrific was its ability to provide a greater range of sensory stimuli, all at once. As a result, claims

[2] Richard M. Carp (1995 [1993]) "Reversing the Metaphor: Language as Material Culture", *Semiotics*, Proceedings of 18th Annual Meeting of Semiotic Society of America, 21-24 October 1993, Robert Corrington-Smith, John Deely (eds), New York: Peter Lang, pp. 405-6.

were made by promoters of various media – new and old – that consumers were 'driving' convergence by their demands for "more realistic and 'immersive' (multisensory) experiences",[3] with the implication that immersion resulted from stimulating all the senses, often to heretofore unimagined degrees. So it was that in 1997, David Rokeby made an observation paralleling Carp's, of a "shift in the sense of what was being most challenged by the computer. In the 80s it seemed to be the material body. In the 90s it seems to be the notions of intelligence, and consciousness."[4]

While examples such as these support my claim of an escalation of interest in the senses, as the decade neared its end it became evident that sensory study was still marked by a number of potent legacies. The international conference "Uncommon Senses: The Senses in Art and Culture", held in Montreal in 2000, might reasonably have been expected to herald some new directions for the senses. It was, however, a typical event inasmuch as it mostly continued the focus of many earlier fora on single senses, constituting more of an end to the decades of scholarly work on individual senses (such as sight, smell or hearing) than a beginning which could attend to the proliferation of discourses about the senses in their plurality.

For me, the notion of sensory concurrence – that is to say, of more than one sense functioning or being invoked at the same time – was one of the main promises of the technologies newly available. This formulation of sensory concurrence seems to have been close to the way that early enthusiasts like Howard Rheingold and Jaron Lanier conceptualised the appeal of Virtual Reality, a technology which became synonymous in popular accounts with stimulating 'all the senses'.[5] Meanwhile, the adoption by some academic speakers of this figure of 'all the senses' was noticeable, sometimes in tandem with rhetorics of convergence, with the latter best exemplified by Sadie Plant's claim that

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[3] No author given (press release) (August 1997) "Philips Digital Convergence Product Defines Multimedia Home Cinema", http://www-us.sv.philips.com/news/press, accessed 18/7/00.
[4] Erkki Huhtamo (1998) "Silicon Remembers Ideology, or David Rokeby's Meta-Interactive Art", *The Giver of Names* (exhibition catalogue) McDonald Stewart Art Centre, Guelph, Ontario, available online at www.interlog.com/~drokeby/erkki.html, accessed 3/10/01.
[5] Reflecting on this period, Peter Lunenfeld writes that Lanier's hype was at least understandable: "After all, he had a start-up company he needed to hype". Peter Lunenfeld (1998) *Snap to Grid: A User's Guide To Digital Arts, Media, and Cultures*, Cambridge, Mass., London: MIT, p. 35; Jaron Lanier and Adam Heilbrun (1988) "A Vintage Virtual Reality Interview", http://people.advanced.org/~jaron/vrint.html, accessed 11/7/01; Howard Rheingold (1991) *Virtual Reality*, London: Secker & Warburg. Alan Dunning and Paul Woodrow also express

"computers melt the senses," advanced at a seminar on "Touch" held in Sydney around this time.[6] Others adopted a less sensational approach, concerned with the challenges posed by simulating different senses. Typical is an article by Florian Rötzer, published in Simon Penny's 1995 collection *Critical Issues in Electronic Media*, in which he mused on some of the difficulties and limitations of digitally simulating sensory experience. Rötzer wrote,

> …by now we have learned how difficult, if not impossible, it is to bring about total simulation of the world of natural perception – the famous paradox of computer sciences. The furthest advanced, so far, is the audiovisual dimension. Experiments with tactile experience indicate that the weight or resistance of the virtual objects can be experienced via the data glove or the data suit, which would naturally strengthen the impression of reality…However, it is easy to imagine that the infinite variety of material that can be touched by far exceeds the mechanical reproduction possibilities of simulation. There is not even the recording equipment for the universe of smells and taste, and the thought of a 'data tongue' or a 'data nose' is not only far-fetched, but, most likely, also technically impossible.[7]

Rötzer's concern was with the difficulty of making simulated sensory information *believable*, and while it is worth noting the inroads that have been made toward the creation of a 'data nose' since this was written, that Rötzer seriously pondered these difficulties in 1995 is not only consistent with my overall claim of an escalation of interest in the senses at this time, but also reveals how influential was the idea that multi-sensory stimulation better simulates the way we 'naturally' experience the world.[8]

While the exact point at which the senses began to emerge as a significant factor in the discourses surrounding newer technologies could be debated, pinpointing the particular year or month is not what concerns me here. Rather, in this thesis, I am concerned with the shift toward a concurrence of the senses in relation to technology, and with the implications of this shift for subjectivity. As there are lots of discourses on the senses, technology and affect individually, it is the points of intersection between these discourses that I address in this thesis. To give a couple of examples, one intersection occurs where concerns about

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some of these ideas, in their essay (n.d.) "Einstein's Brain", http://www.acs.ucalgary.ca/~einbrain/EBessay.htm, accessed 23/3/02.

[6] Sadie Plant (1996) "Coming into Contact", *Touch Forum*, Abby Mellick (ed.), Sydney: Artspace, p. 31.

[7] Florian Rötzer (1995) "Virtual Worlds: Fascinations and Reactions", *Critical Issues in Electronic Media*, Simon Penny (ed.), New York: SUNY Press, p. 128.

[8] That interest in believably simulating olfactory sensation continues is evident in *Wired*'s recent account of "what was surely the world's first multimedia presentation – of the wine-making process in France – to include the smells of crushed leaves, grapes and burning wood", featured at Siggraph. Michael Stroud (2001) "These Ideas Make a Lot of Senses", *Wired News*, August 18, www.wired.com/news, accessed 20/8/01.

technology meet those about interface and questions about how interfaces are experienced, including questions of affect. Another is located at the point where the often totalising rhetoric in which discourses of 'more' stimulation meet promises about the particular sensory experiences that will be 'enjoyed,' raising questions about how standardised such experiences are.

That a range of discourses on the senses began to emerge during the mid 1990s strikes me as somewhat curious, given how limited understandings of the aesthetic nature of engagements with technology have often been. In part this seems to be the legacy of binary thought structures (mind/body, reason/passion), and the alignment of technology on the side of the former, rather than the latter. And certainly, the more recent fetishisation of information – devoid of embodied aesthetic qualities – has not helped in developing an appreciation of the aesthetics of technological engagements. The recent framing of technology in terms of the senses seems quite a calculated move. Judging from the explosion of discourse about the senses, the way that various technologies are said to effect the senses, and the extent to which media technologies are currently being aestheticised, one might be tempted to conclude that the popular view of technology as *asensual* has been overturned or supplanted. However, the continuing fear and anxiety regarding technology's perceived alienating effects suggests that this is still a significant discourse. The colonisation of some sections of the discourse on technology by a reinvented *cogito* of "I sense, therefore I am" – with sentience replacing conscious reflection as the basis of subjectivity – also casts doubt on such an upbeat assessment, revealing how sentience might confirm the presence and existence of a prior, conscious subject in contemporary media culture in ways that do not differ much from the classic Cartesian model.

This is, however, a complex scenario, in which either/or approaches are of limited help. Significant shifts have transpired in the ways that technology is perceived and discussed and these have not been adequately addressed by existing theories of information society or digital revolution. The need to attend to the nature and causes of these shifts, together with the effects that these developments are thought to have generated, begins to indicate why it is important to reconsider the senses in relation to technology, now. The new attention to the senses presents a degree of promise that there is more going on than these theories might suggest, and it is one of the aims of this thesis to critically appraise the significance of some of these shifts. The rise in interest in the senses also presents me with an

opportunity to rethink some of the problems and legacies of earlier approaches to both the senses and to technology.

To address each of these in turn, I have noted that the regularity with which the senses were – and continue to be – invoked in relation to technology *in their plurality* is one of the reasons for this study's concern with sensory concurrence. There are also a range of tendencies within existing scholarship on the senses which add weight to this formulation. The overwhelming focus of research on individual senses has fostered a climate of oppositional debate between theorists of different senses. Although feeble and unsatisfactory, ideas of the senses as hierarchical and adversarial continue to be advanced. So while vision is less often proclaimed the 'noblest' of the senses, the rhetorical gesture of privileging one sense at the expense of others has been preserved, with some writers still happy to blithely invoke the hierarchising gesture all over again. Ironically, Plant is one who replicates this gesture – ironic because it is the very one she is critiquing – when she argues the importance of touch for new media. Arguing against hierarchies of the senses and the phallocentric nature of visual paradigms, she not only opposes touch to sight, but also to all other sensory functions, claiming for touch (she says after McLuhan) the status of a 'meta-sense'.[9]

Given the continuation of the tradition of oppositionality amongst various senses, it is clear that the orthodoxy has *not* been dismantled, though its form has undergone some change. More recently, the gesture has been inverted, with many writers arguing not that 'their' particular sense is the most important, but rather the most neglected, the most marginalised. Martin Jay's 'anti-ocularcentrism' thesis is perhaps the best, though not the only, example of this.[10] I do not mean to suggest that all those who write on the senses adopt or condone these approaches; quite a few writers rework and develop aspects of the inter-relatedness of the senses, without collapsing the specificity of different senses.[11] My

[9] Though Plant qualifies her points to some extent later. Sadie Plant, "Coming into Contact", pp. 37, 40.
[10] Martin Jay (1994 [1993]) *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought*, Los Angeles, London: University of California Press.
[11] See, for instance, Laura Marks, who argues for a multisensory understanding of the cinema experience, beyond devices like Odorama, which takes account of viewer's mimetic and synaesthetic inclinations (pp. 195-6), in her (2000) *The Skin of the Film: Intercultural Cinema, Embodiment, and the Senses*, Durham, London: Duke University Press See also Gabriel Josipovici (1996) *Touch*, New Haven and London: Yale University Press; Geoffrey Batchen (1996) Touché: Photography, Touch, Vision", *Photofile*, vol. 47, March, pp. 6-13; Frances Dyson (1995b) "Nothing Here but the Recording: Derrida and Phonography", *Essays in Sound 2:*

point is that the tendency has been a prominent one, at times serving, I would argue, to reinforce and legitimate existing aesthetic discourses rather than encouraging a process of casting around for more innovative approaches to the senses. Richard Shiff suggests as much in discussing Cézanne's paintings in terms of a privileged, visual mode, compared with a haptic one, observing that each mode "sets priorities and delimits conclusions."[12]

One of the implications of such atomistic tendencies is that it limits the ability of theorists to account for the merging and multiplication of sensation that is occurring in many contemporary media forms. This became apparent in the early 1990s with Andrew Goodwin's criticisms of those analyses of music television (MTV) which attended almost exclusively to the visual aspects of the channel, ignoring the music and other elements. Writing on the subject, Peter Wollen suggested that music video's "hybrid and technologically sophisticated form" demands "new concepts and new attitudes", an insight which would be well applied to many newer media technologies.[13] For while some theorists emphasise the continuities between new media and cinema for instance, and while the media archaeological approach can be a useful one at times, newer media frequently pull apart and reconfigure standard audio-visual relations, for instance, presenting unfamiliar combinations of media elements in a new format.

Further to the inadequacy of oppositional, atomistic conceptions of the senses to account for the complexity of *contemporary* media configurations, what the MTV example also highlights is the likelihood that analyses of this sort also missed the sensory complexity of *earlier* experiences and media, as they were not equipped to recognise complex inter-relations and configurations of the senses. My point is that attempting to analyse a complex medium like MTV from the perspective of a single sense paradigm (visuality, aurality), or even in terms of a single institutional history (such as cinema), will necessarily be limited. It is for these reasons that, as a part of my project to rethink the senses, I draw

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Technophonia, Sydney: Contemporary Sound Arts, pp. 40-46; Richard Shiff (1991) "Cézanne's Physicality: The Politics Of Touch", *The Language Of Art History*, Salim Kemal and Ivan Gaskell (eds), Cambridge, New York, Melbourne: Cambridge University Press, pp. 129-180.

[12] Shiff, "Cézanne's Physicality", pp. 166-9. Louise Vinge's book *The Five Senses* also highlights the constructedness of sensoria, historically and culturally. See Louise Vinge (1975) *The Five Senses: Studies in a Literary Tradition*, Lund, Sweden: Royal Society of Letters.

[13] See Andrew Goodwin (1993) "Fatal Distractions: MTV Meets Postmodern Theory", *Sound and Vision: The Music Video Reader*, Simon Frith, Andrew Goodwin, Lawrence Grossberg (eds), London: Routledge, p. 45-66; Peter Wollen (1997 [1988]) "Ways of Thinking About Music Video (and Postmodernism)", *Postmodern After-Images: A Reaction in Film, Television and Video*, Peter Brooker, Will Brooker (eds), London, New York: Arnold, p. 231.

on a range of precursors to digital multimedia, including mixed media collaborations amongst artists, whose commitment to experimental configurations has perhaps never been more relevant.

At the other end of the spectrum from those who continue to argue oppositionally about the senses, is the also common and equally inadequate speculation on the essential unity of all sensation. Somewhat surprisingly, this gesture seems to be particularly common amongst writers on synaesthesia, the condition where the stimulation of one sensory mode arouses sensations in another. Lawrence Marks is one writer who seems to suggest that synaesthesia is the best evidence there is for the unity of the senses. Indeed, his 1978 publication – though subtitled *Interrelations Among the Modalities* – is entitled *The Unity of the Senses*.[14] Synaesthetic experiences and metaphors are something of a touchstone for motifs of sensory concurrence, with the phenomenon continuing to arouse popular interest especially on the internet, where the unity of the senses is frequently asserted.[15] The major problem I have with conceiving of the senses as a unity is that it effectively elides the differences between sensory modalities, collapsing them, and the media which they are often taken to stand for, into a whole. This tendency has, I think, been the subject of sufficient critique in the past – most prominently in the figure of the *Gesamtkunstwerk* or total work of art – to arouse strong concerns.

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[14] Lawrence Marks (1978) *The Unity of the Senses: Interrelations Among the Modalities*, New York: Academic Press.

[15] A quick internet search reveals the many sites dealing with synaesthesia. Apart from academic and institutional writings on the subject, there are pages devoted to visual or 'liquid music', linkages between contemporary and earlier artists with known interests in synaesthesia, and descriptions of drug experiences with synaesthetic qualities. Crétien van Campen echoes my claim about the exponential increase of interest in synaesthesia online: listing a number of 'Websites on syaesthesia', van Campen notes:

> During the last five years the Internet has been filled with an explosion of information on synaesthesia. A selected number of sites contain well-informed introductions and references. The[se] websites [are by] a mixture of (digital) artists, designers, software programmers, engineers, writers, photographers, musicians, computer scientists, psychologists, etcetera etcetera…

Unfortunately, many other sites on synaesthesia, which I visited at the outset of this project, have been removed, including sites on digital renga, visual music, and the synaesthetic potential of multimedia. While I recall finding some of the claims that were advanced far fetched, and some problematic from an academic perspective, it is also somewhat sad to see the disappearance of some of the early exuberance, which embraced technology for its aesthetic potentials. For a description and rationale of the 'benefits' of liquid music, which captures some of this early enthusiasm, see Selwyn Rodda (n.d.) 'Liquid Music', www.liquidmusic.com.au/ht.htm, accessed 27/3/02. See also Crétien van Campen (last modified 15/2/02) "Psychology and the Arts", http://home-1.worldonline.nl/~cretien/websyn.htm, accessed 23/3/02.

Framing this project around figures of sensory concurrence has enabled me to move away from these oppositional and organicist debates. I find myself in agreement with Helen Grace when she writes of "the exhaustion of certain polarised debates" with regard to aesthesia, and the need to "open a space in which we can feel around for some fresher approaches to the questions which will continue to concern us".[16] For me, the deadlock of these inherited ways of thinking about the senses points to the need to consider the relations *between* the senses, the ways they interrelate, without either treating individual senses in isolation or collapsing different senses into a whole. Thinking about sensory *concurrence* allows me to investigate the ways in which the senses are claimed to function and to be experienced concurrently, as well as retaining an awareness of the cultural and discursive constitution of the senses, and the ways that sensoria are also historically specific. The category of sensory concurrence implies neither the figure of 'all the senses', nor does it assume a one to one relation between a sense modality and a medium, another problem with some accounts. But it potentially provides a way to think about the closeness of certain senses (such as taste and smell) as well as of the effects of altering the 'natural' configuration of the senses, which I take up in Chapter Four.

In this thesis, then, my concern is to rethink sensory and aesthetic relations with technology. While this extends what might commonly be thought of as aesthetics (according to one definition, aesthetics is the concern with style), a number of important studies have shared similar concerns. The formulation of my title "Aesthetics and Hyper/aesthetics" is intended to signal this project's proximity to, as well as divergence from, Susan Buck-Morss's essay of 1992, "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered,"[17] an important essay which has played a significant role in reviving interest in the etymological meaning of aesthetics.[18]

Although aesthetics has since the Enlightenment been associated with art and with notions of the beautiful, the original realm of aesthetics was not art but the body and the senses.

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[16] Helen Grace (1996) "Introduction", *Aesthesia and the Economy of the Senses*, Sydney: PAD/UWS Nepean, p. 2.
[17] Susan Buck-Morss (1993 [1992]) "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered", *New Formations*, no. 20, Summer 1993, pp. 123-143.
[18] The following three studies are just a sampling of those which draw on Buck-Morss' essay: Laura Marks, *The Skin of the Film*; Karen Pearlman (2000) "Learning to Read the Physical Mind", *Body Show/s: Australian Viewings of Live Performance*, Peta Tait (ed.), Monograph Series Australia Playwrights: 8, Amsterdam, Atlanta: Rodopi, pp. 217-228; Neil Leach (1999) *The Anaesthetics of Architecture*, Cambridge, Mass.: MIT Press.

As Terry Eagleton notes, "Aesthetics is born as a discourse of the body."[19] I use aesthetics in this way, which derives from the Greek roots *aisthesis*, meaning the sensory experience of perception and *aisthetikos*, that which is perceptive by feeling. The senses are of course the way that we receive sensation: hearing gives us a sense of place relative to vibrations emitted by sounding objects, vision the chromatic and shapely qualities of objects, and we feel the contours and surfaces, consistencies and densities of objects tactually.[20] Yet the senses are not just 'natural'. They are enculturated, as well as being historically and discursively constituted, governing precisely *how* we see, taste or experience the world, in a specific place and time, as well as affecting *what* we can know.[21] Nor are the senses just the means by which we receive stimuli in some automatic way, as the often-invoked stimulus-response conception suggests. Finally, beyond questions of modality, the senses situate us in sensory worlds, worlds in which we cannot always nominate a particular sense for what we perceive (or at least not one from the five or six that are taken to constitute 'the' sensorium in contemporary, Western cultures), but which nonetheless orient subjectivity. One of the questions I will be asking is how changing the sensory configuration through which we come to know, might also affect *what* we can know. At such times, it seems, the senses help us to – literally as well as metaphorically – *make sense*; though at times the 'sense' that is 'made' can be quite unfamiliar.

As regards technology, I am also concerned to find some "fresher approaches" to questions that current technologies confront us with, there being a number of not very helpful tendencies in much commentary on technology. Perhaps the most problematic tendency is that found in studies which, though purporting to think about the changes in conditions or practices accompanying technological development, instead focus solely on the alienating effects, on atrophy (and this is particularly true of writing on technology and the senses), ignoring the corresponding changes which might not be so gloomy. Alienation has of course been a prominent concern in much work on technology, and it is an issue which concerns me. However, I am also concerned to ask, what lies on the other side? What else is there?

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[19] Terry Eagleton cited in Buck-Morss, "Aesthetics and Anaesthetics", p. 125.
[20] Alphonso Lingis (1996) *Sensation: Intelligibility in Sensibility*, Atlantic Highlands, N.J.: Humanities Press.
[21] Richard Shiff (1991) "Cézanne's Physicality"; David Howes (ed.) (1991) *The Varieties of Sensory Experience: A Sourcebook in the Anthropology of the Senses*, Toronto: University of Toronto Press; C. Nadia Seremetakis (ed.) (1996) *The Senses Still: Perception and Memory as Material Culture in Modernity*, Chicago: University of Chicago Press.

The contemporary technological moment elicits a range of responses. During the moment of escalation in sensory discourse in the 1990s which I've described, for instance, there was excitement and anticipation accompanying the emergence of significantly faster personal computing, which the Pentium chip provided, together with the enhanced connectivity which the internet promised and delivered to many at around the same time. This excitement fed into and mixed with an array of existing emotions and concerns about speed and intensification, the role of technology in everyday life, and the ways in which experience itself seemed to be undergoing change. I want in this thesis to point to the doubleness and variety of technological engagements, without either homogenising or binarising these.

Walter Benjamin's approach to technological developments is relevant and useful in developing such a double approach to technology, and I refer to his work for this reason, as well as for the specific insights he offers on the senses and technology. He is aware of the hollowness of many of the claims to newness that are advanced subsequent to the appearance of new technologies, as well as the promises preceding their development which remain unfulfilled.[22] Yet he is also, I argue, at times willing to allow himself to be *taken by* an image, or an effect produced using technological means, much as he suggests that the art lover experiences the warmth of a painting, which "stirs sentient springs" within.

Benjamin's reflections on art, criticism and advertising in "One Way Street" are worth elaborating on in this context. They are particularly relevant, I suggest, when considered alongside later writings on the phantasmagoria and shock. For me, the image evoked by the short passage from "One Way Street," cited at the beginning of the chapter – of Benjamin finding himself captured by a moving neon advertisement reflected in a wet footpath – is important and it is one that I return to. It represents the doubleness of Benjamin's thinking on a range of topics relevant to technology. To explain what I mean by this 'doubleness', consider that where other commentators are fixed by the phantasmagoria's potential – in this case, neon advertising – to *take in* the unsuspecting passerby, 'duping' them, Benjamin's acknowledgement of this possibility is accompanied

by a meditation on what it is that makes advertisements superior to criticism, in which their ability to captivate the senses is an important factor. Unlike a number of his contemporaries, Benjamin does not dismiss phantasmagoric forms on the grounds that they are merely spectacular or manipulative, glittering with promise and failing to deliver on this; or that the phantasmagoria just covers over the 'real' situation, as the accounts of Karl Marx and Theodor Adorno suggest. The phantasmagoria which others condemn for its falseness seems to intrigue Benjamin, drawing his attention through the effect it exerts on his senses. He reads the figure as both evidence of a distracted state and a society in which class divisions are entrenched, *and* as a cultural phenomenon with aesthetic and philosophical significance for his theses on the changes in experience and the implications and potentials of technical media. Aware perhaps of being *taken in*, Benjamin is also *taken by* these vivid neon colours, emphasising the doubleness of this 'lure'.

It is this doubleness in Benjamin's thought which I, along with a number of other writers, find gives his work a continuing relevance.[23] An ambivalence is particularly evident in his analyses of technology, producing work that does not just attend to either the 'positive' or 'negative' effects of technical developments, but to both, and others besides. Evident in his writings on shock as well as the barbarism of technological destruction resulting from the First World War, Benjamin has an open and subtle approach which I hope will guide my analyses in this project, allowing me to attend to some of the more complex dynamics of the junctures between contemporary technology, the senses, and affect.

Although this is not a thesis *on* Benjamin, his discussions about and concern with technology and media technologies in particular, are of obvious benefit to this project. The writing of a number of commentators on Benjamin's writing are also relevant. As well as Buck-Morss, I rely on the work of another prominent Benjamin scholar, Miriam Hansen. Apart from the nuanced insights she provides into Benjamin's usage of concepts like shock and innervation, Hansen specifically addresses media technology and the effects of technology on the senses. Her (1999) essay, "Benjamin and Cinema: Not a One-Way Street", is particularly helpful for theorising this doubleness.[24] While I will say more about the work of Buck-Morss and Hansen in what follows, their scholarship provides important

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[22] Susan Buck-Morss (1997a) *Dialectics of Seeing: Walter Benjamin and the Arcades Project*, Cambridge, Mass.: MIT Press, pp. 92, 107.
[23] Miriam Hansen notes that these 'antinomies' are a part of Benjamin's method in her (1999) "Benjamin and Cinema: Not a One-Way Street", *Critical Inquiry*, vol. 25, no. 2, p. 310.

reference points, with the set of concepts comprising shock, anaesthetics and innervation establishing some of the terrain this project covers. In turn, I hope that my application of these concepts might be a useful contribution to the debates.

Having introduced some of the theoretical motivations of this thesis, I can now reflect on the unexplained term in my title. Hyper/aesthetics is a term intended to capture a range of aspects of the current debate, from hyper, to hyperaesthesia, as well as hyper/aesthetic (with a slash), concepts which I will now introduce.

Many discourses about technology – particularly recent ones about new technologies – are of course characterised by hype, with a number espousing what I think of as hyper relations as the appropriate relation to technology at the present time.[25] Evident across a wide range of cultural products, the hyper figure is particularly related to the hyper-stimulation of the senses, through media. The concern with that which is hyper can be understood, in Raymond Williams' terms, as an emerging structure of feeling, what I term the hyper state. Representations of the hyper state frequently feature claims to extra-ordinary sensory experiences, with the appropriation of drug and psychedelic motifs featuring prominently. These elements of the 'hyper' figure are highly appropriate – the OED's colloquial listings for the prefix include links to the hypodermic or intravenous delivery of drugs, as well as to hyperactivity. Yet despite the emphasis given to hyper feelings and sensations, 'hyper' discourses frequently deny or marginalise aesthetic factors, in order, for instance, to 'get more done'. Besides these meanings, I also point to another meaning of hyper- here, that of a *going beyond*.

In conjugating hyper with aesthetics, my intention is not to leave aesthetics behind, but rather to move beyond some of the previous analyses of aesthetics and technology. This

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[24] Hansen, "Benjamin and Cinema", pp. 306-43.

[25] After settling on the term, I discovered that both Alain Corbin and Peter Lunenfeld use the term hyperaesthetics. Lunenfeld intends the term to capture something of the hype accompanying the emergence of newer technologies, as do I. He writes, "Real-time theory does not posit a pre-lapsarian past…it eschews the hype-mongering of hysterical neologizing, and it condenses vapor theory into a discourse grounded in the constraints of production. Real-time theory strives for balance while maintaining passions both positive and negative." While there are some similarities between Lunenfeld's approach and my own, he is primarily concerned with finding an approach which can keep up with the instantaneity of discussion and critique in contemporary technoculture – that he finds in listserves. See Alain Corbin (1995) *Time, Desire, And Horror: Towards A History Of The Senses*, Jean Birrell, trans., Cambridge: Polity Press,

term, hyperaesthesia, references those states or practices where a hyper intensity coexists with a concern for the senses and aesthetics. Examples of contemporary hyperaesthesias include phenomena such as the rave scene, as well as the example of computer gaming, examined in Chapter Three. Both of these are hyperstimulating, and yet they go beyond the hyper view, where stimulation is *all* that counts, as well as accounts of anaesthetics, which argue that high degrees of stimulation (necessarily) result in experiential impoverishment and anaesthetisation. Anaesthetics accounts, in making such a pronouncement about hyperstimulation, rely almost exclusively on the *quantity* of stimuli dispatched; this ignores other factors which are, for me, also important to consider. Ravers and computer gamers both experience altered states of consciousness, but to argue that these are necessarily impoverished is inadequate. Hyperaesthesias such as these constitute exceptions to the anaesthetics thesis.

The term in my title, 'hyper/aesthetics,' is meant to resonate with both of these terms, as well as move the debate beyond them. Thinking about hyperaesthesias has inspired me to develop an approach that is attentive to the many points of ambivalence, between hyper states and hyperaesthesias, hyperaesthesia and anaesthesia, and the more general ambivalence regarding the unknowability of the outcomes of technological use. Writing hyper/aesthetics with a slash emphasises the always uneasy relations, specifically between hyper states and hyperaesthesias, as well as the awareness of these more widespread ambivalences, which inflect hyper/aesthetics. Foregrounding this ambivalence enables me to revisit some of the neglected dimensions of the aesthetics/technology/affect nexus. While a number of hyperaesthesias are discussed in this project, my primary concern is with the possibility of theorising hyper/aesthetics, and with applying a hyper/aesthetic approach to rethinking relations with technology. A hyper/aesthetic approach involves ambivalence, doubling, virtuality, unfamiliarity, innervation, and moving beyond, all concepts that are relevant to the senses and subjectivity. As an approach, it allows me to bring these concepts together, to consider the contemporary significance of the senses in media technological contexts, and what implications there are in this for subjectivity.

I would argue that Benjamin's thinking is hyper/aesthetic in that it goes beyond either/or terms – indeed, I think of his approach as being couched in terms that are more supportive

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Cambridge, Mass.: Blackwell; Peter Lunenfeld (2000) *Snap to Grid: A User's Guide to Digital Arts, Media, and Cultures*, Cambridge, Mass., London, MIT Press, p. 37.

of a both/and position, as well as a range of possibilities besides. While he identifies anaesthetics, for instance, as a prominent feature of modern relations with technology, he never suggests that it is the only possible relation. Even as late as his essay "The Work of Art in the Age of Mechanical Reproduction" (1936) – a piece which some commentators identify with a growing bleakness or pessimism in his writing – Benjamin remains interested in what other possibilities modern technologies can reveal, showing that the issue is not simply one of optimism or pessimism.[26] His is a criticism able to appreciate the range of relations that it is possible to have with technology. Benjamin is interested – as am I – in questions of virtuality, and he is able to explore these even in the dark circumstances of fascist Europe.

While I've referred to Benjamin's thinking as 'double', he is of course not the only one to engage with technology's multiple possibilities. A similar openness is evident in the work of many of the theorists whose work I rely on in this project, writers such as Donna Haraway, Margaret Morse, Miriam Hansen, Roger Copeland, and John Docker, and this openness constitutes an important second dimension of a hyper/aesthetic approach. While the growth of the internet and digital cultural more generally has led to a great deal of research on technoculture, it is still possible to detect in many accounts a prevailing concern either (just) with the spectacle of it all, valorising the digital phantasmagoria for its own sake, or else with the 'negative' effects for which technology is perceived responsible – alienation in the forms of loss of community or social skills, for instance. While I am not suggesting that there is anything 'wrong' with the surface glitz and fun of certain elements of cyber- or technocultures, generally speaking much writing on technology is not able to acknowledge this ambivalence. Nor am I claiming that the deployment of technology is always benign or harmless; clearly this is not so. The link between aesthetics and politics is one which many scholars have struggled with, and it is clear that the uses to which technologies are put have political significance.

The products of technological development are multiple, creating anxiety as well as excitement, and other responses besides. Pre-existing practices, experiences and affects *are* rendered obsolete by the development of new technologies, at the same time as new ones are animated. The new ones will not always be promising, but there is more going on

[26] Benjamin (1992 [1936]) "The Work of Art in the Age of Mechanical Reproduction", Harry Zohn, trans., *Illuminations*, Hannah Arendt (ed.), London: Fontana, pp. 219-253.

here than much writing – with its emphasis on destruction and atrophy – would lead one to believe. So, while I am suspicious of current claims to extraordinary experience, I am not convinced that sensory intensity always *has* to end in atrophy, or anaesthesia. Relatedly, I question the self-evident logic according to which certain practices are invoked as examples of either pathological addiction, or else the social disintegration technology is said to be causing. What I object to are the simplistic accounts on both sides – of techno-libertarians and other uncritical champions of new technologies on the one hand, and the scenarios of social disintegration attributed to 'phenomena' such as internet 'addiction' on the other – where neat causality creates moral panic and reinforces technofear. What seems to me to be required are analyses that can both critique the empty promises and the rhetoric of newness, as well as recognising, and learning to describe, the range of possibilities that result, and I suggest this is what a hyper/aesthetic approach can do. In interview with Constance Penley and Andrew Ross in 1991, Donna Haraway made this point humorously:

> I know that there's a lot going on in technoscience discourses and practices that's not about the devil, that's a source of remarkable pleasure, that promises interesting kinds of human relationships, not just contestatory, not always oppositional, but something often more creative and playful and positive than that. And I want myself and others to learn how to describe those possibilities.[27]

The challenge is, it seems, to remain alert to the hype of accounts that proclaim their own newness, while also simultaneously watching for that which is genuinely different. Accounts which fail to do this, restricting the range of outcomes of technological change, are just not convincing, particularly when they add to the already untold pages that have been devoted to analysing how technology *diminishes* and *degrades* experience.

It is significant to me that, over the last decade, Nicholas Zurbrugg has consistently advanced a similar argument with respect to the electronic arts. Significantly, in prefacing his essays in *Critical Vices* with "One or Two Final Thoughts," Zurbrugg refers to the "new waves of more enlightened theoretical debate" that developed during the course of the 1990s, as some theorists (he refers to Baudrillard and Guattari) began to "advocate 'a more subtle form of analysis,' *sensitive to technology's potential as an instrument of*

[27] Donna Haraway cited in Constance Penley and Andrew Ross (1991) "Cyborgs at Large: Interview with Donna Haraway", *Technoculture*, Constance Penley and Andrew Ross (eds.), Minneapolis, University of Minnesota Press, p. 8.

magic'" (my emphasis).[28] Besides suggesting that a change in attitudes is taking place, Zurbrugg's critique of those scholars who refuse to consider the work of techno- and media artists – *because of its unfamiliarity* – has produced a concept which is helpful for articulating another aspect of what I am calling a hyper/aesthetic approach, and why it is important. This is the concept of 'unfamiliar art'. Art that is unfamiliar not only expands what we know, but also what we don't know, according to Zurbrugg.[29] This concept not only provides a useful way to think about unfamiliar art, but also about the significance of unfamiliar aesthetic experiences more generally, and why a hyper/aesthetic approach might be interested in that which is unfamiliar. Apart from Zurbrugg's own consideration of technology's potential to generate new possibilities, 'unfamiliar art,' as a concept, also suggests an alignment between hyper/aesthetics and virtuality. These concerns with (un)familiarity and virtuality, figure prominently in my decision to develop an approach to technology that I am calling hyper/aesthetic and to use it to inform the studies of the senses that I undertake in the next three chapters.

Familiarity constitutes a significant hurdle to a hyper/aesthetic conception of technology. Although we are frequently told that our interactions with (new) technologies revolve around all too familiar human fears and desires, it can be difficult to find evidence that many theorists have learnt to – or are even interested in trying to – describe other possibilities, despite Haraway's urging.[30] Attending only to already familiar relations with technology severely constrains the critical undertaking, as the familiar comes nowhere near exhausting the range of the possible.[31] And while it is by no means easy, it is important work, to which I think a hyper/aesthetic approach can contribute through creating a theoretical space in which to consider – to quote Haraway – the "other kinds of power and

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[28]Nicholas Zurbrugg (2000) "One or Two Final Thoughts (A Retrospective Preface)", *Critical Vices: The Myths of Postmodern Theory*, Amsterdam, Australia: G+B Arts International, pp. xvi-xvii; Zurbrugg (1999) "Getting 'The Real Facts': Contemporary Cultural Theory and Avant-Garde Technocultural Practices, *Angelaki: Journal of the Theoretical Humanities*, vol. 4, no. 2, p. 190.

[29] Nicholas Zurbrugg (1994) "Introduction: Contemplating Electronic Arts", *Continuum: The Australian Journal of Media and Culture* (issue on Electronic Arts in Australia), vol. 8, no. 1, pp. 10-21.

[30] Claudia Springer makes this argument about familiarity, in her analysis of science fiction films. See her (1999) "Psycho-Cybernetics in Films of the 1990s", *Alien Zone II: The Spaces of Science-Fiction Cinema*, Annette Kuhn (ed.), London, New York: Verso, pp. 203-18.

[31] Donna Haraway (1991b) "The Actors Are Cyborg, Nature Is Coyote, and the Geography is Elsewhere: Postscript to 'Cyborgs at Large'", *Technoculture*, pp. 21-26; David Rokeby, (1998) "The Construction of Experience: Interface as Content", *Digital Illusion: Entertaining the Future with High Technology*, Clark Dodsworth, Jr (ed.), New York: ACM Press/Addison-Wesley Publishing Co., pp. 27-47.

pleasure", as well as the "monstrosities", issuing from technical development.[32] Taking my cue, then, from theorists who *are* able to appreciate the doubleness of technology's products, hyper/aesthetics takes seriously the idea that, as well as displacing practices to which we are accustomed, technological development also facilitates interesting new practices, relations and subjectivities, which are worthy of attention.

In this thesis, then, I am concerned to open up the range of arguments that it is possible to make about sensory-technological arrangements, via particular case studies of advertising representations, popular culture, and art practice. As a part of this project, I (begin to) recuperate the notion that new technologies can facilitate new and different experiences, including sensorially intense and experimental ones, and that the outcomes of technological encounters are not predetermined. The senses are significant in this: not only do they provide a ready way of registering new and different experiences, but many of the shifts and changes of the present are specifically aesthetic ones, as I will argue in subsequent chapters. Also, rather than continuing the separation of passion from reason, 'body' from 'mind', I argue that the senses and aesthetics affect cognition, meaning that the limits of experience necessarily have some bearing on what can be thought.[33] I am concerned to expand the understandings of human relations with technology. Though it can sometimes seem as if recent claims to 'experience' are merely entrenching standardised humanist relations to self and technology, with a conscious subject in control, or, merely calling forth standardised responses and embodiments, I also discuss, in line with a more open conception of technological relations, more experimental relations with technology, to consider what new experiences, thoughts, and feelings they make possible. This is based on the belief that the sort of relation with technology matters; that it significantly affects subjectivity, and that it is important that this relation is understood as a variable, rather than a fixed term.

While certain subjectivities have been standardised in popular responses to technology (the humanist fear of runaway technology and loss of control to the machine being a common

[32] Donna Haraway (1990 [1985]) "A Manifesto for Cyborgs: Science, Technology, and Socialist Feminism in the 1980s", *Feminism/Postmodernism*, Linda J. Nicholson (ed.), New York, London: Routledge, p. 196.

[33] This contrasts markedly with the fear and paternalism that some theorists display at and for the senses, concerned at how easily they might be led astray, an issue that I deal with later. For an example of the latter, see Siegfried Kracauer (1960) *Theory of Film: The Redemption of Physical Reality*, London: Oxford University Press.

one), it seems that some theorists have also come to think about subjectivity in quite standardised ways. Many refer to subjectivity as if it were just a relation with self, a point which I detail in the next chapter. In assessing the implications of particularly sensory arrangements for subjectivity, I adopt a conception of subjectivity as a multi-dimensional relation, involving relations with self, with others, and with things.[34] Questions of over-familiar relations are of concern here, not only in terms of how relations with technology might be habitual, but also relations with others and self. I am interested in how such relations might undergo change or expansion, or be improvised or experimented with in the technological encounter. My thesis is that developments in technology do usher in new ways of feeling and of relating to oneself, *as well as* new ways of relating to others and things, including technologies themselves.

I have chosen to approach these questions via three case studies, or sets of case studies, which also constitute my chapters. These studies and the analyses they contain have permitted me to follow certain lines and arguments in relation to specific examples in a more speculative and exploratory way than an approach which sought to completely exhaust the enormous array of issues pertaining to the senses across an equally diverse array of media contexts, even supposing that this were possible. Each chapter takes a different medium for analysis – including print advertising (Chapter Two), computer gaming (Chapter Three), and CD-ROM based new media art (Chapter Four) – undertaking either a close examination of a handful of examples within that media category, or, as in the second case study, a number of issues and themes pertinent to the practice and context of computer gaming.

The thesis project comprises five chapters: this Introduction, three chapters, and a short Conclusion. As well as addressing the relation with technology in explicitly aesthetic terms, each of these three intervening chapters helps to further locate what is at stake in hyper/aesthetics. The subjects of the three chapters and the particular cases in each were selected for a range of reasons. In Chapter Two, advertising representations of the senses were selected both for their cultural importance and their currency. These representations are important because advertising not only reproduces but also in part constitutes discourses in contemporary culture, modelling and valorising particular attitudes regarding

[34] This I derive from Paul Rabinow's Introduction to Foucault's lectures at the College de France. See Rabinow (1997) "Introduction: The History of Systems of Thought", *Ethics: Subjectivity and*

the senses and media technologies. Indeed, it was in advertising that I found the particular discourses of sensory bombardment – stimulating 'all the senses' to an intense degree – most clearly articulated during the mid to late 1990s, and the three advertisements I have selected are typical of many that were circulating at the time. These advertisements – for Jolt Cola, Onkyo Home Theatre, and Panasonic Mini System stereos respectively – each feature the senses explicitly, usually in direct connection with a consumer media technology. Each advertisement is a prominent representation of experiential intensity and sensory hyperstimulation, premised on a kind of unwritten assumption that the more senses that are stimulated to a high degree, the better. I use these three ads to guide my investigation of hyperstimulation, intensity and the senses. The advertisements enable me to first, describe and develop a critique of the hyper subject, and second, to consider relations with technology which move beyond standard concerns about control. The second half of the chapter is able to move beyond concerns just about the quantity of stimulation dispatched, towards an appreciation of, for instance, the dissolution of boundaries and of consciousness which is a factor in some of the hyperaesthesias depicted.

Following the advertising analyses, I spend some time thinking about the similarities between classical accounts of sensory hyperstimulation and these contemporary examples. I argue that Benjamin's account of shock and his reading of its doubleness can support a double approach to hyperstimulation – in line with my readings of the advertising examples – providing a basis for a theory of hyper/aesthetics. Hansen's reading of Benjamin's use of the term innervation to theorise an alternate relation with technology is important here. I argue that these concepts of shock and innervation help to recuperate hyperstimulation, out of an acknowledgement that the effects of intense stimulation are not predetermined, and that the shock-anaesthetics thesis often does not allow for this instability.

Following on from the focus on representations of sensory intensity in Chapter Two, in Chapter Three I look to a particular example of sensorially intense technological engagement that has often been overlooked or not taken seriously, namely the practice of computer gaming. Multiplayer lanning can be a particularly intense sensory experience, and is an important site for considering the effects (as well as affects) that computerised media generate. The multiplayer gaming group itself challenges a number of assumptions that are made about the practice of computer gaming and online interactions generally,

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Truth, Paul Rabinow (ed.) Robert Hurley and others, trans., New York: New Press, p. XXXI.

with the face to face involvement of players making lanning an atypical example of computer gaming and online interactions more generally. Indeed, lanning's uniqueness makes my case more important, I think, with Margaret Morse's understanding that "what subjectivity will become in information societies is still an open question" particularly pertinent for multiplayer gaming. This openness is welcome, enabling the reconsideration of many of the assumptions that are made about this maligned pastime. Lanning makes a number of important contributions to my theory of hyper/aesthetics. In this chapter I consider the "uses that are made" (de Certeau) of the personal computer, as platform for multiplayer gaming at a LAN, which provides a clear example of the way that a productivity tool (the computer) can be turned to non-instrumental ends, in play. Interviewing gamers enable me to inquire into a number of topics about the particular relation with technology that is *play*. These include the ways that players experiment with games, the meanings they make around games, and how players find themselves affected by gameplay. A number of important points also emerge about gaming's facilitation of highly intense play experiences, in which a range of opportunities open, ranging from encounters with unfamiliar kinaesthetics, to an enjoyment of the openness of games. As well as moving beyond the instrumentality which predominates in many analyses of technology, my study of lanning enables pragmatic questions to be asked, about the range of uses that are made of (computer) technologies, and about the significance of technologies facilitating sensory experiences and reconfigurations which are unfamiliar.

Finally, after having traced a trajectory from the advertising representations of sensory concurrence in the bombardment of the senses and the discourses of 'more' (in advertising), through a more nuanced consideration of a playful relation to technology (in computer gaming), in Chapter Four I push further the limits of current figures of the senses. It seems to me that most current articulations of the senses do not come anywhere near realising the promises of the new sensory experiences that were made on behalf of newer digital media. One of the most significant of these promises is the *denaturing* of the senses through the use of unfamiliar media configurations, getting away from ideas of the repetition, reinforcement and fusion of different media. While the figure of 'all the senses' is one that has been frequently invoked in relation to multi-media, rather than making new configurations and combinations of media possible, it has tended to limit unfamiliar configurations of the senses, thus marginalising other ways of experiencing. In this final study, I explore how else the senses might be configured. Configuration is a significant

issue as it presents a chance for experience and use of technical media to recoup some experimental properties. As this more open approach is not evident in (m)any current commercial media applications, I turn for examples in this chapter to art practice. I examine a number of CD-ROM based, new media art works which are concerned with the unfamiliar at a range of levels; some works in particular, I suggest, denature the senses, through experimenting with non-conventional configurations of media elements. Analysis of these art works helps me to consider some of the effects that reconfiguring the senses has on perception and meaning-making, as well as relations with others and otherness more generally. Reconfiguring the senses in this way also allows me to move beyond some of the concerns which arise from the effacement of mediation, such as those which continue to plague computer games. Indeed, Jay David Bolter and Richard Grusin's notion of 'hypermediacy', as involving an acknowledgement of the medium as medium is relevant here, as discontinuous configurations of various media elements point up the opacity of the medium, well and truly preventing the mistaking of the mediated for immediacy.[35] (Yet as other cases also show, that which is mediated can also generate an enhanced sense of immediacy, something which I am also concerned to explore.) This case establishes a link between hyper/aesthetics and virtuality, in that denaturing the overfamiliar sensory parameters through which knowledge is arrived at, challenges the limits of what can be thought and known. In this case, porosity between different senses, and the commingling of sensation and cognition is of particular interest, pointing to other configurations of users' sensoria, and of the relation between feeling and thinking, both aspects of subjectivity which seem to be shifting.

While the three cases are diverse, there are many themes and threads besides aesthetics and hyper/aesthetics linking them, running across as well as through the different chapters. Terms which have featured in this Introduction, such as experience and experimentation, as well as being terms which I use in distinctive ways, also resonate in less expected ways, for instance with references to experimental arts traditions, and experimenting with other configurations of the senses. Likewise, the themes of familiarity and unfamiliarity recur: references to unfamiliarity in Haraway's notion of an "unfamiliar unconscious" in Chapter Three are picked up in my argument in Chapter Four on the incidence and even especial suitability of digital multimedia for addressing material, experiences or conditions that are,

[35] Jay David Bolter and Richard Grusin (1999) *Remediation: Understanding New Media*, Cambridge, Mass, London: MIT Press.

in one way or another, strange or unfamiliar. Another thread which is central to the thesis and which is evident in different forms throughout the three case studies is my treatment of audiences as active participants and creators of meanings.

In the conclusion, I discuss some of the aspects of subjectivity which the chapters have found to be shifting, charting how these vary from classical conceptions of the subject. I further reflect on some of the ways in which relations with technology are hyper/aesthetic and offer some perspectives for the reluctance of some writers to engage with technology hyper/aesthetically. The conclusion reflects on some of the challenges which newer mediated experiences and conceptions raise for old questions, particularly on the relations between sensation, affect and cognition, and how the relations between these might be shifting, historically, as well as the newer challenges that are raised by experiences of mixed realities. Finally, I signal where further work would be productive, both on the concept of hyper/aesthetics, and on particular aspects to have arisen from the studies themselves.

2

Representing the Senses: From Hype to Hyper/aesthetics

> *...hyperactive man has plenty of ancestors...people whose bodies have gradually become instruments.*
> -- Paul Virilio[36]

Advertising is one of the main arenas in which discourses about the senses and media technologies are shaped and played out publicly. In recent years advertisers have shown enormous interest in invoking the senses, depicting the relation to technology in multi-sensory terms. Stimulation, particularly that resulting in intense sensation, has virtually become an end in itself, as one advertisement after another promises that with the use of a particular product comes an extraordinary sensory experience. In this chapter, I will examine three recent print advertisements in detail – for Jolt Cola, Onkyo home theatre, and Panasonic Mini System stereos – heeding the claims each make for the experiences resultant from their use.

Whilst there is a large literature on advertising and its effectiveness, it is not these aspects which preoccupy me in analysing these advertisements. My primary concern in this chapter is with discourses of the senses, figured concurrently. Though advertising's gaze is mercantile, it also articulates wider cultural attitudes and anxieties about technology, amongst other things. It provides an opportunity to consider contemporary articulations of the senses, particularly the relations between aesthetics (as *aisthesis*) and media technologies, thanks to a dependence upon experiential marketing techniques whereby products are typically equated less with their functionality than with a desirable experience.[37]

At this particular moment forecasts which assert that contemporary technological development will significantly effect the nature of experience abound. Articles in the press attest to (and actively construct) such a transformation of experience, citing the 'rapid' pace of technological change and ensuing stress and intensity as a,

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[36] Paul Virilio (1995) "From Superman to Hyperactive Man", *Art of the Motor*, Julie Rose, trans., Minneapolis: University of Minnesota Press, p. 109.
[37] On the general shift toward the experiential in advertising, Pasi Falk's genealogy of modern advertising is useful. See Falk (1994) *The Consuming Body*, London: Sage, ch. 6.

if not the, major factor in such change.[38] In this context, what is desirable – so the logic goes – is the extra-ordinary, suggesting that ordinary reality is just not good enough. A survey of slogans for consumer 'high-tech' media, bears out the theme; a high degree of stimulation is the key to such extraordinary experiences. We are warned that media are "Explosive" (Kenwood) and that we should "Prepare for impact" (Philips); claims are made that products will "blow you away" (Panasonic); "[do] amazing things to your system" (TDK); "take you by storm" (JVC); "take sound to the extreme" (Sony); and finally, "make the hairs on the back of your neck stand on end" (Pioneer). The technique is one of inducing desire for intense, hyper experiences. The exciting, the extreme, the remarkable, the stimulated, altered state and ecstasy are all valorised, as they promise to keep at bay the undesirable state of affairs associated with a *lack* of intensity, that is, the mundane, the boring, the everyday.

In line with these discourses, each of the three advertisements depicts the intensification of a different emblematic moment: performance related stimulation and anxiety in the case of Jolt Cola, the sensory onslaught of Onkyo's home theatre spectacular, which also holds the possibility of dissolution, and the potential for new embodiments in the Panasonic advertisement, through the coupling of organic and technological bodies. I will analyse what significance these articulations of sensory stimulation and experience hold for the senses, contemporary media technologies, the relations between these, and finally, what implications there are in all of this for subjectivity. These are, of course, huge questions, which will not be exhausted in the course of a single chapter.

In this chapter I will argue that technology both is, and is not, becoming more aesthetic. While this is admittedly an awkward way to phrase the proposition, it does communicate some of the ambiguity that currently characterises relations between the senses and media technologies. On the one hand, technology is portrayed as if it is being transformed into something that is *more aesthetic*, and the representations of technology in the Onkyo and Panasonic advertisements exemplify this, clearly situating technology in terms of the

[38] Contemporary western societies are, it is claimed, increasingly marked by "cutthroat competitiveness" in the marketplace (Peters), a relentlessly expanding working week resulting in artificially high levels of stimulation and anxiety (Toohey), and a corporate-managerial world where the pull/reach of 'the office' is almost unqualified (Hewett). See Cynthia Peters (2001) "The Howling Inhospitable Wilderness of…The Marketplace?," *ZNet Commentaries*, 24 June, http://www.zmag.org/sustainers/content/2001-06/24peters.htm, accessed 25/3/02; Peter Toohey (1998) "The Big Yawn", *The Sydney Morning Herald*, 7 February; Jennifer Hewett (1998) "Yanks R Us", *The Age*, 24 January.

sensory experiences that it induces. Examining the particular ways in which this is done forms an important part of this case study. It is a complex matter. In part, it can be traced to technology undergoing processes of aestheticisation. But while this may be a part of the more general aestheticising of everyday life, it should not *just* be understood in stylistic terms in this context. Compared with Mike Featherstone's analysis of the aestheticisation of everyday life as a central feature of postmodernism,[39] this is perhaps more an *aisthesis*-isation of technology, making it sensorially affective for the user – or perhaps, sensorially affective in different ways.

One of the clear features of this move to render technology as inciting sensory feeling, is the combating of unfavourable conceptions of technology as *a*sensual. An IBM advertisement from the mid 1990s for voice-recognition technology takes this theme further, humanising technology and rendering it user-friendly. The text says, "Wouldn't it be great if you could just talk to your computer?"[40] The message is that the computer should be thought of as less technical and more of a bodily extension through its possession of *de facto* sensory capabilities: the implication is that if you speak, it will *listen* (and presumably respond). This IBM ad differs from those I will be analysing in that it reverses the standard direction, whereby technologies exist to stimulate 'you'. However, it is useful for also pointing out the way that the encounter with technology uses a personal and direct mode of address, which both makes it present to 'you' (the frequent use of 'you' in advertisements will be discussed later) and 'you' present to yourself.[41]

Frequently, the aestheticisation of technology operates according to an instrumental rationality, as advertisements imply that with the purchase and use of a particular product comes a specific sensory experience. Hyperstimulation, a central motif which recurs throughout the three advertisements, demonstrates this instrumentality as *intensity* of experience is equated (at least in part) with the *quantity* of stimulation 'delivered'. More stimulation is invariably presented as desirable, to be embraced for the immediacy and excitement that allegedly come with it. 'Hyper' promises excitement, a liberation

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[39] Mike Featherstone (1991) "The Aestheticization of Everyday Life", *Consumer Culture and Postmodernism*, London: Sage, pp. 65-82.
[40] IBM voice recognition advertisement (1996), *The Sydney Morning Herald*, 26 November.
[41] See Margaret Morse's discussion of this point, after Èmile Benveniste, in her (1998) "Virtualities: A Conceptual Framework", *Virtualities: Television, Media Art and Cyberculture*, Bloomington and Indianapolis: Indiana University Press, p. 9.

from boredom and dullness, whilst 'stimulation' is a central trope in the portrayal of contemporary media culture, particularly in terms of the senses. While this kind of appeal is generally not very challenging, theoretically speaking, often fetishising the commodity and the experience that allegedly follows a purchase, not to mention assuming an automaticity of response and affect, we start to see the possibility of other outcomes associated with hyperstimulation in the second and third advertisements, for Onkyo home theatre and Panasonic stereos respectively.

Whilst the calculative accruing of extraordinary sensory experiences is one manifestation of technology becoming more aesthetic, I also take seriously the idea that the subject's experience of technology is changing, exploring some of the ways that the relations between subjects, their bodies, and the world are being refigured now. A question that relates to the whole of this thesis is why technology is coming to be seen in terms of the senses, in terms of aesthetics, at the present moment? Why are the senses coming to constitute such an important criterion of technological experience, as well as a notable element in encounters with technology? In this chapter, I explore some possible explanations for the added interest in, and significance being ascribed to, the senses. The focus of recent discourse in this area on the *experiential* is a crucial factor, particularly experience in and of the present. Not only is this about being 'up to date' and 'hip' through having the latest technological gear, though this might well be one factor that affects experience; of more importance here is that experiencing the present is about living in the present, being filled with new, intense sensations, and experiencing these repeatedly. For their part, producers and promoters of new technologies have become concerned with how technologies affect – and with how they are perceived to affect – users. Audiences are meant to be struck with wonder, astounded at what the technology can do. Also relevant is the idea that sensory experience takes on new significance in environments in which relations to materiality are changed, as a result, for instance, of working with information which lacks materiality. Finally, the issue of making information perceptible is considered, along with the different ways in which this can be done, raising issues of the link between intelligibility and sensibility.

On the other hand, it can also be argued that technology is *not* becoming more aesthetic. This is best elaborated by returning to the idea of *intensification*. I have noted that each of the three advertisements depicts the intensification of a different emblematic moment. Two of these advertisements (for Onkyo and Panasonic) could be cited as support for the

argument that what is intensified is the sensory experience of technology. But it would be quite another thing to argue that the Jolt Cola advertisement is selling an enhanced sensory experience of technology, despite the fact that it explicitly references the senses. Rather, I argue that this advertisement represents the intensification of instrumentality. This is consistent with Martin Heidegger's critique of technology in "The Question Concerning Technology", in which he famously identifies the related instrumental and anthropological definitions of technology as untenable.[42] In his terminology, technology is a way of revealing, but the revealing that is characteristic of modern technology is a challenging-forth (12); in modern technology, "the revealing never simply comes to an end," but becomes 'standing-reserve'. "Everywhere, everything is ordered to stand by, to be immediately at hand, indeed to stand there just so that it may be on call for a further ordering" (16, 17). Though my project is different from Heidegger's, he is an important thinker and some of his concepts are useful for analysing the contemporary situation of the senses with regard to media technologies. In particular, his identification of the predominance of the instrumental conception of technology, and of the calculative thinking which supports it, helps to consider the preponderance of instrumentality in advertising representations of the senses.

Having briefly outlined both these positions, I should note that it is not my intent to seek to form a single narrative about the senses and technology from them. As should become evident from the second example onwards, the analyses insist on *both* possibilities. Unlike a recent reading of the relations between aesthetics and technology by R.L. Rutsky, who argues that there is a return of sorts underway to aspects of the conception of *techne* outlined by Heidegger,[43] I conceive of the current situation as less of a return, than as facilitating *new* aesthetic possibilities, embodiments and affects, *different* engagements with technology. To say that relations between the senses and media technologies are ambiguous is not new. A number of the theorists whose work I refer to struggle with this or similar tensions that resist easy resolution, writers such as Walter Benjamin, Donna Haraway, Margaret Morse, and Miriam Hansen, with a number of them committed to utilising this tension to productively think different kinds of subjectivities and other ways of relating to technology. Consistent with my stated

[42] Martin Heidegger (1977 [1954]) "The Question Concerning Technology," *The Question Concerning Technology and Other Essays*, William Lovitt, trans., New York: Harper, pp. 4, 21.
[43] R.L. Rutsky (2000) *High Techne: Art and Technology from the Machine Aesthetic to the Posthuman*, Minneapolis, London: University of Minnesota Press.

hyper/aesthetic approach to technology, I try in this chapter to move beyond immediately apparent questions such as "How much stimulation is enough (or too much)?," reading a certain doubleness into the figure of hyperstimulation by asking what other technological engagements it might make possible. This is a recognition of the need to attend to criteria other than (just) quantity in analysing sensory engagements with technology, as well as a recognition that the type of relation had with technology *matters*.

I

A new and urgent need for stimuli?

Rhetorics of intensity have thoroughly pervaded the world of work. Just keeping up (allegedly) requires a level of intensity that is markedly different from that of a generation ago. Hyperactivity is a reality in the contemporary workplace: for some years we have been hearing that the working week is "expanding relentlessly", and that, in Australia as in America, "longer hours are for everyone, especially those in better paid jobs".[44] At this particular moment, discourses of intensification forecast and actively construct the transformation of experience across many aspects of contemporary life, casting such change as the 'inevitable' result of technological developments. Whilst the focus on the ensuing stress and intensity is not exclusively centred on the realm of paid employment, work often seems to function as a lightning rod for anxiety. Although I acknowledge that it is increasingly difficult to pinpoint what is signified by the term 'work', due to the major changes the field is undergoing (in part due to the effects of discourses discussed here), I read the first advertisement in this series of case studies in terms of discourses on the intensification of work. The Jolt Cola advertisement locates its product squarely within these discourses, and so demonstrates the concern with ends (Figure 1). Using the themes in this advertisement as a springboard, I will consider the particular spin that is given to intensity and hyperstimulation in work settings, arguing that rather than the discourses of intensification producing anything new, their articulation in the Jolt Cola advertisement instead represents the intensification of already existing instrumental conceptions of, and relations to, technology.

[44] Jennifer Hewett, "Yanks R Us".

Figure 1 Jolt Cola advertisement

Jolt's reference to the senses is explicit, in fact it could not be more direct. Using a synaesthetic metaphor, drinking Jolt is said to be like "a carbonated slap in the face". It is clear from this slogan, and its context, that immediacy and intense experience are important aspects in the company's attempt to break into the cola market. Jolt's treatment of intensification is also revealing. Tracing the Latin root of intensity helps to identify the company's particular approach: the Latin verb *intendere* has two forms, *intentus*, which has amongst its meanings to be intent, eager, attentive, as well as *intensus* meaning stretched or strained in a physical sense.[45] Jolt Cola adopts both of these meanings of intensity, putting the latter in service to the former. The company's approach is an attempt to represent that which is experientially distinct for current (technologically literate) generations, however, the treatment of hyperstimulation and intensity is marked by a calculative, instrumental approach to extracting the maximum. In line with free market rhetorics of intensity, to be enthusiastic, eager and energetic in the workplace is accorded the highest value (*intentus*), even though this depends upon the denial of the effects of physical strain and bodily exhaustion (*intensus*). The senses are of course affected by this corporeal denial, but for Jolt, sensing becomes merely a function of stimulation, which is further confused with impact. In this version of intensity, to be energetic is not merely desirable, it is virtually an essential job requirement. And whilst some of those in positions of privilege within the 'new economy' might be able to 'stay ahead', enjoying an enhanced sense of immediacy as a result of an eager, attentive approach, in the main the vision of intensification is inflexible, and offers little that can be considered new.

Conceding on their website that "Occasional exhaustion is part of a demanding lifestyle," the company normalises 'exhaustion' and demanding lifestyles, endorsing them as descriptors of contemporary experience (even though such 'demanding lifestyles' result in fatigue).[46] Jolt both locates excessive stimulation as the *cause* of fatigue, as well as prescribing more stimulation as *antidote* to this fatigue. This tension, between on the one hand identifying *too much* stimulation as the problem, and endorsing such stimulation as not just endemic but *desirable*, is neither posed as a paradox nor resolved in the ad. Though stimulation is being used in a number of ways here (notably in the slippage between sensory stimuli and stimulation more generally), what is significant is that Jolt

[45] Robert K. Barnhart (ed.) (1988) *The Barnhart Dictionary of Etymology*, New York: H.W. Wilson Co., p. 535.
[46] See http://www.wetplanet.com/productinfo.html, accessed 9/10/01.

renders culture and action *in terms of* stimulation. In a sense it doesn't matter what kind – stimulation is all treated as the same. Complex motivations and decisions are reduced to *functions* of stimulation in this view, a kind of balance sheet mentality where stimulation received is lined up against energy expended.

Jolt's caffeine content is credited as the source of (extra) stimulation here; it is "a refreshing alternative to coffee,"[47] with unique stay awake properties. Caffeine is also what distinguishes Jolt from other colas. The connection between cola, stimulant effect and energetics is, of course, not new – Coke's link to cocaine comes to mind, as does the 'pep' in Pepsi (despite its origin as cure for dyspepsia). Similarly, the claim to deliver 'more' is familiar in cola marketing (Pepsi-Max, 'max taste', 'to the max'), though here it is used to emphasise caffeine content and taste – "Jolt has twice the caffeine for twice the taste".[48] Where Jolt's strategy differs from other colas is in the *degree* of stimulation said to be derived. Wet Planet Beverages, the company that produces and distributes Jolt Cola, promises that each of their products delivers 'sharpness' of mind, making them more *smart* drink than soft drink. Significantly, the emphasis in smart drug discourse is not on getting 'high' but on getting an 'edge', through staying awake longer, increased intelligence, concentration and cognitive abilities, which it is alleged are 'delivered' without unpleasant side effects.[49] Jolt's sugar and caffeine composition are thus guaranteed to deliver a *precise* affect – the Jolt 'fix.'

Jolt describes a culture of stimulation, promising consumers stimulation when they *need* it, stimulation that will spur them on to action. Drinking Jolt allegedly helps in accomplishing the things that one *has* to do (consumers are offered references to 'hard work' and 'burning the midnight oil'). Unlike beverages which cultivate images of extreme sports or leisure pursuits (Solo man's exploits and Coca-Cola's sky-surfing come to mind), Jolt focuses on periods of extreme demand, times of urgency (though rendering this as a work/leisure split is not that compelling, as working hard and playing

[47] http://www.wetplanet.com/cola.html, accessed 9/10/01.
[48] Nor are caffeinated beverages limited to colas – Jolt Cola, the flagship product of Wet Planet Beverages in New York state, also distributes XTC (caffeine and guarana drink) and Krank$_2$O, the latter being caffeinated water to "getcher motor runnin" and "…enhance yer hyperactive lifestyle." Demand for the latter product would seem to have been disappointing, given the product's subsequent replacement with Blu Botol, "quintessential H2O".
[49] See Morse (1994) "What do Cyborgs Eat? Oral Logic in the Information Age", *Culture on the Brink: Ideologies of Technology*, Gretchen Bender and Timothy Druckrey (eds), Seattle: Bay Press, pp. 157-189.

hard are increasingly characterised by a similar degree of frenetic activity).[50] Cola might be a soft drink, but the advertisement's forceful language and mode of address indicate that Jolt is *anything but soft*. Observe Jolt's address to readers, asking whether they are "Feeling calm, peaceful and relaxed?," a state of relaxation which is immediately juxtaposed with an image of frenzied, loud and intrusive stimuli. Readers are told to imagine a hypnotist "screaming the Zimbabwian war chant while banging [their] head with a large mallet". In the abrupt shift from calm to frenzy which constitutes a palpable threat, we begin to "get the picture" that to feel "calm, peaceful and relaxed" is, according to Jolt, undesirable. Indeed, feeling calm under such conditions would be near impossible.

Why does Jolt valorise frenzy and denigrate calm in this way? I have already noted that Jolt offers its product as an aid to getting things done. The primary goal here is not so much enhancing one's experiences, as boosting *performance*. So hyperstimulated states – or, as I refer to them, hyper states – are presented as preferable in Jolt's promotional materials because they enable you to *do more*. It is telling then, that in contrast not just to other colas but also to other drinks promising a quick hit of energy, Jolt specifically aligns its product with the world of work.[51] (Compare the breadth, for instance, of Lucozade's "Ready to Drop?" campaign slogan, part of an advertisement featuring Tomb Raider's Lara Croft, which was displayed prominently around Sydney in 2000 and 2001.) While work is, as I have already admitted, only one of the beverage's points of reference, it is an important one as the workplace and employment market more generally have been the site of profound attitudinal changes over the last decade, particularly relating to stimulation. As Samuel Weber writes "Rarely has the complicity between technocracy and voluntarism been as manifest as it is today."[52] Jolt glorifies work, particularly work conducted at a frenetic pitch of intensity. Jolt's claim that it will

[50] Kracauer hypothesised that leisure forms matched those of work ("The form of entertainment necessarily corresponds to that of enterprise"). And there is certainly slippage for Jolt Cola between the two: once you've finished working hard it's expected that you'll party hard. As Jolt's website used to proudly claim: "The 'Jumper Cable' is quickly becoming the latest, greatest drink (…) just blend your favorite rum with Jolt Cola…and get ready to party!" See Siegfried Kracauer (1987 [1926]) "Cult of Distraction: On Berlin's Picture Palaces", Thomas Y. Levin, trans., *New German Critique*, no. 40, Winter, p. 93.

[51] "Jolt is popular with entertainers, musicians, computer programmers and just about anybody who burns midnight oil. Often these are America's hardest working people." See http://www.wetplanet.com/productinfo.html, accessed 9/10/01.

[52] Samuel Weber (1996a) Upsetting the Setup: Remarks on Heidegger's 'Questing After Technics'", *Mass Mediauras: Form, Technics, Media*, Alan Cholodenko (ed.), Sydney: Power Publications, p. 74.

provide stimulation and energy when you need it dovetails neatly with the voluntarism of free market rhetoric, which champions the visibly energetic individual. "Hard work, long hours will result in success."[53] Whilst being able to 'do more' need not pertain just to work, Jolt's hyping of stimulation provides an opportunity to delve into discourses about work's intensification.

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Work can be a site of high and continual stimulation, in some cases creating a kind of stimulant dependence. In 1998, Peter Toohey, a local academic, said as much in offering his view of changes to the nature of work.

> Stimulation is the problem. Take it away and people who are used to it will become frustrated. If the frustration is prolonged, they'll become bored. These days work is just too continuously stimulating. (Not necessarily because of interesting stimulation, either, but because of the anxiety-making sort.)[54]

We live and especially work in a culture of stimulation. Media technologies play a part in this stimulation. For instance, with the speeding up of communications networks and the adoption of more communications media, subjects may find themselves literally 'on call' for more hours of the day. But it is less the penetration of media into everyday contexts that I want to consider here than the attitudinal shift. Certainly the two are related, but I do not want to posit the relationship as a causal one. Speed certainly has effects, and induces feelings of speediness, but this is only one aspect of the current prominence of stimulation. There are a number of other factors that are also relevant. So whilst it is interesting to recall that according to Moore's Law (named after John Moore, Intel's founder) the speed of computer chips was predicted to at least double every year to eighteen months, and that Jolt Cola now offers 'users' 'Twice the Caffeine,' I read this as relating to a more general anxiety about keeping up, rather than just keeping pace with technology. In this section I will consider the intersection between stimulation and energetics, the rise of a particular conception of *productivity*, and the related emphasis on *performance*, before suggesting what the role of the senses is in these shifts.

In the Australian employment context, retrenchments and 'downsizing' have been the catchphrases of the last decade, the 'inevitable' result of restructuring aimed at eliminating 'inefficiencies'. Doing more with less has become 'best practice', making it

[53] Toohey, "The Big Yawn".
[54] Toohey, "The Big Yawn".

difficult to call the rising performative expectations. A cursory glance at the 'Positions Vacant' reveals the normative behaviours that define this productivity: energetic 'self-starters', with the ability to meet tight deadlines, and develop innovative strategies with minimum resources, are highly sought after. Behaviours which do not fit this (narrow) definition of what it is to be (and look) productive – like daydreaming or doodling[55] – are assumed to be non-productive. Like Heidegger's identification of the predominance of the instrumental conception of technology, and the resource view that supports it, maximising performance is what counts. The term 'performance' has itself gained technical connotations. It is now less associated with the mere fulfilment of commands, and more with measurable behaviour (such as the *time taken* to fulfil commands), approaching the *specification* of that behaviour. It certainly retains few creative resonances, references to performance as play and to improvisation having been all but obliterated. That which is not 'productive' according to this conception is deemed a 'waste,' time squandered. Like time which has become a commodity needing management ("every second counts"), measuring and quantifying performance renders it calculable. Jolt normalises the deadline mentality, along with the *hyperactivity* which is required if one is to consistently operate at fever pitch (though the label is never applied pejoratively, reserved as it is for children who cannot sit still). Little wonder that Jolt advocates those working under such pressures ingest large amounts of caffeine, to produce this hyper state.

Whilst war was the modern epitome of the concept of the masses as functional units according to Heidegger, crudely instrumental management practices render workers as 'human resources', statistical bodies whose behaviour can be calculated. Quantified, performance conceived in this way needs always to be enhanced, in line with fantasies of absolute efficiency. While I acknowledge here that (to paraphrase de Certeau) beautiful, abstract models of work might need to be substituted for "the compromises, opacities and dependencies of a workplace", and Lev Manovich's argument that work is also about waiting is well taken, the tendencies I am describing *are* evident in recent workplace practices.[56] For instance, blatant normalising techniques of surveillance have been reported within call centres and other computerised environments where software makes covert monitoring and data collection possible. Time spent away from one's desk, or

[55] Toohey, "The Big Yawn".
[56] Michel de Certeau (1984) *The Practice of Everyday Life*, Steven Rendall, Berkeley: California University Press, p. 114; Lev Manovich (1991-93) "The Labor of Perception," http://www-apparitions.ucsd.edu/~manovich/home.html, accessed 15/3/02.

time spent not typing can be monitored remotely, through technology, illustrating the role of time in this technical conception of 'performance'. Some other employers use workplace assessments which seek to 'type' employees or determine their 'compatibility'. While these type of tests have been available for some time, there has been a change in the way they being promoted. The aptly named company, High Performance Systems, for instance, aggressively markets the Myers-Briggs Type Indicator test, the Team Compatibility Index and the Assessment of Basic Leader Effectiveness, amongst others, to business and industry, claiming that these tests will "create a positive change in your bottom line" and "move [organisations] into the high performance zone."[57] Apart from further standardising a particular conception of performance, administering assessments which seek to 'type' or determine 'compatibility' raises significant questions regarding performativity's tolerance of difference. After all, what if you're deemed not 'compatible'?

In these circumstances, Jolt's mention of "feeling calm, peaceful and relaxed?" takes on an ironic, mocking tone. I would argue that no one actually believes anymore that performance can be continually 'enhanced' whilst staying calm. There is a frenzy about the very demands for increased productivity, matching the physical frenzy perhaps of those striving to meet raised targets (as did Charlie Chaplin on the production line in "Modern Times"). However, the success of this particular, limited conception of what constitutes productive behaviour means that it is rarely the subject of scrutiny. Nor are indices measuring efficiency, or the assumptions on which measurements are premised – what counts as an 'outcome' or 'product', for instance – often the subject of analysis. There seems to be a definite lack of interest in such critique at the moment (possibly itself an indication of the concern with not falling behind).

[57] High Performance Systems, www.hpsys.com, accessed 15/3/02. Researchers at Northwestern University have expressed some concern at "authors of Commercial sites discussing the application of personality measurement (usually using some form of a type measure rather than using conventional personality research instruments)…" "Most of these are uncritical proponents of the MBTI and fail to mention alternatives to 'typing'….Unfortunately, although there are a number of serious criticisms of the use of 'type' instruments available in the literature, none of them seem to be available online." William Revelle (2001) "The Personality Project" http://www.personality-project.org/perproj/nonacademic.html, accessed 15/3/02. Benjamin was also, it seems, a critic of personality tests, identifying "the extraordinary expansion of the field of the testable brought about for the individual through economic conditions. Thus, vocational aptitude tests become constantly more important. What matters in these tests are segmental performances of the individual." Benjamin, "Artwork", p. 239, n. 10. See also n. 82.

The present culture and rhetoric of intensity as performance has largely supplanted earlier discourses of stress in the workplace. Jolt's hyping of the benefits of stimulation, conveniently eliding the less pleasant bits, is remarkably similar to the arguments advanced by critics of 'stress', who suggest optimistically (to put it kindly) that 'stress' should be embraced as opportunity. Consider this pronouncement by psychologist Alex Gilandas: "The key to thriving under stress…is having an optimistic attitude that enables you to accept the chaos of life and label it as excitement, rather than stress or trauma."[58] The discursive displacement of stress by intensity and stimulation is based, at least in part, on the denial of the effects of pressure and exertion on bodies. Allegedly, Jolt can help one cope – thrive even – under pressure: it functions as an armouring device, it is a beverage to 'tank up on', 'fortifying' oneself with caffeine. But whilst caffeine may provide an initial boost of energy, this is only ever temporary. A glance at the shaky, jittery font used in the advertisement suggests the flaw in over-reliance on stimulants, how untenable operating at a fever pitch of intensity is. The nervy lettering of the advertisement's text suggests imminent collapse; an excessive caffeine intake, whilst initially providing a boost to performance and alertness (even hyperactivity), eventually impedes performance, adding instead to anxiety and inducing the jitters.[59]

What this all points to is, I suggest, the ascendancy of hyper states at the present moment. An emergent 'structure of feeling' constituted by a cycle of intense stimulation and demand, hyper states have of late been accorded lifestyle characteristics, based largely on the repudiation of calm or more relaxed states. They are most often identified by the excessive quantities of stimulation involved – understood in terms of energies required or demanded – and the term's links with hype and hyperactivity are not coincidental. Though hyper is, properly speaking, only a prefix, this is appropriate; for whilst I also use it in conjunction with 'aesthesia' and 'aesthetics' to refer, respectively, to a range of sensorially intense engagements with technologies, and the approach I develop to considering these, I distinguish the hyper state from these as many of the practices and techniques of the former are not particularly interested in aesthesia. Indeed, while one of my arguments is that the shifts in experience associated with technological development, often considered only in terms of decline, can also be read as offering new subjective possibilities, it is hard to see in the case of the hyper state what these might be.

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[58] Alex Gilandas, cited in Belinda Parsons (1998) "Break out of the cocoon and live with stress", *The Sydney Morning Herald*, 13 October.

[59] See Hal Foster's discussion of the fascist subject, continually at risk of going to pieces in his (1993) "Postmodernism in Parallax," *October*, vol. 63, pp. 3-20.

The instrumentalising of (human and technical) bodies that characterises the hyper state can hardly be said to be conducive to exploring other relations with technology. Affect, too, is thought of in instrumental terms: calm and relaxed states are of *no use* to the organisation's hyper resourcefulness and so are denied; frenzy and manic performance, on the other hand, boost performance and so are acceptable. A thoroughly familiar maximising of output reduces technology to a tool for extracting resource value. Hardly anything new is produced: those who don't burn out, may adapt to and become dependent upon the hyperactive lifestyle, as Toohey suggests, better adapted to weathering the strain perhaps, but reduced for it. Intent on survival and so perhaps prepared to do whatever it takes, such an individual (for that is what they are) recalls Hal Foster's description of the fascist subject – fortified against every thing and every one which threatens, yet continually at risk of 'going to pieces'.[60]

From another angle, hyper states share more than just a prefix with what has been designated the hyper-real, explaining perhaps why the hyper subject and the critique I offer of it resonates with arguments regarding some of the more distinctive features of subjectivity in postmodernity. For instance, I find resonances with Umberto Eco's commentary on the attempts at total simulation in waxwork museums in America, as well as Jean Baudrillard's pondering of the significance of attempts to forcibly decode the gene. As Baudrillard writes,

> …nature provides us with an opposite example [to "calling on all one's resources"] by leaving two-thirds of the human genome to lie fallow. One wonders what purpose these useless genes might serve, and why they should be forcibly decoded. What if they were only there to meet a requirement for a degree of leeway?[61]

In thinking about what is at stake in current articulations of the senses, I share Baudrillard's concern at what he sees as an attempt to reduce the margins and occupy the interstices, in everyday life as well as genetics. As he continues, "this is the ideal everywhere set before us today, by way of the techniques of self-maximization, of performance blackmailing, of absolute realization of the human being as programme…" Baudrillard's analysis provides a glimpse of what is at stake in the sensory relation to technology. Like the gene, the senses are also susceptible to being rendered in totalising

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[60] Michael Pickering writes on Raymond Williams' notion of structures of feeling in his (1997) *History, Experience and Cultural Studies*, Houndsmills, England: Macmillan.

[61] Umberto Eco (1998 [1975]) "Travels in Hyperreality," *Faith in Fakes: Travels in Hyperreality*, William Weaver, trans., London: Vintage/Random House, pp. 1-58; Jean Baudrillard (1994) "How can you jump over your shadow when you no longer have one?", *The Illusion of the End*, Chris Turner, trans., Cambridge: Polity Press, pp. 101-2.

ways, in terms of performance maximisation and functionality, as well as in attempts to render affect calculable, three themes which feature in my critique of hyper states. The hyper state – and the esteem it currently commands in the guise of the 'workaholic', or the 'sensation junkie' – encourages the development of a particular kind of subject, similar to what Paul Rodaway has dubbed in his work, the 'hyper-subject'.[62]

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Jolt is thoroughly implicated with the penetration of discourses of energetics into the workplace in that its hyping of stimulation not only presents drivenness as a positive character trait, but turns hyperactivity from a necessity into a virtue. Perhaps one of the most recognisable points of intersection between Jolt Cola's embrace of intensity and the present culture of stimulation at work in the so called 'new economy' is Jolt's representation of the present as a break with the past. This can be seen as an extension of the claim, popular in business and communications at the moment, that "the old rules don't apply any longer". In part the features of this break are traceable, though it is also a break manufactured for its marketing potential, for the novelty that inheres in a new start. Casting the old in a pejorative light, Jolt steps into the breach, differentiating itself by its break with tradition. As a relatively new entrant to the 'cola wars' (and perhaps also in part to avoid being labelled an imitator), Jolt identifies as the "maverick", the underdog, the "upstart" of cola companies, attempting to singularise the company 'vision'.

> Brash and irreverent are two words that have been used to describe Jolt Cola's introduction to the beverage industry in 1985. At that time, leading beverage companies were trying to convince consumers that less is better. Everyone, that is, except for the Jolt Company.[63]

Other similarities between the intensity Jolt peddles and the intensity of the workplace are crystallised by Jolt's invoking the figure of the hacker on the product's web site. Though they seem to have changed tack more recently, hacking was invoked self-referentially both to describe the company's entry to the beverage market ("We have hacked the

[62] Actually, Rodaway gives the hyper-subject quite a specific meaning in relation to his discussion of Baudrillard's writing, which my usage, referring to his comparison of the consumer and the hyper-subject, simplifies somewhat. The focus of Rodaway's article is slightly different. As he writes, "In exploring examples of the subject in hyper-reality, we will explore less extreme forms of the hyper-subject." Paul Rodaway (1995) "Exploring the Subject in Hyper-Reality", *Mapping the Subject: Geographies of Cultural Transformation*, Steve Pile and Nigel Thrift (eds), London New York: Routledge, pp. 253, 263-66.

[63] http://www.wetplanet.com/company.html, accessed 9/10/01.

beverage industry, and will continue to do so. We will not be stopped…"), as well as to appropriate qualities attributed to the hacker in popular mythology.

> Jolt is known for its radical attitude as perpetuated by an unconventional class of hackers burning the mid-night [sic] oil. If you have ever spent all night staring at a monitor, drinking Jolt and accessing systems you never dreamed of, then you know what we mean.

"Accessing systems you never dreamed of" is a source of excitement, it references immediacy as the thrill of discovery, thanks to computing technology which extends the hacker's/individual's reach. The sting is that this is accomplished by spending "all night staring at a monitor". Jolt claims that its stimulation will make the things you have to do interesting and exciting, the feelings that a hacker allegedly experiences, suggesting an equivalence between hacking and other kinds of 'work'. Sitting up "burning the midnight oil" is allegedly 'fun,' and it may well be for hackers. But it needs to be remembered that hackers, the unorthodox 'cowboys' of cyberspace, enjoy a privileged mode of engagement with computers, characterised by relative freedom, autonomy, and anti-productivity.

One of the things that the hacker enjoys, on Jolt's description, is immediacy. Jolt models a version of immediacy in its abrupt address to readers, as well as in its use of synaesthetic metaphor, but it is the crude immediacy of ballistics, that "all but hits us between the eyes"[64], as consumers are told that drinking Jolt is like "a carbonated slap in the face". Eschewing tactics of persuasion, Jolt relies on the direct approach: short, sharp and to the point. Generally used to censure, to be slapped – particularly in the face – is humiliating. It is meant to bring the person slapped "to their senses."[65] The product name – 'Jolt' – further suggests instantaneity and visceral impact. A jolt is something to which you cannot help but respond, with the lightning bolt on the can suggesting electrical or nerve stimulation at a *sub*sensory level. The force of a jolt is important here, as when potency is required, soft is suspect. But the emphasis on force also suggests that perception and affective states depend *only* upon the stimuli dispensed. The motif of stimuli hitting one smack in the face is one that will be explored further in the next example. In the current context, however, the references to the senses and to feeling states must be considered highly ironic, as Jolt Cola – with its aim of inducing caffeine speediness – could not be said to enhance sensuality. The senses only feature here as

[64] Benjamin, "One Way Street", p. 89.

[65] It was the standard technique of male heroes for calming hysteric women.

receptors for the stimulation that is *aimed* at them, as a projectile is aimed at a target, illustrating the confusion here between impact, the sensational, and sentience. This understanding of sensing and sensory engagement is severely limited, unable to take account of the many factors affecting the reception of stimuli.

Of course, digital, real time media have been credited with providing a heightened sense of immediacy, and such media do change our relation to space and time. And Jolt is, in every sense, trying to sell the *now*: to distil the present and bottle it. But whilst currency and timeliness *approach* immediacy, they are not the same. If we are to believe a recent newspaper report, it is immediacy which many executives have been missing in their work, and which explains their 'going over' to the new economy in droves. Even after the 'tech-wreck' of April 2000, journalist George Anders was able to write that executives are leaving secure jobs with established companies to join internet startup companies, often with "no real assets or heritage but with huge ambitions".[66] Apart from the significant differences in corporate culture, Anders reports that many executives cite the *feeling* that they will be *directly* involved in something as an important part of the decision.

In the 1960s, Walter Ong argued that writing and print and electronic devices reshaped human's contact with 'actuality'; that with the advent of auditory media like the telephone, radio and television, those in 'technological society' had a greater sense of participation in actuality than was previously had. Though Ong felt that the computer was at that time "far from being the dominant factor in human life which the popular mythologies make it out to be…", his comments about particular media enhancing this sense of contact with and participation in 'actuality' have arguably become more relevant today.[67] For whilst claims about immediacy in relation to new media technologies have tended to revolve around questions of speed and presence, or with evaluating the success or otherwise of *illusionistic* practices of virtuality, there are other aspects to consider. Indeed, the very notion of what it is to have an impact, as well as what it is that one has an impact on (Ong's 'actuality') is being reshaped. This is occurring as a result of the

[66] George Anders (2000) "Voyage to the new economy", *The Sydney Morning Herald*, July 15.
[67] Walter Ong (1967) *The Presence of the Word*, New Haven, London: Yale University Press, pp. 90-92.

reconfiguring of relations between subjects, their bodies, and the 'outside' world, brought about by new media and particularly, access to networks.[68]

As relations to materiality change with new media technologies, immediacy seems to depend less on whether one has *unmediated* access to 'things' than on the ready *availability* of access. The objects of operations more often than not concern information rather than material objects (my online library borrowing record rather than the books themselves), or sometimes a *mix* of materiality and reality statuses, as Morse puts it.[69] In dealing with flows of information, *feelings* of immediacy and directness attain more importance, as does having the *capacity* to affect and direct information, indicating the central importance the senses have in information environments. The senses provide a link to materiality when we seem to increasingly attend to information which lacks materiality. The senses have always been important in judging immediacy, for it is through the senses that the impact one has on 'things' is perceived. Yet I would also add that reciprocity is an important consideration in judging one's relations with things. Jolt's hyper state – impermeable as it is – rates poorly on this criterion.

It is interesting that the executives of whom Anders writes find the discourse of immediacy a plausible one, particularly in the internet startup market. For whilst the executives may perceive that they will be able to have more of an *impact*, less thwarted by bureaucratic strictures and part of a "get-things-done culture", the significant material rewards currently on offer in the IT industry also constitute a significant incentive. These executives are not simply seeking immediacy for its own sake. The stakes of both project success and remuneration are high. In such contexts immediacy also derives from an awareness of risk, which, in the wake of the falling fortunes of internet startup companies, has turned out not to be a hollow promise. Experience gets its intensity from the proximity to uncertainty because to achieve feelings of exhilaration, there generally needs to be some risk, the chance of failure. It makes the senses that much keener. In a way the startup market is a version of the contemporary sublime, a gamble with the potential for spectacular failure as well as huge monetary rewards. Like those who seek adventure in extreme sports, accepting the danger because it heightens consciousness of

[68] Mike Featherstone and Roger Burrows (1995) "Cultures of Technological Embodiment: An Introduction", *Cyberspace/Cyberbodies/Cyberpunk: Cultures of Technological Embodiment*, London: Sage, p. 3.

the present, the risk in starting or joining an internet company is characterised as delivering a certain 'rush'. Indeed, extreme sports provide the metaphor of choice: Anders writes that Michele James, headhunter for America Online (AOL), reports asking prospective employees "Do you want to be at a cliffhanger?". That these attitudes have been incorporated into the wider culture of work is evident in claims that startup experience is valued in potential employees, even if the company went bust. Ironically, the very media that insulate from the 'real' are felt to be delivering an increased exposure to risk.[70]

Jolt's conception of intense experience is crude, more interested in the sensational than sentience, and moreover, not even aware how limited the particular relation to technology it describes is. It can be otherwise. The senses are impoverished by this instrumentalising of bodies, by constant demands to be more efficient, and by dosing up on stimulants to evince the requisite levels of energy. Jolt incites desires for states that are just plain hyper, rather than aesthetic. Regarding the half quote from Benjamin with which I headed this section, on a new and urgent need for stimuli, I suggest that there is at the moment an urgent need not for *more* stimuli, but for a proliferation of new and different relations, or forms of *engagement*, with technology, as well as different conceptions of sentience, beyond the impactful one that features in the Jolt advertisement. The next two advertising examples, I think, begin to present a greater variety of engagements with media technologies, as well as broadening conceptions of stimulation and sensory experience. I link these to the resurgence at the moment of an older meaning of the term 'experience', in experimentation. In the next example, I will also consider some of the features of the hyper subject that seem to be emerging in the context of the intensification of experience (at least as advertising is presenting this), for which my analysis of the Jolt Cola advertisement has laid the groundwork.

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[69] Margaret Morse, (1996) "Nature *Morte*: Landscape and Narrative in Virtual Environments", *Immersed in Technology: Art and Virtual Environments*, Mary Anne Moser and Douglas MacLeod (eds), Cambridge, Mass., London: MIT Press/Banff Centre for the Arts, pp. 200, 208.
[70] These themes, of (hyper-)mediation and immediacy are treated by Bolter and Grusin in their study, *Remediation*.

II

Electrify your senses

This Onkyo advertisement (Figure 2)[71] for home theatre illustrates the way that the senses, configured concurrently, are used to promote consumer media technologies. Significantly, it is the headline describing the *experience* that dominates the space of the advertisement – "Amaze your eyes, wow your ears, stimulate your brain" – *not* details about the equipment being sold. Noting the relative sizes of the 'black box' and that of the person who has encountered the technology, it is obviously to the latter that we are supposed to attend. Yet what are we to make of this person? At a quick glance we may not notice many details other than their generally excited, aroused state, attributed to an "amazing" Onkyo home theatre experience. However, if we linger on it for more than a few seconds, other things become apparent: the person's gender is not clear (my guess is a woman) as her features are almost totally obscured by large glasses, with tomatoes lodged in the frames. Her head is thrown back and a somewhat maniacal pose has been captured by the photographic still – hair unkempt, mouth wide open with teeth bared. Transformation of some sort has been *enacted* on her body. The placement of the hand is the only thing to suggest that perhaps the gesture is laughter…yet what kind of laugh is it?

The Onkyo advertisement is interesting because it renders technology in terms of sensory experience, or more precisely, in terms of the affects produced by technology. It demonstrates the particular ways in which technology is aestheticised in advertising at the moment, and the ways that this aestheticisation of media technologies is articulated through the bodies of those who come into contact with them. So, in contrast to the Jolt Cola advertisement, where the effects of stimulation were largely sidelined beyond the question of energy, the effects of strong stimulation on bodies are here brought to the fore, with the allegedly amazing home theatre experience rendered in terms of the woman's extreme affective response. Her body – in fact her entire demeanour – is offered as proof of the extraordinary nature of the experience.

[71] Onkyo advertisement (1996) 'The Guide', November 11-17, *The Sydney Morning Herald*.

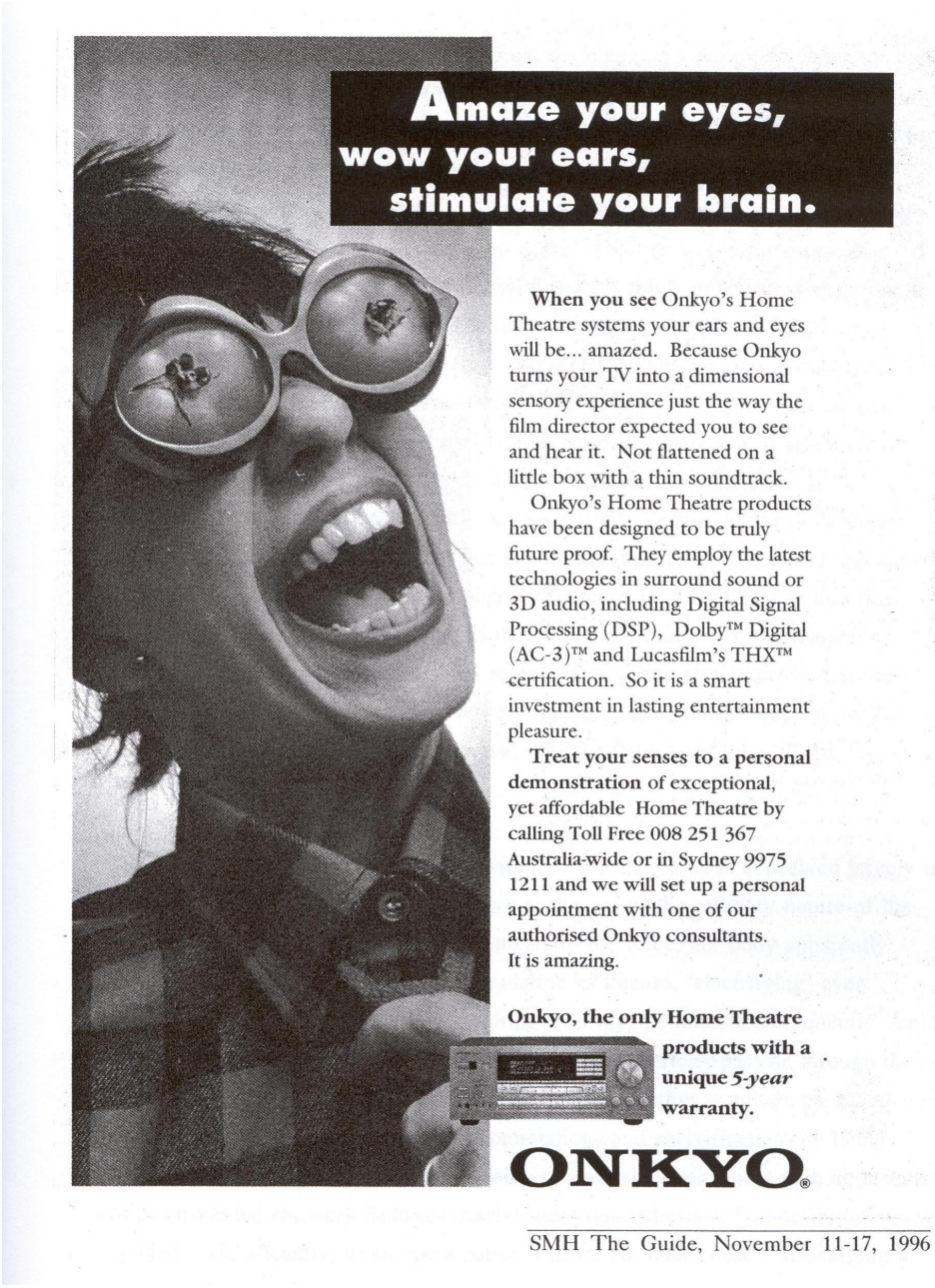

Figure 2 Onkyo Home Theatre advertisement

The Onkyo advertisement can also be viewed as a close-up of the effects of hyper-stimulation on bodies more generally. I am not claiming a definitive status for the image here – apart from the fact that advertising specialises in hyperbole, it plainly is not representative. But the *ambiguity* of the woman's response *is* significant for my argument about hyper/aesthetics: she manages to appear *both* as if she were fatigued, so tired that she is supporting her head with her hands, literally 'vegging out' in front of the tv, *and* as if she is in ecstatic rapture, hyped up with energy. It is impossible to tell which it is. Both readings are, I think, intended. Her ambiguity of response also parallels responses to intensification generally; that is to say, some find it exciting while others (or perhaps the same people in different contexts), find it cause for anxiety. For the purposes of the advertisement, the thing which is important is that fatigue and ecstasy are both results of *extremes* of affect. The suggestion is that in contemporary home entertainment, high degrees of stimulation, experienced concurrently across multiple sensory modes, engender intense feelings and states, and that this is not only desirable but *liberates* the viewer from the trial of having to watch a picture "flattened on a little box with a thin soundtrack". To this end, elements of the bizarre are used, with the tomatoes registering how far from ordinary the sensation is. They also intimate that the stimulation comes with significant force – they are, after all, literally 'in her face'. Like the Jolt rendering of intensification, the stimulation of home theatre is depicted as exciting *– in itself*.

The *force* of the (multi-sensory) stimulation in the Onkyo ad is conceived largely in terms of *quantity*. Apart from testifying to the out of the ordinary nature of the experience, the woman's posture also attests to the force, her body apparently arching in response, qualifying the stimulation as intense, 'electrifying' even. Representations of extreme affect resulting from hyperstimulation frequently depict subjects feeling the force of such an 'onslaught' as electricity passing through their bodies. Electricity is being equated with intense stimulation in quite a particular way at the moment; in particular, vitalist connotations and revivification are being emphasised. An Opera Australia television commercial depicts just such an instance of electrode-led recovery from unconsciousness (anaesthesia) when defibrilators are applied – significantly, to an opera patron's head, not their chest – discharging a shock. This stimulation results in the patron's revitalisation: the force of the shock directly inverts the usual link between shock and anaesthesia, with the result that they are (literally) energised. The commercial concludes with the textual

command "Be Moved", punning on the opera experience as emotionally and sensually moving as well as to the passage of electricity by which the subject cannot but be moved. Like the opera-goer, the Onkyo woman is transformed, it is suggested, from a relatively unremarkable state to one of amazement and extreme affect. The force of the stimulation dispensed to the opera-patron is, it is implied, appropriate because it is necessary: his unconscious state (lack of sensory arousal) justifies the forcible resuscitation (of his sensory capacity). In using this dramatic life and death analogy, it is difficult to argue that the ends do not justify the means: who can deny the merit in resuscitating the (as good as) dead?

If this all seems highly instrumental, it is. Though the Onkyo advertisement's appeal seems less functional than Jolt Cola's – Onkyo offers leisure options after all – the message is clear: if you purchase the product then you will enjoy the extremes of affect, relief from ordinariness. It is all so simple: consume. Onkyo make this invitation explicit in using the second person, inviting *you* to become the locus of affect: "Everything *you* ever wanted to ask about great home theatre…", "bring movies to life in *your* home", "Amaze *your* eyes, wow *your* ears, stimulate *your* brain", "When *you* see Onkyo's Home Theatre systems…", "Treat *your* senses". In becoming the locus of televisual media's impact, you are invited to replace the Onkyo woman, whose body has been offered up to this point as testament to the extraordinary potential of home theatre for inducing extreme experiences. What does it mean for the body of a subject to become evidence in this way – to invite an onslaught, for media to mark and shape one's body according to the logic that more is better? While advertising's use of the second person is quite common, in this advertisement it signals the shifting significance of aesthetic shock now, compared to the last *fin de siècle*. While shock may still be experienced as an unwelcome sensory bombardment for which one is not prepared, the Onkyo advertisement also suggests that such intense hyperstimulation is embraced positively by some consumers.

Earlier, I noted that the hyper state is an emergent structure of feeling which has come to be defined by lifestyle characteristics. In the Jolt Cola advertisement, the intensity of stimulation was mostly read in terms of necessity, specifically the way that extra caffeine would help you to get things done, though there was also a sense that drinking Jolt would generate or enhance a sense of immediacy. The invitation which Onkyo extends to the viewer to position themselves in the place of the woman continues the modelling of a certain kind of self. The Onkyo advertisement promises an *extension* of self, through

sensation. Richard Shusterman's summary and critique of Richard Rorty's conception of the postmodern aesthetic life as one of self-enlargement and self-enrichment is remarkably close to the message Onkyo are selling:

> 'The desire to enlarge oneself…is the desire to embrace more and more possibilities, to be constantly learning, to give oneself over entirely to curiosity.' This quest for self-enlargement involves a dual 'aesthetic search for novel experiences and (for) novel language' to redescribe and thereby enrich those experiences and their experiencer.[72]

The suggestion is that if you're not living such a life, leading such a lifestyle, then you are missing out.

This discourse on experience is of considerable importance. It derives from the centrality which *personal* experience of the present is accorded in contemporary culture. On this view, experience authorises and legitimates; you experience what you consume, and you are what you experience. Raymond Williams writes that experience (present) has developed as a particular kind of consciousness, often involving an appeal to the whole being, as against reliance on more specialised or limited states or faculties.[73] He notes that it is distinguished in some contexts from 'reason' or 'knowledge'. Whilst a shift in the essential qualities of 'the human' – away from rationality and towards feeling – has been underway for some time,[74] the emphasis accorded subjective experiences of the present could hardly be more pronounced than in the portrayals of extraordinary, intense sensory experience in contemporary advertising. At its most extreme, Williams notes that this kind of experience bestows an "unquestionable authenticity and immediacy" and can become the basis for subsequent reasoning and analysis, suggesting that the cultivating and collection of extreme media based experiences constitutes a particular technology of the self. Moreover, it is one which potentially works to stabilise the *status quo*, not merely because of its consumerist origins, but because of the "unquestionable authenticity" with which this form of experience is credited.

The notion that you are what you experience is close to what Paul Rodaway calls subject as lifestyle, or – appropriately for this project – the hyper subject. Such a subject, Rodaway writes,

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[72] Richard Rorty cited in Richard Shusterman (1988) "Postmodern Aestheticism: A New Moral Philosophy?," *Theory Culture and Society*, vol. 5, no. 2-3, p. 345.
[73] Raymond Williams (1983) *Keywords: A Vocabulary of Culture and Society*, revised edition, London: Flamingo/Fontana, p. 128.
[74] N. Katherine Hayles (1999a) *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, Chicago and London: University of Chicago Press, p. 175.

> …is defined not by an accumulation of experience, an individual biography and social history, but what it lacks, that is, possession of the current fashionable accessories or encounter with the latest 'experience' (each commodity forms). The subject is not a creative and knowing agent…but a hedonistic, relatively passive entity which seems to be dependent – even addicted – to a continuous supply of ready-made identities inscribed in commodities, products and experiences which can be purchased in the market-place. (266)

What I particularly notice about and draw from the work of writers like Shusterman and Rodaway, is that that which is coming to constitute the intense experience of the present is predominantly experience that is focussed on the self. 'Experience', particularly the pursuit of hyper states, has become a technique of the self, another chapter in Foucault's genealogy of modes of relationship to the self. But whereas the ancient Greek notion of the aesthetic life entailed 'care of the self' in line with the imperative to 'know oneself', the contemporary hyper state appears to beget a subject more interested in accruing exciting moments in order to gratify – rather than know – thyself.[75]

This is an individual remarkably similar to John Hartley's 'Do It Yourself' citizen, becoming even more explicit in the phenomenon of 'suiting yourself' that Hartley identifies and, to an extent, champions. In the book, *Uses of Television*, Hartley argues that television provides a 'training ground', in which we learn,

> …the practice of putting together an identity from the available choices, patterns and opportunities on offer in the semiosphere and the mediasphere. Whether it's a fully 'fitted' identity, expensive, integrated and in a recognizable off-the-shelf style, or an identity more creatively put together from bits and pieces bought, found or purloined separately, is a matter of individual difference… How do you learn this difficult trick of 'suiting yourself', as it were, while remaining locked in to various actual and virtual, social and semiotic communities? Television audienceship provides the training ground.[76]

Hartley's individual who suits themselves, and Rorty's subject who is concerned only with accruing novel experiences, and novel language in which to describe them, convinces me that this self-obsessed subject could do with some fleshing out. They may well be full of experiences and gratification, but what of Shusterman's claim that the zone this subject inhabits is an ethical *horror vacui*? In such circumstances, it seems reasonable to ask, as Paul Smith does, whether this is a subject, or merely a *fiction* of a subject, "a

[75] Michel Foucault (1988) "Technologies of the Self", *Technologies of the Self: A Seminar with Michel Foucault*, Luther H. Martin, Huck Gutman, Patrick H. Hutton (eds), London: Tavistock, p. 22.
[76] John Hartley (1999) *Uses of Television*, London, New York: Routledge, p. 178.

purely theoretical 'subject,' removed entirely from the political and ethical realities in which human agents actually live"?[77]

There are a number of further arguments as to why such a conception of the subject is inadequate, and why it is desirable to go beyond these claims to experience in thinking the implications of the senses and contemporary technology for subjectivity. For one, this discourse *on* experience denies the discursive status *of* experience. As Joan Scott argues regarding the role of experience in writing history,

> When experience is taken as the origin of knowledge, the vision of the individual subject (the person who had the experience or the historian who recounts it) becomes the bedrock of evidence on which explanation is built. Questions about the constructed nature of experience, about how subjects are constituted as different in the first place, about how one's vision is structured – about language (or discourse) and history – are left aside. The evidence of experience then becomes evidence for the fact of difference, rather than a way of exploring how difference is established, how it operates, how and in what ways it constitutes subjects who see and act in the world…
> …The project of making experience visible precludes analysis of the workings of this system and of its historicity; instead, it reproduces its terms.[78]

Locating the Onkyo woman's experience as central then runs the risk of simply confirming existing relations to technology and existing frameworks for subjectivity, as well as the human subject's centrality in the relation to technology. The technology, in this view, exists solely in order to entertain her, with little importance attached to the way that the relation with the televisual might structure her vision and subjectivity in the first place, questions which are of concern here.

For these and other reasons, I want to invoke an alternative conception of experience that is also important in contemporary relations with technology, in order to develop an account of the senses and contemporary technology that is hyper/aesthetic – able to diagnose as well as to move beyond the limitations of the hyper state and the subject it engenders. In doing this, Williams' meditation on the term 'experience' in *Keywords* is important. Noting the term's complexity, he wrote that experience was "once the present participle not of 'feeling' but of 'trying' or 'testing' something", that is, of experimentation.[79] It is this older form of experience – experimentation – which I think provides a way to consider that which is also at stake in the aesthetic, embodied experience of media technologies. However, arguments appealing to experimentation –

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[77] This is Paul Smith's question, in his (1988) *Discerning the Subject*, Minneapolis, London: University of Minnesota Press, p. xxix.
[78] Joan W. Scott (1991) "The Evidence of Experience", *Critical Inquiry*, 17, pp. 777, 779.
[79] Raymond Williams, *Keywords*, p. 128.

perhaps like those appealing to 'pleasure' or 'new experiences' – often seem vulnerable to criticism, making some initial comment on this appropriate.

One of the reasons why 'experimentation' often makes an easy target is that it has to an extent been trivialised by being made (or made to seem) to serve consumerism. Hartley's study provides a clear illustration of this. The metaphor of shopping functions very well for Hartley's argument, and although he doesn't use the term 'experimentation' himself, his use of shopping as a metaphor for trying out identities does summon up the concept of experimentation. Experimentation has in this way come to be seen in terms of trivial consumption – 'trying things on', perhaps with little commitment beyond that – linked with an ethic of 'suiting oneself,' the very figure of gratification and self-enlargement noted above.[80]

Another difficulty with experimentation is made clear in Celia Lury's problematic description of what she terms the 'experimental individual'. For such an individual, Lury writes,

> …the capacity to put *all* the parts of the person to work is at a premium (not simply those parts that had been subject to wil(l-)ful modification, but also those previously a matter of social and natural determination), an individual for whom the possession of a resource-ful self is something to be worked at in the very serious role-play of what might be called experimental individualism.[81]

Lury's model is perhaps closest to the individual whom Jolt Cola envision, who needs to call on their (bodily) resources to achieve certain ends. Not only is the voluntarism of Jolt's rhetoric echoed in Lury's model; also remarkable is the view of the person as resource, to be exploited, putting "*all* the parts of the person to work".[82] Lury's experimental individual – an extension of the possessive individual of modern liberal democracies – is both enabled and threatened by technology as prosthesis. Her notion of experimentation, like Hartley's reference to shopping around for identities, involves the piecing together of an identity by choice, in a high-tech theatre of possible 'selves to be'.

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[80] With the recent appearance of the slogan "I shop, therefore I am", in advertising for the fashion chain store, Sportsgirl, I have to wonder at how useful shopping is as a metaphor for identity construction, given how easily it can be reduced to triviality.

[81] Celia Lury (1998) *Prosthetic Culture: Photography, Memory and Identity*, London, New York: Routledge, p. 23.

[82] cf. Baudrillard's assertion that "calling on all your resources is completely wrongheaded". See Baudrillard, "How can you jump over your shadow", p. 101.
Also, in terms of my discussion of work practices and the voluntarism explicit in Jolt Cola's appeal, it is interesting to note that Lury writes explicitly about her experimental individual in terms of employee performance review and feedback (25).

In these models, experimentation has been coopted into an instrumental, resource-view of the self.

While the figure of the individual that Lury focuses on is a very interesting one, I find her designation of this individual as 'experimental' somewhat confusing. For her, technology prosthetically extends the reach of the individual; however, I am not clear on how this is necessarily experimental. Media technologies as prostheses can certainly make us present to ourselves by virtue of the sensory relation we have with them. This does not mean that the experiences facilitated are necessarily experimental. Experience can, as Williams makes clear, merely entrench already established subjectivities, perhaps dressing them up in the appearance of experiential immediacy. Lury's deployment of the term experimentation seems to rest (like Hartley's) on liberal notions of choice, that one can choose to exploit one's person as resource. Although Lury does not explore the relation of her individual to technology, it seems likely that this is a relation in which technology is not only used instrumentally, but prosthetically for self-enlargement. By contrast with Lury, I think that experimentation, as well as suggesting something new, implies less the calculation of ends than a lack of prior knowledge regarding the outcomes of experimentation (including the possibility that the products of experimentation will not please). After all, there's nothing very experimental about calculation.

While the term experimentation has been much reduced, made to revolve around the proliferation of relations to the self to be tried out (excluding in the process other relations of considerable importance), I argue that aesthetic experimentation *is* an important aspect of the experiences that media technologies can facilitate. In contrast to the self-focused individual, for whom experimentation merely means *more* experiences, I adopt a conception of subjectivity as a multi-dimensional relation – with the self, with others, and with things. My thesis is that developments in technology do usher in new ways of feeling and of relating to oneself, *as well as* new ways of relating to others, and to things, including technologies themselves. I will argue that the use of certain media technologies can be a kind of experimentation, a trying out and seeing what happens, and that this experimentation can lead to a range of new relations, to new forms of subjectivity.

Returning to the Onkyo ad, it must be considered as highly ironic that, despite the promises of amazement, it should all seem so familiar, predictable even. For while home

theatre is one of the newer digital media to penetrate consumer markets, the amazing 'new' experience seems very much like the existing one of cinema. Essentially the claim that is made for this "life enhancing technolog[y]" is that it enables you to "Enjoy Academy Award winning performances in the comfort of your favourite couch…at home."[83] It is this idea that has to date been the defining image of home theatre in Australia – of being able to sit at home and watch a movie on your very own 'big screen', without significant loss of special effects (or at least on a system superior to an ordinary tv), rather than going to the cinema.[84] Nevertheless, it is interesting to track this relation to cinema. For while other home theatre companies employ the rhetoric of convergence and virtuality – such as Philips' promotion of their "digital convergence product…providing a multi-sensory, immersive experience" – in the main Onkyo stick to comparing their product to cinema, and the claim that their system will deliver a viewing experience *faithful* to the cinematic experience. (Onkyo promise a verisimilar relation to cinema, which is interesting, given that cinema has its own relation to verisimilitude.)

As a spectator/auditor, you will see a film "just the way the film director expected you to see and hear it". The standards of home theatre are those of the cinema (Dolby, Lucasfilm THX) and from their brochures it is clear that the aim is to "recreate the enveloping sound field you experience at the movies." That this is a familiar, quasi-cinematic experience is confirmed by the set up instructions: consumers are instructed how to set systems up 'correctly', and warned against fiddling with the settings, further standardising the relation to technology and demonstrating the constant striving to emulate and replicate the cinema in detail.

> Even though you adjust the surround channel to be as loud as the others on the test signal, you'll find that on actual program material the surround channel is usually much lower than the front. Don't be tempted to readjust the surround level; program producers use surround mostly for subtle atmospherics and ambience, and only rarely for special effects. A good surround mix doesn't call attention to itself; if it did, it would soon become distracting.[85]

Even though – or perhaps because – the cinema sound field is recreated in your living room, it is still all quite familiar. In contrast to Ong's thesis about aurality heightening a

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[83] Quote attributed to the television film reviewer for "The Movie Show" (SBS), David Stratton, Onkyo catalogue: "Everything you ever wanted to ask about great home theatre…"

[84] Associated issues, such as the restricted content that is available, or the connectivity of web tv, have not featured prominently to date in the local market, though this may well change in the next few years with the introduction of digital tv and datacasting.

[85] Dolby (2000) "The Sound of Home Theater" (Installation and Operation Tips) http://www.dolby.com/ht/sound/sound4.html, accessed 20/8/01.

sense of participation with *actuality*, the surround sound and visuals here only seem intended to provide a more realistic rendering of explosions and other dramatic (but also rather predictable) special effects. The only sense of participation that is heightened is that of being in another location – the cinema.

I say this because, although the sensory effects of home theatre stimulation are constituted in large part by the sound, the Onkyo advertisement displays only a limited understanding of sound's properties. The added sonic reality which the surround and low frequency channels provide give the sound of home theatre a tactility, which audiences feel viscerally; it also gives them an awareness of themselves perceiving. I have already noted Walter Ong's argument that aural technologies enhance a sense of participation in 'actuality'. Ong further argues that it is difficult to have an awareness of oneself hearing (as it is through the sense of touch that we experience ourselves as most immediately involved in perception), *except* at the point when sound becomes tactile. Ong writes,

> …when I hear something [I do not] hear myself hearing…[but] as the kinaesthetic (touch) element in hearing becomes more assertive (for example, with the heavy throbbing of bass instruments in music), I do begin to experience myself, but in a tactile more than in an auditory way: my body begins to participate in the rhythms muscularly." (171)

The arched torso of the Onkyo woman conceivably indicates such a kinaesthetic, muscular response to the low frequency sounds of home theatre. She seems to feel the sound on her body, on the surface of her skin. Sound can feel this way, particularly when it is amplified to the point that it swamps listeners, penetrating their bodies such that they are no longer sure whether it is inside or outside, a particularly sonic form of dissolution. One literally *feels* the sound, giving some meaning to advertising promises that sound will "blow you away". And yet while Onkyo quite successfully capitalise on sound's kinaesthetic impact, aurality is still conceived of frontally: witness the way the woman's body is thrown back, *away* from the force she encounters, even though Onkyo is selling *surround* sound. In positing home theatre as a total-body[86] experience Onkyo assumes, as so often happens, that the non-visual senses follow the visual model. Whilst the tactility of sound potentially facilitates a different kind of engagement with televisual

[86] For evidence that this theme of stimulating all the senses pertains to home theatre, the availability of "Aura Interactor Cushions" should suffice. These devices, available to home theatre aficionados as well as gamers, are cushions which, when placed at the back of a seat, exacerbate the low boost sounds, giving "a complete 3D sound environment to your entertainment experience." Jaycar Electronics, www.jaycar.com.au, accessed 27/3/00.

media – perhaps enabling subjects to experience their bodies differently (experiencing themselves perceiving) – the ad does not reflect sound's important role in this.

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Although the claim has been that home theatre provides the cinematic experience in the convenience of the home, it is clearly not the same as cinema. Home theatre differs in important ways from cinema. Absorption in the movie spectacle has until now occurred in the public space of the movie-house, not the private space of the home. While the content might be the same, the context certainly makes a difference to the (quality of) escape found, amongst other things, with the cinema (also) affording an *escape from the prosaic*, leaving familiar confines for a time. Apart from the spatial context, there are the communal relations of apprehension, anticipation and response which are altered at home, limited to those with whom you choose to share the experience. While some of the differences between cinema and home theatre might seem to confirm the home theatre experience as just an individualistic pleasure, perhaps there is more to it than this. I suggest that this is indeed the case, as home theatre's ability to alter consciousness can result in changed relations with both technology and self, including more experimental relations and the dissolution of consciousness and self. In some ways this might be similar to the cinema, yet it departs from how we are accustomed to thinking about cinema. The relation with technology need not only be a spectacular one; nor does the relation to self need to be that of a resource to be exploited, or the sensing body merely a receptacle for experiences dispensed.

Home theatre constitutes a phantasmagoria. Susan Buck-Morss writes that the term phantasmagoria "originated in England in 1802, as the name of an exhibition of optical illusions produced by magic lanterns. It describes an appearance of reality that tricks the senses through technical manipulation" (133). For Buck-Morss, the phantasmagoria is an experience of intoxication to which we succumb, due to its control of environmental stimuli. She continues,

> Marx made the term phantasmagoria famous, using it to describe the world of commodities that, in their mere visible presence, conceal every trace of the labor that produced them. They veil the production process, and – like mood pictures – encourage their beholders to identify them with subjective fantasies and dreams. (135)

Buck-Morss considers that contemporary practices of sensory flooding have much in common with nineteenth century phantasmagoria, and has coined the term 'simulated sensoria' to signify sets of practices where the goal is manipulation of the sensory system, achieved through the control of environmental stimuli. She lists the following contemporary environments in which the stimuli is controlled so as to manipulate the senses:

> …shopping malls, theme parks, and video arcades, as well as the totally controlled environments of airplanes (where one sits plugged in to sight and sound and food service), the phenomenon of the 'tourist bubble' (where the traveller's 'experiences' are all monitored and controlled in advance), the individualized audiosensory environment of a 'walkman,' the visual phantasmagorias of advertising, [and] the tactile sensorium of a gymnasium full of Nautilus equipment (133-4).

Buck-Morss argues that such practices anaesthetise the organism, "not through numbing, but through flooding the senses", producing altered states of consciousness resembling drug states, yet achieved "through sensory distraction rather than chemical alteration" (133-4). Her interest in the control factor of environmental stimuli and sensory manipulation reminds me of another ad for home theatre, which also makes the link to the earlier medium of cinema clear. Like the others, this Pioneer advertisement explicitly references the senses, and like Onkyo, Pioneer also utilise the motif of sensory bombardment by quantity (Figure 3). In keeping with the emphasis on the *force* of the stimuli dispensed, Pioneer's tone is half-warning: "Once, simply seeing a film was enough (though maybe not enough to raise a goose bump). But now Pioneer DVD is here, to make it a sensory onslaught..."[87]

This Pioneer ad uses a number of curious devices to communicate this force, which it is useful to consider briefly here. Featuring the slogan 'Sound for every sense,' the advertisement shows a goose pimpled forearm with thin cords tied around the wrist. Reminiscent of the 'feelies' of Aldous Huxley's *Brave New World*, the implication is that watching a movie on this system is (more than) 'enough to raise a goose bump'. The cords, improbable as an accessory, suggest that the system delivers such force that

[87] Pioneer advertisement (1998) 'The Good Weekend Magazine,' *The Sydney Morning Herald*, 6 June. It is worth noting that the series of print advertisements for Pioneer's audio(-visual) range from which this is drawn all feature multi-sensory puns, often based on sound/taste connections ("In designing car audio, here's a TASTE of what we're driving at"; "No matter what your TASTE, Pioneer makes it SWEETER"; "Pioneer makes them even HOTTER"), and synaesthetic references (claims that Pioneer's 'Legato Link' technology, "recreates sound for senses other than just your hearing," "Hotter Chili Peppers. Juicer Cranberries. And the smashingest Pumpkins."), with all the ads in the series carrying the slogan, "Sound for every sense".

Figure 3 Pioneer Home Theatre advertisement

spectators require restraint. Though the fineness of the threads distinguishes them from stronger means of restraint, the contrivance on the themes of control, disempowerment and aversion draws attention to the alleged 'sensory onslaught', illustrating, too, the way that advertising both stirs and calms fears about technology. Like the risks involved in *consenting* to be restrained, the device plays on the danger as well as the (illicit?) thrills to be had in being thus overwhelmed by stimuli. (It makes one wonder what might happen if the restraints were loosened?) Nevertheless, the phantasmagorian's motives, as well as the wisdom of surrendering oneself to the illusion, are effectively queried by this ad. As well as signifying force, then, the 'sensory onslaught' also suggests a power which you are unable to resist.

Technology is again a provoker of feeling in the Pioneer advertisement, as the gooseflesh indicates, with the reference to the feelies useful for thinking about the significance of being so provoked. Pioneer's promise (threat?) of 'sensory onslaught' might be thought of as suggesting the numbing of the senses, similar to Buck-Morss's account. Yet the crucial issue, I think, concerns the extent to which the phantasmagoria is seen (just) as an instrument of control. It is plain from Huxley's novel *Brave New World* that the feelies are an instrument of control. Witness the conversation that Huxley stages in his novel between 'the Savage' and 'the Controller' on the topic:

> The Savage was silent for a little. 'All the same,' he insisted obstinately, '*Othello*'s good, *Othello*'s better than those feelies.'
> 'Of course it is,' the Controller agreed. 'But that's the price we have to pay for stability. You've got to choose between happiness and what people used to call high art. We've sacrificed the high art. We have the feelies and the scent organ instead.'
> 'But they don't mean anything.'
> 'They mean themselves; they mean a lot of agreeable sensations to the audience.'[88]

Though the Controller defends the feelies feebly to the Savage ("they mean themselves; they mean a lot of agreeable sensations to the audience"), the reader is left with little doubt of their function. It seems that for Huxley, they are the medium of distraction, *par excellence*; they really do not 'mean' anything; they are just a way of delivering a docile workforce. The question of mass culture's role in managing consciousness was, of course, of great concern to Benjamin and other Frankfurt School thinkers. In "The Mass Ornament", for instance, Siegfried Kracauer writes about spectacles of mass culture and the distraction that they induce in the audience, with a number of themes in common in both men's analyses. For Kracauer, the significance is that the "…production and

[88] Aldous Huxley (1974 [1932]) *Brave New World*, Penguin/Chatto & Windus, p. 173.

mindless consumption of the ornamental patterns divert from the necessity to change the current order", effectively propping up the *status quo*.[89] And, like Marx, Adorno registers the concealment that is at the phantasmagoria's base, historically: the audience is meant to be taken in and astonished by the phenomenon.[90] In contrast to these writers, however, I argue that conceiving of the phantasmagoria as just a distraction, is to severely constrain understanding of its significance. Yes, the audience of a phantasmagoria is meant to be *taken in* by the illusion. But, following Benjamin and the doubleness which it seems to me that he attributed the phantasmagoria, I maintain that the phantasmagoria produces more than just an effect of power. I refer to Benjamin's account where he found himself affected, *taken by* the reflection of an neon advertisement in a wet stretch of footpath. The top-down language of 'manipulation' and control over audiences in which debates over the phantasmagoria are so often couched is inadequate for describing this and other possibilities of audience engagement.[91]

To pick up the thread of my earlier argument, that home theatre's ability to alter consciousness might alter relations with self and technology, I am suggesting that sensory hyper-stimulation from an 'amazing' sound and light show can alter consciousness in the way that Buck-Morss describes. Yet this need not result in anaesthesia, nor in the abdication of criticality, a point I'll address further. The figure of sensory flooding or bombardment might instead reference the desire for an absorbed mode of spectatorship, in which spectators can 'lose' themselves. There are similarities here with the promise of escapism at the movies: the pleasures of being overwhelmed by, and feeling oneself sucked into, a big screen, in a darkened space where there are no distractions, no phones ringing, and no responsibilities, just the surrender for an hour and a half. This absorption is what Onkyo are offering, as well as the license to 'let go', 'conveniently', in the comfort and privacy of your own home. The Onkyo advertisement gives respectable

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[89] Siegfried Kracauer (1989 [1927]) "The Mass Ornament", Barbara Correll, Jack Zipes, trans., *Critical Theory and Society: A Reader*, Stephen Eric Bronner, Douglas MacKay (eds), New York, London: Routledge, p. 153.

[90] Adorno devotes a chapter to phantasmagoria, in his (1981 [1952]) *In Search of Wagner*, Rodney Livingstone, trans., London: NLB.
This also recalls Tom Gunning's arguments about early cinema, and recent applications of his 'cinema of attractions' thesis to more recent technological wizardry. See Tom Gunning (1986) "The Cinema of Attractions: Early Film, Its Spectator and the Avant-Garde", *Wide Angle*, Fall, pp. 63-70; Angela Ndalianis (2000) "Special Effects, Morphing Magic, and the 1990s Cinema of Attractions", *Visual Transformation: Meta Morphing and the Culture of Quick-Change*, Vivian Sobchack (ed.), Minneapolis, London: University of Minnesota Press, pp. 251-271.

[91] That Benjamin references Aldous Huxley in a note to the Artwork essay as "obviously not progressive" is interesting here. See Benjamin, "Artwork", n. 13.

citizens the license to discard their civilising controls, to enjoy the intoxication, let go, lose themselves and possibly lose control. This inverts the familiar motifs whereby technology either facilitates control or is something which it is necessary to keep control *over*. While the Pioneer reference shows that advertisers remain willing to play on this fear of losing control to the machine, the Onkyo advertisement presents an example of a relation involving surrender to the machine, which, while it is still shot through with these anxieties, also promises *something else*.

Dissolution can be one of the effects of strong stimuli. In the Onkyo ad, the tomatoes lodged in the woman's glasses provide an important clue. Part of a noticeable trend in advertising where eye devices are used to depict intense and extraordinary states, where everything from bottle-tops to custom contact lenses either *cover* or otherwise *alter* the appearance of the wearer's eyes,[92] the tomatoes attest not only to the incomparability of the home theatre experience, but also to the woman's altered state, recalling the red eye syndrome of 'being-on-drugs'.[93] Though an ineffectual prosthesis – all they will enable her to see, albeit vividly, is red – the device is extremely economic, standing out in a monotone newspaper reproduction. Dissolution – of self and of consciousness – changes orientations as well as existing relations. Boundaries can blur – between self and other, self and surroundings – as one becomes indistinct, or merges with the environment. Sensory bombardment can be an occasion for upheaval, which can free from undertakings which would otherwise be unavoidable. According to Georges Bataille, "The more equilibrium…the greater the disequilibrium that can result".[94] Such dissolution, or freeing upheaval, begins to suggest something beyond the hyper state, beyond predictable, existing relations, and potentially beyond the mere maintenance of the *status quo*; a state in which users might try out other, more experimental relations with self, others and technology.

Significantly, the tomatoes conceal most of the woman's face. This pseudo-carnivalesque wearing of tomatoes-as-mask is another reference to the fact that she is 'not herself'. Yet the carnival significance extends beyond the costume: Susan Stewart

[92] Other visual techniques include eyeballs popping out of their sockets and particularly accentuated bloodshot or oversized eyes.
[93] Avital Ronell (1993) "Our Narcotic Modernity", *Rethinking Technologies*, Verena Andermatt Conley (ed.), Minneapolis, London: U of Minnesota P., pp. 62, 70.
[94] Georges Bataille (1988) *Guilty*, Venice, California: Lapis Press, pp. 28-9.

notes the distance or relative lack of involvement of the audience/viewer of spectacle, compared with their counterpart in carnival. She writes,

> The participant in carnival is swept up in the events carnival presents and he or she thereby experiences the possibility of misrule and can thereby envision it as a new order. In contrast, the viewer of the spectacle is absolutely aware of the distance between self and spectacle. The spectacle exists in an outside at both its origin and ending. There is no question that there is a gap between the object and its viewer. The spectacle functions to avoid contamination…[95]

Stewart's distinction between spectacle and carnival recalls the absorption of the cinema, and resonates with Laura Marks' recent argument about a haptic mode of visuality in the cinema. This is a mode of sensing in which the viewer is not separated from but imbricated with their environment, in which the gulf between viewer and 'object' collapses and in which dynamic responses are possible. Unlike a more detached and objectifying (optical) visuality, reminiscent of Stewart's description of spectacle, haptic visuality is a more involved, participatory way of sensing and of making sense which, importantly, allows for a degree of porosity between the senses. (It is also consistent with Benjamin's descriptions of a yielding to stimuli, such as the red neon sign's reflections: his being *taken by*, yet not *taken in by*, these stimuli.)

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Apart from the masking effect of the tomatoes, there are other aspects of carnival which it is useful to consider in relation to these issues. John Docker's argument in *Postmodernism and Popular Culture* that television introduces carnival elements into the home is relevant here. For despite Onkyo's claim that this is home *cinema*, their product is actually replacing the consumer technology of television in the home, which is by comparison so inadequate. Drawing on Mikhail Bakhtin's study of carnival in *Rabelais and His World*, Docker argues convincingly for the persistence of carnival in contemporary cultures, what he calls "carnivalesque as cultural mode". He judges Bakhtin's assessment of carnival's diminished force to have been unduly gloomy, pointing to contemporary sites where the carnivalesque continues to exert its influence. Television is one of the major sites he identifies here, with more than its share of fools and inversionary tactics, which bring carnival elements into the privacy of the home.

[95] Susan Stewart (1984) *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*, Baltimore, London: John Hopkins University Press, p. 108.

Television is also, Docker claims, a participatory medium (like carnival), far more so than film, pointing to the different spectatorial relations relevant to the different media.[96]

Docker's study is important to my work for a number of reasons: his argument is not based in the oppositionality of carnival; rather, he situates carnival as an *ambivalence*, whose outcomes are undecideable and which can always go either way, either supporting the *status quo* or undermining it. Docker's approach thus departs from the emphasis on carnival as transgressive, as *only* a safety valve. Bakhtin's contention that the carnivalesque permeates cultural life all year round, not just during the brief annual periods of sanctioned excess, is highly suggestive. The openness of Docker's schema here, in line with his detecting a similar openness in Bakhtin's work, is consistent with my argument regarding the importance of a hyper/aesthetic model, which can accommodate the possibility of a range of reactions to 'simulated sensoria'. Furthermore, Bakhtin does not read carnival's significance only in terms of the individual. Indeed, Docker notes that Bakhtin "criticises Goethe for trying…to limit the philosophy of carnival to its meaning for how the individual as individual feels during the celebrations, rather than acknowledging collective, universal and 'cosmic' meanings…" (176). In the present context, the more 'collective' significance of the reading I have been making of the Onkyo ad would be the departure in moments of dissolution from the particular relation to technology that I have characterised in terms of the hyper state. My argument is that the effects of hyper-stimulation are not fixed, and that this is significant in terms of the changed relations to self and technology it can generate, thereby opening other possible configurations of subjectivity, beyond just the self-focussed hyper state. It is important that a hyper/aesthetic account can theorise hyperstimulation's double significance or potential. Thinking the influence that carnival has outside of periods of sanctioned carnival activity seems to me to be one way to do this, as carnivalesque as cultural mode seems to share something of the unpredictability of experimentation.

Docker's work in *Postmodernism and Popular Culture* also has significance for how we conceive of audiences. Thinking about audiences in terms of carnival requires that their active role in meaning-making is acknowledged (a concern which I share). As Della Pollock has written, Bakhtin's work provides, "a dialogic model in which the audience is

[96] John Docker (1994) *Postmodernism and Popular Culture: A Cultural History*, Cambridge, New York, Melbourne: Cambridge University Press, pp. 182, 273-280.

more active than reactive, and meaning is coproduced by participants equally and powerfully invested in the outcome of their exchange."[97] It signals a more participatory conception of audience engagement with media, appropriate for theorising aesthetic relations with media that depart from traditional film theoretical notions of spectatorship.)

Onkyo's identification with cinema raises the question regarding what the relation is between film and other media such as television, an important issue given the frequency with which it is assumed that film theoretical concepts can be extended to other media. Home theatre perhaps exemplifies the proximity that new technologies are thought to have to film, as either the legacy of cinema or else its fulfilment.[98] And yet Docker's point, read beside the carnivalesque elements of the Onkyo advertisement, poses the question that if some media combine aspects of both spectacle and participation, departing from classical film theoretical notions of spectatorship, then film might not necessarily provide the best model for analysing such media; other models of engagement may need to be developed. (In the next chapter, I suggest that computer gaming might be just such a medium, combining aspects of both spectacle and carnivalesque participation, facilitating the envisioning of alternate orders and becomings other.)

The next example takes up some of these challenges by provocatively engaging our technological anxieties about what lies on the other side of the techno-divide, particularly in relation to yielding to the machine, rendering a very different encounter between subjects and technology. In a highly unusual engagement with technology, we get more of a sense of some of the effects that experimental engagements with media can bring, specifically in terms of changes in embodiment, feelings, sensations, and changed senses of time and space.

[97] Della Pollock (1998) "Introduction: Making History Go", *Exceptional Spaces: Essays in Performance and History*, Della Pollock (ed.), Chapel Hill: University of North Carolina Press, p. 23.
[98] Ross Gibson addresses this question in his (1999) "Projected Backwards into the Future – Cinemedia's Platform 1.0 on Federation Square", *Wide Angle*, vol. 21, no. 1, January, pp. 169-179.

III

"Immerse yourself"

This Panasonic advertisement (Figure 4) – one of a series – was designed to be displayed as a poster and on billboards, where the advertisement's *size* corresponds to an impression of the *quantity* of sound, mitigating unfavourable perceptions about the amount of sound that a 'Mini System' might be able to produce.[99] The use of a confronting image of 'hyper-stimulation,' in which the man has put his head *inside* the stereo – literally immersing himself – successfully generates spectator engagement with the image. Conference delegates to whom I showed this advertisement reported that they felt like cringing at the (imagined) loudness; others expressed a concern for the man's hearing (exacerbated by his own apparent *lack* of response.) These visceral responses *in the viewer* show how hyper-stimulation can successfully arrest the gaze of a market-savvy public skilled at 'tuning out' from advertising, gaining an imagined synaesthetic involvement that would not otherwise be forthcoming. Whilst there is certainly enough in the image to mount a reading for the *violence* of the aural stimulation – consistent with the incidence of violent, often military metaphors up to this point – and the potential for damage to the man's hearing, this is one of the themes which the advertisement itself plays with. As a result, analysing the excessiveness of the stimuli to which (we assume) the man is exposed only gets so far. Because the advertisement trades on the uneasiness and uncertainty regarding the sonic blast, I find it more productive to ask why, despite the man's exposure to what we assume to be deafeningly amplified sound, the image holds appeal, a certain tantalising promise?

Whilst a number of factors contribute to the attractiveness of the image – including aesthetic considerations such as its visual sophistication and high production values, not to mention its wit – I will argue that a substantial part of its appeal derives from the fact that the excitement and adventure being offered lie in areas hitherto 'off limits'. The advertisement is fascinating not so much because it trades a visual mode of immersion for

[99] Nelson and Hitchon suggest that the visual sensation of brightness is commonly felt to 'correspond' to the auditory sensation of loudness, by virtue of a shared 'intensity' (349). While a similar argument could apply to the Panasonic image, I am further suggesting that there is in this example a correspondence between size and sonic power. Size or scale also has associations to the 'bigness' or 'fullness' of amplified sound quality. Michelle Nelson and

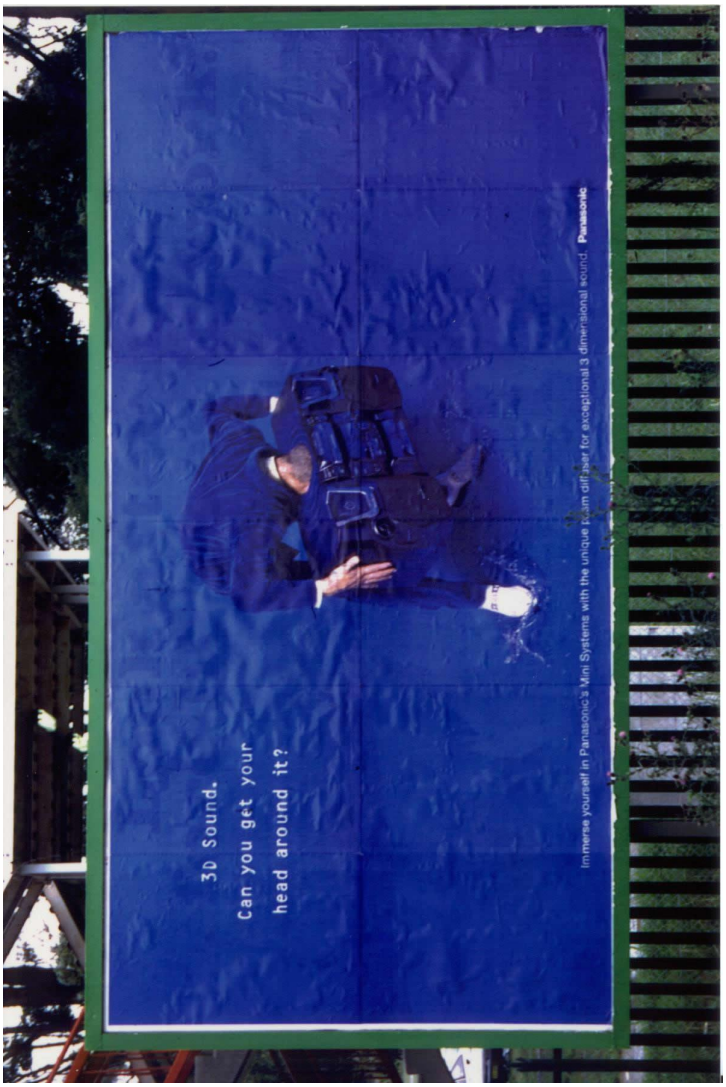

Figure 4 Panasonic Mini Systems advertisement

Jacqueline Hitchon (1995) "Theories of Synaesthesia applied to persuasion in print advertising headlines", *Journalism and Mass Communication Quarterly*, vol. 72, Summer, pp. 346-360.

an aural one, though this is important; rather, its enigmatic appeal derives from the suggestion that the man, by putting his head inside the stereo and forming a union with technology, is accessing realms and (sensory) pleasures which he otherwise would not be able to.

Though this move into the technology might not be particularly 'wise' on his part, not very 'good' for him, we do not always desire what is 'good' for us. This is particularly the case with hyperaesthetic states which seem to trade on limits, and where the proximity to danger and excess (both types of limits) intensifies or sharpens the pleasure. Bataille's work is useful here: Michael Richardson characterises his philosophy of human experience as "an experience of limits".[100] Appropriate in this context is Bataille's question, "what significance can…[philosophical] reflections…have, if they take no account of the intense emotional states?"[101] Contemporary advertising seems constantly aware of pushing limits, especially in pursuit of novelty: in these examples, regarding the types and force of stimulation and the alleged effects on the senses, as well as in thinking up different relations with technology. The suggestion is that the kind of engagement which the man has with the stereo in the advertisement entails risk, because of his crossing the human with the technical, his move from the organic into the inorganic. While his testing and trying of these limits is risky, the man can call on what Andrew Ross describes as a legacy of "bad white boys [who], unlike their female counterparts, can draw upon a long history of benign tolerance for their rebel roles…The values of the white male outlaw are often those of the creative maverick universally prized by entrepreneurial or libertarian individualism".[102] So, whilst one reading of the man's experimental gesture is that it's self-destructive, the pay-off is an extreme listening experience, one which remains inaccessible to the advertisement's viewers, but generates desire (as well as anxiety) regarding extreme technologically based sensory experiences. Bataille describes this combination of excitement and anxiety well, in his insight that, "No one could deny that one essential element of excitement is the feeling of being swept off one's feet, of falling headlong".

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[100] Michael Richardson (1994) *Georges Bataille*, London, New York: Routledge, p. 98.
[101] Georges Bataille (1962) *Death and Sensuality: A Study of Eroticism and the Taboo*, New York: Walker and Company, Mary Dalwood, trans., pp. 252-254.
[102] Andrew Ross (1991) *Strange Weather: Culture, Science, and Technology in the Age of Limits*, London, New York: Verso, p. 162.

The act in which the man is pictured is unashamedly excessive and self-indulgent, in line with the logic outlined in previous examples of the search for extraordinary sensory experiences. But unlike the other advertisements examined, the man in this one, in entering into the stereo, becomes a cyborg. Donna Haraway defines the cyborg as "a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction."[103] For Haraway, the cyborg is one figure within a family of partial, hybridised creatures, whose boundary status is an important factor of their subjectivity. As she asks,

> Why should our bodies end at the skin, or include at best other things encapsulated by skin? From the seventeenth century till now, machines could be animated – given ghostly souls to make them speak or move or to account for their orderly development and mental capacities. Or organisms could be mechanized – reduced to body understood as resource of mind." (178)

Why indeed? Whilst popular representations of cyborgs, particularly those of science-fiction, often portray a body containing electronic components – jacks, wires and various other electronic prostheses – Haraway's conception enables us to recognise the Panasonic man as a cyborg, even though he does not appear this way. Margaret Morse claims that the incorporation of the organic *within* the electronic, or *vice versa*, is the "contemporary fantasy [of] how, if the organic body cannot be abandoned, it might be fused with electronic culture in what amounts to an oral logic of *incorporation*."[104] The man is a cyborg, then, by virtue of his incorporation within the stereo; a boundary dweller, inside its 'skin'.

Yet while the man's head is incorporated within the stereo, he is not exactly fused with it. To put this another way: if he is a cyborg by virtue of having his head inside the skin of the machine, what happens when he takes it out? Does he cease to be a cyborg? What if he then sits down at a computer, only to answer his mobile phone when it rings? Rather than the blanket statement that "we are all cyborgs", these seem to me to be examples of temporary border crossings based in use, of cyborg engagements which are 'partial' in a different way than Haraway initially intended. Thinking of the partiality of such engagements enables consideration of the great variety of (cyborg) relations that any one user has with different technologies, over time, as cyborgism – rooted in partiality anyway – is here treated as having a temporal quality.

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[103] Haraway, "A Manifesto for Cyborgs", p. 191.
[104] Morse, "What Do Cyborgs Eat?", p. 158.

The Panasonic advertisement allows me the opportunity to develop the argument I have advanced in the two previous examples, about imagining other relations with technology, as it presents such an alternative image of engagement. Crossing the boundary between machine and human here results in new embodiments being produced. The advertisement is also significant as it portrays the man as largely having abandoned what Alphonso Lingis has called a 'piloting rationality' and control. Moreover, it shows how this – somewhat unusual – way of engaging with a stereo results in a changed aural experience; indeed, a somewhat *deranged* configuration of the senses. In this section, I will argue that the borderline figure of the cyborg is helpful for beginning to conceive of the combination of factors affecting subjectivity in cyberspace; for, as Morse notes, this "is still an open question."

Panasonic renders incorporation in terms of the figure of immersion. Before I consider what the significance of immersion is in the context of this advertisement for the senses, I need to outline some of the other uses to which the term is put, as it has become something of a buzz word in recent years, particularly popular with those trying to sell products as inducing certain experiences, like those I have been examining in this chapter, as well as with the 'experience industry'. Its widespread and at times loose deployment has lead to significant confusion. Like the term 'synaesthesia', immersion is frequently used interchangeably with 'multi-sensory'. The Panasonic advertisement thrives in the midst of this terminological confusion, pragmatically offering not one but *three* different figures of immersion. The man is immersed in multiple ways: there is the visual pun whereby his head is literally 'immersed' in the stereo, as well as what might be called his 'virtual' aquatic immersion, as the top of the stereo transmogrifies into a pool, his feet splashing in water. This ploy also recalls the very common use of water sounds in sound art, evidence that this (literal and metaphoric) connection between water and sound operates well beyond the bounds of this ad. Lastly, he is immersed in the listening experience in that his attention is fully focused on it. Though I will focus on the first two senses of immersion, this last one is an important one, in that immersion depends at least as much upon the auditor and contextual factors as the technology. A potential immersant needs to be prepared to both enter into and entertain the 'world' that is being rendered (sonically in this case). If they lack sufficient interest in the stimuli, they will presumably just turn it off.

The concern with simulating experiences in their multi-sensory complexity features in many contemporary accounts of immersion, particularly in the 'experience industry' and in some accounts of virtual reality. Whilst the contemporary focus on the senses in their plurality has to a degree marked a move away from '-centric' accounts of perception, the tying of immersion to the 'multi-sensory' illustrates one of the continuing confusions, namely that there is an equivalence between multi-sensory stimulation and immersion. The suggestion is that multi-sensory stimulation is a *prerequisite* to immersion, or alternately, that immersive states entail a sort of 'full-bodied' experience, which involves all the senses. I have already mentioned the claim by Philips that its home theatre provides "a multi-sensory, immersive experience"; this is but one instance among many. Attempts to simulate everyday, multi-sensory experience in the belief that this will be immersive would seem to restrict the senses to prosaic functions in media contexts, including new media contexts, where much of the debate has been centred.

Though the issue of what might be called 'total' immersion is a slight diversion from my main concerns in this chapter, I want to flag in passing the importance of this issue to conceptions of immersion in digital media environments. (I will discuss it more fully in Chapter Four.) I question both the *desirability* of aiming to produce a total range of sensory effects (even though the range of stimuli tends to remain confined to the audio-visual, sometimes with the inclusion of tactile or kinaesthetic sensation), as well as the *political* implications of such totalising approaches. Many projects aiming to produce 'full-bodied' experiences are dependent upon organicist conceptions of bodies and media combination, bearing more than a passing resemblance to theories of the total work of art, or *Gesamtkunstwerk*, as I noted earlier. It is possible that there may be some contexts in which simulated multi-sensory experiences are warranted and beneficial, but past research agendas seem to have been overly weighted toward projects aiming to 'virtualise' existing experience, working out how experiences can be 'converted' into, or convincingly simulated by, digital media. This is cause for concern. Such projects frequently assume a naïve and automatic role for the senses in perception, ignoring the historicity of the sensorium and perceptual regimes, as well as the importance of subjective factors in immersion.

It is uncanny that multi-sensory immersion is so often presented as if it were a trope newly invented. Whilst others have focused on the history of immersion in greater

detail,[105] I want briefly to outline one early articulation of the trope, with special relevance to this context. Morton Heilig published his vision of multi-sensory immersion more than forty years ago. In 1955, he predicted that 'the cinema of the future' would be a combination of three dimensional cinema with other enhanced sensory stimuli that would, he claimed, "far surpass the 'Feelies' of Aldous Huxley's 'Brave New World'."[106] Heilig's vision depended upon assumptions about perceptual ratios as well as claims about the order in which different senses register changes in a field. He promised that his cinema would fill 100% of visual fields and utilise stereophonic sound, enclosing the spectator [sic] "within a sphere, the walls of which will be saturated with dozens of speakers [so that] [s]ounds will come from every direction". In addition, "The air will be filled with odors and up to the point of discretion…we will feel changes of temperature and the texture of things" (284). Heilig's model was elaborated to fulfil what he saw as "the public's deep and natural urge for more complete realism in its art" (282).[107] Though his writing is of its time, and much that Heilig says is uncritical and overblown, his plans for cinema, though apparently tied to realistic multi-sensory simulations, also extended beyond realistic simulation, which is why I mention them here. The cinema of the future, he predicted,

> "…will eventually learn to create totally new sense materials for each of the senses – shapes, movements, colors, sounds, smells, and tastes – they have never known before, and to arrange them into forms of consciousness never before experienced by man in his contact with the outer world." (288-9).

While his plans seems quite over the top and totalising, Heilig also apparently sensed something of the experimental possibilities of non-realistic sensory configurations. So while, as Morse suggests, "for the vast majority of users information must be displayed as symbolic form and made perceptible,"[108] the *ways* in which it is made perceptible remains an issue of some significance. While Heilig's ideas might have been incompatible with his project of expanding *cinematic* codes to other senses, his excitement at the prospect of creating sensations outside the conventions of realism suggests that this idea remains quite innovative.

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[105] See, for instance, Erkki Huhtamo (1995) "Encapsulated Bodies in Motion: Simulators and the Quest for Total Immersion," *Critical Issues in Electronic Media*, pp. 159-186.
[106] Morton Heilig (1992 [1955]) "El Cine del Futuro: The Cinema of the Future", Uri Feldman, trans., *Presence*, vol. 1, no. 3, Summer, p. 284.
[107] Heilig also designed and produced a motor-bike simulator, the 'Sensorama', complete with olfactory and vibratory stimuli. This is discussed by Ralph Schroeder. See his (1996) *Possible Worlds: The Social Dynamic of Virtual Reality Technology*, Oxford, Boulder, Colorado: Westview/Harper Collins, pp. 18-19.

The picture of aural immersion presented in the Panasonic advertisement departs from totalising conceptions of immersion as stimulating 'all the senses', referencing instead the idea often put by sound theorists that aural media are better at creating states of immersion than visual media (such as wraparound screens). Whilst this is a claim stemming from sound's spatial character, it is especially the case with virtual audio. As Frances Dyson notes, in contrast to "previous audio technologies, which offer at best a stereophonic perspective – a "hearing ahead" – virtual audio offers a 360-degree aural space."[109] Virtual or surround audio simulates the ways that sound surrounds and moves around us in spatial environments, giving poignancy to the question posed in the advertisement, "3D Sound. Can you get your head around it?" as sound is precisely that which it is not possible to get *around*. The rendering of sonic stimuli as *surrounding* the man is also substantially different from the representations of perception in both the Jolt Cola and Onkyo examples. In Onkyo's image, sound is modelled on a frontal perception more characteristic of the visual, while for Jolt Cola, stimulation is 'dispensed', sensory stimuli 'dispatched' in the direction of the target subject.

The Panasonic advertisement further departs from the standard figures of immersion in its portrayal of *denatured* perception. This is partly attributable to the man's performance of a gesture that wholly compromises his vision, as a result of which his senses are re-ordered. It is not merely that vision is subdued in order to prioritise sound, for any exclusively aural conceptions of listening are also displaced. Rather, aurality is multiplied and implicated with other senses as aurality becomes more than just listening. Unlike many advertisements in which synaesthesia is invoked as a gimmicky marketing device, the Panasonic rendering heeds the intersections *between* the senses in its representation of an extreme experience. Though it is perhaps more like Yi-Fu Tuan's "synaesthetic tendency" than actual synaesthesia, the shift is one of considerable importance.[110] It also goes to one of the most pressing issues affecting scholarship on the senses at the turn of the century. As I suggested earlier, debates about the senses have to an extent become tired, as claims for the priority or the marginality of a particular sense

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[108] Margaret Morse "Nature *Morte*", p. 200.
[109] Frances Dyson (1996) "When is the Ear Pierced? The Clashes of Sound, Technology, and Cyberculture", *Immersed in Technology: Art and Virtual Environments*, Mary Anne Moser and Douglas MacLeod (eds) Cambridge, Mass., London: MIT Press/Banff Centre for the Arts, p. 80.
[110] Yi-Fu Tuan (1993) *Passing Strange and Wonderful: Aesthetics, Nature and Culture*, Washington D.C.: Island Press/Shearwa, p. 168.

often only confirm the dominant discursive conception of the senses as separate. In comparison, the aural evocation of other senses in the Panasonic advertisement points to the porosity of boundaries between the senses. Paralleling Haraway's conception of the cyborg – which emphasises the dissolution of identities and separate categories in the fusion, highlighting the potential for new, partial identities to evolve – the synaesthetic evocation of other senses in the Panasonic advertisement suggests the eclipse of certain kinds of theorising about the senses (including certain kinds of theorising about synaesthesia). I believe that attending to the inbetween of the senses – their inter-implication – has the potential to dissolve some of the rigidity of sensory categories and discourse, making it possible to think, as well as to recognise, different and partial configurations of the senses. This is an argument that will occupy me in Chapter Four.

The man's submerged head is one of the many suggestive elements in the Panasonic advertisement. It can be read productively as an entry into a different environment – in this case an aquatic one – and can assist in understanding the ways in which the senses and subjectivity are affected by the transition to a different environment, 'world' or space.[111] Being submerged in water has a profound effect on the senses, particularly on aurality. Hearing is qualitatively different, due to the fact that one's ears are full of water. Its not that you *can't* hear, but that what you *can* hear is different, due to the greater efficiency with which sound waves travel in water. Everyday sounds also become muffled as sounds not ordinarily heard become audible. A different sonic world opens. And you can hear yourself. Like John Cage noticing the sounds of his body inside an anechoic chamber, sounds of blood rushing and pulsing become audible, just as the hissing and clanking of water pipes can form a surprising part of a bath soundscape. Entering water can involve a kind of dissolution, having profound effects on one's sense of time and of one's own body, changes in perception which alter consciousness. Time slows down: whether it be the sensation of floating motionless while being gently rocked by waves, the mesmeric feeling of 'hanging' or being 'suspended' in water, or – for those

[111] Immersing bodies in water is, of course, an act within the 'natural' world, and many digital media environments depict purpose-built 'unnatural' worlds. And yet some projects purposely take 'natural' themes as their subjects, which as Morse notes, can make the experience that much more uncanny. The work she examines in this respect is Michael Naimark's *See Banff!* Morse, "Nature *Morte*".

who like to go beneath the surface – donning face-mask, fins and snorkel and slipping into the sea.[112]

Being immersed in water constitutes an entirely different aesthetic experience from that which can be had on land. You may feel weightless, you may feel like you are becoming water, perhaps a fish. My argument is that the example of watery immersion suggests both the significance that the type of relation one has to technology can have, as well as the way that altering this can make other aesthesias, or in Haraway's words "other forms of power and pleasure," possible. Entering a different 'world' can have extensive effects on subjectivity, including changes to kinaesthetic awareness of one's own and others' bodies, thoughts, feelings, and mobility. Alphonso Lingis has written about the changes in *movement* that are required upon entering the water. On a diving trip to 'the deep', he writes how one is "Denuded of one's very postural schema, of one's own motility, swept away and scattered by the surge." Lingis found that in order not to be dashed on sharp coral reefs, he had to abandon a piloting role, ceasing to struggle against the way the underwater currents wanted to move his body. He was also struck at the lack of an apparent 'purpose' or 'object' when in this other 'world': "One takes nothing, apprehends nothing, comprehends nothing. One is only a brief visitor, an eye that no longer pilots or estimates, that moves, or rather is moved, with nothing in view."[113]

Apart from changes in movement, entering a watery realm can effect temporality, even leading to a loss of orientation in time. A number of writers have made points to this effect. Analogous to aquatic immersion, Bataille writes of the absorption that results from mystical or erotic enrapture,

> The object of contemplation becomes equal to *nothing* …and at the same time equal to the contemplating subject. There is no longer any difference between one thing and another in any respect; no distances can be located; the subject lost in the indistinct and illimitable presence of the universe and himself ceases to belong to the passing of time. He is absorbed in the everlasting instant, irrevocably as it seems, with no roots in the past or hopes in the future, and the instant itself is eternity."[114]

Writers have also found dissolution relevant for describing movements into the interface. Like Bataille and Lingis, David Toop fastens on the change in temporality to highlight

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[112] The advertisement's treatment of this slowness is somewhat uncanny, as sound's existence in time is frozen in a perpetual instant by the *visual* advertising medium (perhaps due to the difficulty of representing sound visually).
[113] Alphonso Lingis (1983) *Excesses: Eros and Culture*, Albany: SUNY Press, pp. 5, 10.
[114] Bataille, *Death and Sensuality*, p. 249.

how far immersive experiences are from linear, objectified everyday experience.[115] Meanwhile, Albert Liu – like Lingis – finds the metaphor of diving apt for describing the entry into the digital interface.

> Let's see. I think the appropriate uniform would be a wetsuit. I have a hunch, or a suspicion, that the invention of the wetsuit was the first attempt to submerge the human body in another medium, or to gain access to some kind of experience that is typically considered inhuman or unnatural. The kind of dressing that was involved in the invention of scuba or diving apparatuses was not about protecting oneself from the other, but giving in to it.[116]

It is significant that he likens this to a form of yielding to the environment, where one does not need to protect oneself from the medium or environment (as other). Dichotomous subject/object relations, or notions of will do not seem that useful, then, in understanding experiences of immersion. It is not just that they are novel experiences, in which having the experience is all that matters, as I argued of hyper states, though there is certainly a sense in this advertisement that the experience is an extreme one. Rather, this extreme quality signals a move beyond familiar relations – with technology, self and other – and the possibility of developing new ones. The Panasonic man's experience is not that of a humanist subject, afraid of technology and of entering the interface; if he were, he would not be able to yield to the medium. Instead, his experience as a cyborg exceeds familiar notions of what it means to be human.

While the rise of interest in cybercultures would be thought to aid exploration of some of the other kinds of power and pleasure which cyborg encounters generate, there still is not the vocabulary to describe and theorise these relations. Part of the reason for this is the difficulty of describing experiences of dissolution in positive terms. It also seems to derive from the enigma which being simultaneously in two states raises. For instance, in the Panasonic advertisement, spatial displacement to a watery environment is implied, although the man is physically still present. The space to which the man is displaced is a kind of 'no place', the 'where' of the 'elsewhere' not locatable. Perhaps it is the space to which TDK refer mysteriously in their audio slogan "No longitude, no latitude, just a

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[115] David Toop (1995) *Ocean of Sound: Aether Talk, Ambient Sound and Imaginary Worlds*, London: Serpent's Tail, p. 273.
[116] Albert Liu speaking in Norie Neumark (1994) "Into the Interface", New Radio and Performing Arts, National Public Broadcasting, U.S.A., Jan-March, 1995 and Listening Room, ABC Fine Music (FM), April, 1994.

world of your own."[117] This enigma of cyberspatial voyaging raises central questions about embodied subjectivity in cyberspace. For despite the fact that cyberspace is so often defined in terms of the senses, we allegedly have no need of a body there, according to one school of thinking. Virtual environments exist only in code, not in material space, constituting a disembodied 'space'. But how can one sense these environments without a body?

While the thorniness of thinking about multiple or mixed realities is not to be denied, it has not been helped by the persistent citing of the cyberpunk image of 'escaping the meat'. One of the problems relates to the formulation of these debates about embodiment, which seem to require either/or responses: either a subject either entirely 'in' and identified with their body, or else bodies as empty vessels while consciousness floats freely around in the network. But this is still thinking of body and mind (as well as body and environment) as starkly delimited, having clearly defined boundaries, as subject and object. What needs to be recognised is that dissolution entails a yielding to environment or medium, as Liu and others make clear, as well as that different realms of materiality and virtuality (terms which need not only be thought of in terms of cyberspace), overlap.

These are important debates which I will engage with in greater detail in the next chapter, using concepts from Margaret Morse's work to discuss computer game players' entry into the virtual environments of games. As I will make clear, the gaming body is activated and mobilised, not just 'parked' while players are 'in' cyber- or games' space. In the final section of this chapter, I want to situate some of the themes that have emerged from the three advertising analyses with respect to an historic account of hyper-stimulation, in order to ground my concept of and arguments about hyper/aesthetics.

IV

Having developed my own analysis of what these advertisements seem to be saying (reflecting and constructing) about the senses, particularly on issues like hyperstimulation and sensory excess, and canvassed some of the implications of these discourses, it is

[117] Apart from this trance-like relation to sound/technology, TDK's identifying catchphrase "TDK does amazing things to your system," also plays on the variously integrated notions of 'system' – biological, electronic and computer.

useful to reflect on how this has been conceptualised and debated previously. The theme of hyperstimulation is, of course, not new. A number of writers canvassed issues of hyper- or, as it was referred to, *over*-stimulation in modernity. These debates seemed, in particular, to concern scholars associated with the Frankfurt School. Georg Simmel wrote of the effects on what he termed 'personality' of the intensification of emotional life that came with the "swift and continuous shift of external and internal stimuli," arguing that this resulted in habituation and the adoption of a blasé attitude by the urban dweller.[118] A little later, Siegfried Kracauer commented on the prevalence as well as some of the characteristics of 'distraction' in mass culture, noting the 'total' nature of the entertainment which, he claimed, "assaults every one of the senses using every possible means".[119] And some years after Simmel's and Kracauer's analyses, Walter Benjamin adopted aspects of Freud's concept of shock, using these to advance an account of the relations between technology, experience and the senses in modernity.

These earlier accounts help to situate the idea of hyperstimulation historically, which is valuable given that advertising typically presents the figure as if it were without precedent. I return here to Benjamin's work on shock because it is particularly relevant to this project, for a number of reasons. In the essay "On Some Motifs in Baudelaire," one of his key texts on the topic, shock serves as a figure of hyper or over-stimulation. While I will provide a brief sketch of his account in a moment, it is important to remember that overstimulation is just one of the ways that shock features in his work. Indeed, shock's relevance to this project is furthered by the fact that in his development and use of the concept, Benjamin was cognisant of and attended to the complexities and contradictions of the motif, which he used to characterise humans' encounters with technology.[120] As a result, his readings of the effects of technological shock have

[118] Georg Simmel (1971[1903]) "The Metropolis and Mental Life," *Georg Simmel: On Individuality and Social Forms*, Donald Levine (ed.), Chicago, London: Chicago University Press, pp. 324-339.
[119] Kracauer, "Cult of Distraction", p. 92.
[120] A number of writers have noted this ambivalence in Benjamin's work on shock, including Samuel Weber, Richard Shiff, Tom Gunning, and Miriam Hansen. See Samuel Weber (1995b) "Mass Mediauras, or: Art, Aura and Media in the Work of Walter Benjamin", (the 1992 Mari Kuttna Lecture on Film), *Mass Mediauras: Form, Technics, Media*, Alan Cholodenko (ed.) Sydney: Power Publications, pp. 55-75; Richard Shiff (1992) "Handling Shocks: On the Representation of Experience in Walter Benjamin's Analogies", *Oxford Art Journal* vol. 15, no. 2, pp. 88-103; Tom Gunning (1989) "An Aesthetic of Astonishment", *Art & Text*, 34, pp. 31-45; Miriam Hansen (1987) "Benjamin, Cinema and Experience: The Blue Flower in the Land of Technology", *New German Critique*, 40, Winter, pp. 210-11.

sufficient scope to also identify and attend to the possibility of outcomes *other* than experiential impoverishment.

Benjamin grappled with the complexity of the shifts in experience that he associated with the reception of modern technology. Miriam Hansen argues that this is a result of the difficult nature of the topics themselves; she says they are characterised by "genuine antinomies" and that this is particularly the case in relation to technical media. This is one reason why, she suggests, Benjamin's writings remain pertinent today, because "understanding the issues he struggled with as genuine antinomies…should help us…to discern similar antinomies in today's media culture".[121] I will briefly summarise some of the relevant points about Benjamin's usage of shock, together with recent contributions to the debates, before moving on to engage with these contributions and outline the points where my hyper/aesthetic account departs from an anaesthetic one.

Shock is one of the motifs Benjamin identifies in Baudelaire's poetry. In the Baudelaire essay, Benjamin borrows Freud's idea, developed during his wartime work with the victims of shell-shock, that consciousness functions as a shield. Linking Freud's speculations on shock, stimuli and the "effects produced on the organ of the mind by the breach in the shield against stimuli,"[122] with Baudelaire's writing on modernity – particularly his famous assertion that shock "has become the norm" – Benjamin applies these sources to his primary task, theorising the changing nature of modern experience, a critical feature of which is the disintegration, dating from the mid-nineteenth century, of experience as collective and continuous. Rather than serving as the repository of memory, Freud argues that consciousness has another important function – to protect the organism from external stimuli. According to Freud, "protection against stimuli is an almost more important function [of consciousness] than the reception of stimuli", with the protective mechanism imaged as a shield.[123] The threat which consciousness must protect against is *shock*. "The more readily consciousness registers these shocks, the less likely are they to have a traumatic effect," as the shock defence prevents the full force of shock being felt (157).

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[121] Hansen, "Benjamin and Cinema", p. 343.
[122] Sigmund Freud (1986 [1920]) "Beyond the Pleasure Principle", *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, vol. XVIII, James Strachey (ed.), London: Hogarth Press, p. 31.
[123] Freud cited in Walter Benjamin (1992 [1939]) "On Some Motifs in Baudelaire", Harry Zohn, trans., *Illuminations*, Hannah Arendt (ed.), London: Fontana, p. 157.

Shock, as a figure, provides a way to think about the *bombardment* of stimuli; both Benjamin and Baudelaire use it in this way. Benjamin notes the way that shock effects perception – that a high degree of stimulation results in the shock defence cutting in, protecting and thereby desensitising and impoverishing an individual's perceptions. The factory production line and the city street are both sites where the shock defence operates, with Benjamin claiming that, "The shock experience which the passer-by has in the crowd corresponds to what the worker 'experiences' at his machine" (173). What the factory worker adapts to is the *lack* of skill required on the production line. Industrial work processes, inasmuch as they necessitate that gesture be reduced to reflex, parallel the automatic nature of the responses of pedestrians in a crowd. Such is the nature of modern experience according to Benjamin – where shock events elicit automatic responses, and events are detached from the contexts of (pre-modern) experience.

In recent years, a number of scholars have wrestled with Benjamin's characterisation(s) of shock and its implications for contemporary technological forms. Susan Buck-Morss, in her 1993 essay "Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered," develops Benjamin's work on shock in terms of anaesthetics. She claims that whilst etymologically 'aesthesia' refers to the role of the senses in perception, within the schema of perceptual crisis that Benjamin details aesthesia turns to *an*aesthesia (130-31). Though it is not Buck-Morss's primary intention to consider shock's contemporary implications, some of her arguments pertain to contemporary conditions of experience, suggesting a continuing relevance for Benjamin's "neurological" understanding of experience. In any case, the continual recurrence of the shock motif in the advertisements I have examined, together with the violent, military metaphors of onslaught and bombardment, invite this re-examination of Benjamin's work.

In considering what relevance Benjamin's account of shock has today, the question is whether this account of the bombardment of stimuli leading to sensory shutdown adequately conveys the contemporary aesthetic experience of media technologies? Thinking in terms of the advertising representations examined, does the flooding of the senses – either with multi-sensorial stimuli or because of the intensity or sheer quantity of the stimuli delivered – *necessarily* result in anaesthetisation? I depart from Buck-Morss in answering both of these questions in the negative, for whilst the manipulation and flooding of the senses certainly *alters* consciousness, the results of this alteration are not

fixed. While Benjamin characterises shock as overstimulation in the Baudelaire essay, resulting in experiential impoverishment, he also invokes it as a "means of propelling the human body into moments of recognition", as in "the moment of sexual recognition" in Baudelaire's sonnet "A une passante".[124] Elsewhere he uses shock to discuss filmic montage, speculating on the effects of shock as formal principle on cinema audiences, notably via the notion of the optical unconscious. In the Artwork essay, he speculates on the way that the enlargement of the snapshot "reveals entirely new structural formations of the subject."[125] I take this to mean that with regard to the status of the senses at the present moment, conclusions of decline and impoverishment should not be assumed to be exclusive. Rather, sensory regimes are *transformed*, undergo *change*, the effects of which are often unpredictable. Benjamin was himself aware of this, as he wrote about "a sense perception that has been *changed* by technology" (my emphasis).[126] His avoidance of simple narrative closure – either by saying that technology has unambiguously resulted in the decline of aesthetics, or the unqualified enlivening of aesthetics, which he does not do – is one of the things that makes his work of interest.

In this chapter, as in the rest of the thesis, my project is to develop a hyper/aesthetic account, that is, an account that provides a dual awareness of the potential of media technologies to animate new sensory possibilities and subjectivities, as well as to impoverish aesthetic experience. Analysing the current relation of the senses to technology requires such a dual awareness, I argue, of both the possibilities and the pitfalls. Benjamin's work on shock, as well as the vicissitudes of the concept's reception, helps to locate this project and what is at stake in it. For, as I have been arguing, and as has become evident in the readings undertaken, invoking hyper-stimulation of the senses or using the senses to reference hyper- states, can just as easily act to cement *existing* aesthetics, relations with technology and conceptions of subjectivity as it can to broaden the range of aesthetic engagements and facilitate the trialling of *different* subjectivities. The challenge is, it seems, to neither settle on one or the other as the 'correct' reading of technology's effects, but to hold both in a productive tension.

Miriam Hansen's work is relevant to such a project, as she has engaged explicitly with shock and its dual readings, as well as with what she terms "Benjamin's effort to theorize

[124] Hansen, "Benjamin, Cinema and Experience", pp. 210-11.
[125] Benjamin, "Artwork", p. 230.
[126] Benjamin, "Artwork", p. 235.

an alternative reception of technology".[127] In her article, "Benjamin and Cinema: Not a One Way Street" (which also functions as a response to Buck-Morss),[128] she returns to Benjamin's usage of the term 'innervation' in his essay "One Way Street," arguing that it has a double meaning.[129] While Hansen's is a complex argument, involving detailed readings which range across much of Benjamin's *oeuvre*, she argues convincingly that 'innervation' is crucial to Benjamin's conception of the subject's relation to technology – then as now. It stands not just for the loss of energies characterised by the decay of experience, but also in a more upbeat sense for the possibility of reinvigoration, for the reactivation of "the abilities of the body as a medium in the service of imagining new forms of subjectivity" (321).

On the provenance of the term innervation and Benjamin's usage of it, Hansen writes:

> Whether Benjamin borrowed the term from Freud or from the neurophysiological and psychological discourse of the period, innervation comes to function as an antidote – and counterconcept – to technologically multiplied shock and its anaesthetizing economy… To imagine such an enabling reception of technology, it is essential that Benjamin, unlike Freud, understood innervation as a *two-way* process, that is, not only a conversion of mental, affective energy into somatic, motoric form, but also the possibility of reconverting, and recovering, split-off psychic energy through motoric stimulation (as distinct from the talking cure advocated by Freud and Breuer). (317)

To briefly outline her reading of Benjamin's notion of innervation, Hansen describes the intent of her 1999 essay as being "…to reactivate a trajectory…between the alienation of the senses that preoccupied the later Benjamin and the possibility of undoing this alienation that he began to theorise as early as "One Way Street", particularly through the concept of innervation" (309). According to her, innervation is Benjamin's term for conceiving of an alternate relation to technology, for reversing technology's failed reception. That modern technology's reception was a failure was due in large part to the

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[127] Hansen, "Benjamin and Cinema", pp. 328-9.

[128] See p. 325 for the point at which Hansen's divergence from Buck-Morss becomes explicit. Hansen's 1987 essay is also important in this context, as she writes in detail there on the ambiguity of shock. See also n. 120, above. Interestingly, Buck-Morss writes that "In the Theses [on the Philosophy of History], Benjamin speaks of 'shock' rather than awakening, but they are different words for the same experience". See Buck-Morss, *Dialectics of Seeing*, p. 337.

[129] Benjamin also uses the term 'innervation' in early versions of the Artwork essay and two essays from 1929: (1929a) "Surrealism: The Last Snapshot of the European Intelligentsia", Edmund Jephcott, Kingsley Shorter, trans., *One Way Street and Other Writings*, pp. 225-239; and (1929b) "Program for a Proletarian Children's Theater" , Rodney Livingstone, trans., *Walter Benjamin: Selected Writings vol. 2, 1927-34*, Michael W. Jennings, Howard Eiland, and Gary Smith (eds) Cambridge, Mass., London: Belknap Press/Harvard University Press, pp. 201-6.

continuation of a situation in which it was predominantly used to dominate nature. Though Benjamin did not himself conceive of technology instrumentally, the relation of humans to nature has often, in modern times, been one in which technology is mobilised to achieve mastery over nature, rather than facilitating a relation of interplay ("…technology is not the mastery of nature but of the relation between nature and man".[130]) Benjamin's writing on the deleterious effects of the factory system on the senses points to the way that humans have also missed out on such a relation of interplay, of reciprocity, caught up in capitalist relations of instrumentality.

Hansen's argument about innervation has significance beyond Benjamin scholarship; it is of the utmost relevance to media and technology studies, the present one included, as she highlights how Benjamin's approach, indeed "the structure of his thinking" particularly with regard to the technical media, can be read in terms of the contradictions of media culture, as well as pointing up the instability and unpredictability of the technological encounter (310). The concept of innervation, and Hansen's recuperation of it, provides an important model of how it might be possible to move beyond anaesthetics, and the "vortex of decline" to which it seems vulnerable. I have been referring to this alternate model as a hyper/aesthetic one, and while I said in the Introduction that I would not ultimately be seeking to tie the notion down, I do want to test the usefulness of the concept of innervation in the chapters that follow – to consider what shape it might be taking now, to probe some of its limits, and to distinguish hyper/aesthetics from anaesthetics. But first, it will be useful, in what remains of this chapter, to detail some of the points which contribute to the anaesthetics 'vortex of decline'.

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The impetus for Buck-Morss's essay derives from the closing section of Benjamin's Artwork essay. As she writes, the final paragraph – on the aestheticisation of politics and the politicisation of art – "has haunted me for the twenty-odd years I have been reading the Artwork essay…" (124). She therefore embarks on a reading of anaesthetics in modernity, in an attempt to make sense of this part of Benjamin's essay, returning to it at the conclusion of her own essay. As Benjamin wrote, "Humanity that, according to Homer, was once an object of spectacle for the Olympian gods, now is one for itself. Its self-alienation has reached such a degree that it is capable of experiencing its own

[130] Benjamin, "One Way Street", p. 104.

destruction as an aesthetic enjoyment of the highest order…"[131] These sentences from the Epilogue of the Artwork essay, cited at the conclusion of Buck-Morss's essay, certainly resonate with the arguments she has made, and the vast evidence she marshals to support them. One referent in particular seems to be the fulfilment of this claim of Benjamin's. As Buck-Morss writes,

> In Leni Riefenstahl's 1935 film *Triumph of the Will* (of which Benjamin, writing the Artwork essay, was surely aware), the mobilized masses fill the grounds of the Nuremberg stadium and the cinema screen, so that the surface patterns provide a pleasing design of the whole, letting the viewer forget the purpose of the display, the militarization of society for the teleology of making war. The aesthetics allow an *an*aesthetization of reception, a viewing of the 'scene' with disinterested pleasure, even when that scene is the preparation through ritual of a whole society for unquestioning sacrifice and ultimately, destruction, murder, and death. (142)

Buck-Morss's essay, including her survey of anaesthetics, is undoubtedly helpful in understanding some aspects of the appeal of the particular surface patterns made by the bodies of the crowd and the troops in the stadium at Nuremberg. The (mimetic) dissolution of the individual in the almost swarming mass that is the crowd remains powerful for the contemporary viewer, the effect still potent in Riefenstahl's film, as one strains to work out what the shimmering blocks are that look like bushes in the middle of the field. Having traced the aesthetics of surface patterns and the manipulative potential of the modern phantasmagoria in the body of her essay, Buck-Morss's reference to the Nuremberg rallies at this point seems to prove her case beyond dispute. Why then do I find it problematic?

There are two main reasons for the limited applicability of Buck-Morss' account for thinking about the contemporary significance of the senses in media technological contexts. The first is that, in her reading of the rallies as a phantasmagoria, Buck-Morss presents only one side of the phantasmagoria's allure. For her, at least in this essay, phantasmagoria are always deceitful, concealing the truth of the situation and tricking the senses ("Sensory addiction to a compensatory reality becomes a means of social control" (134)). I have argued that it is important to attend to the complex responses as well as to retain a sense of uncertainty or ambivalence with respect to aesthetic encounters, including the encounter with the phantasmagoria, pointing out Benjamin's own openness regarding this: his ability to still be *taken by* the sensory appeal of the phantasmagoria of the neon advertisement, despite his awareness of advertising's potential to also take one in. In this context, it is worth noting that in a large scale phantasmagoria of a crowd,

[131] Benjamin cited in Buck-Morss, "Aesthetics and Anaesthetics", p. 124.

becoming a part of a spectacle is not always a sure sign of self-alienation; it might even be pleasurable to be part of a mass crowd effect – the crowd's synchronised esky movements at the 2000 Olympic closing ceremony come to mind here, showing that the stakes in being so caught up are not always as destructive as the Nuremberg example suggests. My point is not to argue that phantasmagoria never anaesthetise the subject, but that they can also result in new recognitions, new affects and sensations, which the anaesthetics account has not been able to allow to date.

I do not doubt that German fascists in the 1930s utilised mass spectacles to mobilise the *Volk*, and in her article, Buck-Morss provides a useful reading of some of the factors that might have been operative for some of the people, in following the Party line. However – and this is my second reservation – at the same time as it is the best example there is for Benjamin's cryptic conclusion to the Artwork essay, the example of the Nuremberg rallies is a complex one, and this complexity is important to retain. It is not just that the rallies constitute an extreme example, though they certainly are this. Rather, invoking them tends to conjure a picture of a media event where no one questioned the 'dominant' account (of Hitler and the Party elite) with which they were presented or reflected critically on it afterward. Apart from being a not very subtle conception of the audience, my concern is that too many other factors are passed over, with the result that the ascendancy of fascism in this period begins to appear inevitable, the result of powerful aesthetics alone. To arguments about the importance of never forgetting the atrocities committed, I would add that what is also critical is the retention of complex memories that recall the range of factors on which the rise of Nazism was predicated. Perhaps it is for this reason that inside what remains of the review stand at the rally grounds, a permanent exhibition – entitled "Fascination and Terror" – goes to some lengths to ensure that visitors see more than just a monument, that they get behind the famous signifier 'Nuremberg', to know something of the specifics: not just the extent of the plans that were made for the town, but the slave labour that was used in the building programme, as well as the locally produced, extremely anti-Semitic newspaper, *Der Stürmer*.[132]

It is important that the many factors on which the rise of fascism was contingent are remembered – the complex social, political and economic factors of the period – as well

[132] Eckart Dietzfelbinger (1996) *Fascination and Terror: The Nazi Party Rally Grounds in Nuremberg*, Janet Christel and Ulrike Seeberger, trans., Nuremberg Municipal Museums, pp. 12-25, 47.

as factors like the self-selection of those who came to view and participate in the rallies. These specific factors need to be recalled, I suggest, not in order to build a more complete picture of the event, but because there is a very real risk that in over- genericising, the rise of fascism appears inevitable. I find support for this view in Alice Yaeger Kaplan's argument, that "When we think of media as mechanically controlling a homogenous 'mass,' we are still giving Goebbels too much historic credit…too many peoples' desires and too many hard working imaginations stand in the way."[133] This is then, what unsettles me about the use of the rallies in Buck-Morss' anaesthetics thesis. It also subtends a view of phantasmagoria generally, and fascist aesthetics specifically, as so powerfully manipulative that people could not but accede. These arguments about mass manipulation also lead to a view of the audience as so *necessarily* overwhelmed that they were not able to react otherwise.

To put the example of Nuremberg slightly differently, perhaps people did abandon their criticality at Nuremberg in a kind of perceptual splitting as Buck-Morss suggests (137-8). Perhaps "It was the genius of fascist propaganda to give to the masses a double role, to be observer as well as the inert mass being formed and shaped (141-2)." And perhaps "the mass-as-audience [managed to remain] somehow undisturbed by the spectacle of its own manipulation…" (141-2). Perhaps bodily experience was separated off from cognition and this in turn from political agency, based on Husserl's tripartite splitting of human subjectivity which Buck-Morss cites (138). But while this may account for the specific historical event, it does not exhaust the possibilities, of other configurations of these elements. And while theorising the co-presence of affect and conscious awareness is challenging, I do not see how we can afford *not* to think these other configurations. Of course phantasmagoria can be put to political uses, but this is different to suggesting that phantasmagoria are always deceptive, which ignores audiences' participation in these political outcomes. I at least want to flag in my account the possibility of a mimeticism that does not get sucked into this vortex; that being taken or affected by aesthetic factors need not automatically entail the loss of awareness or criticality. This is one of the points which is raised by current debates about media and aesthetics and which needs to be recovered in thinking hyper/aesthetics. The closing of Margaret Cohen's essay "Walter Benjamin's Phantasmagoria" captures something of the unease that this juncture between

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[133] Alice Yaeger Kaplan (1996) *Reproductions of Banality: Fascism, Literature, and French Intellectual Life*, Minneapolis: University of Minnesota Press, p. 34.

aesthetics and politics produces: as she says, "I am not too easy, either, with Benjamin's critical phantasmagoria, suspicious of the mystifying ends to which its enchantment can be put. But perhaps this very danger indicates its vitality."[134]

This tendency to be pulled toward a 'vortex of [fascist] decline' is not confined to Buck-Morss's work; it is also evident in some portions of Hansen's writing, though it is manifest more in a binarising tendency in her work.[135] Hansen commits to the doubleness of response that I have been referring to, arguing that Benjamin's writing on Mickey Mouse shares "an affinity with Haraway's cyborg…in the assessment of the political stakes, the insistence on holding both infinite destructive power and new possibilities with a double, stereoscopic vision."[136] Haraway's cyborg is an attempt, as I have noted, to think other kinds of subjectivities and different ways of relating to technology; this seems to be similar to the way that Benjamin envisaged the potential of Mickey Mouse. However, Hansen's account of the debate over Mickey reveals something quite different, as I will briefly explain now.

At the beginning of her 1993 essay, "Of Mice and Ducks: Benjamin and Adorno on Disney", Hansen presents a proposition about the role of the technical media, in the double form which by now is becoming familiar. She writes:

> The key question for critical theory in the inter-war years was which role the technical media were playing in the historical demolition and restructuring of subjectivity: whether they were giving rise to new forms of imagination, expression, and collectivity, or whether they were merely perfecting techniques of total subjection and domination (28).

As she tells it, the case of Disney cartoons were a matter about which Benjamin and Adorno could not agree. The major sticking point seems to have been their respective views on "the politics of collective laughter" (53). To quickly sketch their positions, Benjamin's argument was that for the audience watching Disney films, laughter at the antics of the cartoon characters could be therapeutic, "function[ing] as a form of 'psychic innoculation'…effect[ing] a 'premature and therapeutic detonation' of mass psychoses, of sadistic fantasies and masochistic delusions in the audience, by allowing them to erupt

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[134] Margaret Cohen (1989) "Walter Benjamin's Phantasmagoria", *New German Critique*, no. 48, p. 107.

[135] Denis Hollier has written about Bataille's view of French antifascism during the war as such a binarizing gesture: "terrorist binarization, the symmetrical confrontation between fascism and antifascism." While I am not aligning war-time antifascism with contemporary responses, the reduction of the options to a binary is reminiscent of Bataille's critique. Denis Hollier (1996) "Desperanto", *New German Critique*, no. 67, p.24.

[136] Hansen, "Of Mice and Ducks", p. 50.

in the collective laughter."[137] Adorno wrote back, claiming that the linkage of laughter with violence covered over identification with the aggressor. Later, he switched his critique from Mickey to Donald Duck, writing that "Donald Duck in the cartoons, like the unfortunate in real life, gets his beating so that the viewers can get used to the same treatment."[138] On the question of whether laughter can be political or not, Adorno seems to have been adamant: "The laughter of a cinema audience…is full of the worst bourgeois sadism".[139] In terms of the above quote, Hansen suggests that Benjamin took the former position (maintaining that the technical media were "giving rise to new forms of imagination, expression, and collectivity") and Adorno the latter, arguing that "they were merely perfecting techniques of total subjection and domination". Hansen labels Benjamin's investment here in Mickey Mouse as a "utopian overvaluation", suggesting that it was characterised by an "intense ambivalence".[140] She also interprets his eventual removal of this section (entitled 'Mickey Maus' in the Artwork essay's second version) from later versions of the essay as evidence that he himself was aware of the "usability of the Disney method for fascism". (Interestingly, Hansen elsewhere refers to the later, fourth version as the essay's "dubiously canonic version."[141])

There are a number of aspects of Hansen's claims about which I am sceptical. I will deal specifically with her (and Adorno's) treatment of audience identification in the next chapter. For the moment, I suggest that her analysis succumbs to the very vortex of decline that she has identified in Buck-Morss's account: where Buck-Morss accords the Nuremberg spectacle a total power to which audiences cannot but succumb, Hansen backs Adorno's argument that this will also be the effect of Disney cartoons on audiences, who will succumb to the rule of violence. Hansen's judging of Benjamin's position on Mickey Mouse to be a "utopian overvaluation" of the power of innervation suggests that to baulk at this 'slippery slope' argument – which implies an argument about the threat of resurgent fascism – is to risk being labelled 'utopian' or 'naïve'. Still, I have to wonder why Hansen is prepared to dismiss the ambiguities that she elsewhere goes to such lengths to remind us of. She seems unwilling, for instance, to tolerate any

[137] Benjamin cited in Hansen, "Benjamin and Cinema", p. 340.
[138] Adorno cited in Hansen, "Of Mice and Ducks", p. 34.
[139] Theodor W. Adorno and Walter Benjamin (1999) *The Complete Correspondence, 1928-1940*, Henri Lonitz (ed.), Nicholas Walker, trans., Cambridge: Polity Press, p. 130.

[140] Miriam Hansen (1993) "Of Mice and Ducks: Benjamin and Adorno on Disney", *South Atlantic Quarterly*, vol. 92, no. 1, pp. 50-1.
[141] Hansen, "Benjamin and Cinema", pp. 313-4.

ambiguity on Benjamin's removal of the section 'Mickey Maus': for Hansen, this is evidence of the superiority of Adorno's argument. Hansen's phrasing of the question whether technical media in the years between the wars were "giving rise to new forms of imagination…*or* whether they were merely perfecting techniques of total subjection and domination" (my emphasis) seems significant here, leaving remarkably little room for answers which do not fit the either/or form. Given Benjamin's argument regarding the notion of a positive barbarism,[142] a more nuanced reading does seem justified, particularly one which can allow for more than just one possibility. Finally, apart from the concerns I have expressed about fascism being made to appear inevitable, it is also concerning to see fascism invoked by Hansen as threat and limit case, beyond which argument should not proceed; this treatment paralyses debate.

In providing the outlines of a hyper/aesthetic approach in this thesis, I am in particular seeking to complexify understandings of audience reception and meaning-making, to try to introduce some ambivalence back into the sensory encounter with technology. This will enable readings against the grain of technological determinism, moving beyond the concern with ends that is evident in the hyper subject, as well as to a lesser extent in Buck-Morss's and Hansen's work. My thesis on the senses and experimentation – that newer media present a chance for sensory experience to become more experimental, in the sense I derive from Williams – helps me to attend in the next two chapters to what is produced in encounters with media technologies. In the next chapter I think about the uses that are made of the computer in the computer gaming group, in which I consider gaming practices in terms of play, and the potential of play to innervate relations with technology. I utilise insights from this chapter to pursue a double reading of gaming, asking what other technological engagements it might make possible, and how this might affect the ways in which subjectivity is thought.

[142] Benjamin makes this argument in (1933c) "Experience and Poverty," *Selected Writings, vol. 2*, pp. 731-36.

3

Playing the Senses: "Better than playing (PC Games) with yourself"[143]

> *You don't play pinball with just your hands, you play it with the groin too.*
> -- Umberto Eco[144]

Computer games constitute some of the most readily apparent of virtual worlds, which players *enter into* in the course of play. To continue inquiring into the significance of the senses in contemporary media culture, this chapter comprises a study of computer gaming practices, developing a number of themes embarked on in the last chapter in a study of embodied media use. These include the figure of the cyborg, the varieties of engagement with technology, experimentation, the conception of the player relative to the embodied experience of virtual environments, as well as the particular sensory-affective involvement of computer games.

While in the last chapter I was particularly concerned with the *promises* of extraordinary experiences found in advertisements, and with the ways that these modelled engagements with particular media products, in this chapter I am concerned with the *actual engagements* of computer game players with technology in the context of the gaming group. This notion of engagement is one that I will detail later in the chapter; it is an approach, however, more concerned with *practice* and actual *use* than with assumptions about what computer games – and the act of playing such games – comprise. I use these terms 'practice' and 'use' here in quite specific ways. While the next study attends to different art practices, in this chapter, I find some of Michel de Certeau's concepts useful, and his approach to practice particularly productive, for the kind of questions I am asking. De Certeau makes a distinction in *The Practice of Everyday Life*, between production and "the uses that are made" of products, by "users who are not producers".[145] The idea is akin to what we might think of as *consumption*, but lacks the pejorative connotations which that term often has in consumer capitalism. Following on from my criticisms about the strong correlations between some discourses of experimentation and consumerism, this aspect of de Certeau's work is very useful for

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[143] Comment made by Martin, a lanner, in email correspondence with the author anticipating the multi-player day, 11 February 1999.
[144] Umberto Eco (1989) *Foucault's Pendulum*, William Weaver, trans., San Diego: Harcourt Brace Jovanovitch, p. 222.
[145] de Certeau, *The Practice of Everyday Life*.

understanding consumption, and thus experimentation, in a more nuanced way. The verb 'faire' in de Certeau's French title *Arts de Faire*, communicates more effectively this sense of an active making (in French, *faire* means to make or to do) than does the English term "use", which tends to imply functionality, instrumentality.

Conceiving of consumption as a form of production is helpful, if initially paradoxical, as it facilitates inquiry into practices often passed over because not immediately obvious. As de Certeau writes,

> The 'making' in question is a production, a *poiesis* – but a hidden one, because it is scattered over areas defined and occupied by systems of 'production'…and because the steadily increasing expansion of these systems no longer leaves 'consumers' any *place* in which they can indicate what they *make* or *do* with the products of these systems. To a rationalized, expansionist and at the same time centralized, clamorous, and spectacular production corresponds *another* production, called 'consumption.' The latter is devious, it is dispersed, but it insinuates itself everywhere, silently and almost invisibly, because it does not manifest itself through its own products, but rather through its *ways of using* the products imposed by a dominant economic order. (xii-xiii) (italics in original)

Thinking of computer gameplay as a use in de Certeau's sense, with connotations of making and *poiesis*, also allows for a reconsideration of the motivations that are often imputed to computer gamers.

As a form of play, games operate according to a logic that is not (wholly) instrumental, and there seems to be a similar drift away from functional understandings of the senses. While I have acknowledged the pervasiveness of calculative thinking in conceiving of technology at the moment, I think it important not to overestimate its influence, instead retaining an ability to distinguish between the various 'uses' to which particular technologies are put. Thinking such uses and relations can be difficult; as Haraway suggests, we need to learn how to think and to describe them. In contrast, then, to analyses which portray computer technologies as *only* facilitating more effective surveillance, or the induction of subjects into certain regimes of power, I want to suggest that the situation is less clear cut, and that uses of these technologies 'on the ground' can produce quite different effects.

Some of the establishing arguments Jonathon Crary makes in his recent work, *Suspensions of Perception: Attention, Spectacle, and Modern Culture*, exemplify this overemphasis on calculative thinking and the limits of thinking of technology as just a mechanism of control. Crary argues that "It is becoming clearer that a concurrence of

panoptic techniques and attentive imperatives now function reciprocally in many social locations", with the video display terminal receiving a special mention for its ability to function both as an object of attention, as well as an instrument for "monitoring, recording and cross-referencing attentive behavior" for enhancing productivity.

> Television and the personal computer, even as they are now converging toward a single machinic functioning, are antinomadic procedures that fix and *striate*. They are methods for the management of attention that use partitioning and sedentarization, rendering bodies controllable and useful simultaneously, even as they simulate the illusion of choices and "interactivity."[146]

While Crary also recognises the need for "historically analyzing specific and local interfaces of humans and machines", this part of his argument is weighted toward how technologies feed into "effects of control" (76). In contrast, the gaming group's use of computer technology is not about "the reification of private experience,"[147] the construction of conditions that "individuate, immobilise, and separate subjects", nor is it about "techniques of isolation [or] cellularization". Though I would not deny that these are important threads in theorising contemporary technological culture (which I have also referred to), focussing exclusively on those aspects which striate and stratify at the expense of others is to present only one side of what is a complex situation. For my part, I want to argue for the importance of recognising that the aspects of technological societies with which Crary is concerned are accompanied by different – and in this case quite creative – ones, like that of the multi-player gaming group which puts the products of commodified, techno-scientific production to its own, unique uses. These factors are some of the reasons why I find the gaming group, its practices and products worthy of attention and helpful in the clearing of a theoretical space in which to consider a greater variety of relations with technology.

Thinking about the significance of this 'making' with respect to the senses differs from the preponderance of means-end logic that was applied to the senses in the previous chapter. Although games often contain certain aims and goals for players to achieve, there is not the same functional view of the senses as in many advertising examples. This is not to say that the senses are not important – on the contrary, computer gaming is an intensely aesthetic and multi-sensory phenomenon. But in contrast to earlier examples,

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[146] Jonathon Crary (1999) *Suspensions of Perception: Attention, Spectacle, and Modern Culture*, Cambridge, Mass, London: October/MIT Press, p. 75-77.
[147] Rodowick cited in Crary, pp. 76-77, n.189.

presumptions about particular affects as the end results of stimuli did not arise in my research (though these do appear in promotions for computer gaming).

It is difficult to know exactly how to describe the sensory aspects of gaming. Computer gaming might seem a curious case study for analysing the senses; indeed, many people have difficulty accepting that there could be anything sensory about computers, let alone computer games. Nevertheless, computer games involve the senses not only in terms of perceptual function, but, also in a broader way. As sentient, embodied subjects, players' experience of playing a computer game is aesthetic; gaming involves what Marks terms "the complex perception of the body as a whole" (145). I do not mean to suggest that the senses function as some kind of organic whole, but rather, to problematise any suggestion that gaming is simply an audio-visual activity.[148] Gamers enjoy an almost constant sensory-aesthetic engagement with the computer. Perhaps we might say, paraphrasing Marks again, that gamers 'invest' all their senses in the act of gameplay; or, that they play not just with their hands, but with their entire body (as Eco suggests), to account for the distinctive kinaesthetic and proprioceptive sensations. Then there are the particular embodiments that are produced in gameplay.[149]

I treat the player's engagement with the computer and the computer game as broadly aesthetic, arguing that gaming is significant because it allows a glimpse of a hyperaesthesia that is not just a function of the amount of stimuli delivered. Some of the themes identified in the last chapter, like dissolution, are also recognisable in aspects of the players' relation with technology in this chapter. Players neither look to the technology just as a tool, or a device for dispensing stimulation, but rather surrender, entering into a relation with it where their senses are stirred. While the notion of surrender tends to suggest a total loss or abdication of control, the experience of dissolution in gaming is closer, I argue, to Liu's insight of access to something that is perceived to be inhuman or unnatural. This chapter, then, approaches the idea that media technologies like computer games can be hyper/aesthetic in that they facilitate subjective

[148] As Vivian Sobchack writes with regard to the cinema, "such received knowledge is reductive and does not accurately describe our actual sensory experience at the movies." Vivian Sobchack (2000) "What My Fingers Knew: The Cinesthetic Subject, or Vision in the Flesh", *Senses of Cinema*, www.sensesofcinema.com/contents/00/5/fingers.html, accessed 23/1/02.
[149] Brian Massumi discusses the production of different embodiments in this way, regarding Stelarc's work, in his (1996) article "The Evolutionary Alchemy of Reason", paper presented at 5CYBERCONF: Fifth International Conference on Cyberspace, June 6-9, Madrid, www.telefonica.es/fat/emassumi.html, accessed 25/3/02.

relations which are out of the ordinary, and so interesting. Computer games, themselves the object of some anxiety, are almost never thought of in terms of aesthetics, and so, in this chapter, I show how hyper/aesthetics enables a reapproach of critical questions, moving *beyond* some of the limitations of present approaches, to think about how the relations produced in lanning might be innervating, of various social relations.

Gaming at a lan differs in important ways from many other sectors of the experience industry which it initially seems to resemble – such as theme parks, IMAX cinemas, ride films, and the aptly named national chain of gaming arcades, 'Intencity', which are a means of adding value to Westfield Shoppingtowns. Though each of these is able to affect the body of the participant directly, *enacting* claims for extraordinary experiences, each is limited to dispensing pay per view experiences. Computer gaming at a lan differs from these entertainments not just because it is free, I will suggest, but because it involves a more active engagement of the senses. And while a number of commercial lan centres have opened over the last few years, catering to groups who might want to engaged in networked multiplay, the computer gaming group which I visited still seems to constitute quite a unique example of lanning, I think.

Thinking instrumentally, gaming is pointless. It can, however, be productive, a distinction which returns us to the aesthetic significance of games. In keeping with my thesis on the significance of experimentation, I will argue that gaming is about processes of trying and testing, of exploring different possibilities and seeing what happens, and that this is a form of engagement with technology in which the senses are intimately involved. In contrast to the critique of a hyper-subject simply accumulating intense experiences, what we start to get a sense of from studying gaming practices at a lan is a subject in relation not just with themselves, but also meaningfully engaged with (a range of) others and with things, including technology.

While these are some of the important differences from the advertising cases already examined, the present case also develops a number of themes introduced there. I pursue the idea of the cyborg as a particular relation to technology, however, the cyborg here exists in a field of material *and* immaterial relations and circumstances; players' machine interactions, whilst intensely engaging, are temporally defined. Gamers as cyborgs then, do not just exist in networks. In terms of how these cyborg connections impact on how subjectivity is conceived, I argue that gaming can innervate a range of relations –

potentially with self, other and technology. The cyborg who is able to create partial connections with others is a very suggestive figure here, and I detail a number of relations that players as cyborgs develop with unfamiliar others, particularly their avatars, along kinaesthetic and other lines. I also suggest, after Morse, that gaming, apart from crossing through a variety of different reality and materiality statuses, might also be an activity facilitating the negotiation of different aspects of the self.

I will argue that play and immersion in digital gaming worlds are some of the pleasures of the interface. Experimentation (notably through improvisation and limit-seeking rather than simply appropriating and assembling) is particularly significant in gaming practice, suggesting the way that play can accommodate a range of motivations, many of which depart fundamentally from the instrumental ones we are accustomed to associating with computers as productivity tools. I will argue that the experimentation of computer gameplay not only facilitates different forms of embodied subjectivity, but also – potentially – a greater array of relations to technology. After Haraway and Benjamin, I will suggest that computer gameplay can facilitate relations that are based more around notions of affinity with others rather than just utility, around interplay rather than mastery, approaches which depart from both the instrumental and humanist readings of technology. While I conceive of this in terms of innervation – of the subject's (aesthetic) relation to technology, through the animation of bodily capacities, including kinaesthetic ones – Hansen's reading of Benjamin's work, though helpful and interesting for the most part, is of limited use here. She categorically excludes any possibility that computer games might in any way "allow for new forms of innervation", on the grounds that they "naturaliz[e] violence, destruction and oppression". While this is quite a widespread view, I argue that it is inadequate and ignores a number of important issues such as the fantastic nature of many games, the qualities of player involvement in games, as well as the significance of violence within games. It also neglects important aspects like the social contexts in which games are played and discussed, and the fact that players actively negotiate meaning in and from games texts.

The context in which I will consider the uses of gaming is the multi-player gaming group. Whilst I will discuss the group itself shortly, the resourcefulness and imagination it demonstrates is worth noting here. Aspects of its organisation and functioning, such as its locating of material support in the form of sponsorship, the sourcing and adaptation of hardware and software, as well as the generally pragmatic approach to the running of

group days evidences considerable creativity. As de Certeau notes, "[U]sers make…innumerable and infinitesimal transformations of and within the dominant cultural economy in order to adapt it to their own interests and their own rules" (xiii-xiv). Again, this resourcefulness should be understood as a making, a *poiesis*, in which many elements come together. The gaming day is the unpredictable, singular outcome of the interaction of these multiple factors.

As an activity where players get together to play – actually bringing their computer along with them for the day – lanning involves both online and face to face interactions between players. It is therefore distinct from the vast majority of cyber-interactions, which occur only online, and which have aroused concerns for this reason. Barbara Becker, for instance, has characterised face to face sociality as involving a kind of friction, suggesting that the desire for online interactions is a desire to be free of the troubles of the other. And Margaret Morse notes that, "One can now have discourse with others [in cyberspace], but only those with the same access to the inside of the same virtual world and then only with their virtual avatars"; for Morse, one of the things which is concerning is the fact that "no one is *actually* as opposed to *virtually* there".[150] In contrast to the dream of no-mess, no-fuss, uninvolved interactions, lanning requires that players make some effort at face to face sociality, for which they also reap the rewards.[151] One of my aims in this chapter is, then, to present a reading of computer gaming groups who get together to 'lan', for whilst online groups like MUDs and MOOs have attracted a considerable amount of critical attention, multi-player groups have not. This is a significant oversight, as they challenge a number of assumptions about computer gaming as well as cyberculture in general.

Before I start to detail the *group* phenomenon, the current state of computer games scholarship requires some comment. While it would not be accurate to say that there has not been much written on computer games – studies have been conducted since at least the early 1980s, when games started to appear in arcades – much of it has been sorely wanting, and it seems that computer gaming is just now beginning to receive critical attention, as both a media form and practice in its own right. However, it is still common to find computer games negatively compared to other media forms. The prominence of

[150] Morse, *Virtualities*, pp. 29, 30.
[151] Barbara Becker writes on the lack of 'friction' in relationships conducted online in her (2000) "Cyborgs, Agents, and Transhumanists: Crossing Traditional Borders of Body and Identity in the Context of New Technology", *Leonardo*, vol. 33, no. 5, pp. 364-5.

film theory and film theoretical approaches contributes to this situation. Indeed, one of the questions that needs to be asked is whether it is appropriate to use the tools and frameworks of film theory to analyse computer games, or for that matter new media generally? I will argue that it is usually not appropriate, and that attempting to read games as merely a variant (or worse, derivative) of a screen culture where film is presumed to be the norm is likely to perpetuate misunderstandings about computer gaming.[152]

Apart from being unfavourably compared with other media, a number of key assumptions have retarded the development of a computer games scholarship. One of the most significant of these is the assumption that playing computer games is largely a pursuit of 'young people'. Gaming is often assumed to be part of a wider rebellion by young people against dominant, adult culture, and the power it seeks to exert *over* them. The assumed anti-social nature of gaming is frequently played up in representations: gaming in public arcades has long been associated with 'youths' congregating, arousing concerns about gang activities, crime and drunkenness. While such finding were reported in the early 1980s and 1990s in Australia,[153] the stakes appear to be higher now, particularly in the United States: Henry Jenkins's 1999 testimony before a Senate Committee on violence in popular culture and the moral panics surrounding it highlights desires on the part of authorities to exert a normalising influence over allegedly maladjusted teens, based on their perceptions of young people (s' behaviour) as threatening.[154] Alternatively, where

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[152] Mark Wolf is one who argues that "video games have a lot more in common with film and television than merely characters and plots…Theoretically, many of the same issues are present in video games and film: spectator positioning and suture, point of view, sound and image relations, semiotics, and other theories dealing with images or representation." The similarities that seem so obvious to Wolf are far more problematic, for me. Mark J. P. Wolf (1997) "Inventing Space: Towards a Taxonomy of On- and Off-Screen Space in Video Games", *Film Quarterly*, vol. 51, no. 1, Fall, p. 11. Jay David Bolter and Richard Grusin similarly discuss games in terms of (Hollywood) film, pointing specifically to RPGs as the 'remediation' of Hollywood films. Though they briefly mention the freedom of movement in games as a departure from filmic media, their treatment largely accords with Wolf's claim that cinema, and concepts of cinematic visuality, are well positioned to account for the appeal of playing computer games. They claim, for instance, that "These [computer game] plots all turn on the notion of empathic occupation of *another point of view*" (my emphasis). And a little later, they characterise the goal of VR as "the ability of the individual to empathize through imagining." See their *Remediation*, pp. 98, 245, 251.

[153] See Harry van Moorst (1981) *Amusement centres: research papers on 'electronic leisure' and society's reaction to amusement machines*, Footscray, Vic.: Dept. of Humanities, Footscray Institute of Technology; and Howard Sercombe (1991) *Amusement centres and social risk: a survey into the social risks that amusement centres pose for young people who use them*, Perth, W.A.: Edith Cowan University.

[154] See Henry Jenkins (1999a) "Testimony Before the U.S. Senate Commerce Committee", http://www.senate.gov/~commerce/hearings/0504jen.pdf, accessed 2/8/01. See his report on

youth are not seen as threat, the stereotype tends to be of spotty teenagers hibernating in their bedrooms playing computer games, though even this is not seen as entirely harmless, arousing concerns about their lack of 'normal' social experiences.

Two recent publications largely confirm the continuing focus on 'youth': Cary Bazalgette and David Buckingham's (1995) collection, which includes computer games within its purview, is entitled *In Front of the Children: Screen Entertainment and Young Audiences*, whilst the (1998) collection *From Barbie to Mortal Kombat: Gender and Computer Games* – interestingly, co-edited by Jenkins – deviates briefly from gaming's educational potential to consider the significance (mostly for youth players) of continuing gender stereotypes.[155] An interview with Lee McEnany Caraher (from Sega) is a notable exception in the latter collection, it seems largely due to Caraher's refusal to agree to the interviewers' framing of the issues solely in terms of gender representations. Instead she judges and discusses games according to their 'playability', citing gameplay and quality characterisations as the important considerations.[156] Whilst nobody would deny that youth involvement is significant, not all gamers are 'young', a point which many writers seem to miss, and one which results in a failure to address or account for adult gamers and their perspectives. The absence is a significant one in the literature, as the concerns and affects of more mature players are likely to differ markedly from younger gamers. A related point goes to concerns which some computer gaming content arouses, particularly – but not exclusively – in terms of the assumed harmful effects of such content on 'young and impressionable minds'. One of the ways in which I am seeking to contribute to the debates around gaming in this study is through research with *adult* gamers. This will enable me to re-examine assumptions which continue to hinder the development of gaming criticism, including assumptions about players' motives for playing games (particularly their presumed desire to control virtual spaces), players' social aptitude, and the supposed effects of engaging in violent play behaviour.

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testifying (1999b) "Prof. Jenkins Goes to Washington", http://commons.somewhere.com/rre/1999/RRE.Professor.Jenkins.Go.html, accessed 31/10/00.

[155] Cary Bazalgette and David Buckingham (eds) (1995) *In Front of the Children: Screen Entertainment and Young Audiences*, London: British Film Institute; Justine Cassell and Henry Jenkins (ed.) (1998) *From Barbie to Mortal Kombat: Gender and Computer Games*, Cambridge, Mass.: MIT Press.

[156] Jennifer Glos and Shari Goldin (1998) "An Interview with Lee McEnany Caraher (Sega)", *From Barbie to Mortal Kombat: Gender and Computer Games*, pp. 200-202.

In many respects, the critical treatment received by computer gaming has been similar to that which soap opera received. In his book *Speaking of Soap Operas*, Robert Allen notes the prevalence of 'hypodermic' conceptions of 'media effects', namely the belief that watching soaps would have direct behavioural effects on viewers, whose psychological and social needs the genre was thought to fulfil. Enjoyment of soaps had to be explained as some kind of lack: "viewed by many as isolated from meaningful social intercourse, unequipped to deal with the 'real world,' and forever vulnerable to psychic manipulation," not to mention the appearance of the figure of the soap opera 'addict' in a 1947 study.[157] Also evident in Allen's survey of approaches to soaps is the 'safety valve' view, where not only is psychopathology attributed to viewers, but this pathology is thought to have important social functions, a view that we see (often unqualified) in suggestions that gaming functions to help players (particularly young men) 'let off steam'. Assumptions about the audiences of soaps are also telling, especially the 'need' to protect viewers, who, it was assumed, would be pushovers for advertisers, unable to resist their appeals. Both sets of assumptions make regular appearances in commentary on computer games. The latter set is familiar from the previous chapter where I drew attention to the implication in Buck-Morss's argument, that getting caught up in affect is assumed to involve the abrogation of a spectator/player's criticality. In soaps as in other genres, computer games included, the hypodermic account assumes that the content of these media commandeers the entire subject. It is time to re-locate the debate away from some of the perspectives that have been dominant, towards an approach which asks what computer gaming in general, and what computer gaming groups in this analysis, *produce*. Specifically, what are the products of gaming for the senses, and how does this help us to rethink models of subjectivity?

While some of these debates constitute a problematic legacy for the gaming field, things *are* looking up for computer games criticism. A number of moves are afoot to shift debates onto more constructive ground, amongst which the move to consider gameplay as a central element in the study of gaming is decisive. The increasing importance of gameplay over formal aspects also reflects the importance of the experiential and the somatic (a move that is also beginning to become evident in the study of other media). Together with the appearance of a number of theorists, many of whom play games

[157] Robert C. Allen (1985) *Speaking of Soap Operas*, Chapel Hill, N.C.: North Carolina University Press, pp. 21-7.

themselves and find the literature wanting, these factors are combining to create an array of more positive approaches to what computer gaming *is*, rather than what others think it *should* or *should not* be. These changes promise not only that criticism will be less moralistic, but also that it will be more *engaged*. As Jason Wilson writes,

> …if we simply attend to what happens when we and others play games, we allow the possibility of a new aesthetics of gaming to emerge that moves beyond such desires for control. When we realise that what is almost never talked about in current critical work is the body of the player or the nature of machine-mediated play, a field begins to open that might allow us to talk about the uses and pleasures of gaming, and to see its various forms in a wider network of interactions.[158]

Wilson's article appeared in the online journal *M/C: A Journal of Media and Culture*. For the same issue, Jesper Juul contributed a game called "Game Liberation", and his gesture conveys with economy the different attempts that have been made to colonise games and gaming, by other strands of theory. Introducing his game, Juul writes,

> When games are studied, they are often cast in the image of one or more well-known and well-described cultural phenomena. ("The narrative structure of games", "Games as movies" etc...) Sometimes they are dismissed as products of pure commercial interests. Or games are seen as matters of psychology or even pathology: Why do *they* play games.
>
> As I see it, we need to acknowledge games as something unique. They may in some situations and in certain ways relate to well-described pastimes and forms of expression, but it is time to take them seriously on their own.
>
> This game is all about that. You are a games theorist. Your object is to defend games (and yourself) from the imperialism of a thousand theories. Navigate the four levels of narratology, psychology, film theory, and pathology.[159]

These calls for giving serious consideration to thinking gaming *positively* – asking what games are and what games do – are close to my concerns in this chapter. That a number of international conferences devoted to the study of games and gaming have been held recently, and a new e-journal, *Game Studies*, has appeared suggests that there is some cause for optimism that such scholarship is beginning to get underway.

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The multi-player gaming group constitutes quite a specific context for playing computer games. Multi-play can take a number of different forms: games can be played on the internet, on dedicated dial-up servers such as Telstra's 'Wireplay', or by the creation of a

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[158] Jason Wilson (2000) "Odyssey Renewed: Towards a New Aesthetics of Video-Gaming", *M/C: A Journal of Media and Culture*, vol. 3, no. 5, http://www.media-culture.org.au/archive.html#game, accessed 31/10/01.

[159] Jesper Juul (2000b) "Game Liberation", http://www.media-culture.org.au/archive.html#game, accessed 31/10/01. Similarly, Espen Aarseth notes the colonising attempts that have been made from the fields of literature and films in his editorial "Computer Game Studies, Year One", for the first issue of *Game Studies*. Available online at http://cmc.uib.no/gamestudies/0101/editorial.html, accessed 2/8/01.

Local Area Network or LAN.[160] In mid 1999, I attended a multi-player gaming day, at which I interviewed a number of players. This qualitative research, while more suggestive and provocative rather than conclusive in its goals, has turned up a number of important insights. The day was run by a small group of gamers for fellow enthusiasts, and involved the construction of a network for the day. The core organising group grew out of friends networking their PCs in (where else but?) each other's garages, to play computer games in multi-player mode. From a small group, connections have multiplied to the point where large venues are now hired in which to stage the events. The group's occupation of space is always only temporary, lasting for a day, albeit a long one, making these lanners – quite literally – nomads. The events are typically held in hired public spaces such as clubs or scout halls, whose inferred usage suggests that lanning is one of the more unusual uses of these venues. The event I attended was held in the function room of a club; for that day the network transformed a room obviously intended for the hosting of wedding receptions, twenty or more years previously, into something which, by virtue of the one hundred and twenty odd computers assembled there, resembled a movie-set NASA control-room.[161] For their part, players pack up their computers and bring them along to the venue. The question does of course suggest itself: why? Why do people choose to dismantle and reassemble their computer for a day in a locale with little else going for it?

Part of the reason is speed: simply put, lanning is fast. When Paul Virilio writes of the importance of speed to contemporary technological mediations – where distance is transmuted into time – it seems that he could be talking about computer gaming. Speed is what makes it all worthwhile, including the effort involved in physically packing up computers and cables and transporting them for the day. The instantaneous data transmission which lans enable is the reason for multi-player gaming groups' existence. Gaming over the internet is just not fast enough: as one player said "If you try and play this on internet servers, its like you move and then it stops and you wait while the connection [catches up]. Then you're already dead by the time it catches up – so there's

[160] My writing the term hereafter in lower case is intended in part to indicate the term's passage from an acronym to a term in its own right. Original expression has, however, been retained in all citations, including email expression.

[161] According to players, criteria for a good lan venue include there being not only sufficient room for players and their computers, but also its having a robust electricity supply to meet the significant demands made on electric current. Other factors such as lighting (the ability to dim it to avoid screen reflections is valued), and the presence of food services and a bar are considered desirable by some.

no point playing…" Lans provide far lower 'pings' than can generally be attained over dial-up networks (a measure of the interference or noise which affects the speed at which games will run), and so whilst speed is also subject to other variables – including processor speed and other components like network cards – a lan generally ensures better gameplay. Lanning also temporarily relieves the modem of the prominence it has acquired in recent years, eclipsing its dual roles as conduit for information transfer, as well as its function as meter, where time *is* money. Sue Morris estimates that given "the massive amounts of data being sent between client and server (at least 10 megabytes per hour) a typical unlimited time account with a 40MB/month download restriction would be used up in 4 hours of play."[162] A lan is therefore 'free' time, in more than one sense of the word.

Yet contra to Virilio's predictions in "The Third Interval", where he suggests that modes of instantaneous transmission result in our bodies becoming well equipped yet in-valid, consigned to inertia as a result of being plugged in, the interaction that the multi-player gaming group auspices through computer networking has quite different effects.[163] Far from the body becoming invalid, games heighten players' aesthetic responses; rather than atrophy, gaming facilitates different aesthetic experiences. Furthermore, the desire for speed results in the *occupation* of public space, providing a reinvigorated *social* context for gaming. The physical co-presence of players in 'real' space is one of the most obvious ways that lanning differs from other kinds of virtual interactions, where fellow users are often located at a considerable geographic remove. Players at a lan interact both online and face-to-face. Far from being ensconced in the home along the lines of Virilio's *domotics* thesis, lanning is about getting *out* of the house and the computer room (in the case of the gaming group, with one's computer in tow). In this way it resembles older forms of gameplay more than it does other online groups or 'communities', in cultures where there is life on the streets, where public space is not just traversed but lingered in, and where games have long been played publicly, animating parks and piazzas, the sites of meeting and exchange broadly conceived. In such cultures, games never had to come *out* of the home. And as is the case in such games cultures, a substantial portion of the interaction in multi-play centres around the gameplay. Whilst

[162] Sue Morris (1999) "Online Gaming Culture: An Examination of Emerging Forms of Production and Participation in Multiplayer First-Person-Shooter Gaming", n. 16, available at the Game Culture website, http://www.game-culture.com/articles/onlinegaming.html, accessed 3/8/01.

few would deny that playing chess in a park is a form of social interaction, conceivably extending beyond the players to encompass the onlookers as well, it is interesting that accusations continue to be levelled at the presumed anti-social nature of computer gaming.

Even in the course of theorising this material on lans – which are atypical among cyber-interactions in which "no one is *actually* as opposed to *virtually* there"[164] – I have been asked whether the main reason that players participate in a lan isn't because their social lives and social skills are lacking? In line with 'nerdy' stereotypes, the thesis tends to be that people who play computer games are weird, lacking in social confidence and so turn to computer interactions because of an inability to negotiate 'normal' social relationships. This particular stereotype of the anti-social nature of gaming seems to have become entrenched with role-playing games (RPGs) like "Dungeons and Dragons" acquiring cult status in the 1980s. Significantly, in this view, online interactions are turned to as an alternative to 'real' ones.[165] While common, this response to claims that congregating around or by way of computers can be a social activity does not go very far. Nor is the tendency to dismiss gaming as trivial – just because it does not fit preconceived ideas about what is and is not 'social' – very helpful. Apart from pointing out the normalising effects of such a discourse, I am interested in engaging further than this. In line with my commitment to hyper/aesthetics, I want to probe what is going on both for game players as well as more broadly in terms of sensory engagements with media. It is somewhat gratifying to be able to report that, two and a half years after conducting my initial research, this particular lanning group is still running monthly gaming days. Apart from the group's longevity, what is significant is that in the couple of years that have elapsed cable modems have become widely available, and yet many players continue to opt for

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[163] Paul Virilio (1993) "The Third Interval: A Critical Transition", *Rethinking Technologies*, pp. 3-12.
[164] Morse, *Virtualities*, p. 30.
[165] In her work on online Multi-User Domains (MUDs), for instance, Heather Bromberg claims that MUDs serve four social functions for users. Apart from identity play, mastery over the virtual environment and what she calls the erotic appeal of playing in computer mediated realms, Bromberg writes that "Isolated individuals can find solace in interactive computer-mediated communication (which) can act as a virtual response to loneliness and a lack of connectivity and meaning in the exterior world" (147). Though Bromberg acknowledges that there are other views on this, she seems to espouse this one. See Heather Bromberg (1996) "Are MUDs Communities? Identity, Belonging and Consciousness in Virtual Worlds", *Cultures of Internet: Virtual Spaces, Real Histories, Living Bodies*, Rob Shields (eds) London: Sage, pp. 143-152.

the social interaction and 'friction' of a lan, rather than playing over a fast connection, solo.

Lanning has some elements in common with both more traditional, shared forms of gameplay as well as other forms of online interaction. Like older forms of involvement in games, and in contrast to many commercial interactive entertainments,[166] lanning is social in that it depends on the presence of other players. Though it is not necessary to talk with them all and shake their hands (which would quickly become meaningless at a large lan), the presence of these other players constitutes the experience in important ways. Players appreciate that they are competing against each other. As one player remarked whilst playing *Quake*,

> That's a good thing about this game…you know that you're playing another human, not just a computer in a computer game, [which will] just do the same thing over and over again. (John)

Most acknowledge that the sociality of the event is one of the best aspects of a lan. To "have a chat and a beer" and also to,

> …wander around and check out what is happening on other people's screens…is always a great insight into the many and varied games and graphics that exist in the gaming community. [It is] also a great opportunity to discuss different tactics and perhaps to acquire that certain patch or pic that you may need to complete your own system/archive :) (Chris)

The social aspect of multi-play lanning also has implications for the ways in which the group makes meaning out of particular gaming texts, something which is rarely allowed for by critics of games content and whose importance I will discuss later. For the moment, it will suffice to note that lanning's social nature is so strongly espoused amongst lanners that one player, Martin, announced in email correspondence to me that gaming exclusively online was anti-social, using the negative label 'lamer' to refer to those "who just play on the net". In response to my asking whether identity play of the type associated with online chat was ever practiced by lanners, he explained:

> …maybe lamers who just play on the net and never LAN [do], but LAN'ers see each other face to face quite often and get to know each other…[167] (Martin)

When I asked whether 'lamers' was just a typo (gamers? lanners?), he ventured:

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[166] A number of writers have discussed the multi-player 'pod' in game arcades (notably 'Battle-Tech') and the difference which the participation and competition of other players makes to gameplay. See for instance Michael Krantz (1994) "Dollar a Minute", *Wired* 2.05, May, http://www.wired.com/wired/archive/2.05/realies_pr.html, accessed 20/8/01.
[167] Martin, in email correspondence with author, 11 March 1999.

> a lamer, is a lame person... and from a LAN'ers point of view, if you just lock yourself in a room and play games on the net and not get out and LAN then that's lame :)[168] (Martin)

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Talking to gamers about what they rate as important factors in the experience of gaming makes clear the extent to which gaming at a lan is an aesthetic as well as a social experience. Gamers clearly value aesthetics. In attempting to evaluate the significance of gaming aesthetics (in the broadest sense), it is useful to think about the approach taken by Alain Corbin, who points out the difficulties of understanding the effects of stimuli on individuals in his study *Village Bells: Sound and Meaning in the 19-th Century French Countryside*. Though his object of study is the aural significance of bells in nineteenth century France, one apparently worlds away from that being considered here, his comments address the complex array of factors which contribute to individuals' perceptions about the significance of aesthetics. Corbin writes about the difficulty of understanding the emotional power of bells on villagers in France at the end of the *Ancien Regime*, due to our inability to know how they were affected by the sounds of the bells. He puts part of this difficulty down to the lack of objective measurements of the frequency, form, and intensity of auditory messages which prevents us from reconstituting their impact upon the individuals who heard them. However, the problem of understanding their "emotional power" would not be solved by measurement either, I suspect: as he continues, "The reception of such messages is determined at once by the texture of the sensory environment, the modes of attention bought to bear on the environment, and the procedures of decipherment."[169]

While the differences between computer games and bells are important, the factors that Corbin identifies, and the interplays between them, help in inquiring into the aesthetic and hyper/aesthetic significance of gaming at a lan. I will argue that gaming both requires a bodily investment on the part of players, and rewards players in a similarly visceral way. To attend to the sensory or aesthetic texture of the gaming environment initially, the aesthetic qualities of games and the surrounds in which they are played, as well as the form of player involvement is extremely important. Typically the aesthetic aspects of

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[168] Martin, in email correspondence with author, 12 March 1999.
[169] Alain Corbin (1998) *Village Bells: Sound and Meaning in the 19-th Century French Countryside*, Martin Thom, trans., New York: Columbia University Press, p. 4.

gaming have not been addressed satisfactorily. Though the hype about the senses discussed in the last chapter is missing in the gaming group, gamers do value aesthetic considerations, particularly as these affect 'the gaming experience'. This is no doubt why players value things about a venue such as the quality of the lighting, the comfort of the chairs, and the reliability of the power supply. While these might appear to be trivial considerations, they certainly affect perception and the overall enjoyment of a particular day and can exercise a decisive effect on the success or otherwise of a lan (as in the case of electricity supply). Significant attention is also paid to monitors, keyboards, mice and earphones, hardware items which are the means of interaction; while computer processors (and how fast these can be made to run) are also crucial to the success of the gaming enterprise, the peripherals are all that is visible, given that the computer's innards are not (usually) on display. So, for instance, mice are objects of some interest amongst gaming enthusiasts: reviews rate specialised gamer's mice for '*mouse*-feel' in the way that a winemaker or chef might describe *mouth*-feel. As well as comfort in the hand, smooth action is also highly prized. One gamer's new frictionless mousepad was pronounced to be 'very sexy,' attesting to the importance that smoothness is accorded, both functionally and aesthetically.

While some of these considerations might seem banal in aesthetic terms, their significance becomes clearer when it is realised how long people play for at one of these events. At the event I attended, gamers played in multi-player mode for up to fifteen hours. The ostensible reason for playing all day (and/or all night) is that it gets you further 'into' the gaming experience, both metaphorically *and* literally, I will suggest. This quite remarkable commitment became evident to me at about 10pm when, despite signs of obvious exhaustion, some 'die-hard' gamers were still determinedly organising inter-clan competition. A blood vessel had burst in one man's eye – apparently from the (eye?)strain of it all – yet he was busily inducting his neighbour into the finer points of the *Quake III* beta version, his effort and bloodshot eye providing another perspective on the Onkyo advertisement. Like the tomatoes which so clearly mark that experience as extraordinary, this was no ordinary session at the computer.

Games perception is demanding partly because it is kinetic, involving a mobile (visual) perception – what Ross Harley has termed "perception on the move." As Harley's concern is with mobile or (after Wolfgang Schivelbusch) 'panoramic perception', some of his comments pertain to the feelings that movement through games space generates, and

so are useful in the games context. (While applying film concepts wholesale to games is problematic, film studies arguments on the effects of movement on cinema audiences can be helpful up to a point, given that a poetics of navigation through space is yet to be developed.[170]) Harley notes that in many immersive entertainments, the effect is like that of "a 'perceptual vortex': it [is] as if the rider disappeared into an uncharted geographic space".[171] This idea of a vortex describes well the disorienting perceptual effects that the twisting and turning through the maze-like architecture of *Quake* maps generated in me, a non-gamer. The fast moving, often disorienting visuals mobilise your body. As one player put it, "You're not supposed to stand still in this game." Setting aside the game's finer points for a moment, I found it incredibly difficult just following a character's movements – let alone trying to keep track of their whereabouts – within the map. It was as if my body could not keep up with my vision. Whilst I am told that this *is* something one gets used to, and that the architecture is all too predictable for some, the rapid movements are intensely affecting.

Borrowing from John Belton's work on widescreen cinema, Harley writes that this vortex of longitudinal, down-the-line motion, is what "animates many of the supposedly participatory media of this century, from cinema to interactive multimedia."[172] Techniques such as the use of 'shaky-cams' and a first person perspective are intended to heighten the audience's illusion of participation and presence, that sensation of entering into the events onscreen, events over which they have absolutely no control, no hope of influencing. Harley's ideas about how an illusion of participation is created are echoed by James J. Gibson, who notes that in film,

> The moving camera [makes us] onlookers in the situation…not participants, but we are in it, we are oriented to it, and we can adopt points of observation within its space. The illusion of participation can be enhanced by having the camera occupy the point of observation of one of the protagonists in the story.[173]

This technique of having the 'camera' occupying the protagonist's position is used extensively in games, to generate a sense of engagement. Indeed, the First Person

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[170] See Lev Manovich, who insightfully distinguishes between analysing spatial representations and developing such a poetics of navigation through space. Lev Manovich (2001) *The Language of New Media*, Cambridge, Mass., London: MIT Press, p. 259.
[171] Ross Harley (1999) *Motion Landscapes: A Video-Essay on Panoramic Perception*, DCA thesis, University of Technology, Sydney.
[172] Ross Harley (1994) "Learning to Drive: Motion Landscapes video series", *Cantrills Filmnotes*, 75/76, pp. 4-13.

[173] James J. Gibson (1979) *The Ecological Approach to Visual Perception*, Dallas, London: Houghton Mifflin, p. 298.

Shooter (FPS) genre gets its name from the first person perspective typically used; that is, players see the scene before them through the eyes of the 'character' they play. This is distinct from the "illusion of participation" which pertains to the use of these techniques in film. One crucial distinction between film and games media is, then, that where spectators of a film are onlookers, players in a computer game are participants. Participation is not an illusion for gamers. In a game it is they who direct the mobile 'camera'. This means that in the FPS game *Quake II* (easily the most-played game at the lan and, according to Morris, probably also the most popular game world-wide during this period[174]), the view changes according to the ways that players manoeuvre their 'character' around the 3D simulated 'map'. So, if a player makes their character move so as to peer over the edge of a ledge, the player will see what is at the bottom; if they make their character spin around, they will see the textures of the walls flashing past on their screen. The fact that both these choices are available to *Quake* players highlights another difference between games and the ride film genre which Harley writes of, namely that the mobile perception of gaming is not just 'down the line'. Players have much greater freedom of movement, a point I'll return to. In playing computer games, players *do*, they *become*, they don't just watch. This is one of the reasons why gaming, as a medium that combines aspects of both spectacle and participation, requires new models for theorising engagement, as I argued in the last chapter.

Sound also mobilises players' bodies, and can produce kinaesthetic responses. This is something to which I can readily attest having donned the headphones in the game "Grand Prix Legends," a racing game featuring classic cars. Listening to the sound of twelve Ferrari engines warming up (screaming more like it) on a race grid was exciting and intensely visceral: I had not understood before that one might go to a Grand Prix to *listen*. After the race had begun, I found my body moving involuntarily in response to the fuel-rich sounds of 'my' car's engine, anticipating and responding to the gear changes in the way that one is thrown around within a car by hard driving. I must have looked like the kids that Grahame Weinbren describes "twisting and grinding as they manipulate the control pad of a video game".[175] Yet there is more to it than just a felt response, where a player's body merely reacts – automatically – to a stimulus. It's worth noting that some players do not seem to respond physically at all to the games they play, perhaps due to

[174] Sue Morris, "Online Gaming Culture".
[175] Grahame String Weinbren (1995) "Mastery: Computer Games, Intuitive Interfaces, and Interactive Multimedia", *Leonardo*, vol. 28, no. 5, p. 405.

familiarity. In my case, these were sensory cues that were familiar in that they were meaningful to me in a way that other games might not have been. *I know* what it feels like to be thrown back in the seat by gear changes, and I know the engine sounds that typically accompany this.

The sound is an important aspect in a games visceral affect on players. The techno backbeat of Trent Reznor's sound design for *Quake* gives the game an edginess; you can't help beginning to move with the beat of the music. Games theorist Aki Järvinen has described the techno music as facilitating a kind of 'zone',

> …for me as a player the techno soundtrack in FPS deathmatches etc. is an essential part of the fascination, contributing to the breath-taking suspense and action. I have sometimes contemplated the getting into the 'flow' of the game and forgetting everything else as an similar experience as dancing in a techno rave...[176]

Another game, *Thief*, uses sound in a different way. *Thief* is a strategy game which Matt was playing solo at the lan, and which he described as being "…the same as *Quake*, it's like a first person perspective, but it's not so gory, and it's not as violent... If you put it on 'easy' you are allowed to kill people, but if it's on 'expert' you're not allowed to kill anyone. And that makes it harder." At one of the stages in this game, Matt's object was to sneak into a prison and free 'Cutty', so that he could be paid for a 'job' he had previously performed for him. 'Sneak' is the operative word here, as Matt explained:

> …you see guards but instead of trying to kill them, you watch until their back is turned to try and sneak into a shadow…take the next opportunity.
> ...this surface I'm on now, if I run and I jump, if there was a guard down there he'd hear me. So actually a guard just heard me there. He'll probably come out of this door. You can peer around corners. [Cutty's cell is] actually down here somewhere." (Matt)

The different sound regimes in different games and different genres of games, mobilise players' bodies in different ways. Sometimes, perhaps when the intensity of the lan was all getting a bit much, or when John wanted to talk with Matt (they were friends and workmates) or when he was talking with me, he would take his headphones off. He did this particularly when he was playing *Quake*. There was a sense that the soundtrack, while still intensely affecting, generated familiar affects in him, things he didn't necessarily want to feel at these times (whereas he expressed on multiple occasions how impressed he was with the sound in the various car racing games he owned). In a game featuring British racing cars, John demonstrated the way that when the car drove over the red and white bumps on the corners of the racetrack, the bumpy, onomatopoeic *da-da-da-*

da-da was duly rendered aurally. He was also very impressed with the sound in *Grand Prix Legends*: in contrast to other race games where the engines are "just droning", the sound in this was, he felt, much better, much more realistic.

Computer gaming at a lan is an endurance event. Despite appearances and the commonly held wisdom that sitting in front of a computer playing games is 'passive', gaming is involving, viscerally affecting, and can be quite athletic. As well as the temporal and perceptual stamina required in playing games like *Quake*, there are many games in which a lot happens at any one time. Lulls in the action are few and far between, and information comes from multiple sources at once. *Quake* players have to monitor their 'health', weaponry and ammunition statuses, keep track of where they are within the map, shoot other players *and* dodge bullets meant for them. In addition, there are options to set and scrolling dialogue which provides a kind of running commentary on who has been 'fragged' (killed, to be 'spawned' again), the status of weapons, and the like: "…you don't really get much time in this…when there's ten players on the level. Every corner you turn there's someone there waiting for you" (Matt).

Matt continued, "It's a long day because games like this are very taxing on your mind…especially *Quake*, with that many people playing on one level, you're running on adrenalin all the time because there's people all around you and it comes down to reaction time." Players readily agree that "your reflexes get faster" from playing games, including one man who said that he didn't really like playing that much. And many expressed that they found playing *Quake* good for stress relief. Why is this? What does it mean to say that games "are very taxing on your mind"? Is it just that playing demands one's full attention and that this creates a distance from the day's events?

I want to suggest that one reason why players find games a good antidote to stress is because playing them does not require a lot of *conscious* thought. Matt's comment about games taxing his mind were made in the context of talking about the speed of a game, and the demanding nature of keeping pace, doing the moves. He was playing *Quake* at the time, in which manoeuvring one's character requires considerable skill. I remarked on this and the requisite finger agility to John, who provided a different (possibly more experienced) perspective, noting that "it takes you a couple of hours but once you get used to it, you think about doing something and it just happens." He was referring to the

[176] Aki Järvinen, email correspondence with author, 15 August 2001.

way that after a while the interface comes to feel natural, and that moving one's on-screen representation or avatar ceases to require conscious thought. The finger movements become intuitive, as they do for a touch-typist who does not need to think consciously about where the keys are. Conscious directing of the body ceases, such that it might be difficult to explain how you actually executed a move, as the knowledge is not in your head. It is kinaesthetic knowledge. At these moments, there is a continuity between the movements of an avatar and the player. The meanings of this continuity – and discontinuity – between avatar and player, virtual and material realms, will be of interest through the rest of this chapter.[177]

So while gaming can be "taxing on your mind", it seems that a certain flow comes with experience, allowing entry to a different awareness, where the need to think (about how to execute a move) largely gets bracketed out. In its place, you think about doing something and your fingers just carry it out. In referring to gameplay taking a *mental* toll, it is conceivable that Matt is referring either to the frenzy of a game in which many things are happening at once, and there are demands on players at many different levels, requiring response. Either that, or perhaps he is yet to *give over to the interface* sufficiently.

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John's claim that with practice, you just think about executing a move and your fingers automatically do it is worth dwelling on for a bit longer, as it speaks to the cybernetic interpretations some writers offer of gaming. N. Katherine Hayles, for instance, has said of gaming, "It's partly visual, of course, but the speed with which reaction takes place short-circuits a lot of the cognitive machinery. It's more aimed to sensory experience and less heavily weighted toward the cognitive."[178] I agree with Hayles here, but have noticed that in more recent work the 'short-circuit' which appears to be a metaphor in this quote has developed into a broader claim about perception and cyborgism. In her latest book, Hayles claims that in the cyborg neural feedback *replaces* cognition.[179]

[177] Mark Dery discusses having a symbiotic union with a car, in his (1997) "'An Extremely Complicated Phenomenon of a Very Brief Duration Ending in Destruction': The 20th Century as Slow-Motion Car Crash," *Techno-Morphica*, Rotterdam: V2 Organisatie, pp. 111-143.
[178] N. Katherine Hayles speaking in Neumark, "Into the Interface".
[179] N. Katherine Hayles (1999a) *How We Became Posthuman*, p. 84.

The context in which Hayles advances this claim is important. At the beginning of Chapter Four of *How We Became Posthuman*, Hayles presents Gregory Bateson's question on whether "a blind man's cane is part of the man", moving from that example via hearing aids and voice synthesizers to "a helmet with a voice-activated firing control for a fighter pilot". "This list is meant to be seductive" she writes, moving as it does, "over the space of a comma,"

> …from modifications intended to compensate for deficiencies to interventions designed to enhance normal functioning. Once this splice is passed, establishing conceptual limits to the process becomes difficult. In "A Manifesto for Cyborgs," Donna Haraway wrote about the potential of the cyborg to disrupt traditional categories. Fusing cybernetic device and biological organism, the cyborg violates the human/machine distinction; replacing cognition with neural feedback, it challenges the human-animal difference; explaining the behavior of thermostats and people through theories of feedback, hierarchical structure, and control, it erases the animate/inanimate distinction. (84)

The problem with Hayles' list, I want to suggest, is less with the shift from corrective prostheses to enhancements than in the conception of the cyborg solely in terms of cybernetic principles, the slippage from partiality to 'fusion'. While I suspect that Hayles does not altogether support this view,[180] she is not alone in stating the relation between subject and technology in terms of feedback, a view which is not very helpful in rendering the complexity of the relations between players and machines in gaming. Of particular relevance to this study is Ted Friedman's rendering of computer gaming as a cybernetic process. Friedman gives a very clear example of how he sees this working in the simulation game "Civilization":

> The constant interactivity in a simulation game – the perpetual feedback between a player's choice, the computer's almost-instantaneous response, the player's response to that response, and so on – is a cybernetic loop, in which the line demarcating the end of the player's consciousness and the beginning of the computer's world blurs.[181]

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[180] It can at times be hard to discern Hayles' position on this point. A little earlier, she suggests there are more complex factors involved in placing 'man' in a cybernetic loop, writing, "Were he at the end (of the circuit), it might be necessary to consider more complex factors, such as how he was interacting with an open-ended and unpredictable environment". Her interest in embodiment also raises doubts about the extent to which she thinks bodily cognition is actually being bypassed (197-8). Later in the book, Hayles revives cognition as an important feature of what she terms distributed cognition environments (287-91). On these last two points, see also Hayles (1999b) "Simulating Narratives: What Virtual Creatures Can Teach Us", *Critical Inquiry*, vol. 26, no. 1, pp. 23-6.

[181] Ted Friedman (1999) "*Civilization* and Its Discontents: Simulation, Subjectivity and Space", *On a Silver Platter: CD-ROMs and the Promises of a New Technology*, Greg Smith (ed.), New York: New York University Press, pp. 132-150. Available at http://www.duke.edu/~tlove/civ/htm, accessed 3/8/01. In another essay, Friedman actually labels the relation between the player and computer "symbiotic": "Flowing through a continuous series of decisions made almost automatically, hardly aware of the passage of time, the player forms a symbiotic circuit with the computer, a version of the cyborgian consciousness described by Donna Haraway…" See Friedman (1995) "Making Sense of Software: Computer

I see a number of problems in theorising this close coupling between the computer game player and their machine in terms of a cybernetic feedback model, and suggest that there are other ways of explaining the pleasure of action, of having an impact and receiving an almost immediate response (as in Friedman's example) which are less problematic.

One of the main difficulties with such conceptions of cyborgism is the ease with which they slip between alleging that cyborgs disturb neat boundaries – where the cyborg's boundary status is a productive tension – and fixing its features, removing its ability to disrupt. What troubles me about Hayles' claim that cognition is *replaced* by neural feedback (apart from what such a statement might mean for perception and the senses) is that for a function to have been *replaced* suggests a cyborg that is less of a boundary figure – always in-between categories, undecideable – than something fully arrived at, formed, stable and no longer in-between or in the process of being constituted (or processual, in her terms). This development of the cyborg is evident in the language in the excerpt cited, particularly the figure of "fusion", as well as references to the *seamlessness* of the human-machine relation (34, 35).

Haraway goes to some trouble in her "Cyborg Manifesto" to emphasise the partiality of the cyborg. In the last chapter, I argued that the cyborg merger was (always) an incomplete one, and that this incompleteness or partiality was important in theorising engagements with technology. It seems that a cybernetic conception of the cyborg would write out this integral part of the construction. Though there is little point in trying to refer to some 'essential Haraway' here (almost every writer cites her work to support their own position), from my reading, Haraway seems to have resisted the reduction of the cyborg; maintaining the boundary status of the figure is important to her. Haraway remains committed to actual contests and struggles of embodied subjects rather than just projected future bodies, and has resisted the cyborg's high-tech appropriation which often misses the generative political potential she envisages for the figure.

Another limitation of cybernetic approaches to computer gaming practices is that too much of what are complex processes of exchange and meaning-making is lost when reduced to the (over)simple figure of a loop. I am not convinced that a model which

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Games and Interactive Textuality", *Cybersociety*, p. 83; online at www.duke.edu/~tlove/simcity.html, accessed 3/8/01.

seeks to "explain… the behavior of thermostats and people through theories of feedback, hierarchical structure, and control…" (84) can adequately account for the interactions between computer game players, their machines, and the images that appear on the screens. These need to be thought of in more detail, not less, and mine is an attempt to reintroduce some of the variety that exists in these relations, to improve understandings of human-computer-avatar relations at a lan, attending to the textures, hues and variations of these. Models which figure these relations as feedback seem to me to rob them of their possibility, their virtuality. Moreover, the fetishisation of information is evident in this feedback model, in the implication that *content* is without meaning; information and its free movement is all that counts. Rather than erasing distinctions between human and computer, human and non-human, then, I find it more productive to conceive of the gamer as a cyborg-like relation between *different* terms. While gaming involves close couplings of computers and bodies, these are far from total (especially in the context of a lan): these are partial, temporary assemblages rather than 'fusions' or 'unions', terms which imply an organicism which isn't there.

Lanning is constituted as much by the seams in the relation between player and computer, as it is by the smooth (or not so smooth) flow of information on the day. While it might seem as if lanners share the cybernetic desire for optimal conditions – guaranteeing the smooth flow of information – actual lanning does not bear this out. Conditions are not controlled and so there are many factors which introduce 'friction', disrupting the flow particularly of large lans, where there are more things that can go wrong. As Andrew said: "…its hard enough trying to get six people online doing one thing at once, try doing that with three or four hundred!" Some of these factors derive from the actual co-presence of gamers in the same space (chatting, meeting and greeting, negotiating on game strategies), some from technical issues like overloaded power circuits tripping, or the fact that some players find on the day that their machine does not work, or is lacking a vital component, in which case it is just as likely to get rebuilt on the spot.

Other factors which 'disrupt' the flow relate to the time spent *not* gaming – looking for a game to join or organising new competitions, for instance, as well as replenishing and caring for the cyborg body, for these cyborgs *do* eat, need toilet breaks, and make repeated trips to the bar. But crucially, the lanners I spoke with did not view these as 'disruptions'. Rather, getting around and talking to people and checking out what others are doing is a central part of their day. All these things mean that the flow of gameplay is

punctuated by complications and distractions which tend not to be accounted for in pristine accounts where a player-cyborg simply becomes part of the circuitry. In fact, mid-interview, Andrew's unexplained high ping of 290 meant that he had to give up and restart his computer: "that should be nothing like that. Best [thing] I can do is shut down…and reset." When I asked whether he would have to do this many times in a day, he replied: "Oh yeh, its Microsoft…Windows!"

Another limitation of the cybernetic perspective is the degree to which it is able to grasp the *range* of aesthetic pleasures involved in playing computer games. For Friedman, "The pleasure of computer games is in entering into a computer-like mental state: in responding as automatically as the computer, processing information as effortlessly, replacing sentient cognition with the blank hum of computation."[182] While there may be an argument to be made about the ways in which computer games induce subjects into particular habits of information processing required in information societies, tricks of the trade which capitalise on felt time-criticality and tactical thinking, this hardly exhausts the pleasures of the interface; rather, as a play environment in which users immerse themselves, a range of new embodiments and negotiations seem possible. I am also concerned at the (significantly reduced) notion of cognition which computation (or feedback) is alleged to be replacing. Apart from the rather obvious Cartesian body/mind symmetry, the assumption is that cognition is primarily about rationality. This misconception, as John Waterworth argues, has been a central problem in the design of computers, and constitutes, in Waterworth's opinion, one of the main failings of the discipline of Human-Computer Interaction (HCI), namely that it does not support "much of real human cognition, which embraces non-computational phenomena such as sensation, imagination, emotion and fantasy, as well as more plausibly computational faculties such as mental problem solving (reasoning)."[183]

While Heidegger did not address play, some of his concepts resonate with these concerns. His concern at the prevalence of 'calculative thinking' – which "computes ever new, ever more promising and at the same time more economical possibilities"[184] – seems close to Waterworth's concern at HCI's focus on particular aspects of cognition (rational

[182] Friedman, '*Civilization*'.
[183] John A. Waterworth (1997) "Creativity and Sensation: The Case for Synaesthetic Media", *Leonardo*, vol. 30, no. 4, p. 327.
[184] Martin Heidegger (1966 [1955]) "Memorial Address", *Discourse on Thinking*, John M. Anderson, E. Hans Freund, trans., New York: Harper & Row, p. 46.

problem solving) and its neglect of others (emotion, fantasy, etc). It is perhaps not that surprising, given that cybernetics was founded as a science of command, control and communication, that theorists who read gaming in terms of cybernetics seem absorbed with questions of gaining and maintaining control, frequently finding it one of the main sources of pleasure in computer gaming, either in terms of controlling virtual games worlds or exercising control over bodies (their own and opponents') which defy control in the flesh. An interesting article by Henry Jenkins and Mary Fuller draws out some similarities between Nintendo games and New World travel writing, arguing that both share concerns with mastery, colonisation and conquering territory. The implication is that what gamers learn during play is how to master – even dominate – their environment, and that this interest in domination is what motivates them to play computer games.[185] As I have been suggesting, however, and as my research revealed, this barely begins to approach the relations that gamers have with technology, let alone the range of relations that are conceivable.

Control and instrumental rationality have, of course, been privileged terms in discourses on technology. Yet this privilege can mask other relations, and so it is important not to overstate it. Ironically, the aptness of Heidegger's critique of the instrumental conception of technology may make it harder to recognise, or imagine non-instrumental conceptions of, and relations with, technology. In the present context, where thinking about non-instrumental relations is one of the goals of this project, it will help to point up the ambivalence, the doubleness, of 'play'. Play can be ends-directed, oriented towards controlling or mastering a situation or one's opponents, for instance, but this is not the end of the story. Play can also take one outside familiar modes of apprehension or thoughts. Play can be experimental, risky even, involving trying and testing, where the results of an action are not known before they are enacted.

The lanners I interviewed seemed to be motivated more by this second sense of play, making its relevance to a hyper/aesthetic rethinking of the aesthetics/technology/affect nexus clear. These players certainly were not motivated (solely) by mastery, by a need to control either the terrain of their game, the technology on which they played, or the

[185] Henry Jenkins and Mary Fuller (1995) "Nintendo and New World Travel Writing: A Dialogue," *Cybersociety: Computer-Mediated Communication and Community*, Steven G. Jones (ed.), London: Sage, pp.57-72. Bolter and Grusin also discuss this issue in terms of exploring outer space, as the 'final frontier' in their book, *Remediation*, pp. 244-45.

physical environment in which their meeting took place, adopting a more sanguine approach to power outages and the like than I would have thought possible. The view I have formed from my research is that far from revolving around instrumental concerns of dominating, manipulating, calculating, and accruing, many of the pleasures of (multi-player) gaming are ones which relate to *the virtual*. I found a much stronger concern among lanners with virtuality (in the sense of wondering how things could be) and with experimentation, than with control – with finding out what was possible, what a game could do and what it would let them do, testing what the outcomes of an action were, and generally pushing the limits of all of these. This is a major point of divergence between this thesis and accounts of computer games which equate participation with *control*. As I have been arguing, while players certainly learn and develop skills in manoeuvring their character or vehicle within a game, to read this (just) as proof of the desire for mastery is a massive oversimplification. Getting it to work properly can be a challenge, but again, these are different issues. So while play does include this possibility of mastery, (computer game) play can also be a use (in de Certeau's sense) of technology which is concerned with making and doing, and which facilitates other, non-instrumental relations with technology, as well as self and other. These include setting up such affects and experimental motivations in players as probing to 'see what the thing can do,' testing what outcomes result from an action, and generally finding out what a game's limits are.

That players are concerned with virtuality, with how things can be otherwise, is evident in their active production. Often enough, players set out to enhance the possibilities for interaction within a game, pioneering new techniques and making various add-ons for games. In Neal White's case, this meant making his own map on which to play *Quake* (which he then offered for download free on the internet), one which offered particular challenges for gameplay. His "Corkscrew" map affords good coverage for snipers, adding an element of surprise to games. On his design efforts, White writes,

> The architecture is carefully lit and makes use of custom textures with much attention to detail. Be sure to notice the shadows, I worked hard to make them match the sun in the sky. I worked even harder to rotate, scale, and align all of the textures to the nearest half-micron. ;) If you hate misaligned textures, you'll love this map![186]

As well as maps, considerable effort is invested by fan-players in making mods and skins. Morris has written on other aspects of what I am calling players' making, their *poiesis*:

[186] Neal White (1998) "The Corkscrew," www.bluesnews.gameaholic.com/idgames/quake2/levels/deathmatch/a-c/corkscrw.txt, accessed 3/8/01.

she notes that players frequently beta test games prior to their commercial release, a trend which, "allows mod authors to get an early start on their development of their add-ons to the game." Players have also been known to invent moves,

> …[having] discovered ways of exploiting the game's physics to invent moves not planned by the games designers, such as 'rocket jumping' where, by firing a rocket at the ground and jumping simultaneously, a player may jump three times higher than usual to reach areas of the map not normally accessible from that point, and (in *Quake II*) 'strafe jumping' which, by using a combination of sidesteps and jumps, allows a player to move faster than normal 'running'.

The improvisation does not stop there. Also remarkable is Morris' relating how players found and fixed software issues that *Quake*'s developers did not even know of.

> In February 1996, months before the commercial release of *Quake*, id released three levels over the net to allow gamers to bug test network play. Two days later, game hackers had not only discovered bugs but provided patches to fix them; hundreds of patches and hacks were sent to id in the following months. Users had even figured out how to activate features in *Quake* the developers had not yet thought were functional, leading to one id developer to be quoted as saying: 'The joke around here now is (that) we can let the rest of the world finish *Quake* for us.'[187]

These efforts at production by consumers who are not producers constitutes quite a remarkable example, I think, of de Certeau's notion of *poiesis*. Other acts of making that occur within the lan group include players giving freely of their time and skill, not only in setting up the network but also in helping to fix others' computers, swapping files and the like. Andrew said that he found this aspect of the lan more enjoyable than the actual gameplay, volunteering that, "I learnt most of this stuff myself, just experimenting, [asking] why doesn't this work?" A keen motorcyclist, he said he had picked up fixing and building computers as a hobby: "…it's all basic engineering. You make a few mistakes, but [you] try again. You've got to learn from your mistakes. But it's a lot different from what it used to be…" (Andrew)

Players attunement to the virtual is also evident from their frustration with particular interfaces and the limits that these impose on action and interaction within games. Most are highly critical (as well as appreciative) of the design of different games, rating them in terms of the quality of their graphics and sound, as well as how well the controls respond (often described by the gamers I spoke with in terms of how 'realistic' the response was) and how these factors, in turn, affect gameplay. While a number of comments were passed about how 'realistic' graphics were, players were generally less concerned with appearance than with the implications of design for gameplay. The

[187] Morris, "Online Gaming Culture".

frustration at the limits to interactivity is evident in Andrew's assertion that interfaces are "Horrible…in 90% of car racing [games]." When I asked what he would like them to be, he said that he didn't know yet. As well as suggesting that games' interfaces weren't what they could be, he seemed to be saying that designers rarely acknowledged that they could be otherwise, illustrating his concern with possibility and virtuality. Part of Andrew's frustration was with the limits that the games he was playing imposed on *how* he could drive his 'car': the game didn't allow him to execute anywhere near all the manoeuvres he could imagine doing, pointing up his desire to improvise. He demonstrated this in a police car chase game, which largely *did* allow him to indulge in some sport on the road. His dissatisfaction with the level of improvisation afforded in games was interesting, however, because he was comparing it with the antics he actually performs on the road: "This is something which I'm sure the police would love…shame I can't do half the stuff I do on the road on here. It just won't let you…"[188]

Some gamers have quite definite ideas on what sorts of interfaces they would like to play on: Martin, who worked testing self-paced educational software in the IT sector, was keenly aware of the shortcomings of different display technologies. As he wrote to me,

> A 17'' monitor will of course make everything look a little larger, however like TV once you are immersed in the action, you hardly notice the difference. A 17'' monitor will provide the user with added comforts as you can run a high screen resolution and thereby fit more on the screen when using Windows (type) applications. Luckily my monitor is light so I can carry it – I'm only a little person eheh.
>
> When I was a kid I figured that it's nice to have video games (1 flat screen) but I would prefer to have a room (6 internal surfaces). The user would sit suspended in the center and an image would be projected onto each wall (incl ceiling and floor). Say it was a flight sim, you could look over your shoulder and see what is behind, look left to see left. Currently in games you exec a fucntion [sic] (press a key) that will change the screen to show *that* view and then you flick back eh. One day this happen. I suppose Imax is a bit like this, but I want more. Virtual Reality equipment sucks ass bad… it is heavy and the user suffers from fatigue.. [I know someone who has] Wicked 3D™ glasses and hardware, it makes the screen look 3D. He uses it a fair bit.. but not good enough…[189]

[188] Players are also aware of the realities of game production in terms of a game's commercial viability. To them, product placement in the form of 'road-side' advertising means the designers have more money to spend on developing and producing the game. Matt:

> It all comes down to the technology that's available at the time, and how much money they've got to spend on the programming of the game. Like I think they've got computers that can make this run like almost realistic, but it's just not commercially viable to be able to mass produce these things. So, you know, we don't get access to them at the moment, it's just a matter of waiting.

Computer games are objects of play, which gamers can engage with in a spirit of play. I have been discussing gaming thus far in terms of the way that players enter into a bodily engagement or investment. This 'investment' should not be thought of in the sense of an economic transaction, as neither the gaming group nor the player's production efforts functioned this way (it is more that players invest their senses, and their effort, for instance, in learning a game, for which they are rewarded.) Indeed, at the time of my research, the organisers were debating whether to formalise the group, and try to turn a profit from it; they were, however, reluctant to do this as they felt it would stop being fun. Nor does this engagement subscribe to a logic of calculating returns on investments. As the production of mods and patches illustrates, gamers seem to operate more within a gift economy than a financial economy. However, another interesting twist results from the fact that a good proportion of the gamers I spoke with worked in the IT and associated industries. These players could be said to be users who *are* producers. Yet they are users who, while they might use the same technology within the work economy as outside it, are interested in and actively pursue a *range* of uses of these technologies. So, while computing technologies play a substantial role within the work economy, where they are more often thought of in terms of production and performance, productivity and performativity, these players also use them (to produce) outside these spheres, where these principles do not hold.

It seems that some players might well sit in front of a computer at work for much of the day, and then come home to play games in front of a screen. Differentiating between the *uses* to which these players put technology – at work and at home – is important for theorising the relation to technology in a more nuanced way, as the relation with the machine varies considerably with context. The findings of Jan English-Lueck and other academics on the Silicon Valley Cultures Project are interesting to consider in relation to this question. These researchers note the very social nature of work in high-tech meccas like Silicon Valley, and the extent to which high-tech work relies on the exchange of favours, information sharing and network building.[190] The presence of some of these elements in the gaming group, together with gamers' quite experimental and

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[189] Martin, in email correspondence with author, 11 February, 1999.
[190] See for instance, C.N. Darrah, J.A. English-Lueck, J.M. Freeman (2000) "Living in the Eye of the Storm: Controlling the Maelstrom in Silicon Valley", available on the Silicon Valley Cultures Project website, at http://www.sjsu.edu/depts/anthropology/svcp/SVCPmael.html, accessed 23/3/02.

improvisational uses of the same technology they use at work for productive ends, lends further support to my argument about the ambivalence or doubleness of our engagements with technology.

Gameplay at a lan permits players to enjoy *feelings* and *affects* that would not be sanctioned within the world of contemporary work: the loosing of less-rational aspects of mind; play and playing around with other movements, becomings; the license to feel at the computer and to 'zone out'. Commenting on the analogy that is frequently drawn between the computer and the mind, Claudia Springer (echoing Waterworth) argues that this is dependent upon a very particular conception of mind, characterised not just by separation from 'body,' but also eschewing irrationality, dreaminess.[191] Perhaps one of the reasons why players report finding gaming good for stress relief is that it facilitates a sort of splitting (or better, a *multiplication*), which enables them to negotiate different aspects of their person, to manage or transform affect at the end of a long day. Later I will suggest, after Morse, that gamers experience and exploit the continuities and discontinuities that are the result of playing across different materiality and reality statuses, and which produce such a multiplication of the different aspects of a person. Perhaps game playing works to relieve stress similarly, by way of a negotiation between the multiple relations that players have to technology?

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Instead of understanding degrees of continuity between players and technology (and between players and the images and sounds in particular computer games) just in terms of control or 'circuitry', I want to pursue further the themes of virtuality and of experimentation. Players *are* in a close relation with their computers and the images and sounds they produce: I was introduced to John's computer by name, while others have evidently developed special bonds with their particular machines over time; many also personalise the 'skins' of their avatars. They are – like the Panasonic man of the last chapter – *willing cyborgs*, unafraid of entering the interface and the dissolution that this entails. Far from feeling a need to protect themselves from high-tech otherness, players embrace the coupling – giving in to it – eagerly awaiting its special offerings. Pursuing players' experimentation is a useful approach because we can begin to see what the products of this close relation are, in computer gameplay. What sort of a relation is it

that players have with images and sounds in particular computer games, especially when they have acquired the level of skill so that they simply think about moving and the avatar moves (as John described)? What results from the continuity that a player might feel with their avatar, be it a rocket-gun-toting figure or a throaty sounding racing car? And what is the significance of such continuities (and discontinuities) for the way we think about subjectivity?

The cyborg outlined by Haraway is still a useful construct for thinking about some of these aspects of players' relations, despite the attempts of some to fix the partiality of the figure. While her "Cyborg Manifesto" does not directly address cyberspace, Haraway's articulation of the cyborg – with an emphasis on its partiality and particularly its partial connection with technology – is helpful for thinking about engagements with newer media technologies, including the extension of the body in games space, and "the abilities of the body as a medium in the service of imagining new forms of subjectivity".[192] And in terms of my argument that through gaming, players develop a range of relations with self, others, and technology, Haraway's work is exemplary. In her recent work, Haraway has been working with a concept of *relationality* to emphasise and examine connections between humans and an expanded category of 'others', drawing attention to relations which cross both species and sentient divides.[193] In interview with Thyrza Goodeve, Haraway explains how she has arrived at the concept of an "unfamiliar unconscious," in terms of both her academic writing and personal biography. Deriving from a well known ambivalence to psychoanalysis, she argues that because oedipal constructions have monopolised our awareness of relationality, it is important to develop accounts of relations other than those of the primal family. "It is time to theorize an 'unfamiliar' unconscious, a different primal scene, where everything does not stem from the dramas of identity and reproduction".[194] The alliances that Haraway speaks of with non-human others – both machines and other species – are *unfamiliar* in two important senses of the word, being both strange and non-familial, no longer speaking just to the family. In the past, Haraway's cyborg has attracted criticism from some psychoanalytic theorists both

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[191] Springer, "Psycho-Cybernetics", p. 216.
[192] Hansen, "Benjamin and Cinema", p. 321
[193] Steve Pile and Nigel Thrift comment that, in this respect, Haraway finds Foucault 'androcentric.' Pile and Thrift (1995) "Mapping the Subject", *Mapping the Subject: Geographies of Cultural Transformation*, Steve Pile and Nigel Thrift (eds), London, New York: Routledge, p. 18.
[194] Donna J. Haraway and Thyrza Nichols Goodeve (2000) *How Like a Leaf*, New York, London: Routledge, p. 123.

for its impossibility, and for its claims to being a subject. Hal Foster for instance, has admitted that the Oedipal subject is just as mythical as the cyborg, "but," as he counters, "at least the Oedipal subject *is* a subject – a construct that helps one to understand fears and fantasies regarding technology (among other things)." Foster's criticism is answered – though perhaps not in the terms that he would like – in Haraway's claim that what the cyborg *does* is enable the telling of other stories, apart from the powerful ones that psychoanalysis tells about Oedipal subjectivity.[195]

For Haraway, unfamiliar encounters are significant by virtue of the non-oedipal narratives they allow to be written. I am attracted to some aspects of Haraway's recent arguments about relationality and an unfamiliar unconscious, which seem to not only build on earlier, important ideas about the cyborg's partiality, but also to extend those others and things with whom the contemporary subject might have meaningful relations. If a hyper/aesthetic approach is, as I have suggested, useful for recognising the interesting new kinds of practices and relations that are developing in tandem with technological development, then these ideas of Haraway's help to appreciate some of the features and significance of these emergent subjectivities. Players at a lan are implicated in multiple ways: relations exist amongst and between players, between players and their computers, between players and the network in which they are imbricated, as well as between a player and their character or avatar within a game. This is a subject located at the intersection of their relations with a range of others, things, and selves (including a range of relations with technology), a subject for whom relations with other humans are not the only ones that count. I am also interested in Haraway's mention of unfamiliarity, because it is consistent with investigating the unfamiliar in positive terms, as a (perhaps) viable option, rather than just sticking to what is known. It signals a preparedness to pragmatically consider new and different relations, rather than simply dismissing them or focussing on what they 'ought' to be. These aspects of Haraway's work remind me of aspects of the work of Gilles Deleuze and Felix Guattari, particularly their idea of machinic assemblages. Haraway's theorising of connections and relations between different sorts of bodies is similar in some ways to Deleuze and Guattari's attempt to think about 'machines', whilst her emphasis on the possibilities and potential of these hybrid bodies, for "other kinds of power and pleasure" could be likened to their question

[195] See Penley and Ross, "Cyborgs at Large", pp. 1-20; Hal Foster (1996) *The Return of the Real: The Avant-Garde at the End of the Century*, Cambridge, Mass.: MIT Press, pp. 221, 289-90, n. 41.

about what is *produced* by such machines. Haraway certainly refuses to think of desire as lack, and shares Deleuze and Guattari's commitment to moving beyond oedipal explanations of subjectivity.[196] However one conceives of it, current research on non-standard, unfamiliar relations with technology – and sometimes not just unfamiliar but "startling and frightening and bizarre and [evoking] other irreducibly intense, if strange, emotions," as in Norie Neumark's latest work – suggests that interest in thinking about the various relations humans have with technology is on the rise.[197]

In practising experimentation, where trying and testing produces unexpected or unfamiliar results, the notion of unfamiliarity is important. And though I will not be analysing the 'new narratives' which experimental gaming practices make it possible to tell, the aesthetic counterpart to this idea is that the unfamiliar encounters which gaming facilitates, in turn produce new and different feelings and affects. One relation in particular – that which computer game players develop with avatars – can be productively considered in these terms. Although avatars stand in for a player, marking their position in a game, they also constitute (a new kind of) other with whom a player is in relation. The avatar exists only in the network, yet in play, the relation between gamers and avatars is a dynamic and important one. So, while gamer's intimacy and focus in gaming has been accounted for in terms of feedback and circuitry, I propose that it might be helpful to think beyond the hardware and consider what particular aesthetic opportunities and affects games offer.

From my research, players' relations with avatars seemed to be an integral part of the affective potential of games, one which has frequently been overlooked. The recent report *Computer Games and Australians Today*, commissioned by the Office of Film and Literature Classification, attests to this. In their recommendations for further research, authors Kevin Durkin and Kate Aisbett target the relation between players and avatars, simultaneously referring to the unfounded assumptions that this relation is one of identification. They write,

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[196] Gilles Deleuze and Pierre-Felix Guattari (1977) *Anti-Oedipus: Capitalism and Schizophrenia*, Robert Hurley, Mark Seem, and Helen R. Lane, trans., New York: Viking Press.
[197] Neumark analyses a number of works of new media art, in terms of four different machinic relations, namely affection, oscillation, projection, and contamination. See Norie Neumark's (2001) "E/motional Machines: Esprit de Corps", *Affective Encounters: Rethinking Embodiment in Feminist Media Studies*, A. Koivunen, S. Paasonen (eds), University of Turku, Finland: School of Art, Literature and Music, Media Studies, Series A, No. 49, http://www.utu.fi/hum/mediatutkimus/affective/proceedings.pdf, p. 163.

> …more research is needed into the player's experience in relation to the characters on screen. The findings reported in this monograph indicate that players, in general, do not feel a strong sense of identification with the characters. This differs from experiences with other media (such as television and film), and the implications for any effects requires further attention.[198]

In their findings Durkin and Aisbett also note – significantly, I think – that more research into players' perceptions of games, as well as the contexts in which people play computer games, is required. As they write, "The tendency to date, especially among critics, has been to assume that all games are equivalent, but this seems quite implausible" (130).

But in addition to avatars constituting an important new other, gamers' relations with these others seem to be shot through with an experimental imperative. So players are free to try out a range of relations with avatars. These encounters can be quite physical, affecting players viscerally, moving them. While most gamers I spoke with found it difficult to pinpoint what precisely they find pleasurable in gaming, one of the specific pleasures it seems to offer is that of movement. Apart from the finger agility and skill required to manoeuvre a character around or successfully negotiate a vehicle around a games course, players report enjoying the opportunities for movement in games, both in terms of a greater freedom of movement as well as the chance it presents to improvise. This is certainly true of *Quake*. Demonstrating something of this pleasure of movement whilst playing *Quake*, John explained, "I can do whatever I want. I can run down here, I can go down here….", and later, in discussing how reflexes develop with practice, "…like I could jump up here…spin around (I'll pull it off if I can), and now I'll see who I can shoot". While manoeuvring well has already been noted as a significant source of satisfaction, the sheer fact of being able to move in ways which are not possible under normal conditions – flying across a room with the aid of a grappling hook, for instance, or jumping off a high ledge (presuming the player has sufficient 'health' and armour) – while dependent upon skill, goes beyond just the technical acquisition of skill. Moving through this games space is experienced as freeing because it is not subject to the same conventions, restrictions or determinations as that which we normally inhabit. Movements within and through this space become improvisation, a kind of "experiential research into the relationship between the moving/sensing body and its environment,"[199]

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[198] Kevin Durkin and Kate Aisbett (1999) *Computer Games and Australians Today*, Sydney: Office of Film and Literature Classification, p. 129.

[199] M. Dantas, D. Davida, K. de Spain (2000) "The Kinaesthetic Sense: Touching from the Inside", paper given at "Uncommon Senses: The Senses in Art and Culture", Concordia University, Montreal, 27-29 April.

that is articulated within games space and felt in the bodies of players sitting in front of their screens.

I realise that this seems somewhat illogical, to speak of the pleasures of improvisation when players are seated in front of terminals, apparently not moving. But this is the *interface*, which provides a space for improvisation, reverie even, where – apart from the requirements of the game – movements need not be directed toward ends. Territory can be explored and apprehended in a different way. Players can make the most of the pleasure of orienting themselves in space, the kinaesthetic pleasure of exploring a space unhampered by convention nor weighed down by bags, able just to feel movement through that space.[200] Bodily gestures are not restricted to learned or planned ways of moving, or even possible movements, for impossible acts are possible in this arena, feats which the laws of physics and mechanics do not permit. Perhaps this is one of the reasons why the figure of the superhero crops up so often in relation to games: because impossible feats become possible. John linked the distance between what the game would let you do and real life, to the idea of superheroic status, saying "This is something [I'd] see on TV when I was smaller, and I'd think great…now I'm doing it."[201] New moves are invented, moves which discover new ways of being, new negotiations between bodies and space, new orientations, different affects.

Of course it is not all blissful improvisation. Juul makes the point that computer games are not like children's games, drawing on the distinction which exists in Scandinavian languages between 'Spil' and 'Leg', terms which he says approximately translate to formal games, and children's play respectively.[202] He suggests that because computer games are played by algorithm they belong to the former category in which there is no room for interpretation or improvisation. However, I argue that there can be forms of improvisation involved when a player sits down in front of a computer game. The boundaries between what is rule based and what is improvisational play are especially blurred in multi-play, where the games engine is really facilitating play between human

[200] See n. 170, above.
[201] Morse also uses the imagery of the superhero, notes that her first experience of VR reminded her of the sense of weightlessness and superpower that she had imagined in childhood. Morse, *Virtualities*, p. 182.
[202] Jesper Juul (2000a) "What computer games can and can't do", paper presented at the Digital Arts and Culture conference in Bergen, Norway, August 2-4, available online at http://cmc.uib.no/~dac/, accessed 14/12/00.

players. But also, as I think John's comments illustrate quite adequately, players do think of movement in improvisational terms.

Habituation also plays a role: the novelty seems to wear off as players' senses adapt to the speed and pace and disorienting perspectives. The same games do not seem to address players' bodies in such a directly kinaesthetic way over time. So it might require players to purchase another game in order to get excited about it in the same way. And yet it's also more complex: *Quake* has, for example, remained a favourite among players long after they have 'mastered' it, apparently because of the quality of the gameplay. Weinbren argues that the pleasures of connoisseurship and expertise (that is, skill rather than a dominating mastery) are largely ignored in the design of contemporary interactive work, as many authors (along with software companies) are more concerned with immediate usability. In contrast, computer games present a different model of interactivity: "acquired expertise [is a] cardinal ingredient of the computer game experience, but anathema to the current conception of effective interface design for nongame applications" (although some information designers seem to be coming around to the view that incorporating some of the lessons of game interfaces might not be such a bad idea).[203] The gamer's devotion and the time they have invested in learning a particular game results in certain personal satisfactions, and yet playing – and experiencing the navigation – seems to be the thing rather than necessarily being seen to have become a *Quake* genius. For instance, when I asked John whether there is satisfaction in manoeuvring well, he responded, "I'm pretty disappointed sometimes, yeh, but it's just a game." Of Grand Prix racing he felt "Just trying to get through the race without crashing…" was a significant challenge. "With this game, they say, it's really hard to take the corners in this game, [see,] the computer car just took off and you're supposed to be able to race like that, but…[it's really hard]." This is a more *performative* understanding of embodiment, in which different embodiments are *enacted*, paradoxically, without the player's material body actually executing moves.

[203] Weinbren, "Mastery", p. 403.
The obvious example is e-learning, though the idea is gaining credibility in other fields as well. Slavko Milekic, an Associate Professor of Cognitive Science and Digital Design in Philadelphia is running a panel this year with the title "Making Playful Interfaces for Serious Content". Newmedia digest, 31 January, 2002, available at http://www.uib.no/mailman/private/newmedia-ann/20020131/000134.html, accessed 15/3/02.

Which brings us back to avatars. When John expressed his enjoyment of the sensation of moving around in a game, he was referring to his avatar's execution of these movements within games space, in response to the commands he keys in: that he, in some sense, feels and enjoys these moves in his body suggests a degree of continuity between player and avatar. Having rebutted the cybernetic explanation of this continuity, I want to propose thinking of the closeness of the relation in mimetic terms; thinking of the relation as a collapsing of distance between the player and their onscreen avatar allows this closeness to be thought about in quite nuanced ways, I suggest. Play of this sort can entail an empathetic 'being-there' – a being *in* the game with one's avatar – which the concept of mimeticism can help to conceive of. This reveals another hyper/aesthetic angle on computer gaming, namely that although computer gaming is a fast-paced, high stimulation activity, players seem to experience a heightened responsiveness during gameplay, manifest most clearly as a kinaesthetic responsiveness.

An anecdote helps to explain this, as well as to show how the experience can arouse affects that are unfamiliar. Martin, a man in his late twenties, related to me how after a particularly long or intense session of playing *Quake* he used to find himself, once at home, moving robotically in his sleep. That is, as he was lying asleep in bed, he would periodically become aware of the fact that his movements were *similar* to those of figures in the game he had spent so long playing.[204] Reflecting on this experience, he accounted for it intuitively in terms of the constant and demanding sensory engagement involved in playing *Quake*; being so affected was understandable – if a bit funny – for him in terms of the particular kind of game that *Quake* is.

There are a number of things that might be said about Martin's becoming-robotic. But before elaborating on his story, I need to draw out the relevant points about mimeticism a little. Unlike Platonic notions of mimesis which tend to be concerned with the *faithfulness* of a likeness or copy, Benjamin's conception is premised on the notion of similarity. While he speculated on the possible mimetic foundations of astrology, graphology and language (amongst other things), play was for him a privileged mode of

[204] Similar findings, in which subjects reported seeing the shapes of the game *Tetris* in their dreams after playing it, have been reported in neuro-psychological research using computer games. See Robert Stickgold et al (2000) "Replaying the Game: Hypnagogic Images in Normals and Amnesics", *Science*, vol. 290, 13 October, 350-352.

access to the mimetic.[205] He accorded children's play and the way that children read or engage with picture books a special importance. In his early writing on children's picture books, Benjamin speculated that in apprehending pictures, "The objects do not come to meet the picturing child from the pages of the book; instead, the gazing child enters into those pages, becoming suffused, like a cloud, with the riotous colors of the world of pictures."[206] On children's play in general, he claimed, "Children's play is everywhere permeated by mimetic modes of behaviour, and its realm is by no means limited to what one person can imitate in another. The child plays at being not only a shopkeeper or teacher but also a windmill and a train."[207]

Mimeticism can be helpful in understanding the close relations between player and technology (that dissolution is a figure of cyborgism was evident from the Panasonic advertisement), as well as between player and avatar, and the improvisational opportunities and (unfamiliar) becomings that this relation seems to offer. As well as the sense of partial displacement that may create the sense that one can go into the pictures in a book, and the creative perception and responsiveness that makes one want to, it is important to note that in playing at becoming a windmill or a train, a child imitates by becoming similar *in some respect* (we assume gesturally), perhaps just moving their arms around like blades moving in the wind. Similarity is here a kinaesthetic similarity, not a psychic identification, nor a mistaking of the thing for the self. Benjamin's examples clearly show that imitation as a function of the mimetic faculty should not be confused with identification; nor is becoming similar limited to becoming similar to some*one*. The child becoming like a windmill is not concerned with whether they *exactly* meet the specifications for the role they have envisaged for themselves. Rather, play is about approximating some aspects of a role or object; it is a *partial* becoming, and I suggest this is also the case with Martin's becoming robotic in his half-awake/half asleep state.

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[205] Benjamin's writings on mimeticism are somewhat scattered. In addition to the pieces cited here, the following are also important: (1999 [1929b]) "Program for a Proletarian Children's Theater" Rodney Livingstone, trans., *Walter Benjamin: Selected Writings vol. 2*, pp. 201-6; (1933a) "Doctrine of the Similar"; Knut Tarnowsky, trans., *New German Critique*, no. 17, Spring, pp. 65-69.

[206] Benjamin (1996 [1926]) "A Glimpse into the World of Children's Books", Rodney Livingstone, trans., *Walter Benjamin: Selected Writings vol. 1, 1913-1926*, Marcus Bullock and Michael W. Jennings (eds), Cambridge, Mass., London: Belknap Press/Harvard University Press, p. 435.

[207] Benjamin (1933b) "On the Mimetic Faculty", Edmund Jephcott, Kingsley Shorter, trans., *One Way Street and Other Writings*, p. 160.
Mimeticism can also function aurally. Douglas Kahn provides a useful gloss of Benjamin's distinctive descriptions of aural experiences whilst in Naples in his (1999) *Noise, Water, Meat: A History of Sound in the Arts*, Cambridge, Mass: MIT Press, pp. 25-31.

Becomings are inbetween states. Like Martin's hypnagogic state and similar to the way that gaming imperative to move, to be in a state of perpetual motion, constitutes gamers as peripatetic subjects – in tension between where they have been and where they are going – gaming is a practice wherein a tension is sustained between the different kinds of bodies that gamers have. In a state of becoming robotic, Martin is in a tension between these different kinds of bodies: the familiarity of *what* he has been and what he can do, including how he can move, and what he is in the process of *becoming*.

This tension between familiar and unfamiliar bodies, of being a body in becoming, is productive for some and not for others. For instance, the reason Andrew prefers to fix people's computers rather than play games at a lan is because he has trouble looking at the screen:

> …it makes me feel sick and really frustrated. To be honest after 15 minutes I feel like throwing up all over the screen and you get up and you walk away and you come back ….I spend 15 minutes at a time. That's about it.
> […]
> This makes me sick. My eyes. The problem with my eyes is that I know there's no depth to that picture. I know there's no depth there and when I'm riding a bike I turn my head. If I'm looking around a corner I turn my head…This might be better if it had depth to the picture and screens around the side. Screens around each side.… But again, I'm looking at a cabinet behind us, the top of the screen, the keyboard, back to the screen. I know there's supposed to be depth in that screen, but there's no depth. I have the same problem with a brand new motorcycle visor. When a brand new visor goes on, I know there's something in front of me, I can't see it [but] my eyes register there's something in front of me, and I get very sick. With a brand new motorcycle visor you get a coin and you scratch it. I can then focus…. I need proper perception. If I can't have proper perception, it makes me sick. (Andrew)

Despite Andrew's inability to adjust to games' perception, most gamers can adjust and have no problem going into the screen, despite the lack of depth. Their doing this is a kind of mimeticism: Benjamin's encountering neon lights as a 'fiery pool' has mimetic overtones, as does Roger Caillois' work on mimicry in insects. Caillois conceived of the mimetic as a confusion or "temptation by space", what Michael Taussig describes as a sort of spacing out.[208] The mimetic faculty comes into play in the interface in a similar way, with the particular physicality of the computer gaming experience – including the disorientation felt watching the screen image – presenting such a 'temptation by space'. As players become involved in a game (it is common parlance to talk about the way that a game 'gets you in') there is a breaching, a dissolution, whereby the distance between

oneself and the object which one perceives is diminished. The action onscreen often seems very near, and players can become dissociated from their physical surroundings and drawn 'into' the game, something that is aided by the wearing of headphones at a lan, as it helps to shut out one's surroundings, at least to a degree.

Caillois' notion of 'temptation by space' is similar to Benjamin's example of children projecting themselves imaginatively into the pictures in books, as an act of creative perception.[209] Martin's becoming robotic, understood as a mimetic response to the game *Quake*, suggests that playing current generation computer games involves something of the ability to actively *engage* in perception, like that which Benjamin identified in children's play, and which he felt was generally brought under control in adults. This is significant, because, in contrast to Hansen, I am arguing that gaming can re-animate or innervate players' aesthetic engagement with technology, presenting different possibilities for mimetic experience – as Benjamin writes in the context of theatre, "New forces, new innervations appear – ones that the director had no inkling of while working on the project."[210] Or, as Laura Marks says, paraphrasing Eric Auerbach, "mimesis requires a lively and responsive relationship between listener/reader and story/text, such that each time a story is retold it is sensuously remade in the body of the listener" (138). In contrast to Benjamin, however, Caillois interpreted submitting to the temptation of space as a *pathology*. Invoking schizophrenia, he answers the question "where are you?" with the response "I know where I am, but I do not feel as though I'm at the spot where I find myself."[211] The sense of not feeling that you are where your body is accords with something of the sensation that I described feeling as I watched the rapidly moving games with their disorienting perspectives. But at a time when entering virtual environments is fast becoming commonplace, this aspect of Caillois' account – that I can know where I am, but not feel as thought I'm at that spot – seems less pathological and more like a

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[208] Roger Caillois (1984 [1935]) "Mimicry and Legendary Psychasthenia", John Shepley, trans., *October* 31, p. 28; Michael Taussig (1993) *Mimesis and Alterity: A Particular History of the Senses*, London, New York: Routledge, ch. 3.

[209] It is interesting to note that Benjamin was present when Caillois gave a paper on festival, at the Collège of Sociology. Reading Benjamin's correspondence with Adorno gives some insight into their assessments of his work. See Allen Meek (1998) "Benjamin, the Televisual and the 'Fascistic Subject'", *Screening the Past*, www.latrobe.edu.au/www/screeningthepast/firstrelease/fir998/Amfr4e.htm, accessed 23/3/02; Denis Hollier (1988 [1979]) *The College of Sociology (1937-39)*, Betsy Wing, trans., Minneapolis: Minnesota University Press, p. xi; Theodor W. Adorno and Walter Benjamin (1999) *The Complete Correspondence*, 1928-1940, Henri Lonitz (ed.), Nicholas Walker, trans., Cambridge: Polity Press, pp. 212-13, 220, 266, 274-5.

[210] Benjamin, "Program for a Proletarian Children's Theater", p. 205.

[211] Caillois, "Mimicry", p. 30.

description of working across physical and virtual realms, where each is able to affect us sensorially, sometimes at the same time. Once again, the co-presence of lanners in both physical and games' space is worth emphasising: lans present a significant challenge to assumptions that one is either in a virtual environment, *or* in everyday material space. As I think lanning shows, these assumptions need redressing. Beyond the lan environment, it is interesting to note that other writers are also investigating these overlaps between different zones, where 'here' and 'there' bleed into each other.

In her recent writing on sensory reactions in the cinema, Vivian Sobchack discusses her sensory responses to the film, *The Piano*. Describing the scene in which Baines reaches out and touches Ada's flesh through a hole in her black woollen stocking, and referring to another reviewer, Sobchack writes that she also,

> …felt an 'immediate tactile shock when flesh first touches flesh in close-up'. Yet precisely *whose* flesh I felt is ambiguous…At that moment when Baines touches Ada's skin through her stocking, suddenly my skin is both mine and not my own: the 'immediate tactile shock' opens me to the general erotic mattering of flesh and I am diffusely – ambivalently – Baines' body, Ada's body, what I have elsewhere called the 'film's body,' and my 'own' body. Thus, even confronted with an 'objective' shot, my fingers know and understand the meanings of this 'seen' and this viewing situation and they are everywhere – not only in the touching, but also in the touched…

For me, one of the most interesting aspects of Sobchack's piece is her insistence that "I am not speaking metaphorically of touching and being touched, but 'in some sense' quite literally of our capacity to 'feel' the world we see and hear on-screen and of the cinema's capacity to 'touch' and 'move' us off-screen."[212] For Sobchack, on-screen and off-screen are not mutually exclusive locations for what she calls a 'cinesthetic subject', and this aspect of her analysis marks, for me, a rare moment when computer gaming and filmic perspectives seem to share a common concern – and it is interesting to speculate on how the darkened theatre and headphones might function in each case. In a similar way to Sobchack, the gamers I interviewed seemed to both *feel* and enjoy the onscreen movements of their avatar, as well as *feeling as if* they were feeling them. Their stories evidence both continuities and discontinuities between virtual and material bodies and spaces, which my questioning presence perhaps helped to accentuate. In contrast to Caillois, I do not think this just indicates a confusion on a player's part (though it may sometimes be this); rather, what interests me is what this crossing through and overlapping of different materiality and reality statuses produces. This constitutes

[212] Vivian Sobchack (2000) "What My Fingers Knew".

another aspect of what is recognisable – with the help of a hyper/aesthetic approach – as one of the shifts that are underway in the realm of aesthetic relations with media technologies, and one, moreover, which is better understood as a new kind of experience rather than just the atrophy of experience *per se*. While I need to turn next to the lack of fit that seems to result when film theory is applied to gaming and to how this underpin Hansen's criticisms of gaming, a number of the examples which I discuss reference such a 'lively responsiveness' across the material/virtual divide.

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Perhaps one of the most interesting angles to Martin's story is its characterisation of the relation between players and avatars in *Quake* in kinaesthetic terms. In contrast to what many might expect, this relation is primarily kinaesthetic, not psychic. Given the predominance of theories of narrative identification, particularly in film theory, this is a distinction that some may well find difficult to accept. The consideration of similar ideas amongst some film theorists is, then, significant: apart from Sobchack's account, another scholar, Anne Rutherford has theorised similar phenomena of bodily responsiveness to movement in cinema spectatorship. Rutherford claims that, "It is precisely this move that film theory needs to make from the concern with sensation or with emotion understood as sentiment organised along the axis of narrative identification, to an understanding of embodied affect, in its theorisation of spectatorship." As she writes,

> …in *Microcosmos* you may be down there in the mud with the copulating ladybirds – it doesn't mean that this is identification… – it may be red-and-black-spottedness, or jiggleness that attracts you, just as in watching an aquarium you may not have an anthropomorphic identification with a fish, but a recognition of floatingness or bubbleness – it may contact some place in your self that knows weightless suspension and set up a sympathetic vibration with it. Similarly you may find rollingness in the image of [a] giant wave, spinningness with a windmill, or bristliness with the spiny protuberances on a prickly pear.[213]

Rutherford's move away from notions of narrative identification is highly significant. She is making a very important distinction between what she calls kinaesthetic 'recognitions' and psychic identification. I also distinguish the bodily responsiveness of mimeticism from identification, but I prefer the term 'responsiveness' to designate this rather than 'recognition', as it tends not to imply the prior knowledge that the latter can. Though it might be that one usually responds to that which is known – that which is

[213] Anne Rutherford (1998) "Cinema and Embodied Affect", paper presented at "Cinema and the Senses: Visual Culture and Spectatorship", University of New South Wales, 13-15 November.

recognised (as in the case of my responding to the familiar sounds of gear changes, for instance) – my argument also seeks to draw attention to responses to that which is unfamiliar, which is what I am arguing can take place in gaming.

Those who consider computer gaming in only negative terms may have a hard time accepting this argument about kinaesthetics. One of the most frequently cited concerns amongst critics of gaming concerns the violent content of some games. Computer gaming has been thoroughly tainted through the connection with violence, which has not always been well founded. Unfortunately, because of the perception that all games are violent, the medium is often considered too odious to be the subject of serious consideration.

As I noted earlier in the chapter, Miriam Hansen has rejected extending Benjamin's positive readings of film to computer games, specifically discounting the possibility that computer games as "play versions of second nature" could be in any way innervating. I will give a brief account of her (even briefer) criticisms of computer games, before indicating my response. Hansen's claim is that,

> The use of technology in the service of domination can no longer be distinguished by the criterion of monumentality, and 'play versions of second nature' (Benjamin) – such as video games – have become a major site for naturalizing violence, destruction, and oppression.[214]

This is a remarkable exclusion, that is difficult to understand, particularly given the way that Hansen criticises readings which reduce the ambiguity of concepts like shock and innervation for Benjamin. Why does she single out gaming in this way? Hansen makes these comments about games in the context of recounting the debate between Benjamin and Adorno regarding Mickey Mouse, which I detailed in the last chapter, specifically regarding the question of whether or not laughter at a Disney film can be political. The position she adopts regarding this debate seems to be linked to her allegations regarding computer games. Apart from the link to this debate, her singling out of gaming seems also to relate to assumptions about the role and *significance* of violence in computer games – "the imbrication of technology with violence still prevails, confronting us as the unresolved legacy of modernity…" (28) – assumptions which themselves need to be critically analysed in relation to gaming, more than they have been to date. Whilst I disagree with Hansen's dismissal of computer gaming, I cannot argue the point she makes directly, as the section to which she refers is located in an early version of Benjamin's

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[214] Hansen, "Of Mice and Ducks", p. 54.

Artwork essay which remains, as yet, untranslated and so not accessible to English readers. In any case my concerns, though overlapping at points, also differ.

In terms of my thesis about hyper/aesthetics, Hansen's discounting of computer gaming is not very helpful, only further marginalising attempts to seriously consider gaming's capacity to produce "new forms of innervation". No matter how much she might wish that games would simply go away, they are not going to. As a result of the bad press gaming has had, it can be difficult to combat and move beyond the stereotypical arguments about gaming and violence.

There are a number of arguments which need to be made in response to these criticisms about violence and computer games, to mitigate against the all too common dismissal of computer games. First, computer games are objects of play, engaged with in a spirit of play, which is not only different from instrumental appropriations of technology, but also differs from reality. For the most part, I would argue, players know the difference. Attempting to read play actions as if they were real is problematic. The implication of Hansen's essay is that there is a correlation between the drawbacks Adorno saw in Benjamin's looking to Mickey Mouse cartoons as positively productive, and computer games. Like Adorno's claim that what these cartoons really did was to induct the marginalised into violent treatment, the assumption is that games teach a similar barbarism. (Recall that for Benjamin, barbarism was another double concept.[215]) This argument rests on assumptions about the significance of fantasy violence as well as a significant degree of fear. Critics are afraid that players identify with their avatars. This alleged identification is fearfully regarded as (a) inevitable, (b) terminal, and (c) automatic. The arguments should not be accepted unchallenged.

Anti-gaming arguments from violence tend to imply that there is something pathological about gamers who like games' violence, that they are necessarily embracing it 'gratuitously' or finding some psychic reassurance in the character, who gets away (literally) with murder. The main concern seems to be that players will identify with game characters who kill, adopting their avatar's position as their own, along with their assumed 'motivations' and moral standpoint. Attempts by computer games critics to explain how this allegedly works are founded on dubious, if familiar, arguments. The implications are, firstly, that players confuse themselves with their avatar, and secondly,

that they identify with the 'character' and their psychic 'motivations'. Such identification is typically treated as both total and stable, rather than transitory and shifting (which tends to be how contemporary theorists who work with concepts of identification invoke it, shunning such deterministic usage).[216] Most recent games writing is at least in agreement on this point. In the simulation game *SimCity*, Friedman writes that it is much more a case of shifting identifications than of any simple fixed notion of identification, something that he says is an important part of what the game is, as well as an overarching, more general state of identification with the city as a whole.[217]

It is fair to say that the first person perspectival representation of the onscreen action in First Person Shooters can seem to support the assumptions of some commentators about player identification (and games' promoters are certainly happy to work off the anxieties, indignation, thrills and other affects that this idea generates). Representing the action in this way is, however, just a convention like any other. I asked John about this following his response to a question about the game speed of *Quake* that "once you get used to it, you think about doing something and it just happens." I wanted to know about his use of 'you': when I asked him whether he thought as though he *was* that character, he responded in the negative, but with an impatience that spoke volumes, which I took to mean 'That's what people always think'. He said "You don't go as far as to like [believe that you're that person or anything]". He was talking about finger dexterity, which I discussed earlier, about the way that with practice, your fingers move automatically across the keys to make the character move.

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[215] Benjamin, "Experience and Poverty".

[216] A number of film theorists, for instance, who in the past promoted this sort of analysis now recognise the limitations, as well as extreme complexity, of identification. Robert Stam et al, who write that identification is "Perhaps the most complicated issue in the theory of the spectator…; not only is there a distinction between primary and secondary identification in both psychoanalysis and film theory, but the definition of these is interpreted differently by Freud and Lacan, and later by Baudry and Metz…" Robert Stam, Robert Burgoyne and Sandy Flitterman-Lewis (2000 [1992]) *New Vocabularies in Film Semiotics: Structuralism, Post-Structuralism and Beyond*, London, New York: Routledge, p. 149. See also Tania Modleski's Introduction to her (1999) *Old Wives Tales: Feminist Re-Visions of Film and Other Fictions*, London, New York: I.B. Tauris, pp. 1-12. Here, Modleski protests at the way that the work of early feminist film theorists gets held up and critiqued for its limitations, when the authors have themselves moved on from the positions they once espoused. I see something similar happening with the vague and imprecise application of 'identification' to computer gaming. Though it is not reflective of current thinking on the concept, invoking identification in relation to gaming bestows the kiss of death on the practice, linking it in the popular view with homicidal maniacs.

[217] Friedman, "Making Sense of Software", pp. 84-5.

While this fear probably stems in large part from the pathological treatment of computer gaming generally, it is further evidence of why gamers and games theorists have good reason to be sceptical about computer gaming being fitted into frameworks and assumptions developed for other purposes. I am happy to report that none of these suppositions or fears about gamers was borne out in my research. Indeed, I take the fact that players found themselves having embodied responses to their virtual gaming bodies as indicative that their relations with gaming avatars were not familiar ones, but partial and constantly under negotiation. Haraway's suggestion that relations with non-human others are unfamiliar supports this. I think that the negotiation that takes place between these different bodies has considerable significance for understanding what is involved in games subjectivity, as well as the issue of embodiment in virtual worlds more generally.

Judging from the close proximity of Hansen's dismissal of gaming to her recounting of the Adorno-Benjamin debate over Disney, it seems that she is operating with this pejorative sense of identification.[218] Even though theories of the psychic identification which spectators are supposed to have at the cinema are problematic (as the work of Rutherford and others makes clear[219]), Hansen's argument and discounting of other responses (laughter as corrosive, etc) seem to be subtended by these very assumptions. To assume that computer game players identify with avatars misunderstands the nature of fantasy and its involvement in games. Even when players respond in a bodily way to the movements of their avatar, this cannot be taken as evidence of psychic identification; it is a kinaesthetic responsiveness, which need not entail anything more than this. On the other hand, the conversion of somatic, motoric stimulation is one of the features Hansen points to in describing Benjamin's two-way concept of innervation. Gaming could even be a better example of this than the examples Hansen cites from Hong Kong cinema. The kinaesthetic responsiveness that is involved in playing computer games such as *Quake*, which I have been discussing suggests, then, that a productive reading *can* be made of computer gaming using this theoretical material. Benjamin's work in this area has a lot

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[218] Interestingly, in an earlier essay, Hansen considered that Horkheimer and Adorno's indictment of Disney revealed "a relatively reductive, behaviorist model of spectatorship". It seems Hansen has been progressively changing her mind about this. See her (1987) Benjamin, Cinema and Experience", p. 222. See also her (still earlier) (1981-2) "Introduction to Adorno, 'Transparencies on Film'", *New German Critique*, no. 24-25, pp. 186-7. Also interesting in this context is Hansen's remark that the essay of Adorno's which she introduces constitutes an exception to his culture industry thesis of "universal manipulation and delusion".

[219] See also Linda Williams (1991) "Film Bodies: Gender, Genre, and Excess", *Film Quarterly*, vol. 44, no. 4, Summer, pp. 2-13.

to offer new media theory; the challenge, it seems, is in unbinding the concepts from their weddedness to certain assumptions inherited from earlier film theory.

It seems that there is an argument to be made that rather than naturalising dominance and oppression, gameplay might actually curb the acting out of violence, not in a 'letting off steam' fashion, but through opening up a range of possibilities. Also, play is *enacted* in the gaming context. This goes to one of the other meanings of the French verb *faire* that I pondered at the beginning of this chapter – "to do". Gamers *do*, and the significance of this doing, their performance, needs to be considered. There can be a significance in performing and in doing that is absent in watching. The social fantasy of gameplay works differently at a libidinal level from the social viewing of fantasy violence, in cinema. Far from *covering over* an identification with the perpetrators of violence (which was Adorno's fear about Disney cartoons), being put in such a position of trying out and performing something that initially seems inappropriate can bring other reactions to the fore in a powerful, bodily way. It can even result in a heightened involvement, reintroducing a range of possibilities for action. I am not going to push this line further at the moment (however, I will review an analogous argument that Docker makes, regarding the polyvalence of carnival shortly).[220] What I do want to say is that trying to settle on any one reading of gaming is always going to be fraught. *Quake* is a violent game. But the *significance* of the violence is not often considered in the context of players' overall engagement with the game. There is a need for such a discourse. Though Hansen associates gaming with technology in the service of domination, I want to suggest that the case of computer gaming might be an example of one of the "antinom[ies] in today's media culture" that she finds Benjamin's thought so useful in discerning. Shocking as it might seem, John said that he liked the violence in *Quake*, "Because you can't do this in real life. You wouldn't want to, but I'm just saying…" The paradox of games violence is also suggestively rendered in other players' claims to find the violence good for stress relief. These are significant points, to which I will return.

While it is important to question the application of concepts to games (particularly when these have been developed for the analysis of different media), and while I do not find

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[220] Film critic Jane Mills also makes this sort of an argument, in her (2001) *The Money Shot: Cinema, Sin and Censorship*, Sydney: Pluto Press.

identification a very useful concept for applying to games like *Quake* (and the concept's use in a wholesale way against *all* gaming is objectionable), this is not to say that *no* games work on identification. It is possible that some games might, making it desirable to distinguish between the structures of different games. It is well and truly time that the different genres of games were analysed, work which has perhaps been impeded by the generally negative views regarding all computer games. During the course of the lan I attended, for instance, players from a *Quake* clan gathered around to preview a new game, *Kingpin: Life of Crime*. The opening sequence of this game featured two rough gangsters approaching each other and hurling verbal abuse. The manner of the first character's approach to the second seemed to determine the offensiveness of the language that was returned to him, as well as the degree of violence enacted on his body, which, with a lead pipe as the basic weapon, was inevitable. The group of men standing around the computer on which this was displayed at the lan were at a loss to understand what the appeal of such a game was supposed to be. These players were part of a skilful band of dedicated *Quake* players, and so were quite used to the violent scenarios of that game. But they found this game pointlessly and gratuitously aggressive.

That these lanners found *Kingpin* pointless and disturbing is interesting in terms of the debates about violent content in computer games. In email correspondence, the games writer and player Sue Morris reported that she had also found *Kingpin* off-putting, however, she put it down to the 'subject position' that the player gets co-opted into.

> I put it down to the fact that the chars [sic] talk to you – (and with that there's a demand for you to accept some…degree of the subjective position proffered by the game, so that when you do whack them over the head there's part of, what is, for the purposes of the game, *you*, that is doing that and the experience then is at odds with your 'normal' self and you feel a bit icky about it).[221]

Perhaps in contrast to *Kingpin*, *Quake*'s lack of dialogue is what allows kinaesthetic responses to come to the fore, retaining more of the openness of play. Rather than corralling players into a pre-fab scenario, complete with (culturally specific) insults to hurl, the absence of speech retains a degree of virtuality, giving players a much broader scope for their own readings of, and responses to, the game, something which is appreciated by players. Morris also points to the difference between playing *Quake* in single player and multiplayer mode: in the former, she suggests, there is a certain amount of subjectivity construction taken on by the player via the text "I am the hero and I must

[221] Sue Morris (2001) in email correspondence with author, 27 February.

save the world", whereas in multi-player mode, it's much more a matter of "I am me playing against my friends."

What the *Kingpin* example also shows is the way that players actively negotiate meanings in games' texts. Sophisticated criteria such as the quality of the gameplay are applied by gamers, and even then they may decide that they do not like a game, as was the case here. This contrasts markedly with the assumptions made by a range of writers (including both Buck-Morss and Hansen), in assuming a relatively passive spectator/audience, one who succumbs to the manipulative effects of the phantasmagoria, who is treated as if *unable* to reflect critically.[222] As well as *individuals* bringing their judgements to bear in deciding which games they like and which they do not like, and what meaning they take from games generally, the lan itself clearly provides a *dynamic social context* for the 'reception' of games. The *Kingpin* example shows how the gaming collective constitutes a social context for reception and active meaning making. In terms of my argument about innervation, it can be said that in addition to the way that gaming facilitates aesthetic and affective relations with technology, the games group is also innervating in a social sense, given the dialogic aspects which also play a part in the reception of games. Paralleling Gunning's refutation of the myth of the naïve spectator of early cinema (reputed to have run from the Lumiere's footage of a train approaching), gamers deserve to be recognised as an audience that is both active and astute in its production of meanings.[223]

Lanning clearly provides an important social context for gaming and for negotiating meanings, one that would easily rival the prominence of the arcade in Australia. The computer gaming group offers an opportunity to make explicit the multiple ways in which the individual's relation with technology is more dynamic than has often been thought. In such a context, cinematic concepts of reception are not adequate. There is a need for a different language to describe this dynamism: active/passive binaries are problematic, as

[222] In film theory, Tom Gunning has resoundingly critiqued what he calls the myth of the naïve spectator, who was alleged to have fled from the Lumiere's early footage of a train. See Tom Gunning, "An Aesthetic of Astonishment", p. 33.

[223] Vivian Sobchack has recently suggested that the popularising of Gunning's 'cinema of attractions', and especially its application to contemporary spectacle cinema, is somewhat misplaced. I wonder whether the popularity of Gunning's ideas might not stem from his refutation of the presumed naivety of spectators, and from his according audiences a degree of criticality, as capable of making their own meanings and judgements about a film, a consideration which has often been denied. See Tom Gunning, "An Aesthetic of Astonishment"; Vivian Sobchack, "What My Fingers Knew", n. 26.

if gaming and newer media are designated 'active,' this suggests that older media were and are 'passive' (a point which John Docker's reading of television as a participatory, sometimes carnivalesque medium has shown to be implausible). Thinking of gaming as a *making*, as something which gamers *do* (de Certeau), might avoid some of these difficulties; some of the links between lanning and earlier participatory practices like carnival, will also be helpful to consider. Yet players' interactions on both sides of the interface potentially set computer gaming apart from carnival too, so this also needs to be considered in thinking about the meanings that gamers find and make in and around gameplay.

Margaret Morse's work on virtual environments is helpful with respect to the second of these points, as she attends closely to the overlaps between the real and the virtual, the organic and the technological. In her essay "What Do Cyborgs Eat?" for instance, Morse's concerns with the culinary discourses of non-food and of food's denial find expression in images of interimplication, where organic human bodies and electrical bodies are mutually incorporated.[224] After tracing various figures of incorporation in this essay, she concludes by suggesting that rather than accommodating the human within the machine, the better question might be how cyborgs can become meat? In a way, this is how I have been thinking of lanners, as fleshy cyborgs. I read Morse as productively extending Haraway here on questions of virtual embodiment. Her according the cyborg materiality is in line with my reading of Haraway's emphasis on the cyborg figure's partiality, resulting from its location at the intersection of a number of boundaries, as well as her concern with material conditions.

Morse's argument that "Cyberculture is built upon such a proliferation of *nows* in diverse modalities and inflections and *heres* that are not single, material, and contiguous but multiple, discontinuous, and virtual" is particularly important.[225] It reframes the alleged disembodiment of cyberspace by noting that the material and virtual are contemporaneous, a point which strikes a chord with lanning's operation across both material and virtual spheres. Focussing on the interstices and overlaps of the different reality and materiality statuses involved in computer gaming at a lan also moves the debate away from the binary terms in which it has often been expressed, and accords with the notable absence of desires amongst lanners to be rid of the body. Though escapist

[224] Morse, "What do Cyborgs Eat?"
[225] Morse, *Virtualities*, p. 15.

desires for disembodiment have formed a significant thread in cyber-cultural discourse, this is not supported by gaming practice, suggesting that the ease with which we rattle off the real and the virtual as though they were thoroughly separate categories, belies a much more complicated *intertwining* of these realms. Games space is not so much a cyberspace that one goes to – spectacularly jacking off and leaving the body 'parked' – as an *other* space which constantly informs and punctuates familiar spaces, pervading everyday practices. Players experience both these at the same time.

Morse has extended these earlier insights in a 1996 essay, "Nature *Morte*: Landscape and Narrative in Virtual Environments," in which she employs concepts that are useful for thinking about gaming, particularly in terms of its relation to other debates on embodiment in cyberspace, and the relation between players and their avatars. Morse observes that operating in virtual environments can involve "crossing through a variety of reality statuses…[as well as across] different degrees of materiality."[226] Virtual Reality, she notes, gets its playfulness from the *links* (as material bodies are mapped onto virtual bodies) but also the *disparities* between organic and virtual bodies.[227] This idea offers some directions for exploring the confluence of materiality and virtuality, helping to approach some of the riddles of embodiment and subjectivity in digital immersive environments. Thinking about the overlaps and discontinuities between different realms also provides a way to think about the responsiveness that animates some gamers in relation to virtual worlds and their representatives in them, as well as the condition perhaps of being inbetween these worlds.

Another argument of Morse's joins this insight with my concern for the contemporary (lanner) subject. She argues that in considering a user's experience of virtual environments, it is important to attend to the multiple roles, functions and 'aspects of a person', which are factors affecting the experience of cyberspace:

> Surrogates of the user within the virtual realm can be expressed in many different persons and degrees of immersion: an 'I' or the subjective and 'embodied' view of the world from inside it; a 'me' as a corporeally separate persona or avatar, whose appearance and characteristics (often chosen from stock) represent the self in a screen-based world; a self that lurks as a ghostly, disembodied perception, marked or unmarked in that world; or a character, 'he, she, or it,' with a more distanced relation to the visitor's self – and there is the uncanny agency of the space itself. Furthermore, the voice of a controller/programmer/author may leak in from 'outside' or the view of the virtual world may be superimposed over physical space.[228]

[226] Morse, "Nature *Morte*", pp. 200, 208.
[227] Morse, "What do Cyborgs Eat?", pp. 179-80.
[228] Morse, "Nature *Morte*", p. 199.

Thinking about the player/avatar relation in these terms, as involving a proliferation of aspects of a person is useful, I suggest, particularly for considering the negotiations that are facilitated between the different roles, functions and aspects of the gamer and the avatar. This proliferation locates gamers simultaneously at the intersection of multiple concurrent aspects of a person, while they also cross between different realities and materialities. This is particularly so at a lan, where a player can be talking to the person beside them at the same time as participating in gameplay, where they might also be 'chatting' with team members, textually. Contrary to the speculations of those who think that "a subject immersed in virtual reality, with its mobile perspective and multiple narrative paths, would lose its identity, splinter, and fall apart" Morse argues that there may actually be "more continuity between the experience of the physical, the electronic, and the virtual environment…not less" and that "the many aspects of person available to the user of a virtual environment may offer more possibilities for subjective integration and control" (199). The concept that players negotiate these multiple realities and contexts rings true with what players told me about what they 'got' from gaming, and how it fitted into the rest of their lives. In concluding this chapter, I want to refer to some examples of these material/virtual overlaps, to try to think about how such *negotiation* might be theorised, for it seems important to situate it carefully.

The most immediately apparent material/virtual negotiations were players' reports that they found gaming good for stress relief. As Andrew put it: "It saves me from going and belting the hell out of the boss." Such a statement could be read in terms of a classic 'safety valve' argument, which would assume that actions in the virtual world of a game provide an outlet, allowing players to 'get it out of their systems', with the 'it' often assumed to be 'bad,' pent up emotion, perhaps anger or aggression. This repression argument is analogous to the one which is made about carnival: that it is just a temporary aberration, that carnivalesque laughter is harmless, and that carnival – which only happens infrequently – is just a letting off of steam.[229]

Like Docker, I suggest that this is not an adequate reading of either carnival or gaming. It assumes that the virtual is a substitute for the material realm, rather than an adjunct to it. To accept the 'functional' argument about gaming is to miss the significance of the interaction of the virtual and material realms, and to dismiss the exuberance of gaming,

comparable to what Docker calls the "carnivalesque as cultural mode" in his work. Citing Mikhail Bakhtin's belief in the indestructibility of the carnival principle and the potentially corrosive power of folk satirical laughter (contra to those who argue that it supports state power, and with some interesting parallels to Benjamin's interest in laughter[230]), Docker suggests that the carnivalesque as a cultural mode continues to strongly inflect contemporary mass culture, fertilising other areas of life and culture beyond carnival. In arguing this and identifying other writers who also adopt what he terms a 'postfunctionalist' view of carnival, it is important to note that Docker does not suggest in utopian fashion that carnival energies necessarily lead to the overthrow of existing order, either. Rather, he suggests that carnival is about ambivalence, a point which is also important in my reading of gaming as well as my broader thesis on the hyper/aesthetic quality of contemporary relations with technology. The tension of the carnivalesque does not miraculously disappear just because cultural mores have been transgressed, hierarchies inverted.

Docker's reference to David Kunzle's writing on European broadsheet 'World Upside Down' (WUD) prints helps to explain this point. Kunzle argues for the 'essential ambivalence' of World Upside Down, claiming that there is a contrast "in the popular culture of early modern Europe between proverbs, presenting a fatalistic resignation to the world as it is, and broadsheet images of World Upside Down, where every order of being, cosmic, human, animal, is fantastically inverted, reversed, toyed with." These prints, Docker writes,

> …don't in themselves ensure a set ideological meaning. Groups in society who are satisfied with the existing order might take pleasure in the motif as mocking the efforts of those who wish to overturn that order. Discontented groups, however, might see WUD as a promise of revenge and a vindication of just desires. The World Upside Down broadsheet could be made to appeal to the political conservative, the dissident, and the lover of fantasy and nonsense. The same or similar aesthetic conventions

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[229] Docker, *Postmodernism and Popular Culture*, p. 171.

[230] It seems that Bakhtin and Benjamin might have been able to share some common ground on this question of laughter's significance. Interestingly, Benjamin explicitly references carnival in connection with both innervation and mimeticism, arguing in his "Program for a Proletarian Children's Theatre" that,

> The performance is the great creative pause in the process of upbringing. It represents in the realm of children what the carnival was in the old cults. Everything was turned upside down; and just as in Rome the master served the slaves during the Saturnalia, in the same way in a performance children stand on the stage and instruct and teach the attentive educators. New forces, new innervations appear – ones that the director had no inkling of while working on the project.

Benjamin, "Program for a Proletarian Children's Theater", p. 205.

> could be used, deployed, played with, in diverse, surprising and unpredictable ideological ways. (196)

Just as the carnival principle is one of ambivalence, of many possibilities, gamers may similarly find many possibilities in computer gaming, a point which those inclined to definitive readings would do well to consider.

This argument also resonates with work by Sandy Stone, particularly her study of those who play 'technosocial' games (she includes multi-user interactive gaming amongst these). She writes, "Instead of carrying on an established work ethic, the beliefs and practices of the cultures I observe incorporate a play ethic – not to displace the corporate agendas that produce their paychecks, but to complexify them." Stone continues,

> The people who play at these technosocial games do not do it out of any specific transformative agenda, but they have seized upon advantages afforded by differences of skill, education, and income to make space for play in the very belly of the monster that is the communication industry.[231]

This is one explanation of what is going on for lanners; it seems particularly apt for explaining the situation of the many gamers working within the information technology sector. Stone's point also resonates with my arguments that the various uses to which technologies are put, and that the variety of relations that are developed with technology, *matter*. In addition to the complexification of corporate agendas that she notes, the notion of instrumentality that I have been working with also undergoes complexification through this mixing of work and play.

To provide the context now for Andrew's quote, that gaming "saves me from going and belting the hell out of the boss" (a colourful way of referring to stress relief), he continued,

> After lane-splitting from Penrith to the North Shore [as a motorcycle courier], this is actually relaxing, believe it or not…
> I remember one of the worst days. I started lane splitting at Penrith, I was still lane splitting through the city. For the tape, less than an inch between the handlebars and the [car mirrors]. It was like that all the way across the North Shore, the Harbour Bridge was closed. You turn around and…it's just as bad…
> You just can't handle it anymore. You sit at home, you just sit there shaking…one little mistake. Not only are you going to [do damage to the cars], but on a motorcycle [you're the one that is going to get hurt].

[231] Sandy Stone (1995) "Split Subjects, Not Atoms:, or, How I Fell in Love with My Prosthesis," *The Cyborg Handbook*, Chris Hables Gray, Heidi J. Figueroa-Sarriera, Steven Mentor (eds), New York, London: Routledge, p. 401.

After working under such pressures making time critical deliveries, he finds that, though he does not play games *that* much during the week, gaming does help him to relax. In a sense his experience is the inverse of Martin's enacting of robotic movements, as he reported experiences of going home and not being able to get the centre line out of his mind: "being on the highway, non stop, dead straight, with a nice white line…then you try to relax and go to sleep that night. You're just lying in bed and you can see this white line. The brain adjusts to it, and it expects that and it just can't unwind." The contrast between the material conditions of his life and the virtual one of a game helps him to unwind, to change the pace and zone out. "You can do things that you can't do in real life."

Both Andrew and John used this phrase (that "you can do things that you can't do in real life"), making me wonder whether it is a mistake to read the other incidence (John's admission that he likes the violence because "you can't do this in real life") literally, *just* in relation to violence. It might stand more generally for that which is not socially sanctioned or approved (as in carnival), that which is not consistent with civilised restraint, or – perhaps more to the point – that which is not consistent with contemporary pressures to *get ahead* (two of the premises which the Hollywood film "Groundhog Day" so successfully turned on[232]). The felt pressures of the moment are not only work related ones. Andrew related that though he had other hobbies which he enjoyed, such as four-wheel driving, it was a "horrifically expensive" hobby. Having 'written off' four vehicles, he was reluctant to buy another: "I've got my house to fix up yet." Another player, Greg, reflected on his use of gaming outside the group, noting that compared to going out to the cinema or other entertainment, gaming was "a cheap night in"; this was important to him, he explained, as he was paying off a car loan.[233] A previous fan of the games *Dungeons and Dragons* and *Paranoia*, he further related that he found the RPG *Baldur's Gate* interesting in terms of wondering what would happen if things went a certain way and there were consequences for actions. These are examples which Morse's concept of cyberspace as facilitating a negotiation between the different roles and aspects of a person, and Docker's notion of carnival ambivalence, help to understand. Greg's 'wondering what would happen if…', for instance, is something not generally accorded

[232] Harold Ramis (dir.) (1993) *Groundhog Day*, Columbia Pictures.
[233] While Greg's emphasis as he explained this was on staying in (and so saving money), it should be remembered that gamers also reported congregating at each others' houses to lan in smaller groups, in between larger gaming days.

much importance amongst the demands of contemporary living; it seems that such reverie was, for him, supported by games which simulate consequences, perhaps providing a sense of the virtuality of events and their outcomes.

Lanning can be intense and can be a great release, but that is not *all* it is. Thinking about lanning as characterised by ambivalence, like carnival, acknowledges that gaming's significance inflects and is felt in other aspects of players' lives. For instance, Greg further noted that playing simulator games, you are really in touch with real life. I questioned him on this, asking whether he meant a *simulation* of real life, and he said (thoughtfully), that he wasn't entirely sure. It seems that gaming is a good example of negotiating competing demands and desires – on the one hand, perhaps, to get ahead in material terms, as well as not to be bored, to experience extreme feelings and a sense of immediacy. Gaming can provide this sense of immediacy – of being 'in touch' – that I referred to in the previous chapter. This is quite different from the trivial understandings of the hyper-subject that I linked with Jolt Cola's notion of immediacy, which was like a ballistic force. Greg's remarks suggest that playing computer games can generate feelings of immediacy in (virtual) games space, extending a player's senses beyond their immediate surroundings. This sense of immediacy makes him feel in touch and in the present as well as wanting to experiment, to try and test things out and see what happens, supporting my claim of an experimental ethic pervading computer gaming culture.

Having canvassed some implications for the multiplication of aspects of a person in relation to computer gaming technologies, I turn now to consider quite a different figure of multiplication, that of the configuration of the multiple media elements in new media art work.

4

Denaturing the Senses: Multi-media as (un)mixed media

> *To the total dramatic artwork he opposes the dramatic laboratory.*
> -- Walter Benjamin of Bertolt Brecht[234]

> *If nothing else, digitality provides us with a means to rest in the in-between of the ampersand... Digital art that inhabits the ampersand revitalizes the powers of contrast and paradox rather than seeking their transcendence… This is the intricate critical space where we can pause…to examine what is happening to our visual and intellectual cultures.*
> -- Timothy Murray[235]

In preceding chapters I have explored how the senses function, or are claimed to function, concurrently. In Chapter Two, I undertook an analysis of advertising promotions, a number of which claimed to stimulate "all your senses". In beginning this chapter I want to engage with a related notion, located at the point where this motif of 'all the senses' turns into one of the *unity* of the senses, the sensorium as organic whole, considering the accompanying arguments about media convergence. While I think this concept of the organic unity of the senses is problematic, I want to linger on it for a moment at the outset, allowing its implications to resonate, before using it as one of the points of departure for this chapter.

A second point of departure concerns questions of familiarity, or more correctly, unfamiliarity. (Un)familiarity is a thread which has run through the previous two chapters. In Chapter Two, I argued that technical media could cement in place aesthetics that were already existing, leading to or confirming an already habituated, over-familiar aesthetic (or anaesthetic) relation to technology. I further argued, after Haraway, that technical media could also make new aesthetic experiences possible, and I noted that newer media in some contexts seem to be opening up a space for *experimentation*, in which users can try and test out how a particular technology works, what it might do, and what affects might result from its use. (Un)familiarity is a central aspect of hyper/aesthetics: not only does over-familiarity significantly constrain experimentation, but, if routine dulls the senses, then that which is unfamiliar can innervate sensory response. In Chapter Three I developed some of these ideas, showing how they were manifest in the gaming group, in particular how one player's aesthetic encounter with and

[234] Walter Benjamin (1999 [1934]) "The Author as Producer," Edmund Jephcott, trans., *Walter Benjamin, Selected Writings, volume 2,* p. 779.

response to the strange, robot-like movements of an avatar introduced him to other ways of moving, generating a strange tension between the movements of the different bodies he was experiencing.

In this chapter I will explore the way that these themes, of 'all the senses' and unfamiliarity, find form in some recent multimedia artworks. To begin with, however, I need to ponder some of the resonances between ideas about the mixing and combining of media and the figure of 'all the senses' as forming an organic whole, as well as discuss the importance of unfamiliarity in some recent CD-ROMs.

In commenting earlier on the high profile the senses have enjoyed in recent discourse on multimedia – particularly in advertising – I noted how the 'multi-' in multimedia seems to be taken as an indicator of the medium's ability to dispense *quantities* of multi-sensory stimuli. While the claim of 'wholeness' to which I now refer is conceivably an extension of this earlier conception of multimedia, it is less associated with the spectacular quantities of stimulation or the amazing new kinds of experiences that might be generated. Rather, it relies on the view of multimedia as *configurer* of different media, where the dominant mode of configuration is convergence. Convergence is commonly seen as a process that facilitates the combination of images, audio, text, animation, and anything else that can be digitised into a single, seamless text. The sense of inevitability surrounding this discourse is palpable: the senses allegedly parallel technical convergence, coalescing into an organic whole. Or, if they are not quite converging, then it is something approaching convergence: as Sadie Plant puts it, "computers melt the senses".[236]

Apart from providing a way of thinking about multimedia as a configurer of media, this version of convergence has tended also to present a particular configuration of human and technological bodies – the total union of user and computer – as unproblematic. Not only then does this account feature different media coming together in a single text to form a whole, with the senses following suit, but it is also frequently implied that users are themselves 'melting' with computers. Early conceptions of Virtual Reality helped to popularise aspects of this notion of sensory wholeness and an unproblematic, total

[235] Timothy Murray (1999) "By Way of Introduction: Digitality and the Memory of Cinema, or, Bearing the Losses of the Digital Code", *Wide Angle*, vol. 21, no. 1, January, p. 24.
[236] Plant, "Coming into Contact", p. 31.

technological union. Even though the technical reality was nowhere near being able to provide the dream of a totally immersive, totally absorbing, consciousness-altering, multi-sensory experience, this did not stop it from becoming a pervasive figure. Indeed, VR served in some cases as spectacular 'evidence' for the 'benefits' of the digitally unified sensorium, particularly where this was supported by psychedelic or 'cyberdelic' visionaries.[237] If one had been inclined to believe the (hyped) reports of a few years back, it was only going to be a matter of time before all kinds of experiences could be had 'virtually', at a distance, and where the (realistic) sensations transmitted to data-suited operators would rival the corresponding 'real' experiences. All that remained was the task of filling the remaining 'gaps' in the voyager's sensory data, such as smell and taste and tweaking some input and output devices. So, for instance, VR featured prominently in Rich Young's explanation of why (continuously configured or synchronised) multimedia was so attractive:

> The current fascination with multimedia and virtual reality may be due to an experience known as synesthesia*, the union of the senses*. Synesthetes, numbering perhaps 10 persons in a million, routinely taste shapes, see sounds or hear colors. The rest of us may filter out this part of our brain's attempt to reproduce reality. Cultural forums that promote synesthetic experiences may serve to quench *an unconscious thirst for the unification of our normally fractured senses*. (emphasis added)[238]

Young's argument contains a number of important assumptions about the senses. Most immediately arresting amongst these is that human beings thirst for a unified sensorium. That he terms this longing 'unconscious' gives it the cachet (and all of the associated difficulties) of the 'natural'. According to Young, despite this human 'longing' for unification of the senses, along the way they get fractured. Happily, he alleges, technological developments deliver the means by which the unification of our fractured sensorium can be achieved. One does wonder, however, at what this link is between media and the senses that permits 'fragmentation' and 'fracturing' to so easily be converted into 'unification'. It seems as though it might share more than just ease and instantaneity with the advertising promotions discussed in Chapter Two, specifically what

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[237] Although Timothy Leary's name is probably cited more frequently, my favourite (psyche/cyber)delic reference is to Terence McKenna's rather auspiciously titled (1991) book, *The Archaic Revival: Speculations on Psychedelic Mushrooms, the Amazon, Virtual Reality, UFOs, Evolution, Shamanism, the Rebirth of the Goddess, and the End of History*, San Francisco: Harper. A number of the papers in the 1997 volume of *MESH*, the journal of Experimenta Media Arts, *Altered States*, address these questions. The influence of psychedelia is clearly evident in Howard Rheingold's (1991) *Virtual Reality*, London: Secker & Warburg. For a critique of the metaphysics on which the technology-altered states link is based, see Ken Hillis (1996) "A Geography of the Eye: The Technologies of Virtual Reality", *Cultures of Internet*, pp. 70-98.

I labelled as a view of media as experience machines, consistent with their delivering pre-packaged 'units' as it were, of stimulation-experience.

That Young should cite synaesthesia as the exemplar of a unified sensorium is also telling. The sensory figure of synaesthesia, where stimulation in one sense modality gives rise to sensations in another, is frequently invoked as the best evidence for the 'unity of the senses', especially in regard to mixed and multi-media art. Indeed, it is in art – most notably in ideas on the total work of art – that these discourses of organic unity have alternately survived and thrived for centuries. Various theories of *Gesamtkunstwerk* or the total work of art have advocated different arts media echoing, complementing or compounding each other. Though Richard Wagner was not the first to have dreamt of a fusion of the different arts – Günter Berghaus has traced the history of these ideas back to the Medici's[239] – his conception is the most explicit in its aims, which incidentally seem quite close to the aims of those who advocate a convergent conception of digital multimedia, and the corresponding stimulation of 'all the senses'. Often, as was the case with Wagner's dream of a fusion of the arts under the hegemony of music, theories of the *Gesamtkunstwerk* are overblown and totalising. Adorno, for instance, labelled the effect of the Wagnerian combination of the arts "an intoxicating brew".[240]

While synaesthesia is not my main focus here, Young's use of the figure does afford the chance to note the high incidence with which synaesthesia is invoked in relation to multimedia – digital and analogue. What is particularly striking about invocations of synaesthesia is how little most writers manage to explain by using it. Most analyses just lapse into speculation on the inherent unity of the senses, or else the ease of translating content between different media/senses, leaving the reader with the distinct impression that if only their senses were in such close proximity they would be able *to know* so much more wholistically, experience more intensely. While there have also been a number of very interesting studies concerned with synaesthesia, the senses and media,[241] most do not

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[238] Rich Young (n.d.) "Synesthesia, Multimedia and the Caves of Altamira," www.cel.sfu.edu/msp/instructors/rey/syesth.html, accessed 28/10/97 (site since removed).
[239] Günter Berghaus (1986) "A Theatre of Image, Sound and Motion: On Synaesthesia and the Idea of a Total Work of Art", *Maske und Kothurn: Internationale Beitrage zur Theaterwissenschaft*, vol. 32, nos. 1-2, p.20.
[240]Theodor Adorno, *In Search of Wagner*, p. 100.
[241] See for instance, Claire Oboussier (1995) "Synaesthesia in Cixous and Barthes", Diana Knight and Judith Still (eds) *Women and Representation*, London: WIF, pp. 115-131; Waterworth, "Creativity and Sensation"; Austin Clarkson (1995) "The Synaesthetic Juncture: Analytical Criteria Linking Picasso's mural *Guernica* and *Battle piece for piano* by Stefan

bother to think about how or why synaesthesia might be useful to theorising mixed media, with many simply collapsing diverse phenomena, or eliding the differences and specificities of different sensory modes and media, not to mention obscuring the sense/media distinction itself. Likewise, attention is seldom paid to questions of habituation when claims that an experience is synaesthetic are aired. That such potentially thorny issues are treated as simple is due to the self-evident assertions on which claims of unity rest. What these brief remarks illustrate is that what was supposed to be a single discourse on the unity of the senses, is in fact a whole range of discourses, many of which are quite complex.

In contrast to these tendencies, I favour an explanation that retains and attends to the *differences* between the senses (and different media), rather than their elision. I would argue that the need for close and careful analysis of different sensory modes becomes particularly pronounced where the figure of synaesthesia is invoked, as it is the differences *between* the senses that make the condition so distinct and interesting, not whether they add up to 'a whole'. While such a study would be related to the present one, it is beyond the scope of this chapter. My primary concern in this chapter is to analyse specific works of new media art which, while they are concerned with the senses (plural), refuse to collapse the differences *between* specific arts and senses. These works, then, exemplify what Timothy Murray calls the revitalised power of contrast and paradox, in the digital inbetween. Put another way, if Young's vision for the unified sensorium is 'natural', then what interests me here is the potential of multimedia for 'denaturing' the senses. Rather than the lumping together of different media in an undifferentiated morass ('fusion'), I want to examine multimedia practices that refuse discourses of the organic unity of the senses, as well as of 'more'. In the Introduction I registered my concerns with virtuality, and with opening up the range of arguments that can be made about sensory-technological arrangements. For this reason, I prefer to think of combinatory possibilities which forsake these conventions of unity and synchronisation, in favour of the asynchronous, juxtaposition, the inbetween, the unfamiliar. Though these questions are not unique to new media, I particularly want to look at the work of artists utilising digital multi-media, both in order to contradict the totalising impulse in multi-media and to highlight other, less familiar ways of conceiving and practising *digital* multimedia.

Wolpe", paper presented at New York School of Music and Visual Arts, joint AMS/SMT session, November 2.

Digital encoding has, of course, itself been linked to the demise of specificity. Theorists like Paul Virilio and Friedrich Kittler have pointed to the universal sameness of digitised material, which – irrespective of whether the source was sound or image based or something else – is all encoded as ones and zeros. Kittler is theoretically correct when he writes, "In computers everything becomes number: imageless, soundless, and wordless quantity…if the optical fiber network reduces all formerly separate data flows to one standardized digital series of numbers, any medium can be translated into another".[242] While digital media seem to promise frictionless translation in their reduction to a common code, the reality is often very different, however, as even a simple attempt at translating between different programmes or platforms makes clear. Also, the artists whose works I consider here are more interested in experimenting with differences between digitised media elements, particularly as these are *sensed* by the user, than with their coded sameness. Though the sounds and images they work with might well consist of "standardised digital series of numbers", this is not how the user experiences them. They stir our senses, and often in unfamiliar ways, as a number of these artists are also attentive to the potential of multimedia for denaturing perception. I borrow this term 'denaturing' from Roger Copeland, who refers to the way that perception is denatured in the mixed media performances of Merce Cunningham. But I will return to this.

Though they are often presented as natural, the senses are thoroughly enculturated; what is often perceived as *naturalness* is, I suggest, more accurately described in terms of *familiarity*. A concern with habituation and overfamiliarity is evident, I think, from the number of recent works addressing themes of unfamiliarity of one form or another. These include migration (*Strange Cities* (1999)), illness (*Juvenate* (2000)), madness (*Metal God* (2000)), amnesia (*I Am A Singer* (1997)) and shock (*Shock in the Ear* (1998)), to cite just a few recent CD-ROM based examples. All of these are out of the ordinary experiences that affect perception, changing it and the senses; they are strange experiences or conditions, which lie outside the everyday as well as beyond familiar ways of perceiving.

[242] Friedrich Kittler (1997 [1986]) "Gramophone, Film, Typewriter", Dorothea Von Mücke with Philippe L. Similon, trans., *Essays: Literature, Media, Information Systems*, John Johnstone (ed.), Amsterdam: G+B Arts International/Overseas Publishers Association, p. 32.

Michele Glaser, Andrew Hutchison and Marie-Louise Xavier's CD-ROM, *Juvenate*, for instance, is a work that considers the effects of serious illness on perception. The work forces users to modify their own behaviour, discouraging obsessive mouse clicking and fast movements. To activate the animations within a series of brightly coloured, hyper-realistic screens, the mouse must be moved "at a snail's pace". Moving the mouse incrementally affects the visual screens, making plants grow and bloom in the garden, toys move across the floor, and butterflies hatch from their casings, to give just a few examples. Many of the images and sounds in *Juvenate* are set in the home. Though this is a thoroughly familiar as well as familial space, the artists' suggestion is that to be seriously ill, or forced to convalesce at home is to slow down. In confinement, time passes much more slowly (akin to an organic rate of growth, it is implied), with a concomitant change in perception. Death's possibility also concentrates the senses, so that small, everyday occurrences take on a greater significance. Illness renews sensory appreciation of the small things which are normally passed over habitually in the course of a busy life. This is the work's strength and the best of the soundtrack, as the background sounds of the suburban backyard come to the fore of users' sensory awareness: the hum of a motor mower, the overhead sound of a plane, the drip of a garden tap, the creak of a clothesline. Glaser (narrative), Hutchison (authoring) and Xavier (visual design), thanks to their innovative programming which registers incremental mouse movements, as well as their conceptual focus on illness, manage to communicate a stilling of perception. As they write,

> Illness removes us from the everyday. Priorities change and perceptions alter. Memory, dreams and reality fold into one another.
> *Juvenate* offers you a journey through this experience, picking up the stitches of one life via the emotional ligature of its captive moments.

The defamiliarising of perception is, however, often in tension with the familiar (as familial) in *Juvenate*. So where the sounds of children milling around a playground can provide a background of life against which an illness takes place, sometimes, in the screens where children play, or are bathed or toys are animated in the hospital, the artists seem to assume a universalising view, where children are *central* to what 'life' means, for everyone. Another point at which the work's defamiliarising efforts run the risk of over-familiarity or cliché, is in the hospital scenes. Though the website for *Juvenate* notes that it could be used for grief counselling or palliative care, and the 'narrative' *is* exceptionally open, questions are raised as to whether the sound of a life support machine

going flat, for example, would comfort or aggravate loss and grief.[243] There is a tension then in the work's attempt to suggest some of the un-mappable emotions brought on by serious illness, and the moments when it occasionally succumbs to closure through universal catharsis, which are less compelling. Further exploration of the unfamiliar sounds of illness, rather than the conventional ones we already associate with it, might have made a difference here.

Another recent work, Tatiana Pentes' *Strange Cities* (1999), tells of the experience of the artist's grandparents in Shanghai, fleeing the Russian Revolution, and struggling to survive the Chinese Revolution. For the migrant, of course, everything about the host country is new and unfamiliar, and this is experienced with a particular force through the senses. We can only guess at how Xenia must have found the bustling city of Shanghai when she arrived in 1924. At that time, Shanghai was strange not only in the sense of being different, but because of the mix of cultures living in the foreign-controlled areas of the city – the International Settlement and the French Concession. Whereas Xenia was stateless, a refugee from the Bolshevik Revolution, Sergei Ermolaeff was born in Shanghai, the son of Russians who had emigrated earlier. A bandleader who played in the city's nightclubs, it is from a tune of his that the CD-ROM gets its title.

Strange Cities is concerned with unfamiliarity in a number of ways beyond the dislocation of the migrant. The work tells of the distance a granddaughter (whom we assume to be modelled on Pentes) feels from the colourful lives her grandparents once led. As the narrator, Sasha, says, "When I was a little girl, my grandparents seemed very strange to me…"

> Sometimes, after a few vodkas, Grandad would tell these fantastic stories where he was as famous as a pop star and Grandmother was a glamorous princess. But mostly their lives remained locked away, just my Grandpa's music and my Grandmother's furs.

It is only when they have died that this relation is transformed.

> After my grandparents died, I had the task of packing their things into plastic bags ready for the tip. Dad lit the incinerator, and I was about to put in this old, Russian box. The contents of this box told me about their life in China. It confirmed all their stories, even the ones I had never really believed.

That she did not believe the stories until after her grandparents' death is the conceit around which the rest of the work revolves. This notion that a family member's stories

[243] Michelle Glaser, Andrew Hutchison and Marie-Louise Xavier (2000) *Juvenate*, Perth, WA: Arts WA/Australian Film Commission. See the Juvenate website at http://hosted.at.imago.com.au/juvenate/juvenate.html, accessed 8/8/01.

seem too far-fetched to be believed by a grandchild is an interesting one, in terms of the theme of unfamiliarity. The granddaughter was asked to believe 'stories' about things which were utterly unfamiliar to her, totally outside of her experience, and which she assumed must also have been outside her grandparents' experience. It also reflects the diminishing value in which, according to Benjamin, stories are held. In his terms the grandchild's disbelief could also be said to reflect the very modern 'need' for *information*, deemed to be more reliable than stories.[244] Pentes' decision to reassemble the *story* of her grandparents' lives in Shanghai, and moreover, to do this using digital multimedia, is in this sense an interesting one, given that the shape of the CD-ROM as storytelling medium is still emerging.

Pentes' reconstruction of the time her grandparents lived in Shanghai and of her relation with her grandparents is through fragments. To an extent this is unavoidable: only fragments survive of this time. However, it is also appropriate, as it is not a time that Pentes herself has known, other than through the stories told her. Her reliance upon collages of photographs, video grabs and text generate a sense of 'old Shanghai' as an exotic, mythic place, perhaps in the way that Sergei recalled it nostalgically, or Pentes herself imagined it from his stories. It is a time of gangsters and a cosmopolitan nightlife, in which her beautiful grandmother is a member of a dance troupe, with a Chinese friend, Rose, whom we sense might have had a tragic fate. Sergei's music is of central importance to the CD-ROM: it conjures up a suitably exotic atmosphere, the big band sound seemingly worlds away from our own present. In a curious reversal, it is his sound that also provides the referent for the stories which were initially deemed too farfetched to be true for the grandchild, who was reluctant to be taken in by them; the user unfamiliar with them, however, might allow themself to be taken by them, suffused with the sounds that this man made in his lifetime. The music recordings provide a sense of the 'that-has-been' that Roland Barthes famously identifies as a *punctum* in his *Camera Lucida*, the "special acuity" that comes with the realisation that every photograph (or in this case, sound recording) of a person foretells their passing. Listening to Sergei's music knowing that he is no longer alive evokes the unsettling effects that the phonograph produced in early audiences, due to "its ability to detach voices and sounds from the organic cycle of

[244] Benjamin (1936b) "The Storyteller: Reflections on the Works of Nikolai Leskov," *Illuminations*, pp. 83-107.

birth and death".[245] Sergei's composition "Strange Cities" – written in Shanghai in 1933 and performed by him and recorded in Sydney in 1982 – gives the multimedia work *Strange Cities* a poignancy, not just conjuring the time and place of Shanghai in the 1930s, but also, to an extent, conjuring the man and his absence.

From these two examples, it is clear that digital multimedia can provide a platform for considering experiences that are unfamiliar, and that artists perceive it as an important use of the medium. I venture that there may be something about the medium of digital multimedia that especially lends it to considering the unfamiliar, the strange. Perhaps, as a relatively new medium – often designated simply by the handle 'new media' – digital multimedia is suited to considering that which is unfamiliar in ways that other media are not (and in thinking this, we need not confine this 'something' just to the technology; it could also embrace the hopes that have been projected onto the medium by users.) Without suggesting that unfamiliarity is the *only* thing that multimedia is well suited to exploring, I suggest that it is one of the things that is *implied* by the media: perhaps a moving *beyond* that which is familiar, both in content and presentation, and it is this which makes it of interest for a theory of hyper/aesthetics. In claiming this, I am thinking of Benjamin's idea that certain media almost suggest or imply their uses or developments, an idea that is extremely suggestive. In the opening pages of his essay "The Work of Art in the Age of Mechanical Reproduction", he muses – retrospectively, as am I – on the uses which certain media seem to him to imply or foreshadow: "Just as lithography virtually implied the illustrated newspaper, so did photography foreshadow the sound film."[246] Though this might initially be thought to open him to charges of technological determinism, it need not. For the passage is more concerned with tendencies rather than with fixing any one technology in a particular use, something which I doubt Benjamin – given his recognition of both productive and destructive uses of technology – would have been inclined to do. David Rokeby makes a similar point about new media, noting that, "It's…useful to realize that effective interfaces are usually intuitive precisely because they tap into existing stereotypes for their metaphors." Rokeby compares the taken for

[245] John Durham Peters claims that "In many ways the phonograph is a more shocking emblem of modernity than the photograph" in that it captures *time* rather than just images. See John Durham Peters (1999) *Speaking Into The Air: A History of the Idea of Communication*, Chicago and London: University of Chicago Press, p. 160-2; Roland Barthes (1993 [1980]) *Camera Lucida: Reflections on Photography*, Richard Howard, trans., London: Vintage, pp. 26-7, 96.
[246] Benjamin, "Artwork", p. 213.

granted quality of interfaces that we can't easily question or redefine, first to a hardened perceptual exoskeleton, and then to landscape. He writes,

> Interactive landscapes can explicitly define 'permissible' paths of exploration for each user, but in most cases, it's more subtle than that. It's usually not so much a matter of permission as of paths of least resistance. An interface makes certain actions or operations easier, more intuitive, or more accessible… The interface defines a sort of landscape, creating valleys into which users tend to gather, like rainwater falling on a watershed. Other areas are separated by forbidding mountain ranges, and are much less travelled…
> …A landscape gives you a fine view in some directions and obscures others.[247]

Not only does Benjamin's notion of implication raise questions about what sorts of uses digital multimedia might suggest, but, in the context of this project it is also worth noting that the term 'implied' is preceded by the word 'virtually' in the sentence quoted. This is relevant because any one use emerges from a field of possibilities, of virtuality. Coupled with the concern with the unfamiliar that I am suggesting is apparent amongst artists working in the medium, I will argue that one of the things for which multimedia seems to be especially suited is the provision of unfamiliar perceptual experiences *in the user*. That multimedia is able to do this is at least due in part to its ability to act as a *configurer* of different media. Whereas the catchall cries of 'all the senses' which I have critiqued typically function to proscribe affect, the works to which I will turn in a moment confront the user with how things might be otherwise – with the openness of media in the multimedia format, of sensation, as well as with the virtuality of the (multimedia) encounter. In large part this is achieved through the artists' arrangement of different media elements in configurations which are discontinuous, unfamiliar.

Shock in the Ear and *Metal God* are very clear examples of this potential for digital multimedia to depart from conventional configurations. Like *Juvenate* and *Strange Cities*, the content of these CD-ROMs is unfamiliar – Neumark is concerned with shock, while Migone seems to be concerned with what is sometimes called the outside of thought, that which exceeds rationality, and which might not make sense. Beyond their particular themes, however, these works are arrestingly unfamiliar to the user's senses, owing to the fact that both Neumark and Migone arrange the elements of their CD-ROMs according to sensory configurations that are unfamiliar, experimental. In Migone's case, for instance, the different elements produce a stressed reading, arguing and interfering with each other. I will argue that this technique of media configuration has important implications for the senses. In line with my concern throughout this thesis to question

claims for the 'natural', normative and standardised sensory experiences, and in contrast to narratives where the senses comprise an organic whole, I want to consider how the discontinuous configuration of media elements in these two CD-ROMs denatures the senses. Other questions also come to mind, such as what happens when the senses are deranged, when the manner in which we have come to know is upset? And how might this impact on *what* we can know? While I cannot do justice to questions of this magnitude in the space of one chapter, they are some of the issues this inquiry throws up.

To help me make my arguments and to analyse the significance of discontinuously configured media in multimedia, I will draw on Roger Copeland's work.[248] Copeland is an American writer on theatre, dance and film, and Professor of Theater and Dance at Oberlin College, who has theorised the approach to the combination of different arts taken by the dancer and choreographer, Merce Cunningham, in his collaborations with other artists. Amongst his collaborators, Cunningham can count such well known figures as Robert Rauschenberg, Andy Warhol, Jasper Johns, David Tudor, and John Cage. A key feature of these collaborative works is that the relations between the 'elements' of sound, movement, and lighting/costume/set design are discontinuous.

In his articles, "Merce Cunningham and the Politics of Perception" (1983a) and "A Community of Originals: Models of Avant-Garde Collaboration" (1983b), Copeland provides an exposition of Cunningham's collaborations with these other artists, in which rather than *fusing* different elements there is deliberate *separation* between the music, dance and set/lighting/costume design. He argues that in the performances in which this style of collaboration is operative, not only does Cunningham manage to 'denature' the body by virtue of his distinctive choreography of 'unnatural' movements, but that the mixed – or rather 'unmixed' – media also *denatures perception*. Because Bertolt Brecht's critique of Wagnerian synthesis in the *Gesamtkunstwerk* constitutes an

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[247] David Rokeby (1998) "The Construction of Experience", pp. 33-4, 39-40.

[248] The articles of Roger Copeland's to which I will refer are (1983a [1979]) "Merce Cunningham and the Politics of Perception," *What is Dance? Readings in Theory and Criticism*, Roger Copeland and Marshall Cohen (eds), Oxford, New York: Oxford University Press, pp.307-324; (1983b) "A Community of Originals: Models of Avant-Garde Collaboration, *Next Wave Festival*, 4 October -4 December, 1983, Brooklyn, N.Y.: The Academy, pp. 6-12; (1998) "Nature and Science in the work of Merce Cunningham," *The Art of the Moment: Looking at Dance Performance from Inside and Out*, Proceedings from 31st Annual Conference on Research in Dance, Ohio State University, 12-15 November, pp. 27-36; and (1999) "Cunningham, Collage, and the Computer", *PAJ: A Journal of the Performing Arts*, vol. 21, no. 3, pp. 42-54.

important point in his argument in these articles, I will cite the relevant passage in full, before explaining Copeland's reading of it in relation to Cunningham's practice. In 1930, Brecht wrote:

> So long as the expression 'Gesamtkunstwerk' (or 'integrated work of art') means that the integration is a muddle, so long as the arts are supposed to be 'fused' together, the various elements will all be equally degraded, and each will act as a mere 'feed' to the rest. The process of fusion extends to the spectator who gets thrown into the melting pot too and becomes a passive (suffering) part of the total work of art. Witchcraft of this sort must of course be fought against. Whatever is intended to produce hypnosis, is likely to induce sordid intoxication, or creates fog, has got to be given up. *Words, music, and setting must become more independent of one another*. (Brecht's emphasis)[249]

Copeland's claim is that no one has carried Brecht's principle of separation of the arts as far as Cunningham.[250]

> In Cunningham's work, every collaborative element maintains its autonomy. The choreography, the score, the settings are all created in isolation and often don't encounter one another until the very first performance. This is the aesthetics of peaceful co-existence: sound, movement, and setting all inhabit the same space without affecting what one another do.[251]

Copeland relates how the autonomy of the different elements was initially perplexing to him. For example, in performances of *Winterbranch* and *Canfield*, the lighting,

> …didn't serve the customary end of illuminating the dancers. If lighting instruments happened to fade up as the dancers darted past them – well and good. But the dimmer board had its own agenda, independent of the audience's (perfectly understandable) desire to see the dancing.

He goes on to note that Pauline Oliveros' score for *Canfield*, "which assigned the musicians the task of scientifically testing the acoustical properties of the performance space" evidences the lack of privilege accorded the human element in the dance. In that score, Copeland recalls,

> As the lights dimmed out at BAM, one could hear Cage, David Tudor, and Gordon Mumma communicating with one another over walkie-talkies. With a cool and scrupulous objectivity, they discussed the acoustical properties of the opera house. Indifferent to the 'dance performance' occurring in their midst, they proceeded with an overt series of experiments, a disinterested 'sizing up' of the space, an icily objective

[249] Bertolt Brecht cited in Copeland, "Merce Cunningham and the Politics of Perception," p. 312.
[250] Though Copeland takes care to note that this is his reading, rather than Cunningham or Cage specifically following a Brechtian lead. Copeland, "A Community of Originals", pp. 9-10.
[251] Copeland, "Merce Cunningham and the Politics of Perception," pp.312-13.

> examination of its acoustical properties…I distinctly recall Gordon Mumma blowing short blasts on a bugle while scrupulously turning a full 360 degrees. The sound ping-ponged off a variety of surfaces (including the bodies of the dancers). That some of these 'surfaces' were human appeared to be of no special concern to him.[252]

Rather than resulting in perceptual clarity, Copeland argues that such performances disrupt the automaticity of perception, a goal that he reads as being consistent with the aims of both Brecht and the Russian Formalist, Victor Shklovsky, who elaborated a concept and technique of defamiliarisation. Shklovsky's idea was that art should impede the automaticity of perception, so as to facilitate its approach in a new way. Lee Lemon and Marion Reis, the English translators and editors of a 1965 volume of Russian Formalist essays write, "Shklovsky attacks the views, both typical of Potebnyaism, that 'art is thinking in images' and that its purpose is to present the unknown (most often the abstract or transcendent) in terms of the known."[253] According to Shklovsky, the purpose of art is almost the inverse, to present the familiar in terms of the unfamiliar. As he writes in "Art as Technique":

> Habitualization devours works, clothes, furniture, one's wife, and the fear of war…art exists that one may recover the sensation of life; it exists to make one feel things, to make the stone *stony*. The purpose of art is to impart the sensation of things as they are perceived and not as they are known. The technique of art is to make objects 'unfamiliar,' to make forms difficult, to increase the difficulty and length of perception because the process of perception is an aesthetic end in itself and must be prolonged.[254]

Like Shklovsky, Brecht was also interested in estrangement. Indeed, in his collection of Brecht's writings, *Brecht on Theatre: The Development of an Aesthetic*, John Willett notes that there is an "almost instinctive predilection for strangeness" which can be seen very early on in Brecht's thought. Willett goes on to suggest that Brecht's concept of the 'alienation effect' (*Verfremdungseffekt*) is a translation of Shklovsky's phrase "'Priem Ostrannenija', or 'device for making strange', and it can hardly be a coincidence" Willett continues, "that [the term] should have entered Brecht's vocabulary after his Moscow visit".[255]

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[252] Copeland, "Nature and Science", pp. 30-1.
[253] Lee T. Lemon and Marion J. Reis (1965) translator's notes, *Russian Formalist Criticism: Four Essays*, Lincoln: University of Nebraska Press, p. 3.
[254] Victor Shklovsky (1965 [1917]) "Art as Technique", *Russian Formalist Criticism*, p. 12.
[255] Other scholars dispute this reading of Shklovsky's influence on Brecht. Peter Brooker, for instance, finds the claim unconvincing, citing Willett's source, Bernhard Reich, as saying that "Brecht's concept differs 'quite fundamentally' from this supposed source." See John Willett (1978) translator's notes to Bertolt Brecht's "Alienation Effects in Chinese Acting", *Brecht on*

While Copeland's work is about dance, its significance extends well beyond dance theory, and it is my contention that many of Copeland's underlying arguments, his framework if you like, can productively be applied to media configuration in areas other than dance. His accounts and theorising of the effects that Cunningham's discontinuous configurations have on audiences is useful for considering and theorising audience response to a range of work which is perceptually challenging. For these reasons, I intend to read Neumark and Migone's works 'through' my readings of Copeland's work.

For my purposes, the two points that are most interesting about Cunningham productions is their treatment of different media as different, and their inauguration of a different kind of aesthetic engagement. (The two points are closely related.) In the previous chapter I discussed the active engagement of gamers in and with the computer games which they played. In the case of a Cunningham performance (and the works I will be considering), the audience is involved in unique ways, as they must select what they will attend to at any one time. This would seem to constitute a new kind of "perceptual training" (Benjamin), perhaps the development of what we might call a *multimedia sensibility*. For if each element of the performance makes an equally compelling claim on our attention, we may decide to 'background' one element so as to focus on another. Alternately, we may cultivate the skill Cage called 'polyattentiveness', attempting to apprehend "two or more unrelated phenomena" simultaneously. As Copeland writes, "we can radically alter our mode of perception several times in the course of a single performance."[256]

Like Cunningham's pioneering of techniques that inaugurated new aesthetic modes of engagement in an audience, I will argue that Neumark and Migone, using some similar techniques, have created multimedia works which entail radically different aesthetic

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Theatre: The Development of an Aesthetic, John Willett (ed.), New York, Hill and Wang; London: Eyre Methuen, p. 99; Peter Brooker (1994) "Key Words in Brecht's Theory and Practice of Theatre", *The Cambridge Companion to Brecht*, Peter Thomson and Glendyr Sacks (eds), Cambridge, New York, Melbourne: Cambridge University Press, p. 192.

[256] Copeland, "Merce Cunningham and the Politics of Perception", pp. 321-2.

A recent example of this occurred with the live feeds which Australian networks took from U.S. news organisations in the days after the collapse of the World Trade Centres. Sporting techniques not (often) used in local production, viewers' were faced with multiple demands on their attention: the screen was frequently divided up with a number of newsreaders in different frames, background images, voiced news announcements, and the scrolling text of news updates across the bottom portion of the screen. These different elements seemed to make the S11

engagements on the part of computer users. There are a number of levels at which the significance of this innervated aesthetic engagement can be analysed. The discontinuous configuration of different media constitutes a departure from (over)familiar configurations of (especially audio-visual) media, which defamiliarise the senses. The presence of multiple, simultaneous elements also requires that users negotiate their way through the works (as with Cunningham), both selecting *what* they will attend to at any one moment as well as drawing their own meanings from this. This discontinuous perception contrasts sharply with the characterisation I presented earlier of convergent media, configured seamlessly (fused) in one total work.

It is worth pausing to think about the kinds of configuration that accompany rhetorics of convergence. While allowing for variations, I associate these with the still widespread expectation that digital multimedia content will be coherently configured, with continuous, often synchronised relations between sound, image, text, and any other elements. (While practitioners might not expect this, media in synch remains central to many peoples' conceptions of multimedia.) Frequently, this supports a multimedia (or, it might be argued, an idea of multimedia) where different media elements repeat and reinforce each other, effectively working to shore up meaning. In her review of the CD-ROM adaptation of Art Spiegelman's graphic novel *Maus* – revealingly entitled *The Complete Maus* – Neumark reveals her thoughts on this, writing that through the encounter with multimedia, the 'real' or 'full' story supposedly emerges, more 'authentically' than was previously possible. Neumark's comments are consistent with the focus of my argument here, and, particularly as her work is one that I discuss in detail, her comments are relevant for thinking about the implications of configuration. She continues,

> The CD ROM offers, then, not story or history but a compilation of film, video and aural truth – constructed as Truth, not just via a (limited) documentary tradition but now compounded by the ideology of information. An Archive as database to be accessed. Even Art was seduced by the 'illusion' that it could contain 'zillions of things'. Or so he says. CD ROMs offer an ersatz archive, refigured within the 'Mode of Information' where information *per se* is 'privileged' and the '*configuration* of information exchange' is not questioned. With this fetishisation of information, quantity consumes quality – and masquerades as transparency and completeness of meaning. All we can see and hear on the CD ROM is information, organised as infotainment…[257] (italics in original)

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coverage that much more overwhelming (one figure, perhaps, of a multimedia sensibility), as well as frustrating the viewer simply after an update.

[257] Norie Neumark (1995) "Who was that Masked Maus?", *Essays in Sound 2: Technophonia*, Sydney: Contemporary Sound Arts, pp. 86-7.

Multimedia functions in *The Complete Maus* as "a compilation of film, video and aural truth," where the storage capacity of the CD-ROM allows it to hold "'zillions of things'", suggesting that capacity is sometimes more important than other criteria in determining *what* to include: the view seems to be 'include it all' (because you can, because you get 'more'), with little attention being paid to the *how*. I am concerned at the limiting effect that continuous, in-synch conceptions of multimedia exert, especially on meaning. From my perspective, they work to tie down meaning, via a kind of triangulation logic, where image, speech, sound and text are tightly bound together (perhaps even more tightly than in television, as I discuss in relation to Bellour, below). Neumark's criticisms of the privileging of quantity over quality highlight why unfamiliar configurations of media – which undercut and destabilise meaning – are significant. While my analysis of *Shock in the Ear* and *Metal God* also depends on a conception of multimedia as a configurer of media, the important difference is that these works experiment with configuration, resulting in a plurality of possible meanings. These works use discontinuous configuration to keep meaning open, generative, rather than exhausting it.

The convergence model is also inadequate in its stimulus-response conception of sensory experience: pre-packaged parcels of information are 'dispatched', sensory affects having been calculated for a body that just does what it is supposed to do (whatever that might be). Apart from being an inadequate understanding of sentience, this underpins what I termed an economic conception of experience, based on the accruing of standard-issue experiences. So conceived, non-standard embodiments are foreclosed on. The bodies produced resemble the idealised fascist body: constructed from metal which armours and guards against all that is other and/or threatening, such bodies are not sentient, but inert, controllable, beyond feeling.[258] In contrast, there are no 'correct' responses to either Neumark or Migone's works. Readings are neither easy nor straightforward. Rather than a subject who simply 'receives' stimuli and experiences, or accesses an archive, *users become makers* as they develop individual and highly contingent interpretations, based on their aesthetic encounters with the multimedia works. Like Copeland's descriptions of the responses that Cunningham performances evoke amongst audiences,

[258] See Kaplan's discussion of the fascist body in F. T. Marinetti's novel *Mafarka le futuriste*, in her *Reproductions of Banality*; also see Hal Foster's discussion of the fascist subject in his "Postmodernism in Parallax".

users are required to alter their modes of perception several times in the course of a particular work. Each piece generates a range of different moments, resonances and intensities, and users piece together singular experiences from them.

The expectation that the CD-ROM platform will deliver "not story or history but….Truth" which Neumark identifies is also relevant to my concerns in this thesis. In both Migone's and her work, such expectations are thwarted by the fact that we never actually get the other of the stories. As a result, we can never know the 'full' story. Discontinuous configuration, then, appears as a vehicle for advancing ethical concerns in these works, maintaining others' unknowability, and introducing a virtuality to relations with others. Aesthetic factors play a crucial role in this. The discontinuity of configured elements, then, revives the virtual in multimedia, introducing concerns for alterity into a sphere where otherness has often been ignored.

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Nicholas Zurbrugg's concept of 'unfamiliar art' – mentioned earlier – is useful for thinking about what is produced in such (discontinuously configured) aesthetic encounters. Unfamiliar art "defies familiar modes of contemplation and evaluation and invites unfamiliar variants of these responses." While not confining the category of unfamiliar art to electronic art, Zurbrugg's project specifically addresses electronic art, making it helpful in the present context. In his Introduction to the 1994 special issue of *Continuum* which he edited, dedicated to electronic arts in Australia, Zurbrugg criticises the lack of engagement of some critics (notably Frederic Jameson) with new, electronic art. Zurbrugg's claim is that,

> …empirically and conceptually productive analysis of postmodern technological culture has been repeatedly aborted and contorted by the contagious intellectual myopia of those researchers – Frederic Jameson, especially – whose incapacity or disinclination to address the specific merits of the new electronic arts, and whose preoccupation with the general mediocrity of the commercial mass-media, leads to the reductive hypothesis that postmodern media culture may only *ever* be provisional, superficial, anonymous, fragmentary, submonumental, and so on.[259]

While Zurbrugg makes a convincing case against Jameson's dismissals of television and video art, his argument about unfamiliar art is also useful for theorising users' encounters with works of multimedia art. Zurbrugg contrasts Jameson's unwillingness to engage

with unfamiliar art with John Cage's response to a show of all white paintings by Robert Ryman, an artist with whose work Cage was not familiar. In interview, Cage related how this exhibition provoked in him,

> …a renewed sense of joy, and even a joy close to a change of mind… The discoveries don't give you a loss of the ability to discover, but rather, an intensification of that… So that it's not just something becoming known, or increasing the known – it increases the unknown at the same time.[260]

Zurbrugg goes on to argue that Cage's response is "surely…the more appropriate response to unfamiliar practices". This idea of the unfamiliar interests me here because, in combination with Copeland's writings, it furthers a sense of what is at stake in unfamiliar art, including digital multimedia art which is unfamiliar by virtue of its discontinuous configuration. Cage's claim that unfamiliar art gives an intensification "of the ability to discover…not just…increasing the known (but increasing) the unknown at the same time" resonates with the sense of multimedia as a configurer of media, evoking a sense of the virtual in a range of areas.

The other point which strikes me about Cunningham's collaborative practice is his according the respective arts their difference, without diminishment. (There is a direct corollary to the senses here, in terms of the various attempts to create hierarchies in order to attract discursive privilege to the study of specific senses.) What I most like about the works by Neumark and Migone is that, like Cunningham, neither tries to diminish the difference or specificity of the various elements that are brought into proximity in the multi-media format; in a way, the media become other to each other. While producing any multi- or mixed media work necessarily involves making decisions about the different elements which are brought together, including *how* they are configured, Neumark and Migone foreground these negotiations, and deny or frustrate the desire for coherence, for closure. Both have an awareness of the differentness of the media which they are bringing into proximity, and of the aesthetic effects resulting from a refusal to assimilate one to another; for me, this functions as an analogue for their concerns with the alterity of the other. The technology provides a space to experiment with combinations of different media, where these combinations themselves can also change. In this way, the medium facilitates a range of constantly shifting interplays between the different elements, as well

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[259] Zurbrugg "Contemplating Electronic Arts", pp. 10-11. Zurbrugg's critique of this tendency is also prominent in his other writings.
[260] John Cage cited in Zurbrugg, "Contemplating Electronic Arts", p. 13.

as an interplay between users and the others that are encountered in the works, a point that I will develop in the following analysis.

Apart from similarities in the kinds of aesthetic engagement each artist provokes in their audience, and the attention to the specificity of the arts, there are a number of other resonances between the work of these new media artists and that of Cunningham. Neumark's collaboration with her fellow artists is closer than might initially be thought to Cunningham's, involving the coming together of three different arts practices. Theirs is a conception of multimedia as located at the borders of different arts, which is radically different from multi-media as fused conglomerate of all arts. Elements of this sensibility are also evident in *Metal God*. To borrow and embellish a phrase of Migone's, both *Shock* and *Metal God* navigate the borders of the different arts and corporeal senses; Migone's also navigates the borders of sense and non-sense.[261]

It also happens that choreography is a central element in *Metal God*, not only in terms of the choreographic sensibility which is evident, but also in the "kinaesthetic responsiveness"[262] that the choreographed calligraphy evokes in its user. In turn, Cunningham has recently adopted the computer as choreographic tool, using the Life Forms[263] software, as well as collaborating with multimedia artists to create the virtual dances, *Hand Drawn Spaces* and *BIPED*, in which flesh and blood dancers mingle with virtual ones. While this mixing of actual and virtual dancers is fascinating, what captures my imagination in this context is the similarities between the very expressive word choreography in *Metal God* and the subtlety and range of gesture that I imagine the sparsely drawn 'dancers' in *Hand Drawn Spaces* to be capable of. Though their gestures

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[261] Migone is writing about Art Brut when he says "As one might guess these writings navigate the borders of sense". See his (1996) "Headhole: Malfunctions and Dysfunctions of an FM Exciter", *TDR*, vol. 40, no. 3, p. 52.

[262] The phrase is Copeland's. It arises in a footnote to his (1983a) essay, in the context of differentiating between the empathic identification of conventional theatre which Brecht wanted to break with, and the brand of empathy that dance spectators feel. Copeland's point is that the empathy "that most directly unites the dancer and his or her audience is kinetic responsiveness…" and that "It's precisely this sort of kinetic empathy which is 'interfered with' in much of Cunningham's work." I am not trying to claim that kinetic empathy *unites* the user of *Metal God* with the choreographed text in any simple, sympathetic way, though this would be an interesting argument. As my analysis a bit later will make clear, the work's discontinuity breaks up any preconceptions the user may harbour about developing an emotional affinity with any aspect of it. But the swift changing between what might be called *different modes* of kinetic responsiveness, does engage and challenge the user in a kinetic way. Copeland, "Merce Cunningham and the Politics of Perception", n. 1, pp. 322-3.

[263] Information on some of the Life Forms collaborations can be found at <www.riverbed.com> and <www.merce.org>, both accessed 15/3/02.

are enacted by a computer programme, the gestural simplicity with which these dancers' bodies have been (hand)drawn – they appear as just a few suggestive coloured lines (perhaps the ultimate denaturing) – contributes much to the project's allure. Dance also seems particularly appropriate as a referent for the polyvalent possibilities of sensation; indeed, we may be able to more readily appreciate the virtuality of movement in dance, I suspect, than in strange, clashing configurations of media. In these recent works, Cunningham is merely taking this point to its logical next stage, whereby the movements of lines somewhat resembling human bodies can also be considered dance, (showing up the 'naturalness' of 'the' human body for the ruse that it is).

With regard to the external conditions or contexts in which the different arts practices of Cunningham, Neumark and Migone take shape, certain symmetries are also evident: Cunningham's break with naturalistic dance aesthetics like Martha Graham's is comparable to the contemporary influence of connectionism in multimedia discourse, the contemporary expression of organicism. That Cunningham elected to use discontinuous configuration during the "multi-media mania" of the late 1960s[264] further supports the link I have advanced where Neumark and Migone's discontinuously configured multimedia works act as a kind of counterpoint to organic conceptions of the senses at the end of the 1990s. And Cunningham's often difficult choreography, which "never pretends or presumes to have discovered the most 'natural' way of moving" could be situated alongside the concern with 'naturalised' conventions concerning media configuration, and how this limits what we can think and know. Finally, I think there is a corollary between Migone's questioning and denaturing of the category of the human and Cunningham's inorganic choreography.

In terms of Copeland's use of Brecht and Shklovsky to theorise Cunningham's practices, there are some interesting similarities between their conceptions of estrangement and the works being considered here. A number of passages in Brecht's writing on epic theatre suggest that he was talking about a kind of denaturalising tendency, which would provoke the audience to realise that things could be otherwise. In "A Short Organum for the Theatre", he writes,

> …it seems impossible to alter what has long not been altered. We are always coming on things that are too obvious for us to bother to understand them. What men experience among themselves they think of as 'the' human experience… Here is the

[264] Copeland, "Nature and Science", p. 32.

> outlook, disconcerting but fruitful, which the theatre must provoke with its representations of human social life. It must amaze its public, and this can be achieved by a technique of alienating the familiar.[265]

Brecht's reference to 'alienation' requires some comment. Michael Patterson considers Willett's translation of "one of Brecht's key words, *Verfremdung*…as 'alienation', the equivalent of the Hegelian/Marxist *Entfremdung*" to be problematic: "As Peter Brooker points out, what Brecht in fact pursued was de-alienation."[266] Its closeness to Shklovsky's defamiliarisation (rather than the Marxist usage of alienation) is evident in the following sentence of Brecht's: "A representation that alienates is one which allows us to recognize its subject, but at the same time makes it seem unfamiliar."[267] Brecht was concerned to show that what seemed like 'the' human experience was the product of particular social and political relations. This was the task that he envisaged for his epic theatre. While Aristotelian theatre aimed at illusion, epic theatre's purpose was diametrically opposed. While the actor in traditional theatre "does all he can to bring his spectator into the closest proximity to the events and the character he has to portray…" (93), the actor in epic theatre does not aim at a complete conversion into the character played. Rather than inducing audiences into a 'trance', where they identify with the character and their emotions, it was important to Brecht that audiences should see the social and cultural constructedness of character's roles, decisions and actions. As he writes,

> What is involved here is, briefly, a technique of taking the human social incidents to be portrayed and labelling them as something striking, something that calls for explanation, is not to be taken for granted, not just natural. The object of this '[alienation] effect' is to allow the spectator to criticize constructively from a social point of view. (125)

Inasmuch as his goal was to facilitate the recognition amongst audiences that conditions could be otherwise than they were, that the conditions under which they lived, or the decisions that characters made in plays were contingent and not just 'natural', Brecht's work has relevance for a debate on denaturing the senses, bodies and perception. However, there are also a number of factors which limit its usefulness, particularly its application to the work of Neumark and Migone. Two points stand out. The first is

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[265] Bertolt Brecht (1978 [1947-48]) "A Short Organum on the Theatre", *Brecht on Theatre: The Development of an Aesthetic*, John Willett (ed.), trans., New York: Hill and Wang; London: Eyre Methuen, p. 192.
[266] Michael Patterson (1994) "Brecht's Legacy", *The Cambridge Companion to Brecht*, p. 274.
[267] Brecht, *Brecht on Theatre*, p. 192.

Brecht's emphasis on facilitating a 'critical attitude' in his audience. Epic theatre's discouragement of audience empathy or involvement in the character's emotional and affective lives implies that such involvement is inconsistent with the desired critical attitude. As has been noted, however, this thesis seeks to challenge the view of criticality and affect as mutually exclusive.

Our sensations and perceptions affect the way we think and reflect. One of the effects of the works by Neumark and Migone is that we realise how the senses affect cognition, a point which is considerably different to saying that sensuous involvement obviates thought or critical reflection. Thought cannot be easily separated from feeling in Cartesian fashion, as Brecht's 'critical attitude' implies. Separating the affects such work produces from a user's interpretations or critical responses is just not convincing. But nor is affect an end in itself in these works. Rather I want to suggest that, through the use of a range of techniques which impede (habitual) perceptions, the artists encourage us to reflect in more embodied ways on their art. As in the last chapter, it is possible for the relation between user and artwork to be characterised by a 'lively responsiveness'; indeed, I will suggest that this is what happens in *Metal God*; that, as a result of the unfamiliar media configurations and the sensory affects they produce, users can experience their bodies and the others they encounter, differently. This in turn suggests the possibility that users might reflect on aspects of their person, their experiences – including the act of experiencing themselves perceiving – and their subjectivity in the course of encountering this art, in terms of how these might also be otherwise.

A second point of divergence from Brecht is in the tendency of these multimedia works toward an *opening* of perception and interpretation, a move toward the virtual as Gilles Deleuze characterises it.[268] This contrasts with Brecht's rather didactic conception of epic theatre. Such an explicitly political theatre project, raises the possibility that some insights or social concerns might be deemed more important than others. And in particular contexts, this may be understandable and justifiable. However, the sense that the playwright or director knows best and is seeking to transmit knowledge or raise consciousness about certain issues sets Brecht's work apart from the works by Neumark and Migone and their collaborators. Indeed, for me it is important that *Shock in the Ear*

[268] Gilles Deleuze (1994 [1968]) *Difference and Repetition*, Paul Patton, trans., New York: Columbia University Press, pp. 208-11.

and *Metal God* open up the possible readings that users can make. Whilst I also argue that they are concerned (like Brecht) with displacing a sense of 'the' human experience, it is the potential for users of both works to generate their own, singular readings of the works, within a wide range of possibilities, which interests me.

Antonin Artaud's work is interesting to consider in light of these limitations of Brecht. The embodied nature of perception and reception is something that he addresses more than Brecht: Artaud refused to separate thought off from the body, or from his life. His work is also interesting for its attention to the senses: writing in *The Theater and Its Double* Artaud claimed that "the public thinks first of all with its senses…[so] that to address oneself first to its understanding as the ordinary psychological theater does is absurd".[269] Artaud's theatre also gives a clear sense of what is at stake for audiences; it is not just that he wishes to involve the audience by addressing himself to their senses, but that he conceives of theatre as directly affecting their bodies. Such bodily/aesthetic engagement entails risk. As he writes,

> The spectator who comes to us knows that he has just exposed himself to a true operation, where not only his mind but also his senses and his flesh are at stake. He will henceforth go to the theater as he goes to the surgeon or the dentist.[270]

Neumark and Migone's deployment of techniques of estrangement affect the user viscerally, similar to the way that Shklovsky and Artaud theorised. Each employs techniques of defamiliarisation which require audiences to experience and engage with the work in ways that are new and unfamiliar. While *Shock in the Ear* tends to agree with the direction of defamiliarisation that Shklovsky identified – making the familiar unfamiliar – *Metal God* also works in the opposite direction, bringing that which is outside familiarity – madness, the irrational – into the experience of the audience. On my reading, both techniques work to make apparent the virtuality of the encounter which the user has with the artwork, and it is interesting to note that in a recent reading Samuel Weber has claimed that this was Artaud's goal with respect to his assault on language in

[269] Antonin Artaud (1958 [1938]) *The Theater and Its Double*, Mary Caroline Richards, trans., New York: Random House, p. 85.
[270] Artaud, cited in Allen S. Weiss (1995) *Phantasmic Radio*, Durham and London: Duke University Press, p. 42.

the theatre: "to restore its…virtuality".[271] (Cunningham's dancing and choreography could be viewed in similar terms, as making evident the virtuality of movement.)

There are also a range of differences between Cunningham's dance performances and digital multimedia. One important factor here is the interactivity of the works on CD-ROM. This is also an area in which chance works quite differently in these multimedia works to Cunningham's performances. The sections of *Metal God*, for instance, play randomly in three different sequences, making each run through different and unpredictable, a tendency which is even more evident in *Shock*, where the user effectively mixes the sound, triggering a range of different aural (as well as visual) interactions as they mouse around the screen. As I will explain, chance factors affect the order in which we come to the different 'shock stories' in Neumark's work, in turn affecting the meanings users make. While CD-ROMs' limited interactivity has often been criticised, the fact that the works depend upon user's interactions does make the user's presence and participation important. Though this is not the main subject of either work, the user's role as interactant can be likened, in certain respects, to others' descriptions and theorisations of the visitor to a video installation, whose body is frequently constructed as central to the installation. Zurbrugg writes that the "experience of performing and observing successive physical gestures monitored and mediated by a [video] installation" is extremely personal, interlinking "the viewer's physical and cerebral participation…with unprecedented intimacy and immediacy", resulting in an "intensified subjectivity", a feature he suggests is also present in the multimedia performance.[272] Similarly, Morse notes the way that the visitor to the video installation is typically "surrounded by a spatial here-and-now", which is different to the "not-here and not-now" of a representational painting, for instance.[273] While the phenomenon of seeing oneself on television monitors in an installation certainly differs from noticing the effects that one's mouse movements have on a multimedia work, the user's body makes a difference in both. Morse's distinction of video installation from the proscenium arts is important in terms of these similarities in that like video, these new media works do not separate the user off from "[t]he machinery that creates the vision of another world", as in traditional

[271] Samuel Weber (2000) "'The Greatest Thing of All': The Virtual Reality of Theater", *100 Years of Cruelty: Essays on Artaud*, Edward Scheer (ed.), Sydney: Power Institute/Artspace, p. 20.
[272] Zurbrugg (1995) "Jameson's Complaint: Video-Art and the Intertextual 'Time-Wall'," *Visible Language*, vol. 29, no. 2, pp. 229-30.
[273] Morse, *Virtualities*, p. 159.

theatre. Rather, the user is more directly in contact with it, recalling some of the features of mimeticism elaborated in the last chapter.[274]

On the limited interactivity of CD-ROMs, Anna Munster has recently suggested that,

> If its affective dimension so often registers as malaise or fatigue with its audience this is perhaps also because it is for the artist about a tiring of the body in relation to the triumphant onward march of information, media and technological saturation…The fatiguing of media forms as they recycle themselves through the multimedia format, the fatigue of the artist's body adjusting to the rhythm of media cycling and technological upgrade and unfortunately often the end fatigue of the user who easily tires of its iterative structures."[275]

I have been suggesting another reason why the CD-ROM user might tire of a work, namely because it is addressing an already habituated sensorium. The CD-ROM is limited anyway in terms of the range of senses by which the user can apprehend it. The gallery installation is, by contrast, able to support a much wider range of sensory stimuli (such as olfactory, thermal and oral) and visitor interactions, than the stand-alone CD-ROM can, as the work of a couple of artists working in installation readily shows. Lynette Wallworth's "Hold Vessels #1", for instance, included in the recent "Space Odysseys: Sensation & Immersion" exhibition at the Art Gallery of New South Wales (2001), invites visitors to physically pick up a glass bowl as they enter the room; this bowl acts as the 'screen' on which images are projected, with the visitor 'catching' them. The visitor's physical presence and occupation of the gallery space is pivotal in realising the images in Wallworth's work: not only does Wallworth's choice of a bowl as the interface object give the user a crucial role in making the work, bringing the (normally unreachable) images from the ocean depths to visibility, but the simple and even humble gesture of holding a bowl makes the connection with the work quite intimate (holding a bowl can be an act of supplication).

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[274] The anti-representational nature of Brecht and Artaud's projects is also relevant here, as neither upheld the more traditional separation between the audience and the action on stage. Indeed, Susan Sontag writes that while violating the self-protective distance between reader and text can hardly be considered new, "Artaud may have come closer than any other author to actually doing it – by the violent discontinuity of his discourse, by the extremity of his emotion, by the purity of his moral purpose, by the excruciating carnality of the account he gives of his mental life, by the genuineness and grandeur of the ordeal he endured in order to use language at all." Susan Sontag (1980 [1973]) "Approaching Artaud", *Under the Sign of Saturn*, New York, London, Toronto, Sydney, Auckland: Anchor/Doubleday, pp. 23-4.

[275] Anna Munster (2001) "Digitality – Approximate Aesthetics", *CTHEORY*, vol. 24, no. 1-2, 14 March, www.ctheory.com, accessed 9/10/01.

Mari Velonaki's installations similarly evidence concern with the gallery visitor's presence, but revolve more around their engagement with a digital character, activated via a range of experimental sensory interfaces. In recent works, avatars have responded variously to users' electric charge ("Pincushion" (2000)), to speech ("Red Armchair 4" (1999)), react to their breath ("Amor Veneris A" (1998)),[276] even the number of red apples that the gallery visitor eats ("Unstill Life" (2000)). Compared to Wallworth's and Velonaki's installations, the stand alone CD-ROM is challenged when it comes to delighting and surprising users with novel interfaces, restricted as it tends to be the computer screen, speakers and mouse. However, while such interfaces are beyond the capability of CD-ROM, it still constitutes an interesting medium that is relevant to thinking about alternate sensory configurations. Indeed, it could be argued that the sort of questions I have been prefacing in this chapter are *more* pressing ones for artists working on CD-ROM than installations or other media, in terms of thinking through their address of the user as a sensing and interpreting subject, engaging them viscerally (where this is their goal). Being a largely audio-visual medium, the CD-ROM "virtually implies" questions about innovative and experimental mixing of these media, and how visual and auditory material might evoke other, non-visual or auditory senses, and it is to these questions which I now turn.

Shock in the Ear

> *...to lend to the experience of shock...the quality of reflection that shock, unlike other impressions, must lack.*
> -- Richard Shiff[277]

Shock in the Ear (1998) is an interactive CD-ROM, concerned with various forms of shock – including electroshock, culture shock, and bodily, physiological shock. The work, based on Norie Neumark's research and interviews with people who have experienced shock, was initially commissioned as a radiophonic work for the ABC's "Listening Room". It was also mounted and exhibited as an installation during 1997. However, it is the stand-alone CD-ROM component of the work which I will address here. Neumark writes that "*Shock in the Ear* is an experience for itchy ears, not itchy

[276] Images of Velonaki's works are available as follows: "Amor Veneris" and "Red Armchair 4" http://www.cofa.unsw.edu.au/gallery/showcase/electronics_sculpture.html; "Pincushion" http://murlin.va.com.au/eyespace/pincushion/ as well as on her website http://www.mvstudio.org, all accessed 13/7/01.
[277] Richard Shiff, "Handling Shocks", p. 91.

fingers."[278] The title of the work (together with some prior knowledge of Neumark's sound practice) might suggest that *Shock* is a sound-based work. However, acknowledging the prominence which sound is accorded in this work does not convey the extent to which the piece also departs from expectations regarding the relations between aural and visual media. *Shock in the Ear* has been acclaimed for privileging aural elements, something that is rare in multimedia interactives. However, it is not just an audio work. I will argue that *Shock* exhibits a concern with the configuration of different media elements, not just in terms of not collapsing the specificities of different media into a 'unity', but also avoiding the antagonism that often seems to accompany debates about the senses of sight and hearing. Rather, Neumark evidences a concern for the in-between and inter-relations of different elements. In its refusal of easy, pre-packaged combinations and meanings, *Shock* speaks to a number of my concerns regarding the mixing and configuration of media elements in digital multimedia.

In this section I will first provide a brief description of *Shock in the Ear*, including points which illustrate the ways in which the work differs from popular definitions of multimedia. Following this, I will return to a fuller consideration of Cunningham and Cage's positions on the practice of separation, which will help me to elaborate on the significance of the separation of elements in *Shock*, and how this differs from Cunningham's practice. I will then move on to consider the particular configuration of media in *Shock*, paying particular attention to the novel audio/visual relations the work contains, as well as some of the ways in which the work differs in its treatment of sentience and affect.

In seeking an aesthetic solution to what she thinks of as audiences' over-familiarity with shock, Neumark adopts a deliberate strategy of defamiliarisation. She is concerned with the way that the ubiquity of shock aesthetics anaesthetises us to the sounds of shock. Shock aesthetics frequently fail to affect an audience as we literally 'tune out' those sounds that have become cliched. As Neumark writes in her article "A Shock in the Ear: Re-Sounding the Body, Mapping the Space of Shock Aesthetics",

> We stare at, thrilled, horrified (or turn away from, in a conditioned response, chilled, horrified) the same old wounds, rather than map their etchings through the body. We

[278] Sleeve notes, Norie Neumark (1998) *Shock in the Ear*, Sydney: Australian Film Commission.

> are shown the blood and the wound, the impact, the melodrama, we hear the screams and the crash. We have sensationalism but do we have sensation?[279]

The expectation that audiences will be shocked – on cue as it were – is dependent upon the over-simplistic view that stimulus dispensed to an audience will somehow automatically elicit the intended affect. Neumark argues that despite the claims of *extra*-ordinariness often attached to their use, the very "'extraordinariness' and 'abnormality' [of] shock aesthetics" (or rather *anaesthetics* as she terms them), actually "underscores and reaffirms existing 'normal' perceptions rather than dislocating and disrupting them" (44). She thus wants to defamiliarise shock, presenting it in such a way that the listener can experience something of the bodily space of shock, as well as what shock means for other subjects.

Part of Neumark's technique for getting user's to re-engage with shock is to make them *listen*, and listen to sounds that do not reference the obsession with *impact*. She reasons that in such a context of overstimulation and the numbness of conditioned response, "to 'shock' now we would need to melt the numbed perceptions of shock as scream and crash, to break through the anaesthetised perceptions of impact-fixation and experience the before/after moments" (45). She writes,

> …it was a mapping of bodily shock space experience rather than early modernist shock aesthetics or recent Hollywood that I sought. I worked with sounds that traced that space. Not so much the crash of glass at impact, but the sweeping of shards that mark and mark out a fragmented space. Not the scream, but the sucking-in of breath, deep into the body, along the nerve lines, into the tissues. (46)

Sound is accorded prominence in this aesthetic strategy, as the chief vehicle for conveying the experience of shock. Neumark cites an array of factors in support of this choice. For her, she explains, sound is the medium best suited to this mapping: sound enters the body and the imagination, and though the radiophonic medium is sometimes thought of as a disembodied, dead space, this is due more to radio's pursuit of a particular, 'clean' sound than its supposed disembodiment, as well as to the *dislocation* that listeners can perceive in radio (41-4). This second factor of dislocation, she writes,

> …makes radiophony eminently available for the aesthetic shock effect of dislocation because it is dislocation which so aptly expresses the way in which different spaces and times seem to pass into each other during shock, and it is dislocation which has become an important part of shock aesthetics (42).

Finally, sound's relation to memory makes it the obvious choice for her to use to approach shock. Not only can sound both carry memory and stimulate memory,

[279] Norie Neumark (1999a) "A Shock in the Ear: Re-Sounding the Body, Mapping the Space of

Neumark writes, but radiophonic space is also often a space of memory. "Sound itself has a lot in common with memory – combining evanescence, transience and chance with a materiality" (43).

To attend to the structure and organisation of the work briefly, *Shock in the Ear* is arranged in five sections – 'Attack', 'Decay', 'Resonance', 'Memory – the shock stories', and 'Telephonic Interruptions', a section which interrupts the other four sections. Each section contains a number of screens (generally twelve or more) and as the mouse is guided around the screen, roll-overs activate linked sounds. Movement within as well as between the five sections is achieved by clicking on visual icons in the lower portion of the screen, which become visible when rolled over. These allow the user the choice of either moving randomly to another screen within the same section, or randomly to a different section, a choice which significantly affects the sense that is 'made' from the work. While I will describe the structure and different sections of the work beginning with the shock stories, the user may not come upon these until after they have encountered all the other sections which deal only tangentially with people's accounts of *what happened* to them. Ironically, this is more likely if, in the attempt to chart a logical or linear path through the work, they continually choose the button which lets them move around *within* a section rather than *between* different sections; if the 'Memory' section has not yet been accessed, then they will continue to travel around the shock stories, without actually hearing them.

While all of the sections except 'Resonance' are based on material derived from, or responding to, interviews with people who have undergone or experienced shock of one form or another, it is in the section 'Memory' that we actually hear these people's accounts themselves. Six survivors of shock tell their story: some quite straightforwardly relate the facts of what happened to them, while others speak of their memories of shock, of how it felt, and what they remember thinking, as well as how it affects them now. One man received an electric shock when the telephone he was holding was struck by lightning; a woman recalls her memories of emigration and culture shock as a small child; another tells of her experience of electro-shock 'therapy'; one man recounts his torture with electricity; and there are also accounts by two women whose experiences are not exactly detailed. One of these women describes the severe injuries she incurred, though we are not told exactly *how* these were sustained, only that they result from a (car?)

Shock Aesthetics", *Essays in Sound* 4, Sydney: Contemporary Sound Arts, pp. 44-5.

accident in which she was thrown clear. The other woman gives powerful descriptions of what shock (of what sort we are not told) *felt like* for her, of the bodily sensations she experienced and how this affected her perceptions – both at the time of her trauma and afterwards.

Listening to these people telling their stories is a very intimate experience. Auditors get a 'glimpse' into another's life as they recall some of the moments when they were least 'together' and often very vulnerable, describing experiences which are clearly unnerving, the after-effects of which continue to be felt. The personal nature of many of the reflections, as informants recall their thoughts and feelings, registered particularly strongly for me. Like the woman who, after describing what her leg looked like upon hitting the ground, went on to recall the thoughts that she remembered having as she was lying in great pain. These were not of the horrific wounds or the operations she would clearly need to undergo or thoughts of loss of function. Rather, she recalled thinking that that morning of the accident when she had shaved her legs was (now) the last time she would ever shave that particular leg. Though peripheral to what was 'really' going on – the urgency of her injuries – her drawing this meaning at this particular time, as well as her recounting it in interview, illustrates the way that personal meanings are often made less from the things which others think *should* be important, and more from the incidental, the apparently marginal or fleeting, at the borders rather than the main event. This woman's musings resonate for me with something like a recognition: the knowledge that it is the similarly marginal and incidental details which both occur to me at the time of, and which are strongly invested with significance when recalled after, moments of personal crisis.

Throughout the work we find that fragments such as these recollected impressions and feelings accrue in layers; many seem to recur through the stories, which, though they are from different people's experiences, possess a number of similarities. Though I will discuss this build-up, this layering in more detail later, another example gives a sense of how themes or topics find resonance across the various sections of *Shock in the Ear*, beyond even the similarities between the different shock stories. Significantly, they form intensities in the work which tend to wash over the user over time rather than hit them square on 'in the face'. For instance, one man's testimony of how the telephone he answered during the course of military service during the Second World War acted as a conductor for a lightning strike comes to assume a greater degree of reality for users

through the telephonic interruptions section. Recalling the moment of 'attack', the man says "The explosion in my ear was so gigantic. It was just…the same effect of having a bomb go off close to you, the explosion in the ear". For him, the telephone has become the everyday reminder of this experience ("I've always had a dislike of the old 'phone"), the ringing activating the memory of his trauma. In what would now be considered classic symptoms of Post-Traumatic Stress Disorder, he tells how the weather report also functions for him as threat, re-kindling the memory of the event.

> I think you sense it, it's a matter of your senses, you know. You know in your own mind – there's a sense that tells you, you know – that there's fear in your body that's telling you; it's there forever. You're even sensitive when you hear the weather forecast or you can expect thunderstorms, you know…and of course the lightning with it, that's a complete revival of the whole event.

For many of us, the telephone also functions as an interrupting presence, though it does not trigger the revival of trauma as it does for this man. But while we may hear his story without really being able to understand the embodied reality it has for him, users might begin to come closer to understanding what it is like for him, through the telephonic interruptions section. Though it is not explicitly connected with his story, this section which intersperses and (as its name implies) interrupts the other sections consists of a telephone ringing, which is then answered (sometimes) in a foreign language. It is clear that the voice addressing us seeks some response, though it is not clear what is actually required of us. What these segments seem more to be about, though, is the telephone's interrupting of us from what we were attending to; it gives us a bodily start which, for me at least, gets me imagining what it must be like for this man, whose body goes into a hyper-alert state every time the phone rings.

Apart from being rich in content, the informants' voices add extra resonance to the shock stories. Neumark is cognisant of the way that radio editing typically reduces the specificity of a voice, in the pursuit of seamless production. This, she writes, results in "an anorexic, anaesthetised, Ajaxed, Hollywood body. In particular, it removes the *alterity*, the otherness, which slaps us in the ear with an unassimilable difference. It gives us not no-bodies, but endless variation/repetition of the same old bodies" (44).[280] This dominant aesthetic of a 'clean' sound on air is, she suggests, also present in the dominant

[280] Dan Lander also writes about the lack of bodily sounds on radio. Like the fear of dead air/silence which he says is threatening because it allows authority to fall away, airing these sounds would challenge the 'objective', factual, authoritative presentation methodology so often heard on mainstream radio. See Dan Lander (1994) "Radiocastings: Musings on Radio and

digital aesthetic. This is not what *Shock* gives us. Instead, these voices bear traces of the subjects whose bodies they articulate: audible traces, in the catch of certain words, the accents, the emotional trauma of shock sometimes evident in retelling the event. "(T)races of the storyteller cling to the story,"[281] so that these voices belie a subjectivity, generating for listeners an experience of an other; in Neumark's words, this is a time-space that can be heard and felt but neither assimilated nor denied.

I have already mentioned that Neumark intends *Shock* to be a sensual experience for users. But from this it should be clear that *Shock* is not an 'experience-machine' for inducing standardised affects. Nor is it intended that listeners should experience shock vicariously; these are, after all, *others'* stories of shock, raising questions about how shock can be experienced by the user of a CD-ROM, how they can have a visceral appreciation of shock, without actually undergoing shock themselves? The way that Neumark does this – rather than attempting to somehow 'dispense' a shock experience – is by foregrounding the 'shock stories' and allowing them to perform (the moments after) shock. At one point Neumark refers to the way that the stories and sounds etch their way along the nerve lines of auditors, making their way into the body of the listener. This is a different understanding of the link between audition and affect, which does not assume that users will all react automatically or in the same way to the same material. Rather than directly rendering or attempting to simulate the experiences for users, Neumark uses the narratives to convey something of the informants' experiences of shock to users. That she is successful at this says something about the storytelling capabilities of multimedia: perhaps, rather than branching narratives, these lie in techniques of not explaining everything and leaving it up to the listener to interpret things the way they understand them. This, according to Benjamin, "is half the art of storytelling" and how it can achieve "an amplitude that information lacks" (89).

The notion of the *encounter* is a useful one to develop here, to think through aspects of the user's relationality. The notion of the 'encounter' entails all the uncertainty, virtuality, and contingency that characterises the interplay of embodied subjects in social space. As a figure it is particularly helpful here for thinking about the relations between the subject (as user) and artwork, the user and others whose experiences the work

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Art", *Radio Rethink: Art, Sound and Transmission*, Daina Augaitis and Dan Lander (eds), Banff: Walter Phillips Gallery/Banff Centre for Arts, pp. 11-31.

[281] Benjamin, "The Storyteller", p. 91.

articulates (also subjects), and the relations between different media elements in *Shock* and *Metal God*. In earlier chapters I have analysed the way that sensation and sensory experiences are frequently conceived along stimulus-response lines, 'dispatched' at a target subject, who 'receives' it. I am now in a position to expand on other conceptions of sentience. In this, I am concerned that the user's relation to the computer is not just conceived as being that of a sensing machine; the idea of sensing as an (aesthetic and inter-subjective or ethical) *encounter* – which Neumark's work can be helpful in thinking about – has the potential to move beyond such a limited conception.

Importantly, a subject encountering art, others and technologies in complex ways signals a move beyond a subject who is just stuck in 'the loop,' as a passive recipient of stimuli, or, as seamlessly integrated into a circuit of user/computer. I think that this is what Mark Poster had in mind when he wrote that Marshall McLuhan's exclusive focus "on the 'sensorium' of the receiving subject…preserves the subject as a perceiving, not an interpreting being".[282] A fuller understanding of the sensing subject as an *interpreter* is required. Relatedly, and addressing the subject who encounters art through computer technology, many writers have expressed their discomfort with terming such a subject a 'user'. Following on from my 'use' of de Certeau in the last chapter – where I stressed the active and creative connotations of the French verb *faire* – I am also thinking of the user of multimedia as a maker. Thinking of the user as one who actively engages in (perceptual and interpretive) making and doing with new media is helpful in theorising the hyper/aesthetic encounter with new media art, as well as moving *beyond* the view that ties use to instrumentality. (Art is, after all, defined often enough by its uselessness, its non-instrumentality.[283])

Returning to *Shock*, Neumark's technique of letting others tell their story constitutes an encounter in both the aesthetic and ethical senses. Together with the other sounds, the music, and the visuals, users piece together their own versions of these experiences, necessarily selecting what they will attend to as well as affecting the way the various elements unfold by their interactions. It is very open. Rather than attesting or witnessing to the *facts* of what happened, the informant's accounts are more *evocative*, allowing the

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[282] Mark Poster (1990) *The Mode of Information: Poststructuralism and Social Context*, Cambridge: Polity/Blackwell, p. 15.

[283] See for instance Susan Buck-Morss (1997b) "Art in the Age of Its Electronic Production", *Ground Control: Technology And Utopia*, Lolita Jablonskiene, Duncan McCorquodale, Julian Stallabrass (eds), London: Black Dog Pub., p. 22.

listener to perhaps develop a kind of empathy, imagining what it might have been like for these individuals. I at least find the accounts more affecting – more shocking – than I think any attempt to render such an experience using special effects could be.

> Listening to the embodiment of the shock experience – following the *durée* of shock in the storytellers' bodies through their voices, sometimes distant, sometimes frozen, often dislocated even now as they returned to that memory space – the after-moment of shock came to be what I wanted to express and have listeners experience. (45-6)

Yet the possibility of empathy is also undercut, problematised. Rather than cathartically realising the other's experience, we instead become aware of the other's unknowability. What listeners get in coming in on these after-shocks is a partial sense of what it might have been like for that person, without any pretence that they know what it *is* like, or what it *was* like; nor are they having the same experience and responses as those whose lives have been marked by shock. There is little room for mistaking the accounts of shock for shock itself, particularly as it is the experience of *others* that is being related. The alterity that we hear in the story-tellers' voices serves as a further reminder that as listeners, ours will necessarily be a second-hand version. This is a point suggestive both of the limits to knowledge of others as well as of the work's hermeneutic leaning. The CD-ROM here provides a platform on which we can hear but not know the other in any definitive sense.

While the impossibility of fully 'knowing' the other is a well worn theme in philosophy (particularly in Emmanuel Levinas's ethics), there is a related sense in which shock can exacerbate the others' distance. Shock can itself be an experience of defamiliarisation, affecting the relationship with the self in unanticipated ways. Shock can be an elusive thing to try to communicate or explain to someone; often the reactions and changed bodily responses do not make sense, even to the person having them. The physical-bodily experience of shock can mean not being in control of your body, being surprised at bodily responses to seemingly innocuous stimuli (like the old-soldier's hyper-vigilance when it comes to lightning, weather reports or ringing telephones). In this sense shock can introduce an element of strangeness into the relation to the self, a sense of simultaneously not being able to understand the strange reactions of one's own flesh, and yet being forced to acknowledge them. On this point, it seems significant that many of Neumark's informants continue to muse on the significance of shock in their lives. Shock seems to constitute a rupture which never quite heals over. While the advent of shock disturbs a life at the time of the shock event, necessarily impacting on what comes afterward, the

more long lived effects can also turn the experience into something of a talisman – to revisit as a site for renewed interpretations over the years.

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Having considered Neumark's use of shock narratives, I want to turn to theoretical questions of configuration, first as these are posed in Copeland's writing about Cunningham's collaborations and then returning to Neumark's CD-ROM. I need to reflect on Cunningham's collaborative practice in more detail than I have thus far. The claim of Copeland's in which I am most interested, as I signalled above, is that Cunningham's practice denatures perception. Of the various factors which Copeland argues contribute to this denaturing, there are two with especial significance for the CD-ROM *Shock*. These are the manner in which Cunningham's collaborations have proceeded, and the techniques which impede and challenge the audience's perception, to which the disjunctive blends of media elements contribute. In the above description of *Shock*, I have also mentioned another factor that impedes the audience's experience, namely that they cannot fully know either the person concerned or the experience.

These two issues – of artistic collaboration and discontinuous configuration – are related. The word most used to describe Cunningham's approach to collaboration is also the term which describes the configuration of elements. That word is *separation*. Cunningham uses it in his essay "Four Events that Have Led to Large Discoveries": amongst these four events "the decision 'to separate the music and the dance'" is first, and one suspects, also foremost.[284] In this context, 'separation' is referring to the different arts (of music and dance). But we also know that Cunningham and his collaborators have frequently followed a policy of non-consultation, giving an additional, slightly different meaning to separation. So which is it? In thinking about these different uses of 'separation', it is useful to return to what Cunningham and Cage have said about their way of working together, to get a sense of the context in which the practice developed, and the significance each attributes to this concept of 'separation'. The video "Points in Space," a 1986 co-production between the BBC and the Cunningham Dance Foundation, features monologues by both on the subject of their collaborations.

Cage:

> When I began to work with dancers I noticed that the modern dancers wanted the dance to be finished first and then the music to be written to fit it. Formerly, the ballet had taken a piece of music which was already finished and they made the dance fit the music. Neither situation struck me as being politically good. I wanted a situation in which both the choreographer and the composer worked, so to speak, simultaneously, and brought the work together without one being ahead of the other or interpreting the other.[285]

Cage's comments make clear that this collaborative model developed in response to specific historical expectations of dance and music and of the dance-music relation. His remarks also indicate that his deeming the situation unsatisfactory was directly related to the fact that priority was perceived to indicate aesthetic worth, determining the relative importance of music and dance. The aesthetic hierarchy which Cage found himself coming up against has a long history, in which the senses play an important part. Debates have raged for centuries on the relative values of the different arts of painting, poetry and music. It is worth noting that historically, these debates about the boundaries and divisions between the arts have often been linked to ones about the relative importance and separation of the senses.[286]

Cage's portrayal of the 'solution' to the 'problem' of music-dance interaction has a noticeably *egalitarian* feel to it – each component of the work would be created simultaneously, "without one being ahead of the other or interpreting the other". This concern with the equality of the elements and the democracy of the process is echoed in Cunningham's comments later in the same video, regarding the effect that 'separation' has on an audience. "The spectator in a sense, the individual spectator, makes a kind of choice about that, that is…how he puts that [the music and dance] together, or *if* he puts that together, or if he keeps it separate." For Cunningham and Cage, separating the music and the dance is a democratising gesture, not just between the arts, but also in terms of giving the audience more choices. Finally, separation is seen as delivering independence to the practitioners of different arts. As Cunningham says,

> John Cage and I decided that the two arts were in time and that they existed in time and we could in a sense use time as the structure within which we worked but we didn't have to use that amount of time in the same way. That he could cut it up with sound in a different way than I might do it with the dancing…

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[284] Cited in Copeland, "Nature and Science", p. 27.
[285] John Cage speaking in Elliot Caplan and Merce Cunningham (dirs) (1986) "Points in Space" video, Cunningham Dance Foundation/BBC.
[286] For a survey of these debates, see W.J.T. Mitchell (1986) *Iconology: Image, Text, Ideology*, Chicago, London: Chicago University Press.

As Copeland's work makes clear, separating the dance and the music was the main means by which the conventional relation between music and dance was dissembled. In practice, this separation was achieved by also separating composer, choreographer and designer, making each work on their own. Other factors were also important in achieving this denatured configuration of the work, in ensuring the 'independence' of music and dance elements. Notable amongst these were the chance procedures which Cunningham and Cage both famously employed to escape their own intentions, that which comes 'naturally'. As Cage put it, "I wanted to open my mind to what was outside of my mind, and so I had to become free of my likes and dislikes." But in general, the collaborators working independently seems to have been the main means by which separation was achieved.

Having heard short excerpts from both men, if we try now to flesh out what 'separation' means aesthetically, it seems that it is still easier to define it by the *absence* of what was unsatisfactory in previous relations between different arts – something that Cage himself does – rather than defining it in *positive* terms. It is relatively easy to pose tentative guidelines like 'no element should be under the control of or subordinate to another element', 'no one element should be ahead of another or interpret another'. By contrast, it is more difficult to actually define what separation *is*. What *I* find most significant about separation as Cunningham has practiced it is the importance that he is able to ascribe to a number of different media elements simultaneously. Working separately from his collaborators was the way he accomplished this, but, as I see it, the central feature is this concern for the specificity of each element, for preserving the independence and integrity of each in the mix. Whilst I realise that integrity is a loaded term, tending to imply original purity, I use it here not to indicate this but to point to the concern with boundaries, and with any one element not getting sidelined or systematically overshadowed by others in the mix.

I have been dwelling on separation partly because it seems that the influence which Cunningham and his fellow artists have exerted has changed the way that we are able to think about configuration and collaboration. In a sense they have opened collaboration to other possibilities, to the virtual. I would argue that it is now more possible to think separation, with the knowledge of Cunningham's practice than it would formerly have been; we can think separation without necessarily having to physically banish collaborators off to their respective studios till opening night. The practice of

collaborators working in isolation which Cunningham and co. pioneered was undoubtedly an important innovation, challenging the assumption that collaborators *necessarily* have to work together. However, it is just one tactic – albeit a sure-fire one – for addressing concerns about aesthetic priority.

Like Cunningham, Neumark evidences a concern for the integrity of the different media elements in combination. Interestingly, *Shock in the Ear* is the result of a collaboration primarily between Neumark, Richard Vella (music), and Maria Miranda (painting and design), in which the three artists worked separately for most of the time. Importantly, while portions of the sound (the stories and some of the sounds) had priority in a temporal sense – having already featured in the radio version of *Shock in the Ear* – Vella and Miranda's contributions retain a strong degree of independence. Vella composed the music with no reference to the visuals, inspired by the general ideas Neumark expressed and a couple of the voices and sounds. But even though the collaborators did not work totally separately, *Shock* is very much the result of three artistic practices, that have not been forcibly unified into One. The interactions between the various parts are dynamic and fresh, even though the visual and audio contents are not as unrelated as in a Cunningham performance. I will continue to elaborate on the different elements in a moment, in particular discussing the innovative audio/visual relations, as well as the implications of this practice for the way users make sense and meaning out of the discontinuously configured elements. But before I do this, there is another very important point that needs to be developed, in terms of the historical conditions pertaining to sound and sound's perceived place in the sensorium, as it is relevant to Neumark's concern with media specificity.

I noted in the Introduction that theorists have often seemed to feel the need to defend the sense they were studying against all the rest. So for instance, vision has enjoyed relative esteem amongst the five senses of the Western sensorium, as the 'noblest' of the senses. Of late, the logic of this has been inverted, with writers alleging instead that a particular sense has been the most maligned, the most ignored, the most marginalised. Somewhat perversely, this is seen to accord the study of that particular sense an enhanced legitimacy. Both approaches are remarkably unsubtle, equally premised on an oppositional logic. Unfortunately, while this discursive technique does seem to have abated somewhat at present, it still underlies many approaches to the senses. Many writers on sound have, of course, pointed out how marginalised sound has been in our

visualist culture. Whilst sound certainly has been neglected, I find Neumark's approach more productive than many others: steering clear of the rhetoric, she also avoids the knee-jerk reaction of simply privileging sound over vision. As I will detail, aural media are not privileged in any straightforward way at the expense of the visual; rather their difference is acknowledged without it needing to be framed as an opposition. This results in a more complex tension both between the different media and the senses, hopefully a sign of a more useful direction for sensory discourse to move in.

The other point that requires addressing is the way that this approach to the integrity of different media also allows us to begin to notice the *porosity* between the different senses and media. Attempts to categorise media according to the senses they stimulate has always been fraught. For though visual art for instance, is generally perceived visually, through the sense of sight, this is not an adequate basis for categorising and defining the aesthetic affect of art.[287] There is not a one-to-one relation between medium and sense. The different senses are porous, at times leaking into each other, or evoking one another synaesthetically. So a visual work of art can evoke hapticity – perhaps a 'haptic visuality' as Laura Marks argues – or aurality, or the olfactory senses.

In thinking about the porosity of the senses and various media, and the very many possibilities for evocative and commingling of sensory affects, Benjamin's reading of a Naples as porous is very suggestive. If the senses have been unhelpfully confined, and subject to hierarchical ordering, then the potential for "new, unforeseen constellations" marks a welcome departure from proscriptive (an)aesthetics. "The stamp of the definitive is avoided. No situation appears intended forever, no figure asserts its 'thus and not otherwise'."[288] Helped by unfamiliar configurations, a hyper/aesthetic porosity has the potential to take the senses *beyond* the places conventionally assigned them, opening the way for mixed, multi and inter-media experiments together with a wide range of unfamiliar affects. Indeed, one of the interesting things that results from the novel sound/image relations in *Shock* is that it begins to seem like the visuals are following an aural kind of logic, returning at times in the form of a *refrain*. Furthermore, the kinaesthetics of the CD-ROM – mousing around the screen setting off sounds – also suggests a kinaesthetic dimension to listening, which is normally not evident (cf. the

[287] See Mitchell, pp. 116-119.
[288] Walter Benjamin and Asja Lacis (1997 [1925]) "Naples", *One Way Street and Other Writings*, Edmund Jephcott, Kingsley Shorter, trans., London, New York: Verso, p. 169.

Panasonic advertisement in Chapter Two, which suggests that listening is about more than just sound). The metaphor of 'digestion' that Neumark has used to describe the audio/visual relations in more recent work is also interesting to consider in relation to this porosity.[289]

To return to configuration, while Neumark and her fellow artists' collaboration differs from that mapped out by Copeland, this is more a difference of emphasis or degree than a radical departure from the practice he outlines. A comment from one of Copeland's footnotes is relevant here:

> Cunningham's approach to collaboration forces us to revise one of the most frequently cited models of avant-garde activity: the idea that the modernist arts have moved in one of two directions: either toward a Wagnerian synthesis or toward the idea of separateness and purity in which each artform is called upon to determine what it and it alone can do particularly well, jettisoning any feature it shares with other artforms. (Hence the modernist painter is advised to affirm the flatness of the canvas, avoiding the representation of three dimensional space – because that would misrepresent the nature of the medium and encroach on the turf of sculpture.) This dichotomy of course, reflects the underlying tension that I've described between isolation and collaboration. But Cunningham – as we've seen – greatly complicates this scheme.[290]

This complicating of what has previously been perceived as a dichotomy is something that both *Shock* and *Metal God* do. Certainly, many moments in the CD-ROM *Shock* rely on neither the *total* separation of media nor on synthesis, or the repetitive parroting of content across and between media.

Having said this, however, *Shock* was originally conceived as an aurally based work. Interestingly, as a result of her own encounters with the finished work, Neumark has found her earlier emphasis on sound shifting to the point where what interests her now is sensing how different media work together. This is consistent with my claim that *Shock* is not an aural work in any simple sense, as well as my argument that Neumark (like Cunningham) has a concern for the integrity and independence of different media elements in combination. But let me backtrack a little here: *Shock* was intended as an aural work, and yet I claim that Neumark is attentive to not privileging one medium at the

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[289] In Neumark and Miranda's 1999 installation *Dead Centre: The Body With Organs*, Neumark utilises the metaphor of digestion, which, derived from the process of digitising ('feeding' material into the computer), is also applied to the relation between the different elements:
"…the sound has digested performance; images and animations have digested sound and performance; and live performance digests sound and the animations." Norie Neumark (1999b) installation notes, "Dead Centre: The Body With Organs", The Performance Space, Sydney.
[290] Copeland, "A Community of Originals", p. 12, n. 4.

expense of others? This is a question because holding both of these claims together raises issues about what it means for a multimedia work to be aurally based. For would that not mean that one element *was* being privileged over others? Is it not a contradiction to assert the *independence* of the elements in *Shock*, *and* to assert that *Shock* is aurally based? Wagner's fusion of the arts, under the hegemony of music, comes to mind again. But only momentarily. The short answer as to why this is not a contradiction is to compare what it means for the other arts media to be under the *hegemony* of music in the Wagnerian *Gesamtkunstwerk*, and to say that *Shock in the Ear* is *aurally based*. The main difference is that the latter does not *subordinate* the visual and other elements to the aural. A longer, more satisfying response as to why the independence of elements is *not* at odds with the work's aural basis requires that I explore in detail the relations between the different elements in *Shock*, especially the visual and aural elements.

Because *Shock* is such a complex work, it will help if I first discuss the visuals on their own (perhaps a fitting way to proceed, given the subject matter). Miranda's screens are often rich and sensuously invite the user to travel over their surface and follow lines with the mouse, tracing a curve or just exploring the space, enjoying the discovery of image and surprise visual interactions as well as the sounds that are triggered by rollovers. They incorporate elements drawn from an array of image-making processes – writing, typography, painting, drawing, photography, and digital-manipulation, as well as incorporating objects that appear to have been placed directly on the scanner. This gives an effect unlike that of traditional photography which is unable to focus on anything pressing right up against the lens, a difference that is particularly noticeable where Miranda has used body parts which can be 'moulded' (and so distorted) against the glass of the scanner.

Many screens are also collages. Like the way that the recording of sounds and stories displaces them, bringing them into the present and into new contexts, the digital collages function to undermine any one, coherent meaning. Collage not only creates this tension, but maintains it over time; it does not provide for its resolution.[291] In contrast to famous modernist collages – Picasso's use of oilcloth with chair caning design for instance, pasted to the canvas – these *digital collages* have no thickness. Layers often develop through the use of overlays, rather than one item obscuring the one beneath it. But

[291] Katherine Hoffman (ed.) (1989) *Collage: Critical Views*, Ann Arbor, Mich., London: UMI Press.

because they have been scanned, the visuals are resolutely two-dimensional, with sharp, neat edges, affirming the flatness of the screen. Their lack of depth means that the images resist attempts to penetrate further 'into' the work, as if that would necessarily reveal something *more*, or prove more immersive.

Interestingly, in his review of *Shock*, Mike Leggett refers to the visuals as using "typography and the obfuscating effect of reprographics".[292] Miranda's animation of some screens does have effects that could be termed reprographic: in one image, for instance, the sky changes colour rapidly, from red to purple to green. And she does use typography, along with the array of other visual forms I noted above, as well as numerals, photos, children's scrawl, computer processed text, together with sketches of human figures. Though the combinations of visuals onscreen are not always collaged together as such, combining these disparate forms also generate collage-like tensions. The screens become interesting as sites of cross-fertilisation, as she puts things together that are not ordinarily seen together. There seems to be a parallel here between the tension Miranda creates between different image making processes and the tension that exists both in *Shock* between the audio and visual elements, and in physiological states of shock, between different temporalities, which are often out of synch. Miranda's compilation and juxtaposition of different visual forms – drawing attention, for instance, to the figurality of numerals and text, to their spatiality rather than their intelligibility or status as signifiers – complicates and undercuts any simple notion of 'the visual'. What Leggett draws attention to is, then, for me very interesting: for alongside what I have identified as a concern with the separateness of different media, here we see different visual forms adjacent to one another, unsettling the conventional ways in which each is most often read: numerals and type, adjacent to fluid human forms, become figural.

Jessica Prinz has written on the combination of visual and textual elements in modern and postmodern art, suggesting that such combinations are 'hybrid' mixes, "balanc[ing] precariously between disciplinary modes", and exercising a degree of ambivalence which upsets the claims of priority of both image and text.[293] These ideas are also relevant to conceptions of intermedia, which is perhaps a more apt descriptor here than hybrid. Considered in terms of the senses, these debates are interesting. To add one more voice

[292] Mike Leggett (1997) "Norie Neumark's *Shock in the Ear*", *MESH*, Altered States , no. 11, p. 62.
[293] Jessica Prinz (1991) *Art Discourse / Discourse in Art*, New Brunswick, NJ: Rutgers University Press, p. 8.

into the mix, Raymond Bellour has argued that it is increasingly difficult to talk about 'the image' (his interest) anymore, as it is so often permeated with language and voice. He is referring to the televisual here, and the extent to which televisual conventions have been naturalised. This media convention, Bellour claims, leads to "a more and more profound relation…between words and images…"[294] I do not disagree with Bellour, and yet it is hard to know from this article whether he might not be nostalgically mourning the passing of some 'pure' visual form. Considered differently, what his comments suggest in the context of multimedia is how much studies attending solely to single senses are likely to miss. (This is a question worth asking, reversing the form in which the question is often asked by theorists of single senses.[295]) Miranda's technique of positioning the textual and visual alongside each other is appropriate, exacerbating the tensions which Bellour suggests have become a part of the realm of the 'visual'. Meanwhile, in the wider context of the novel audio/visual relations in *Shock*, I am inclined to believe that what the televisual naturalises is *very particular combinations* of words, images and voice, brought together in conventional – and often not very profound – ways, generally governed by verisimilitude. In the case of *Shock*, Neumark and Miranda's configuring of music, sounds, voice and various visual elements proximate to each other, allows interesting and novel inter-plays – combinations and recombinations – to develop as the user interacts with the work. As well as complicating the dichotomy between the separation of specific arts and collaboration, the way that this is handled in *Shock* sets up a range of non-standard *encounters* between visual and audio media.

The audio/visual relations in *Shock* are noteworthy for a number of reasons. The independence of the visual and aural elements is evident in the fact that even though they are concerned with similar material, neither is illustrative or interpretive of the other. While the sound carries the stories of shock, the work is as much a visual experience as an aural one, as it is the sensory richness and evocative potential of the visuals that the sound resonates with. That they resonate does not mean that the audio fits neatly together with the visual. This is audio/visual (with a slash) rather than audio-visual (the dash to me suggests a blurring or fudging of boundaries): the aural and the visual are, at nearly every point in *Shock*, in some kind of tension, keeping the relation edgy. Sound is

[294] Raymond Bellour (1990) "The Power of Words, the Power of Images", Elizabeth Lyon, trans., *Camera Obscura*, no. 24, September, p. 7.
[295] Jim Drobnick, for instance, asks it about olfaction and smell in (gallery) spaces usually thought of solely in visual terms. Jim Drobnick (1998) "Reveries, Assaults and Evaporating

not just used to recuperate presence for the visuals;[296] nor do the visuals make easy sense of the sound. While text from interviews is sometimes seen transcribed on screen, this is more graphic than communicative. There are no special 'clues' to be found in it: only ever a transcript of the informants' accounts, the text actually communicates *less* than the audio; there is no more information to be found than what the soundtrack offers up. And yet, at other points in the work the user might find visuals or audio that resonates with a particular story. To experience this work is to find one's senses challenged; to realise something of the virtuality of sensory configuration and enculturation.

Though the visual screens often do relate to the stories or fragments of stories which the auditor hears, the connections are loose, only tangential; there is no easy or realist correspondence. Rather than trying to transpose the stories or give a visual form to them, Miranda's screens are evocative, engaging indirectly with the accounts, and generally do not reference the shock stories, or at least not at the same time as they are being voiced/spoken. This distance between Miranda's own imagery (as well as non-imagistic visuals) and the audio is evident in the images and animations accompanying a man's narrative of torture. A sense of *threat* is all that connects the stylised, shadowy outline cast by a human figure with his account, though this threat is certainly palpable throughout the telling. A clickable hand icon appears on the shadow, which, when clicked, separates a white outline of the shadow-figure off from the figure itself, in the process becoming distorted in size. This evocative image is suggestive of a becoming-diminished as a result of torture, the splitting off and dissociation that can be experienced during extreme trauma. Importantly, none of these readings are mentioned or in any way alluded to in the narrative, indicating both the originality and force of Miranda's visuals, as well as the potential for significant interpretation on the part of the user.

The set of screens accompanying another shock story further shows how Miranda avoids the obvious in favour of slow developing intensity, the apparently peripheral, and sometimes just a background on which the user can project their imaginings. The story of the woman who sustained serious leg and other injuries provides a good example of this. She relates her accident thus,

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Presences: Olfactory Dimensions in Contemporary Art", excerpted from *Parachute*, 89, Winter, pp. 10-19. See also n. 13.

[296] Many sound theorists argue that this is too frequently the case. See, for instance, Frances Dyson (1995a) "In Quest of Presence: Virtuality, Aurality, and Television's Gulf War", *Critical Issues in Electronic Media*, pp. 27-45.

> …Because everything else was so still, things kind of registered on my mind as if from a distance, so that I could look at my body and see through the flesh and look at these little sort of yellow globules and then realise that that was the layer of fat, and see the blood sort of swirling around, and notice that ants were starting to crawl into the wound… So yeh, it was like watching a silent movie in a way.
> […]
> I started to count the time until I would be at the end of the pain, because I knew that that would come and it would be over. And I think I really counted the time one second at a time… With each minute that passed, I knew I was getting one minute closer to the time when it would stop.

Timothy Murray has referred to this part of *Shock* in his review, writing,

> The CD-Rom's ever-changing tableaux of paintings and designs by Maria Miranda playfully solicit the spectators with softly contrasting textures, loosely penciled figures, and abstract color fields that literally embody the digital sound tracks. One animated sequence accompanying the horrific description of ants entering the bloody wound of an accident victim's leg displays not a mimetic image of the horrific thing but, instead, a sheet of colored paper being torn in half…[297]

Murray is correct; Miranda does not in any way attempt to *illustrate* the sequence as told by the woman. What she does provide in the way of visuals for this story is very sparse – a black screen with just two small sections with fragments of text on a multi-coloured background, and a white circle in the centre of the screen. As the story proceeds and unfolds, the user's movements over hotspots, as in other sections, trigger musical segments. But as well as this, as the user interacts with the screen, the circle begins to move from side to side, no longer enclosing just a black ground but revealing portions of text, numbers which appear and fade, and a clock. A clickable hand icon on the clock links through to another screen, containing lines of text treated with a painted wash. Moving the mouse over *this* screen leaves a trail of numbers – 1 2 3 4 5 – the seconds which the woman recalls counting? This screen then begins to slowly fade, giving way to reveal yet another beneath or behind it, like a layered jigsaw.

The relations between the sound and visuals are novel here, denatured, unfamiliar. Apart from breaking with the very familiar conventions of verisimilitude, *Shock* also takes apart the convention of one medium needing to be prior. That is to say that the order is not simply reversed, to one where the image fills in the gaps in the soundtrack. It is interesting that the woman speaking should compare her experience to a silent movie, because the audio/visual relations resemble in some ways those of silent film. Carol Hamand writes that in the 'silent' era, the live sound achieved a relative independence from onscreen images. In sound films, by contrast, visual references to sound are

consistently rendered sonically; and even though the talkies used non-diegetic music, any musical event presented onscreen was present in synchronisation on the soundtrack. Musical accompaniments to silent film were, by contrast, largely non-corresponding, with non-diegetic sound acting as a sonic channel parallel to the image track, with only occasional correspondence. "With the adoption of mechanical sound, Hollywood made significant changes in film style. After allowing the aural and visual a noteworthy degree of independence in the silent era, the studios moved to sound derived from and welded to the moving images…"[298] However, while there are similarities between the audio/visual relations of silent film and that of *Shock*, the relations are not exactly the same. One major difference is that *Shock* is the product of *three* artists' practices; difference and the inter-relations between the three arts are rendered without opposition, perhaps in part because the three-way collaboration makes any settling of differences along binary lines less of an option. Rather than the chance to recuperate the image untainted by words or sounds whose passing Bellour seems to mourn, the confluence of these media animates challenging new configurations across the interstices of different media.[299]

Given that very little in the way of meanings or conclusions are offered up to the user of *Shock* pre-packaged, users have to work to make their own meanings, to draw their own (partial) conclusions, from the material they are given (which is in no way complete). They bridge the slash between the audio and the visual, deciding *how* or *if* they will bring them together, or if they will keep them separate. This is a subject who is constantly interpreting, as and while they are sensing new information, which in turn suggests different ways of *making sense with* that information.

The making in which users engage also occurs *across* time, as well as between different elements which are experienced simultaneously. In part, this is a function of the work's complexity and the chance order in which we visit the different screens and sections. But links may also develop between different sections of *Shock* for other reasons, such as the personal resonances which users might find within a particular story or sound or similarities or differences that develop over the course of their encounter with the work.

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[297] Timothy Murray (2000) "Digital Incompossibility: Cruising the Aesthetic Haze of the New Media", *CTHEORY*, 13 January, www.ctheory.com, accessed 3/8/01.
[298] Carol Hamand (1984) "Sound and Image," *Wide Angle*, vol. 6, no. 2, pp. 24-33.
[299] Douglas Kahn and Gregory Whitehead call for more innovation in sound/image relationships in their Editor's Introduction to *Wireless Imagination*. See their (1992) *Wireless Imagination: Sound, Radio, and the Avant-Garde*, Cambridge, Mass.: MIT Press, p. 1.

These can coalesce in striking ways, as I found when one such connection leapt out for me. Returning to the powerful image of the woman whose wound was crawling with ants, I found a screen, remote from the shock stories, featuring an animated group of small, solid, yellow, oval-shapes, moving in a group across the screen. The first time I encountered this screen, it made no great impression. I attended to the sound and observed the shapes moving across the screen and moved on. But when I finally heard the above account of leg and stomach wounds, and ants crawling into them, the result was chilling; I was immediately struck that these oval shaped dots were ants (though they might also be the yellow globules of fat, or maybe something else). And it goes both ways. These moving yellow dots and all that they signify are evoked when I hear the woman tell her story; and when I see the shapes, I recall her description of the details of her wounds and that people were laughing up the road from where she was lying. Though it is a simple technique, the effects are compelling, particularly because the visual rendition is *remote* from the story that it seems to refer to.

I propose that if anything warrants the term, *this* is synaesthetic: an evocation that is singular, (things often do not unfold the same way the second time around), an inter-reference between the senses. Such moments of resonance are ephemeral rather than pre-packaged experiences, orderable on demand; transient links rather than well worn paths which are triggered aesthetically and affectively for an interpreting subject. These are encounters rather than a move to forcibly unite the sensorium. The non-proscriptiveness of such intensities suggests another similarity to collage/montage, namely the openness and the great range of affects that can result from the technique, similar to Sergei Eisenstein's awareness of the range of responses that filmic montage could produce for an audience. Likewise, the practice of reading the aural and visual together and finding both correspondences and juxtapositions in *Shock* can delight, chill, surprise, or confuse.

The ant example illustrates the way that the work builds slowly in intensity, with material accruing or washing over the user in layers over time. This facilitates a different kind of sentience which, as I noted above, also affects how and what it is possible to think and feel. Probably the most significant implication of this layering in *Shock* is that it introduces an ongoing interpretive element for the user. In sharp contrast to my claim that some multimedia interactives stitch up meaning, the definitive reading is never arrived at. Indeed, layers of meaning accrue and resonate, with each other in the user's memory, as well as intersecting with the user's own subjectivity (perhaps their own

memories and experience of shock?) and the meanings they begin to draw from the work as this collective airing of experience unfolds. This frustrates any attempt to get at the 'full story'.

The user is also made to wait, so that the technological experience is not a joy-ride. Denatured, sentience becomes an ongoing affair – waiting, remaining, listening – a mode of attention that is quite different to the manic clicking and scrolling so often engaged in when surfing the internet, for example. Complex interconnections develop over the course of the work, with the cross-fertilising of shock stories and feelings and descriptions resonating in surprising ways, parallels the dislocation of shock, in that "different spaces and times seem to pass into each other".[300] For instance, the woman subjected to ECT talks about feeling as if she were,

> …a television that was going wrong and they just kept kicking me and kicking me until I started working, but in that process some of the nuts and bolts didn't get fitted back into place again, and I've pieced it together in a new way, so some of the circuitry and the wiring isn't quite right.

Her comments resonate strongly with those of the torture survivor, who says, "…it was like an earthquake that suddenly came into my life and reduced my life into nothing…when you return to normality your perceptions are different, your feelings are different…" This ongoing aspect of interpretation is further ensured given the possibility that, though a user may assemble meanings over the course of many screens and stories, there is always the chance that more information will become available later, changing the emphasis or interpretation (much as a good story might, in Benjamin's account). The inability of theories of information society or digital revolution to account for such complexities of sense- and meaning-making in contemporary media contexts provides another compelling argument for why a theory of hyper/aesthetics is valuable. Rather than serving instrumentalist concerns regarding information delivery, the accrual of extraordinary experiences, or indeed, accessing the 'full' story, technology in the form of digital multimedia here facilitates ethical encounters. It demonstrates more of the range of relations that its possible to have with technology in which the senses are important. Further, beyond showing the contingency of anaesthetics and alienation, *Shock* also forcefully reveals the contingency of particular ways of knowing, interpreting, and of engaging with others. These are the ethical and epistemological counterparts to Cage's assertion that unfamiliar encounters intensify the ability to discover.

[300] Neumark, "A Shock in the Ear", p. 42.

Like the audience at a Cunningham performance, with whom the onus of interpretation rests, these techniques reintroduce a virtuality for computer users, both to their sensoria as well as to their relations with the others encountered within the work. The unfamiliar media configurations renew a sense of being able to *make* connections that go beyond the tired, cliched ones formed of habit. Not only are we not faced with the unification of our senses, but in using *Shock*, we may find ourselves experimenting with new ways of putting the senses together, trying out a new sensoria, making sense from disparate and conflicting sensory material, as well as playing with different ways of thinking and experiencing that formerly might not have seemed viable or even have occurred to us. One might say that our relation to our own, culturally acquired, sensorium is *innervated*.

The unresolvable aesthetic tensions contained within *Shock in the Ear* are significantly different from an aesthetics of smooth encounters, the desire for which Becker reads as an avoidance of the other, which she claims is prominent in many new media contexts. She writes,

> By constructing virtual worlds and virtual identities, people try to avoid the dissonance which can appear in concrete contact with the physical world and with others as well as with our own physicality. Accordingly, they retire to the inner world of their imaginations, which corresponds more easily to virtual worlds because here the strangeness and resistance of oneself and the other can be ignored….by avoiding contact with the other, one no longer needs to take up a position or deal with dissonance and ambiguity. Since the concrete materiality of others – their smell, the sound of their voices, their physical presence in all their different and sometimes irritating guises – might throw one off balance, they have to be integrated in one's own model by being reduced to mere effects of communication or virtual instantiations.[301]

Shock is based neither on the avoidance of others nor of dissonances and ambiguities. Indeed, that various tensions are not alleviated in *Shock*, suggests that a different relation is operating. Just as the audio and visual elements in *Shock* are neither illustrative nor interpretive of each other, there is a refusal to reduce the other for easy consumption; the unknowability of those whose stories we hear on the CD-ROM is affirmed, rather than being eroded through representations or otherwise 'killed into knowledge'.[302] A sensory relation whereby the user/auditor hears others' stories and responds affectively, yet without assimilating or denying the other, is suggestive of a range of possible relations with others, some of which may not yet have been named or conceived. Such a proliferation of possible relations resonates with my concern in this thesis for retaining the array of relations between sensing subjects and technology, and with retaining the

[301] Becker, "Cyborgs, Agents, and Transhumanists", pp. 364-5.
[302] Marks, *The Skin of the Film*, p. 193.

sense of contingency that attends any one possibility. And, just as *Shock* makes a user aware of how their senses could be differently enculturated, so the user might begin to realise the contingency of relations with others.

Neumark's new media practice is important then, not just as an example of different non-naturalised configurations of media, and the denaturing of the senses, but also for the way that she uses these techniques with awareness of the limits to knowledge of the other. As she writes, "There *can*…be a different mapping of computer space, an elsewhere, which like radiophonic space can have room for alterity and aesthetics, rather than this anaesthetics" (47). This restores a degree of openness and virtuality to the aesthetic encounter and relation with electronic media technologies. In the following analysis of *Metal God*, I will argue that Migone is also approaching a new awareness of alterity, which goes beyond the old dichotomies and restores some of the virtuality to the user's encounter with alterity.

Metal God

> *With words the other faces. Language is not an instrument. …in coming to me only in his or her words which hardly stir the air, which I can resist without doing anything at all…the other presents himself or herself… This way of coming appeals to my presence, to my response and my resources.*
> -- Alphonso Lingis[303]

Metal God is a very different work from *Shock in the Ear*; it does, however, assume many of the points I have been referring to in Copeland's writing on Cunningham, and in *Shock*, and addresses a number of the issues with which I am concerned.[304] Like Neumark, Migone configures the visual, audio and textual elements in *Metal God* separately and independently of one another. However, where there are occasional correspondences between the aural and visual elements in *Shock*, there are no apparent connections between any of the different elements in *Metal God*. Not only are the different media not illustrative of each other, but they do not seem to relate to each other at all. Each vies for the user's attention, clashing and interfering with the rest: in contrast to the way that resonances build in layers over time in *Shock*, *Metal God* is more like a

[303] Lingis, *Sensation*, p. 69.
[304] Christof Migone (2000) *Metal God*, Canada: Canada Council for the Arts,

bombardment, directly affecting the user's senses. Indeed, the user's *encounter* with the artwork is at some points more of a *confrontation*. I say this both because of the lack of any continuity between different elements, as well as the total lack of any explanation as to why it is configured in this way. With no explanation forthcoming regarding the significance of this asynchronous configuration of media, the user is left with little choice but to accept it as the way things are. The aim is not for them to understand *why* the work is constructed as it is, but to experience it aesthetically, to have it 'act upon them', similar to the way that Artaud proposed for the spectator of theatre.

For this and other reasons, Artaud's writings on the Theatre of Cruelty are useful for considering *Metal God*. Artaud considered it useless to primarily address an audiences' intellect. In *The Theatre and Its Double*, he writes variously of the need for "a theater that wakes us up" and of the way that his theatre "attacks the spectator's sensibility on all sides…". From such a theatre, he says, "there will be neither respite nor vacancy in the spectator's mind or sensibility".[305] It is not hard to see Artaudian influences in *Metal God*. It too exercises a degree of cruelty in the way that it acts on our senses. Perhaps because there is no explanation for this, the question *why?* remains. Allen Weiss's reflections on another artist, Valère Novarina – also influenced by Artaud – possibly provide the beginning of an answer here. Weiss notes that for the French playwright, "Everything that destroys or circumvents our linguistic habits is valorized: errors, slurs, babble, lapsus, agrammaticisms, malapropisms, aphasia, and whatever other effects – psychopathological or quotidian – loosen the tongue, worsen speech, fracture the word."[306] Weiss's observation is relevant to this analysis because Migone does something very similar in *Metal God*. Where Novarina uses all manner of *linguistic* means to mess with convention, Migone valorises and employs a number of techniques to circumvent users' *perceptual* habits, including combining different media so as to maximise the collisions between them; using a too fast pace, or material that might make us avert our gaze (a spider); creating looping sections of film and audio; as well as preferring the unfamiliar or the strange, the inhuman, the illegible. These efforts reveal how bounded conceptions of the human – and what can be known – often are, as well as how the techniques used to generate and structure knowledge in turn delimit what can be known. Migone's work does not present any one solution to these difficulties, but instead

[305] Artaud, *The Theater and Its Double*, pp. 84, 86, 126.
[306] Weiss, *Phantasmic Radio*, pp. 61-3.

raises many questions: about what is covered by a category such as 'the human'; about how moving beyond familiar aesthetics might change relations to others; and particularly about the imbrication of sensory responsiveness and strangeness.

I will consider how Migone's preference for the unfamiliar and the strange fits with the argument I have presented thus far (after Copeland) in a moment. But while I am on the question of cruelty, I need to explain how Artaud's ideas on cruelty and the notion that theatre (or in this case multimedia) 'acts upon us' fit with the argument I have made about users being makers, actively choosing what they will attend to and particularly interpreting the combinations of media they put together. It is, I think, possible to acknowledge cruelty in an artwork – in the way that it 'attacks' the user's senses, seemingly from all angles, allowing no respite – without dismissing entirely the subject's ability to also reflect on these experiences, and produce their own meanings. Such a (negotiated) cruelty implies a user pushed to their limits, enabling me to continue to attend to the range of possibilities resulting from such exposure. In thinking about these ideas, I find it significant that Migone is interested in how the user looks to make sense out of non-sense.[307] This suggests to me that he is committed to both making the multimedia experience a difficult one for the user (in the kinds of stimuli presented, their configuration, and their degree of unrelatedness), *and* that he is concerned with the processes by which users seek and find intelligibility and meaning under such difficulty. Such concerns with the ability of users to be directly affected by the work, as well as to reflect on and make sense of the work, are understandable through my thesis on hyper/aesthetics, specifically on the porosity between sensing and cognition. As noted earlier, I am working with a conception of subjectivity where aesthetic experience informs, but does not determine, thought: aesthetics *affect* cognition and meaning making, without *controlling* them.

Many of the arguments I made in relation to *Shock*, that it denatures the senses through discontinuous configuration, for instance, also hold for *Metal God*. Like Neumark, Migone is concerned with rendering the familiar relation to technology unfamiliar. Indeed, from the moment the work opens on the computer, the user is made aware of how much they are *not* in control. As we instinctively reach for the mouse, we realise it no longer does what we intend it to do, but moves in the opposite direction. All the talk about which computer platform has the most 'intuitive' interfaces goes out the window

here; no matter which way we think we are moving it, the mouse just will not cooperate and go where we intend it. The computer user becomes a novice at this most basic of operations, all over again.

Apart from the strangeness of the backwards mouse, the other elements in *Metal God* – the poetic text, soundtrack and video – are also quite strange; they do not need to be 'made strange'. What is the significance of this strangeness? Obviously, it confronts users' senses, preventing them from simply falling back into habitual responses. In addition to this, this strangeness carries a critique of the normative, especially the 'naturalness' of 'the' human. The strange elements on the CD-ROM stage an encounter for the user with that which is far from the norm. To begin to help think through the significance of this encounter with the 'unnatural' or 'inhuman' in *Metal God* and what the significance is for relations to technology more generally, I want to draw some comparisons between Cunningham's and Migone's practices. The first of these concerns Copeland's identification of Cunningham's "collage-like conception of the body (as an inorganic 'assemblage' of parts)", a conception which Copeland claims is the "anatomical equivalent" of the dissociation of sound and dance in Cunningham's collaborations.[308] The second point concerns the significance of Cunningham's 'unnatural' choreography, which Copeland suggests lies in his "refus[al] to lend human beings or human consciousness any special pride of place".[309] Some similar concerns can be detected in *Metal God*, concerns whose significance for my project stems from the challenge they issue to the presumed naturalness of human bodies, and the presumed unnaturalness, and fearful unfamiliarity of technological bodies, inherited from humanist philosophy. As well as denaturing the senses, *Metal God* is also suggestive of innervated relations with technology and with otherness, pointing to the need to reconceive these, post humanism.

There is a further, related level to Migone's engagement with the un/familiar in *Metal God*, which might be characterised as an inversion of Shklovsky's concept, which follows on from his critique of 'the' human. This is found in *Metal God*'s staging of an encounter for the user with the Unfamiliar, the Other, the pathologised Strange, notably through the work's associations with madness. It is an inversion because, as I will

[307] Migone, "Headhole", p. 52.
[308] Copeland, "Cunningham, Collage, and the Computer", p. 44.
[309] Copeland, "Nature and Science", p. 31.

explain, the Unfamiliar comes to seem strangely familiar, *uncannily* so. Richard Shiff's argument that familiarity has a double meaning, referring not just to the habitual, but also to an uncanny familiarity, such as that which an unplaceable face evokes in us, is relevant here. The latter kind of familiarity, he writes "… – not accustomed but shocking, uncanny – results from a viewer's immediate encounter; no accumulation of experience or scholarly preparation will produce it."[310] *Metal God* is then moving in (at least) two directions simultaneously, in its defamiliarising of the habitually familiar as well as its facilitating an encounter with the Strange, some aspects of which feel familiar. I will explore the implications of both of these gestures.

Migone's two-directional approach to questions of familiarity/unfamiliarity, the Same/the Other reiterates one of the larger arguments I have been making throughout this thesis on the range and diversity of the effects of developing media technologies: that the uses to which they are put, and the meanings and affects that are made with them are not predetermined (though they may be proscribed); that there are always multiple possible implications, and that similar uses or deployments of media technologies in different contexts can produce radically different outcomes. It seems fitting to conclude this final case study weighing the significance of dual approaches to the (un)familiar taken by an artist working in new media. The points I want to make in reviewing the Strangeness of the sound, video, and text in *Metal God* are also consistent with my central thesis on the new and different aesthetic possibilities that media developments and changing aesthetic relations facilitate. Their strangeness does not justify discounting them, or reading them as evidence for the atrophy of sensation. They are strange, but it is important to understand them hyper/aesthetically, as embodying a vitality and virtuality which innervates, taking us *beyond* what we know and intensifying the ability to discover.

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Migone's practice of multimedia in *Metal God* could be thought of as collage-like, in its bringing together of elements which resist attempts to read them together, according to conventions of media configuration. The work joins in collage a number of strange elements which give no ground to their others, but which successfully denature perception, reading, and 'the' body, opening each of these to the virtual. Though no one

[310] Richard Shiff, "Handling Shocks", p. 97.

element in *Metal God* is prior, in the sense of having the others fall into line behind it, the one largely coherent element (which is also the work's namesake) is a poem. (Published in 1991, it also seems to have inspired the earlier performance by Migone and choreographer Tammy Forsythe, from which some of the sounds and video images come.) "Praying to the Gods of Office Ceiling Sprinklers on Juniper Street" by Beth Greenspan (Appendix 1), is presented to the audience line by line, but choreographed in such a way that they only get a brief moment in which to apprehend the lines, prior to their slipping away. Forsythe is responsible for the arrangement of the words, and she brings her choreographer's sensibility to the task. The lines of black text appear out of a screen that is entirely white and recede into similar whiteness, occasionally punctuated by short, low-resolution video fragments in the corners or in different portions of the screen. While the technique of presentation is simple, it is elegant and extremely effective, often conveying a fantastic and playful tone, similar to the way that Greenspan's text plays with conventions. The choreography of the calligraphied words pushes users to experience the words' materiality – their graphic and spatial layout – as well as their semantic meaning. Because the words are not static on the screen, the choreographic technique also imbues them with a discernible rhythm, which changes at a number of points during the poem – does this correspond to a new stanza, we wonder?

Far from simply presenting the poem line by line, Forsythe has pretty much choreographed the words into a dance. At times, this threatens to take over, rendering the poem unintelligible. The words whirl and jumble, delighting us with their antics, sometimes floating out toward us in a rearranged order, leaving it to the reader to arrange them in the split second prior to something else happening. Sometimes, it seems like the words have acquired bodies with urges and desires of their own to move, mobilising in turn a kinaesthetic responsiveness in user's bodies. Frequently, they break out of their lines to mill around and exchange places, before being ushered off the screen in a huddle, or floating off ethereally.

This all makes for a very dynamic reading experience. Users are constantly forced to choose what they will attend to – the dancing text, the poem's semantic content, or the video fragments and sound that play simultaneously – or how (if?) they will put these disparate elements together. Though they might attend closely to the poem, their efforts to 'catch' all of it are frustrated. It is almost impossible to take everything in on the first pass, particularly as each line of text is only shown for a very short period. And though

it is possible to go back to the previous screen, the multiple demands on attention mean that users have to accept that they will miss some bits, that religiously reading every word is only one way to appreciate the work. In light of the fast pace and the discontinuity of configuration, my attention tends to shift constantly between awareness of the soundtrack, the new images that would suddenly appear on the screen, and what the text is doing *and* saying, with the sounds alternately thrust into my awareness or harnessing my body with their rhythms. Interestingly, because of the nature of the text and its presentation, the poem still makes a kind of sense even if words get missed or the reader only gets every second word, or reads them out of order, as they are obliged to do at certain points. When this happens, the choreography seems to embody the words, so that one can still draw enough of the words' meaning from their movements, or else catch half the line as the 'stragglers' are leaving the screen. Apart from this marking *Metal God* out from many adaptations – in that Migone and his collaborators have managed to perform the poem in a new way rather than merely transpose it – this quality of actually getting something out of the word's dynamism in space would seem to be close to Artaud's idea of a "unique language half-way between gesture and thought" (89).

It is significant that the poem is at no time given voice on the CD-ROM. But the text's silence, and its evanescence, invites the viewer to give it voice, if silently. As Migone has written in a different but related context, "The reader acquires ears. What we hear are the sounds of our imagination interpreting the text, a process which exists in all reading to a certain extent."[311] This internal reading further stresses the user's experience, however, as even silent reading is rhythmic, with a poem's phrasing suggesting certain ways of speaking it. Given that Forsythe's choreography also imbues the poem with a visual rhythm, these two rhythms move between being in accord and at odds. But if this combination of visual and reading rhythms is unsettling, this is nothing compared to the sound and video elements.

Some of the sounds are particularly difficult to listen to; they make you wonder at the kind of body that has produced them. Many writers have of course embraced noise for the major challenges it presents to listening conventions. Noises are – by definition –

[311] Migone, "Headhole", p. 52. Claire Oboussier makes a similar point in discussing synaesthesia in the writing of Roland Barthes and Helene Cixous, invoking "an ear which…is linked to a kind of pre-hearing which is not separate from the other senses, not a solely exterior sense. The eye listens as it apprehends the letter on the page, a kind of blind reading…" See Oboussier (1995) "Synaesthesia in Cixous and Barthes", p. 129.

difficult to listen to, their randomness making them much harder to grasp than structured sounds like music or speech.[312] Typically, machines have been thought of as a source of noise. In *Metal God*, some sounds are definitely harder to listen to than others, on account of their 'inhumanity'. But significantly, the split does not fall according to traditional expectations of different kinds of sounds – namely, that that which is 'inhuman' is non-human – as a quick historical comparison reveals. In 1952, Cunningham choreographed a dance to Pierre Schaeffer and Pierre Henry's "Symphonie pour un homme seul" ("Symphony for a Single Man"), apparently the first dance to a work of musique concrete. Allen Weiss writes that this sound piece used both pitched sounds and assorted noises; Schaeffer categorised these as being either *human* sounds (breathing, vocal fragments, shouting, humming, whistled tunes) or *non human* sounds (footsteps, knocking on doors, percussion, prepared piano, orchestral instruments).[313] Schaeffer was particularly opposed to the use of electronic oscillators as sound sources, fearing that the results would sound inhuman.[314] While we might marvel today at the sounds which Schaeffer categorised as non-human – piano, percussion, footsteps – his belief that the electronic sound of an oscillator would sound too inhuman largely fits with the inherited wisdom about the unsettling effects of technology, extended to the sounds of technology.

It is possible to go through the sounds in *Metal God* and assemble them, like Schaeffer, in categories of human and non-human, though I would probably do this on the basis of the sorts of bodies the sounds seem to have originated in. For instance, the sounds of a droning engine, beeping machine, and various whirring and high-pitched sounds clearly have not originated in a human body but a machine one. But in performing such a categorisation on the sounds in *Metal God*, there are a couple of anomalies. The first is that the non-human, machine sounds are not threatening. In fact, the sound loop of an automobile engine is quite reassuring. The second problem occurs with the question of the 'human' sounds: for apart from the whistled tune and humming, the others, though they are still recognisable as having been produced by a human body, seem 'inhuman', especially the sounds of a heartbeat and of running down flights of stairs which have been sped up to an inhuman degree. The most disturbing, unnerving sounds – sounds of growling and ragged breathing – are prime examples of this confusion; though they seem

[312] Weiss, *Phantasmic Radio*, p. 42.
[313] Weiss, *Phantasmic Radio*, p. 52.
[314] Copeland, "Nature and Science", p. 34.

like they must have been produced from a human body, they sound so strange that we have to wonder. And I hesitate about which category to put the static sound in, suspecting that it has in fact derived from a microphone inside a human mouth.[315] The possibility that the static sounds might have been produced by a human body raises the arbitrariness of what is deemed to be 'human'. These sounds carry an uncertainty: they foil our assumed knowledge of their origins as well as our interpretations; they do not conform to the 'proper' uses of voice. It is clear that Migone's use of sound is intended to denature the human body; interestingly, technology comes off seeming quite innocuous, by comparison.

Similar comments can be made regarding the various videos segments in the work. Unreadable text 'raining' down the screen vertically, or small, unidentified figures scuttling across it horizontally seem almost comforting compared with some of the other video clips. One image, for instance, despite its heavy flicker and low resolution, can still be recognised as being of a human face, yet it is a face that is rendered inhumanly. The jaws repeatedly open and close in a gesture somewhere between that of a wild animal and someone deranged. In another segment, we see a very grainy figure squatting close to the floor and waving their arms around. Video loops of a few seconds of movement repeat the same portion of a gesture over and over, the fragment removed from its context. The recognisably human body is made strange here, problematised by this inorganic movement, deriving from the unnaturalness and inhuman quality of the gesture, as well as its perpetual looping.

What is the point of these strange sounds and video segments? Evidently Migone is, like Cunningham, determined not to privilege the human. But is there some significance beyond the question of what is 'natural' and unnatural and which sounds are more unnerving? An Artaudian influence is recognisable in the complete lack of spoken language. And yet while voice is not used linguistically for communicative ends, other kinds of vocal utterances abound: namely, all the other non-linguistic utterances and noises that the corporeal body can make, in line with Artaud's exhortation to actors to experiment with their bodies, beyond merely reciting lines already written. We might then think of the significance of these techniques – of voicing the body and subjecting the

[315] Another work by Migone on the same CD, entitled "The Tenor and the Vehicle," is a film made at extremely close range of a person with a microphone in their mouth. The sounds of breathing and sucking sound very much like the static we hear on *Metal God*.

user's senses to cruelty in the process – as being in the expansion of possibilities that they usher in, and of Artaud's claim that terror and cruelty "confronts us with our possibilities" (86). Weber's recent argument supports this, that Artaud "never dreamed of simply abolishing language but rather of restoring its capacity to signify, in short: its virtuality."[316]

It is this aspect of Artaud's work that interests me the most. A number of writers have admitted that his practical attempts to realise his ideas failed (Weiss, Weber, Sontag). His poems were rejected, his plays unbearable, and his radio work let down by the recording techniques used in radio at the time (Weiss suggests that cinema recording techniques of the time would have produced better results). But Artaud's efforts to push the limits to knowledge as well as the range of what could be known, continues to be of relevance. His targeting the virtuality of the body has particular relevance to this project. It resonates with Cunningham's refusal to accord privilege to the human body. Copeland's theorising of Cunningham's practice as a process of denaturing, which has provided the impetus for my thinking in this chapter about the significance of denaturing the senses, could similarly be said to revolve around fundamental questions of how to get beyond what we know. Artaud's various techniques for voicing the body, and what Susan Sontag calls his "permanent suspicion" of writing "as the mirror of consciousness"[317] also makes clear the way in which the structures given to thought constrain what it is possible to know. These concerns are evident in *Metal God*, particularly the extent to which humanist beliefs continue to inflect and proscribe encounters between humans, others, and technology. *Metal God* seems concerned to push users to move beyond these limitations, a goal that is also consistent with the project of rethinking relations with technology, hyper/aesthetically. Reversing the usual associations to technology and humanity, the strange elements position technology ambivalently, as something that can be both threatening and reassuring, whereas the denatured 'human' sounds and images offer little in the way of recognition, highlighting the virtuality of relations with both these, the range of possibilities (not all of which are promising) which open when the human's centrality is displaced. Like the way that I argued that Neumark's departure from conventional audio/visual configurations allows users to make their own meanings free of already-habitual patterns of response, Migone's

[316] Weber, "'The Greatest Thing of All'", p. 20.
[317] Sontag, "Approaching Artaud", pp. 21-2.

denaturing of the senses also requires that users 'use' their senses differently, in turn opening different meanings and interpretations, and shaping what can be known. This is quite a concrete illustration of Zurbrugg's claim that unfamiliar art expands the sense of the unknown as well as the known.

Migone's cultivation of strangeness and of that which seems 'inhuman' is interesting for my analysis for the different thoughts, feelings, and ways of being that it opens – including different ways of interacting and knowing an other – and with which the user can engage. While the implications of this claim are broad, I will focus on the way that Migone disturbs the category of the 'natural', as well as the relations between human and non-human, user and technology. The second, related argument I want to make refers to the poem that features in the piece. I explore its dual tendencies – toward the strangeness of 'irrationality' and the seductiveness of the fantastic, before thinking about the ethical significance of users' aesthetic implication in the poem's presentation and its fantastic reality. The user's approaching of that which is other in *Metal God* is worth considering, I suggest, for its difference from other approaches that seek to either assimilate alterity, or to cordon it off. Like Shiff's description of an uncanny familiarity, and Artaud's notion of cruelty, *Metal God moves* the user. Unlike many treatments of the Strange, Migone manages to recuperate a sense of the virtuality of encounters with others, without either appropriating or denying their alterity.

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As a work of unfamiliar art in Zurbrugg's sense, *Metal God* is very much concerned with the expansion of the unknown. His work might be considered 'hyper' in that it uses technology to critique humanist conceptions of the subject and to experiment with what lies beyond these all too familiar relations. He also pushes users beyond their comfort zone, and as I will detail, beyond ready made relations with others, pushing them to consider what other possibilities exist. In performing the unfamiliar, Migone (like Cunningham), performs things that we are not always able to adequately describe, things that have not yet been said, and for which we lack the vocabularies to say. To repurpose Benjamin's comments on Brecht, each of these artists – Neumark, Migone, and Cunningham – seems to be deployed in their own dramatic laboratory experiments, such that we have also to adapt our concepts to describe and discuss what they discover.

I find a number of points that Copeland makes in his analysis of Cunningham's practice helpful for understanding the significance of Migone's experiments, and how technology figures in them. Highly pertinent, for instance, are Copeland's questions regarding the electronic scores which Cunningham dancers often dance with. As he asks,

> …what happens when an all-too-human dancer's body moves through that kind of auditory environment? What sort of movement is stylistically consistent with such sounds? Inorganic movement…choreography that never pretends or presumes to have discovered the most 'natural' way of moving.[318]

The aforementioned 'collage-like conception of the body' is one example Copeland marshals to explore this idea of inorganic movement, where the choreography itself challenges the presumed naturalness of the human body: "As early as Cunningham's *Untitled Solo* in 1953, the choreographer's movement choices for the arms, legs, head, and torso were all conceived separately and ultimately linked together by chance operations", in what Copeland calls a "collage-like conception of the body".[319] (Cunningham dancers have claimed that this 'unnatural' choreography is what makes the choreography so difficult to perform.) But my favourite example of inorganicism is Cunningham dancing with a chair strapped to his back in the dance *Antic Meet*. Having only seen still photographs of this performance, I have to imagine what it would have looked like. It highlights the important role that (appropriately, 'low-tech') technology plays in Cunningham's extension of the unknown. The humble chair strapped to the human form may not look 'elegant' (in a conventional sense), but as a method for challenging the naturalness of human bodily movements, and experimenting with the new movement vocabularies that result from adjusting one's relation to technology – in this case wearing the technology as opposed to sitting on it – its pragmatic elegance is unsurpassed.

Copeland details a number of other examples which showcase other ways in which Cunningham has embraced technology and allowed it to affect the dance, inaugurating other ways of moving that are so suggestive of other ways of being in a technological age. For instance,

> …in *Walkaround Time*, when Carolyn Brown performed slow développés on demi-pointe, she 'swept' her working leg like an electronic antenna picking up otherwise invisible signals. (And in '69, when Cunningham choreographed a work called *Signals*, the title felt entirely appropriate – maybe even inevitable.) In fact, in *Signals*, the dancer would often stand in one place with feet firmly planted, while their torsos

[318] Copeland, "Nature and Science", p. 34.
[319] Copeland, "Cunningham, Collage, and the Computer", p. 44.

> tilted and twisted like radar scanners. Furthermore, in that same work, one dancer wields a stick in such a way that both delineates and enforces the physical distance between the performers.[320]

A number of techniques in *Metal God* resonate with this, suggesting other ways of being human in the context of contemporary technology. The spatial arrangement and choreographed words manage to make reading an experience that delights, far more so than many of the machines for super-speed reading that seem to feature in the visions of our technology museums. Also remarkable is Migone's use of looping video. Gloriously low-tech, the loop as technique is – as Manovich notes – here a source of new possibilities rather than technical constraint.[321] The video loops turn recognisably human bodies into something far stranger (exacerbated by a heavy flicker, they also recall the proto-cinematic nature of the loop, which is here simulated digitally.) Though momentarily confusing and definitely disconcerting, the images are compelling, suggesting other ways of moving, or of thinking about movement, and other ways of being in space. Like Benjamin's comment that techniques of close up and slow motion reveal new formations of the subject and qualities of movement previously unknown, the cut up and looping body seems to perform aspects of contemporary experience.[322] For me, it particularly recalls the words of the ECT survivor in *Shock in the Ear*, who speaks of feeling like a television that had been reassembled differently post-shock, pieced – or collaged – together in a new way, expressing well the quasi-strangeness that now characterises her sense of self.

The looping images themselves, together with the other elements of *Metal God*, confront the user with their strangeness, paralleling the strangeness of the other whose writing we encounter in the work. Users' responses obviously differ greatly, however, the elements do share a certain seductive quality: as they reflect on the artwork in an embodied way, some users might find that experiencing the work and its concerns (one on one) generates experimental energies in them. Perhaps it defamiliarises the user's sense of self, introducing a strangeness, or leads them to experience their own bodies differently, or reflect on how their perceptions might be otherwise. As Rokeby says of one of his installations, "the music…is…in the interplay of resonances that you feel as you

[320] Copeland, "Nature and Science", pp. 33-4.
[321] Manovich, *The Language of New Media*, pp. 314-322.
[322] Benjamin, "Artwork", pp. 229-30.

experience the work with your body."[323] The sound montages, choreographed text, and cut up and looping film segments affect me in this way. Their strangeness speaks not just to an intellectual appreciation of the possibilities of dehumanisation, but also to an awareness of my own habitual movements, automatic trains of thought, and patterns of sensing and attending to my surroundings.

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Earlier I suggested that the notion of the encounter could be applied to the aesthetic *and* the intersubjective levels of *Shock* and *Metal God*. I want now to consider the ways in which *Metal God* stages an encounter with alterity. The poem of Greenspan's which Migone uses on the CD-ROM, like the sound and video elements, is strange. It is, however, the main element with which user's are able to engage, providing them something to read through all the other attention-grabbing bits which often seem to disappear as soon as they have appeared and been attended to. It is not so much that the poem is privileged, but that it is less random than the sound and video, and develops in a more linear fashion – at least in the way that lines of flight are linear. As well as claiming that the poem is the element in *Metal God* that makes the most sense, I want to think about how it is possible to make such a claim about a poem which walks the line of un/intelligibility.

The poem itself is quite a challenge to rational thought. Though it starts off quite straightforwardly ("I've got a headache THIS FUCKIN' BIG"), details quickly accrue in descriptions which defy both logic and the reader's ability to remember them, without the benefit of being able to glance back over what has already been read: "[N]eedles through pinched skin / With lead weights hanging off the tips", "every body position known to humankind", "leech[es] gripping to each muscle", and "painful poisons… / So that every step, every turn of the head / Is a spasm of muted agony / As you try to pretend that nothing is going on". As if that was not enough, the poem continues on its course in the second stanza without stopping to consolidate, building on the cascade of images which we have already been told to imagine ("So with that in mind….").

[323] David Rokeby (1990) "The Harmonics of Interaction", *Musicworks* 46, Sound and Movement, available online at www.interlog.com/~drokeby/harm.html, accessed 3/10/01.

What seems like an elaborate imaginary exercise in the first stanza is 'realised' in the much longer, second stanza. That is, in the world of the poem, you are no longer just 'thinking' of these things (needles through pinched skin and the rest); the prayers offered to the gods of office ceiling sprinklers have 'actually' been answered. The water "sounds like a waterfall and everyone loves waterfalls", "the office becomes a human fish tank", and "the window explodes". Just when the whole edifice seems to have reached its culmination, with the paper fishes and human fishes and filing cabinet fishes gushing out the window, it falters, returning 'you' to the realisation that its all still there:

> But suddenly you yell NO! NO! NO! NO! NO! 'cause not a single thing
> Has happened and you're still just sitting there praying
> With the leeches exhausting your soul and you're just staring
> At that damn little grey god that doesn't act…

My intention is not to give a detailed analysis of the poem, but to demonstrate how far its concerns are from rational, logical ones. Greenspan's poem – indeed the whole of *Metal God* – emphatically refuses to provide users with the 'full' story. The concerns, states and feelings she addresses are matters not easily rendered, that do not fit within the terms of pre-existing discourse. They do not make sense in a 'normal' way and it is patently useless to try and use our senses to establish what is 'really' going on in the midst of these flights of fancy. The poem frustrates all such attempts. In spite of this, the reader gets carried along and caught up in the cantilevering of fantastic scenarios; the way the poem continually takes these further is extremely seductive. Significantly, I found that the presentation of the poetic text made me more willing to entertain the poem's fanciful details and leaps; the wonderful word choreography means users have a kind of investment in going along with it.

Another reason for the user's involvement with the poem is that from very early on (by the fifth line) they become implicated in the unfolding poem. Though the first two lines suggest that this is a poem about Greenspan or her character, this expectation is very quickly defied in the shift from 'I' to 'you'. Even though the harnessing requires that the reader allow themselves to half-accept that these things might – in some imaginary way – be 'happening' to them, the technique does secure some involvement. Perhaps part of the reason why the reader goes along with it is because they initially assume (as I did) that the poet is just using the technique to elicit engagement from her readers, only to reclaim the experience at the end of the poem. However, this never happens. Instead, the

boundaries between 'you' (the reader) and 'I' (the poet or the character she has created) become quite fluid, with the 'I' becoming 'you'. This is one of the aspects which I think allows us to read *Metal God* as involving a non-standard encounter with the other.

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Beth Greenspan's poem appears in the 1991 collection *In the Realms of the Unreal: 'Insane' Writings*, compiled and edited by John Oakes.[324] The title of the collection addresses a number of the issues which attach to conceptions of madness. The reference to the 'unreal' teases with a double gesture, first offering 'the *un*real' as the flip side or negation of 'the real' (only far less credible); the subsequent reference ('insane' writings) to the social construction of reality, however, effectively renders 'real' and 'unreal' equally suspect. The scare quotes around the term 'insane' further recall Michel Foucault's famous thesis on the discursive construction of madness, through confinement. Of course, the fact that the poem comes from a book of *'Insane' Writings* provides an easy means of discounting it for some as an act of sheer irrationality. This would be one response to the poem, but it is a response in accordance with normalising tendencies. Madness is here conceived of as Reason's other, a threat to intelligibility, prompting a stark delimiting of the Other from the Same, the different 'them' from 'us'.

It seems that in modern times, responses to madness have tended toward one of two poles, of which this confining mentality is the first. The second I think of as the inverse of normalisation; it can be illustrated through reference to responses to the art of the mad. Though normalising conceptions consider madness to be the Outside of thought (the notion of the 'Outside' has also been associated with Foucault's thought), this term is now widely used to designate the art of those who have not had formal training or who are in some other way said to be 'outside' society. The (re-) discovery of art produced by people with a history of mental illness, together with the art of children, has been dubbed 'Outsider Art'. Typically, it is valorised as the product of an unconscious creativity. Bettina Brand-Claussen, one of those to have studied the famous collection Hans Prinzhorn amassed at the psychiatric clinic of Heidelberg, starting in the 1920s, writes,

> Prinzhorn….constructs the model of the autonomous, mad artist…whose inspiration and powers of expression are fuelled by the soaring inspiration of schizophrenia, so that formal splendour and deepest insight 'well up' from within. In the productions of

[324] John G. H. Oakes (ed.) (1991) *In the Realm of the Unreal: 'Insane' Writings*, New York: Four Walls Eight Windows.

> these mad, hermetically confined artists, Prinzhorn finds 'authenticity' and 'primordiality'…
> The ten 'Masters' created from the resources of the collection…are beings in communion with nature, whose inner life takes objective form through spontaneous 'expressive manifestations'.[325]

Prinzhorn's very romantic and essentialist view of these artists and their "unconscious creativity" has, as Brand-Claussen writes, increasingly been "revealed as a case of Expressionistic wishful thinking", as research shows that many of the patients whose work he collected "had prior notions of visual design and imagery from school, from drawing lessons or from craft or technical training."[326] Another problem with the 'outsider' label lies in its naivety: as Oakes writes, it ignores the ease with which the Outside can be appropriated to form the core of a new Academy, effectively becoming the Inside.[327] Indeed, Jonathon Fineberg makes an argument along these lines about the way the work of 'outsiders' has been appropriated, and subsequently used by celebrated artists to formulate their own artistic breakthroughs.[328] Nevertheless, the art of 'outsiders,' including the work of the mad, continues to be valued for its outsider status (and the exhibition of the Prinzhorn collection, on which Brand-Classen comments, occurs within these tensions).

These debates and tendencies to either confine or fetishise the other are relevant for considering how *Metal God* and its users approach otherness. Migone's treatment of the poem does not fit within either tendency – he does not romanticise it, and he obviously thinks it is worth making a CD-ROM around. Indeed, the question of its strangeness is never explicitly raised; Weiss asks the crucial question here, concerning how it is possible to tell a 'sane' from an 'insane' idea or work?, to which Migone replies "You don't have to be crazy to write non-sense."[329] Certainly, we cannot assume the poem is an outward representation of Greenspan's inner state. Rather, what concerns me of these debates is the way that neither of these two 'standard' responses to madness accounts for the user's

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[325] Bettina Brand-Claussen (1996) "The Collection of Works of Art in the Psychiatric Clinic, Heidelberg – from the Beginnings until 1945", *Beyond Reason: Art and Psychosis: Works from the Prinzhorn Collection*, Bettina Brand-Claussen, Inge Jadi, Caroline Douglas (eds), London, Berkeley: Howard Gallery/University of California Press, pp.12-3.
[326] Brand-Claussen, "The Collection of Works of Art in the Psychiatric Clinic, Heidelberg", pp. 12-3.
[327] Oakes, "Editor's Preface", *In the Realm of the Unreal*, p. v.
[328] Examining the collections of many celebrated modernist painters of children's art, he argues that each exploited aspects of child art to formulate his or her own artistic breakthroughs. Jonathon David Fineberg (1997) *The Innocent Eye: Children's Art and the Modern Artist*, Princeton: Princeton University Press

very real *enchantment* with the text, nor its effects on them. Rather, the way that the user gets involved in the poem's drama and fantasy and their encounter with its strange logic differs from both of these approaches to madness. The experience the user of *Metal God* has is nothing like the first approach, which dismisses the other as Other, a threat to logic and/or self. Nor is it the appropriative, assimilationist treatment of the mad other as visionary, as Outsider artist. The user of *Metal God* neither encounters the other as the grotesque Other, nor as an other they seek to make into the Same.[330]

What the experience facilitates is, rather, the opposite of these. Returning to the poem, what users get is a sensory encounter with otherness. I am motivated to engage with the poem by virtue of Forsythe's choreography. Her choreography removes the experience from everyday reading, making the poem a delight to read and watch. In particular, the reader's kinaesthetic awareness is aroused: I find myself wanting to yield to it, responding to the movements of the words. The words affect the reader almost by stealth, getting inside their body and moving them in the way that sound can, only to unexpectedly change rhythm or direction. As I've noted, even when this distracts me from the words' semantic meaning, the choreography seems to convey something of the meaning of the poem, showing the imbrication of meaning and movement, cognition and aesthetics.

Importantly, *Metal God* demonstrates how the senses and cognition are both involved in aesthetic response. Many writers have argued that in yielding aesthetically, cognition is totally left behind ('disconnected,' as it were), leaving the subject prone to being swept away without any ability to reflect or mediate their sensory impressions. The tendency is well exemplified by Kracauer, who, in discussing the way that film addresses the senses in his *Theory of Film: The Redemption of Physical Reality*, notes three separate points in support of the argument that "film images affect primarily the spectator's senses, engaging him physiologically…" First, that because film records physical reality, the spectator reacts to filmic representations as they would to the material thing itself;

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[329] Weiss, *Phantasmic Radio*, p. 71; Migone, "Headhole", p. 52.

[330] Hal Foster provides useful glosses of these two positions in "Postmodernism in Parallax". Though he is concerned with the cultural other, there are significant similarities with the positions sketched here. He argues that the Lacanian subject is a fascist subject, who perceives the (cultural) other as threatening. This is realised in a policy of non-identification with the other. In contrast, the Surrealist response to the other marks out the alternate pole, where the alterity of the other is fetishised, and members of the Surrealists claimed to be the ('Primitive' cultural) other, in an act of over-identification. María Fernández has similar concerns in relation to postcolonial media theory. See Foster "Postmodernism in parallax"; María Fernández (1999) "Postcolonial Media Theory", *Third Text*, vol. 47, Summer, pp. 11-17.

second, that film's representation of motion particularly stirs spectator's senses; and third, that when film "reveals otherwise hidden provinces of [reality]", the very unfamiliarity of these means that the spectator's encounter is primarily a visceral one, where sense impressions are all important. Each of these quite reasonable seeming arguments, Kracauer claims as support for the thesis that sensory responses pre-empt cognitive – or as he calls it, "intellectual"– response. Time and again, he plays sensory response and intellectual response off against each other, as if they were easily separable and unquestionably discrete.[331] Ostensibly, Kracauer's is an argument about the importance of the senses, similar in some ways to arguments I have been making here. He writes of the desire to lose oneself in the cinema, as well as the experience of dissolution. Also interesting is his recognition of cinema's mimetic tendencies. And yet he strongly – though it must be said not exclusively – suggests that these are negative tendencies, with the claim that they *weaken* the spectator's consciousness. Kracauer's emphasis is understandable: fascist propaganda films were, after all, not far from his thoughts or experience, for that matter. Referring to his film essays of the late 1920s, Inka Mülder-Bach writes of the frustration and sense of helplessness that Kracauer felt:

> Kracauer enters the lists against the 'stupidity', 'falseness' and 'meanness' of the general run of contemporary German films, not just with unparalleled bitterness, but also with a confession of his own helplessness. For the more rigorously he analysed the ideology of mass media products, the more insistently the question confronted him of the kind of audience that would swallow these products.[332]

Metal God presents an important exception to the argument that sensation obviates criticality, which Kracauer and others have made. It illustrates another moment when an anaesthetic account is not adequate, specifically highlighting the need for an account of an aesthetically responsive yet still critical subject, as spectator/auditor/interactant/immersant. In *Metal God*, it is not that the senses and cognition work together, as generate an unresolveable and central tension. The tension between the poem's aesthetic and semantic content is of central importance here. Though separate, the two aspects operate simultaneously upon the user. On the one hand, the poem's choreography that so delights and acts upon the user's senses seems to bypass the 'filters' that would normally block out the strange or fantastic. In this way, because of the seductiveness of the word choreography, the text manages to attract and involve users

[331] Siegfried Kracauer (1960) *Theory of Film: The Redemption of Physical Reality*, London: Oxford University Press, pp. 158-59.
[332] Inka Mülder-Bach (1998) "Introduction" to Siegfried Kracauer, *The Salaried Masses: Duty and Distraction in Weimar Germany*, Quintin Hoare, trans., London, New York: Verso, p. 13.

with its idiosyncrasy. As it gets more and more fantastic, new ideas just keep being introduced, resembling the endless quality of some dreams, and the way that new themes get worked into existing threads. It is wonderful to find something so irrational and bravely non-sensical on a computer, that just keeps on pushing the non-sense further, building a world. This aspect of Greenspan's poem generates feelings akin to some of Henri Michaux's prose poems; paraphrasing Andre Gide, Greenspan – like Michaux – makes us feel the strangeness of 'natural' things and the naturalness of strange things. She cantilevers new pieces of information on the ones before – even though they were none too stable – building something where previously there was nothing.[333]

On the other hand, if we try to read the poem analytically – perhaps to discern what it is we respond to – we tend to get frustrated. For while the individual words and lines are not difficult, the challenge the poem issues is to all that is deemed logical and rational and measured, and the primacy and naturalness of these values in Western cultures. It is easy to recognise and say this, but to refuse these constraints which have become so naturalised in modern Western cultures is much more difficult, at both an intellectual and a bodily-aesthetic level. Of course many texts (not just poetic ones) are opaque or suggest multiple interpretations. (Instruction booklets, for instance, frequently tell us less than we would like to know; the user is not exactly helpless when faced with such gaps, however.) What it seems to require is the suspension of the expectation that all will be made clear, that meaning will be complete(d). Like my argument about *Shock* – where there was always the chance that the user might get more information, deferring final, definitive meanings – a difficult text like Greenspan's, which does not give users 'completeness' of meaning or pre-packaged interpretations, also results in an indefinite deferral of meaning, the postponement of conclusions or judgements.

In an act of cruelty, the user is pushed to an extreme, pushed to experience complexity. Unable to slip into either of these familiar positions, they are forced to ask what lies

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[333] Andre Gide cited in Michaux (1968) *Selected Writings of Henri Michaux: The Space Within*, Richard Ellmann, trans., New York: New Directions, rear jacket.
Many of the things that have been said about Michaux could apply equally to Greenspan's poem. Consider the following: "…he has willed the invention of a new land, and…never uses it for any edifying or didactic purpose. His is a gratuitous creation, one that invites no comparison and no justification. It demands of the reader that they enter this extravagant world without any hope of discovering its meaning, that they enter it as if they were entering the void."
No author listed (n.d.) "Now No More of That, I Will intervene, Henri Michaux 1899-1984", *Kicking Giants*, http://www.kalin.lm.com/michaux.html; accessed 23/8/01.

inbetween these poles of identification and incorporation on the one hand, and non-identification, non-recognition and refusal of the other on the other hand. What variations of response are possible? Prevented from falling back on standard assimilatory or exoticising responses to otherness, users are forced to negotiate the complexity for themselves. This is not just a matter of choosing what to attend to: users' responses are made mixed, double, and undecideable. This doubleness confronts users with their own circumscribed processes of cognition and sense-making, as well as pushing them to experience something of the unfamiliar, to sense what they do not know. It also provides a fascinating and at times inexplicable bodily experience of recognition, as it is hard to pin down what it is that seems familiar. The intermedia rendering of the poem raises powerful questions regarding body/mind distinctions too: we can't simply say that the poem is fanciful, and our minds knows this, whereas the choreography is aesthetic, and our bodies respond. Rather, we're thinking with our bodies; our mind is in our bodies. These things sit uneasily together; they are not resolved. A sense of enigma remains, which to me points to the need to acknowledge the possibility of a hyper/aesthetic audience experience, where one's senses are *taken by*, yet not permitted to be totally *taken in by* the work. For this reason, users are pushed to reflect, whilst being aesthetically affected.

We do not know the other of the poem; indeed, at times, this other seems to be the user themselves, turning a Othering gaze within, to the strangeness that it seems resides within.[334] Nor do we know if this strangeness is the strangeness of *an* other (it might be, but it needn't be); it could just be the strangeness of a generalised otherness. The complex responses that *Metal God* brings forth from the user are important in that they mark out a different relation to alterity, one based on aesthetic affinity or response, as well as unknowability.[335] This figure of undecideable otherness – as simultaneously strange but appealing/appealing but strange – clearly has implications for my conception of hyper/aesthetics, in terms of thinking relations with (an expanded range of) others,

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[334] Yuji Sone uses the notion of 'interior otherness' developing this from Kristeva's concept of a 'strangeness within', with reference to Emmanuel Levinas. See Yuji Sone (2002) "Performance of Alterity", unpublished DCA thesis, University of Technology, Sydney.

[335] The figure of "in/appropriated others" which Haraway borrows from Trinh T. Minh-ha's work might be one such relation, figuring as it does an ability "to join with another, to see together without claiming to be another". See Haraway (1991b) "The Actors Are Cyborg", p. 22. Haraway fleshes out some of these ideas in her (1992) "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others", *Cultural Studies*, Lawrence Grossberg, Cary Nelson, Paula A. Treichler (eds), New York, London: Routledge, pp. 295-337.

without either assimilating or exoticising otherness. It feeds into my concerns with virtuality and with exploring what other relations (with self, others, technology, etc) are possible, as well as the questions I have posed, regarding what other possibilities there are for the senses, apart from instrumental mastery, and anaesthetics. *Metal God* confronts users not only with unfamiliar relations with technology, pushing users to engage with otherness, but also asks them to consider and explore how else this relation might be conceived, denying the resolution of either exoticised Orientalism, or Othering.

These tensions are, finally, also relevant in terms of the theorists' mentioned in this chapter. Yuji Sone has critiqued both Brecht and Artaud for their dealings with others and particularly other traditions, charging each with a version of Orientalist fascination and appropriation of others' practices.[336] Unlike more didactic efforts, Neumark and Migone both mark out aesthetic relations with others that manage to retain the alterity of the other. Engaging with the strange and the other/s in Neumark's and Migone's works does not lead to pre-packaged experiences or responses, but pushes the user to develop their own 'unnatural' responses, sensing yet never quite able to master the relation. This is, I think, the significance of denaturing on *Metal God* and *Shock*; the way that each takes its user beyond the familiar, the solid, the justifiable, all of which at times go under the name of the natural.

[336] Sone, "Performance of Alterity".

5
Conclusion

Barbara Becker concludes her article, "Cyborgs, Agents, and Transhumanists" by claiming that many cybervisions are "a reconstruction of old fantasies which are returning in new technological clothes and making a great deal of noise". She further writes,

> …it is clear that cybernetic identities and postbiological subjects fail to overcome the limits of the old Cartesian subject (as they are sometimes claimed to do), but in fact seem to be a perfect reconstruction of it…everything outside one's own mental control is redefined as a code or a program that can be manipulated according to one's wishes. …Reestablishing the subject as an absolute sovereign over the strangeness of the world, of others' and one's own physicality, seems to be an important motivation for all these efforts…."[337]

While Becker may be right to critique many of the *claims* for newness, this thesis has been concerned to show that theorists at the other end of the spectrum, who allege that *nothing* has changed, are also missing the mark. Certainly, in the early parts of this thesis, I examined advertising representations which instrumentalised the senses, either in order to get more done or to deliver more intense leisure options, promising the user control and the accrual of extraordinary sensory experiences. I argued that the calculative logic and discourses of intensification that pervaded these representations were reflective of a hyper subject, a (mythical?) subject whose agenda seems pretty much to follow Becker's charges, of being self-focussed and centrally concerned with maintaining control. It is not just the world that exists as a resource for the hyper subject; the self is also a resource, to be put to work in order to maximise returns.

Of course, I also argued that the hyper subject is not the only type of subject being constituted by the contemporary focus on the hyper and the concern with intense technologically generated aesthetic experiences. The hyper/aesthetic approach that this thesis proposes has allowed me to recognise the way that contemporary subjectivity is also being innervated through encounters with media technologies. A number of the advertisements examined in Chapter Two suggested cleavages along which new relations might be developing, moments when hyper-stimulation leads to changed relations to self and things, such as in dissolution, when defending against technology's otherness is noticeably absent. The sometimes ambiguous/sometimes creative concepts of these

[337] Becker, "Cyborgs, Agents, and Transhumanists", p. 365.

advertisements helped me to think differently about technological relations, and a number of the concerns developed in the advertising studies recurred in later chapters. Given this ambiguity, it is appropriate that the hyper/aesthetics approach I have proposed, which seeks to also recognise emerging subjectivities other than the hyper subject, should also include this prefix 'hyper-'. Where hyper/aesthetics differs from many other types of approaches and accounts is in its ability to recognise that different sorts of relations and subjective possibilities are also being opened up, through more experimental encounters with technology.

Other cleavages, or moments when practice exceeded the instrumentality of the hyper state, became evident in Chapter Three. Computer gaming can go beyond an economic accrual of intense experiences (though I'm not suggesting it always does), and there were many examples of this in the chapter: the contributions which gamers made of their time, skill and effort, in fixing others' computers, where this was cast in terms of friendship rather than an economic transaction (especially significant for those working within the IT industry); gaming's loosening of less rational aspects of mind in play, allowing players to experiment with responses, other movements and becomings, able to enjoy 'zoning out' and feeling(s) at the computer, not normally sanctioned within the hyper-intense world of contemporary work. I suggested that gaming's role in the transformation of affect could be conceptualised as an opening onto other possibilities for feeling, rather than just relieving built up pressure, and, relatedly, discussed the way that gaming provided opportunities for negotiations between different aspects of a person. Finally, I noted the ways that the gaming group departed from the logic of the commodification and consumption of experiences, and the focus on self; gamers were attentive to others, both within their own (temporary) physical space, as well as the avatars which constitute others with whom they engage kinaesthetically.

Finally, where gaming is hyper/aesthetic in that it takes players beyond an economics of experience, the examples of new media art which I analysed take users beyond what is known. Dislocating and impeding the automaticity of perception, these works require users to shift between different modes of perception and engender new configurations of the senses, bringing us to an awareness, perhaps, of others' ways of sensing, or at least the contingency of naturalised configurations of media. In contrast to the intolerance of difference that I described as emblematic of the contemporary hyper-active workplace, which 'types' employees and determines their 'compatibility' through a particular kind of

testing, here difference is explored without being diminished. Rather than a standardised body that just does what it is supposed to – whatever that is – which the advertising and organicist rhetoric of multimedia seems to call forth, users of *Shock in the Ear* and *Metal God* encounter configurations of text, images and sounds which reapproach affect and embodiment as virtual. These examples from Chapters Three and Four, while different, each reflect my concern in this thesis with thinking about virtuality, specifically in relation to aesthetics and the range of relations with technology that are conceivable, even if not yet realised. In contrast to Becker, then, I found indications of movements beyond "the limits of the old Cartesian subject".

Though a number of authors, concerned with the changes they see technology as rendering, have theorised new structures of subjectivity – for instance, "the networked subject" (Everard), "distributed subjectivity" (Hayles), or the "digital subject" (Poster)[338] – my concern has been less with arriving at a particular name than in thinking about the relations that are produced through specific articulations of the senses and technologies. Indeed, in the opening chapter, I stated that my goal in theorising hyper/aesthetics was to try and open up a space from which to think the variety of relations and subjectivities. My concern has been to think this *range* of sensory-technological engagements, testing Benjamin's hypothesis on technology and innervation and seeing what new relations might be being produced, rather than trying to champion any particular or 'right' aesthetic relation to technology.

In the thesis, I have discussed many ways in which subjective relations with self, others, and things are shifting. Rather than simply listing and repeating arguments here that have been made in the body of the thesis, I want in this conclusion, first, to offer some perspectives on the apparent reluctance of some theorists to think hyper/aesthetically about relations with technology. I also want to focus on some of the particular aspects of subjectivity which seem to be in transition, offering a discussion of these in response to Becker's observation regarding the durability of the classical subject. While I can understand Becker's concerns and frustrations and I find aspects of her argument helpful,

[338] Jerry Everard (1996) "The Anti-Oedipal Subject of Cyberspace", www.curtin.edu.au/conference/cybermind/papers/everard/Deleuze.html, accessed 23/3/02; Hayles, "Simulating Narratives", pp. 23-26; Mark Poster cited in Hayles, "Simulating Narratives", pp. 12-14.

I do not agree that subjectivity continues to be conceived only in terms of "absolute sovereignty over the strangeness of the world, of others' and one's own physicality".

With regard to the reluctance of some to think in a more nuanced way about aesthetic relations with technology, one important factor differentiating my approach is that I do not see the will to manipulation and control as monolithically as many others seem to. I take Becker's reference to "the subject as an absolute sovereign over the strangeness of the world", for instance, as implying that the contemporary subject is primarily concerned with manipulating what is outside their control. Such a concern with manipulation is quite close to the interpretations I took issue with in Chapter Three, regarding readings of computer gaming solely in terms of mastery. By manipulation, I take Becker to be referring to acts that are ends- and self-directed, aimed towards an instrumental self-gratification and fulfilment, motivations that I attributed to the hyper subject from quite early on. As has been my central thesis, the range of relations with technology is wide; various 'uses' are made of technology, both by users who are not producers and those users who engage differently with a particular technology in different contexts.

Probing this issue further, I suspect that one reason why some commentators are reluctant to detail the ways in which experience *changes* (rather than atrophies, declines) and subjectivity is innervated stems from the prominence accorded to (critiques of) the instrumental conception of technology. While others also criticise technology in terms of instrumentality, the status of Heidegger's essay "The Question Concerning Technology" as one of the seminal texts in the field locates these concerns as central. I wonder if the usefulness of this aspect of Heidegger's work might not also be its limitation, in that it (at least to an extent) contributes to the naturalisation of instrumentality. One of the hurdles to thinking and theorising a greater range of relations with technology seems to be the ease with which we are able to recognise the calculative logic underpinning many facets of life in highly technologised societies. The current will to utilise, functionalise, and optimise is strong and all too evident. I suspect that this is why some commentators – prematurely – argue that uses will be found even for that which is currently useless.[339] It is as if Heidegger was too close to the mark, did too good a job of diagnosing this

[339] Brian Massumi makes such an argument, writing that "An invention is something for which a use must be created", before extending this to Stelarc's art making. See Massumi, "The Evolutionary Alchemy of Reason".

particular relation to technology, with the persuasiveness of his critique acting as a disincentive to thinking other kinds of relations.

Another reason for my avoidance of this privileging of instrumentality is that the products resulting from particular uses are not always knowable in advance, and this is particularly the case with respect to the senses. Rather than furthering this critical tendency, I am more interested in attending to the moments of instability and slippage around instrumentality, using these to try to think other sorts of relations with technology. Lingis presents an example of one moment of slippage, reading Heidegger's famous hammer example against the grain, as it were. He writes,

> The movement of the carpenter that takes hold of the hammer passes through it to the nails and the shingles and the house and the stormy skies and the work done in the home to be sheltered. But once on the job, this relay-course of finalities dissolves into sunlight and bracing air, and in his hand his hammer becomes a rhythm that prolongs life itself. He can be contented with that, contented with hammering in the sun.[340]

Lingis' example is interesting for its confirmation that the products of actions – even instrumentally intended acts – are not predictable. We may 'space out' even during the most apparently instrumental drive to work, in which the freeway is apparently just a means to get from point A to point B. Even during this dash through space, we may forget what we are doing, finding ourselves five kilometres further down the road with no memory of having driven those kilometres. It is not the technology which determines what our experience of it will be, as was evident in Chapter Three with the gamers who were also employed as I.T. professionals, and whose workplace uses of networked technology differed from their recreational uses. What Lingis' example also points towards, however, is the mutual implicatedness of technology and sensuality, his critique of the argument that instrumental thinking has thoroughly pervaded all being and thinking, including the sensuous. Responding to Heidegger's claim that it is nothingness that gives meaning to being, he writes,

> ...prior to the anxious taking hold of things that for Heidegger makes our sensibility practical from the first, there is the sensuous contact with material, there is sensuality. It is not with their "primary properties," their contours, but also not with their forces, their instrumental potentialities, that the things first affect us but, indeed, with their matter, their substance. In our sensuality we find ourselves immersed in a sensuous, qualitative medium, supporting and sustaining, a depth of sustenance. We find things, we find ourselves, in the light, in air, on terra firma, in color, in tone. Our sensuality makes us find ourselves steeped in a depth before we confront surfaces and envisage the profiles of objects. Sensibility opens us…upon luminosity, elasticity, vibrancy, savor. The sensuous element – light, chromatic condensation and rarefaction, tonality,

[340] Lingis, *Sensation*, p. 21.

> solidity, redolence – is not given as a multiplicity that has to be collected nor as data that have to be identified but as a medium without profiles, without surfaces, without contours, as depth, *apeiron*. We find ourselves in it, in light, in the elemental, buoyed up, sustained by it. Life lives on sensation; the sensuous element is sustenance, ends, the goodness of being we enjoy before any practical intention arises to locate means for our pursuits. (80)

While many commentators seem disinclined to question the pre-eminence of instrumentality, the slippage and inter-implication that Lingis' rethinking suggests is of great interest to me, particularly in that it specifically concerns the sensory aspects of relations with, and uses of, technology.

I have tried to recuperate something of this openness for a concept of hyper/aesthetics, to avoid the determinism that can inflect critical work that is only attentive to the instrumental. I would argue that this aspect of the approach is particularly important, as I have been able to appreciate that as well as supporting hyper subjects, endeavouring to experience more and more novel sensations, and finding the terms to describe these sensations, aesthetic experience can also constitute a moment of instability or slippage, in which engagements with technology are more experimental. So it was that I attended closely to the experimentation of computer game players, and emphasised the unknowable outcomes of such experimentation. This marks my work as significantly different from the majority of those who write on computer gaming. Gamers' experimentation with software and with their computers, with avatars and the negotiations this facilitates between the aspects of a person, are all clear examples of an experimental approach, based on trying and testing to see what 'the thing' will do. Players' cyborg entry into the interface was also read in terms of a dissolution of boundaries, a mimetic collapsing of distance between subject and 'object' as players found themselves encountering the unfamiliar otherness of avatars. In striking distinction to Becker's description of "the subject as an absolute sovereign over the strangeness of the world, of others' and one's own physicality", players allowed their senses to be 'taken by' an avatar's movement, to respond and to fall in step with this other, drawn into a dynamic relationship that was neither puppetry nor protecting against otherness.

In thinking about departures from classic conceptions of subjectivity, the hyper/aesthetic approach that I have outlined has enabled me to appreciate the lanner's encounter and kinaesthetic responses to a *Quake* avatar as significant, for the new and unfamiliar type of relation that it constitutes (player-avatar), as well as a new tendency which challenges the way that subjectivity is conceived. Not only does the unnaturalness of the relation

challenge the humanist assumptions about human relations being the only ones that really matter, but the unfamiliarity of the movements, and the dynamics between players and that which is thought of as 'inhuman,' further challenges the variety and parameters of what a human subject can think and feel. In this sense, it is interesting to note that a number of artists are at present experimenting with computer gaming interfaces and games engines, with a commissioned games piece due to feature shortly at Cinemedia's Australian Centre for the Moving Image, at Federation Square in Melbourne. Selectparks, the makers of this piece, describe it as,

> …the first site-specific games based intervention into the public-space using a system that will be freely available to the public online. Rather than using proprietory [sic] systems that require the user to own commercial games, selectparks are building a game-engine especially for the purposes of public architectural simulation, audio - visual installation, and museology. It has all the action, physics and detail of a first-person multi-user game. Alongside it's [sic] presence on the intenet [sic], it will be installed for three years on a dedicated LAN at the Australian Centre of the Moving Image.[341]

I am encouraged that artists are joining in the experimentation with computer games, with the artist ensemble JODI, for instance, having recently completed their "Untitled Game CD" which contains twelve modifications of *Quake*.[342] While some seem to hope that once the industry gets past its teething stages, 'those' shoot 'em up games will become a distant memory, I consider that artists and others playing around with games and with games' code is likely to result in extra dimensions and genres being added to computer gaming.

To address some of the particular aspects of subjectivity that this thesis has found to be shifting, one issue to which I have found myself constantly returning over the course of this project is the question of the relation(s) between the senses and cognition. In the introductory chapter, I drew attention to the revamped *cogito* which inflects the contemporary hyper subject, whereby sensing is taken as the ground of subjectivity, replacing conscious reflection (which the Cartesian legacy of the "I shop, therefore I am" slogan clearly exemplifies). There is significant ambiguity, however, around this aspect of the subject's constitution. One of the important referents for me continues to be Buck-

[341] Selectparks (2002) "Featured Project", http://www.selectparks.net/index2.htm, accessed 18/3/02.
[342] Anne-Marie Schleiner (2002) "2 Reviews: Untitled Game and Ego Image Shooter", review posted to nettime (12/3/02), archived at http://amsterdam.nettime.org/Lists-Archives/nettime-l-0203/msg00061.html; http://www.untitled-game.org/, both accessed 18/3/02.

Morss's claim that, at the Nuremberg rallies, the crowd were so caught up in affect that they were not capable of any reflection on the sensory event (141-2). Buck-Morss bases her analysis of this on Husserl's tri-partite splitting of the subject into agent, object, and observer, an historical shift in perception coincident with modernity (137-8). While I explained my reservations at the way that Buck-Morss uses this example in an earlier chapter, clearly this is one possibility that needs to be acknowledged. I have, however, also been interested in other possibilities besides the anaesthetic one, particularly in theorising the 'audience' in more nuanced ways, and the relations between sensation and cognition.

In Chapters Three and Four, for instance, I argued that criticality and affect were not necessarily mutually exclusive; indeed, throughout this thesis I have treated audiences as active participants and creators of meanings. In Chapter Two, using John Docker's work on carnival participation, I argued that media which combine aspects of both spectacle and participation demand new models for theorising audience engagement, and that film might not be the best model. In relation to computer gaming, I drew on de Certeau's suggestion that users who are not producers can be thought of as makers, a point that is readily in evidence throughout the chapter, from the modifications that players make to their systems and to games, to the actively negotiated meanings that they draw from games' texts, and which I suggest is significant in terms of arguments about the violent content of some computer games. In Chapter Four, this concept of 'user as maker' provided a way of re-conceiving of the label of 'user' which many writers have expressed dissatisfaction with. Users of the interactive CD-ROMs not only *make* their way through the works, drawing or *making* their own meanings and interpretations as they go; they also *make* the work by selecting what they will attend to at any one point in time. Due to the unfamiliar combinations in which elements are configured, there may be several points of interest occurring simultaneously which they must either choose between, or else cultivate the skill of 'polyattentiveness'. While I am not proposing basing other configurations of an audience's sensory/cognitive capabilities on a platform of choice, given that this relation is a discursive, historical one, there does seem to be room to think other possibilities.

I have argued that the senses affect cognition, that they are related, but that this relation does not rule out an individual's reflective capacities. This is not to reinstate a prior conscious, reflecting subject. Buck-Morss' Nuremberg subject, and the subjects of

classical phenomenology and liberal humanism, are all extremes. What seems to be required is the theorising of other configurations which are able to think in more nuanced ways about the historical and cultural factors constituting sensoria. Laura Marks writes of some 'recent returns' to phenomenology, and if Marks' work is thought of as one such return, her concern with encounters between individual subjects' (differently enculturated) sensoria provides one way of complexifying the classic phenomenological subject. However, we also need an account of the subject as spectator/auditor/immersant that is able to consider a range of possibilities. As Tom Gunning's repudiation of the myth of the naïve spectator has made evident, accounts which continue to treat audiences as dupes are just not adequate. Proceeding, then, from Gunning's recontextualisation, we need an account of the subject which is able to attend to the complexities of the way that the senses are stirred, as I argued of gaming, as well as the way that, for instance, *Metal God* pushes the user to both experience and reflect, without assuming an abdication of the ability to reflect on experience. Indeed, Migone's work seems to make it very difficult *not* to think about what one is experiencing, stuck with an undecideable tension between two polar responses, neither of which are satisfactory. For me, the experience of this CD-ROM, together with the image of Benjamin feeling his senses seduced by the coloured reflections of neon advertisements, which I have returned to throughout the thesis, points to the need for a hyper/aesthetic account of the subject, specifically an account able to tolerate the ambiguities around this difficult question of affect and cognition. The concept of hyper/aesthetics that I have developed here has certainly made it possible to critique the view that sensory engagement necessarily entails a lack of awareness on the part of the user/audience.

Another prominent aspect of subjectivity whose shifts this thesis has pondered is the condition of simultaneously being across, or feeling oneself to be across, multiple realms simultaneously – in virtual and material spaces, as well as online and face to face at a lan. While technologies of telephony have been something of a precursor for such situations in which we now find ourselves routinely crossing through materiality and reality statuses, lanning significantly extends the parameters of this experience. While lanning was considered mostly in terms of the computer gaming group's use of it in this thesis and the uncanny way that it brought players together both in games space and actual space, I am also interested in the wider significance of lanning as a new form of collaboration in its own right (interest in which has initially been spread at least partly through computer gaming), and particularly the way that lanning changes the conditions

for collaboration. Lans are of course not only used in gaming: for a number of years they have functioned to bring together employees scattered throughout a building(s) or organisation, physically perhaps not very far from each other, yet remote enough to make a lan useful for information exchanges and collaborations. The mix of interactions that is seen when users of a lan are co-located, as happens when a gaming group gets together, however, can be quite strange. This is most pronounced for me when these different types of interactions (seem to) develop along parallel tracks. An example of the parallelism of other communications networks used to collect communications for individuals (in a university, pigeonholes, voicemail, e-mail, and perhaps SMS), helps to illustrate this. I have been noticing how, with a hectic schedule, I frequently don't refer to non face-to-face communications sent when I eventually see the recipient face-to-face (sometimes I totally forget about these exchanges). Sometimes it's that there isn't time, though it also seems as if protocols are shifting as greater emphasis is placed on the technologies of delivery. The lan in which participants are co-located dramatises this everyday shift in behaviour, where information flowing between individuals need not be mentioned, it is just assumed. Because everyone shares the same space at a co-located lan (onscreen and off), there is little need to verbally clarify what is plain to all onscreen. Communications instead attend to the interstices between different users' perspectives, or perhaps collaborative discussion about what is onscreen. With the war for games' console market share set to hot up between Microsoft's X-Box and the Playstation 2 – both of which are I believe capable of multiplay as well as other, non gaming functions – greater opportunities to reflect on the lan as an important new model of collaboration and exchange will soon become available.

As an extension of this interest in the lan as a new collaborative model, in Chapter Three I recounted, drawing on some of Margaret Morse's concepts, examples of some of the negotiations which gamers reported networked gaming facilitated, across different materiality and reality statuses, as well as between different aspects of their person. The few examples I gave there seem to be just the beginning of a very promising line of inquiry into the multiple negotiations which operating in mixed realities more generally necessitates and facilitates. This, then, is also an area in which further inquiry would be rewarded.

Finally, the use of techniques of defamiliarisation and experimental configurations of media by Neumark and Migone, discussed in Chapter Four, were significant instances of

an experimental ethic. The unfamiliar nature of these multimedia experiences meant that users were pushed to experience them in their strangeness, rather than just skate over them habitually. I have argued that a hyper/aesthetic approach is both useful and necessary for appreciating the different experiences, practices and subjectivities that are emerging in media technological contexts, which an anaesthetic approach is at risk of considering as merely impoverished experiences, of diminished value by virtue of their intensity, their magnitude or their unfamiliarity. The ability of hyper/aesthetics to appreciate the importance of the unfamiliar, both for moving beyond humanist terms of reference, and in terms of retaining the alterity of otherness, are significant points. In the gaming chapter, I discussed an example of a mimetic responsiveness which, as well as being an example of mimeticism which did not capitulate to the Same, was significant as an encounter with otherness. And while the aesthetic responsiveness generated by the word choreography bore some similarities to this mimetic yielding, the discontinuous aesthetics also resisted attempts to enter into, disrupting empathic recognitions or assimilationist responses to alterity. The user which Neumark's and Migone's works address can hardly be considered "sovereign over the strangeness of the world" (Becker), nor detached from others' strangeness. This play between responsiveness (as a mode of accessing that which is considered 'unnatural' or strange) and the denial of access to the strange constitutes a significant dynamic which a further development of hyper/aesthetics needs to attend to. Knowledge may come through the senses, but it seems that not all that is sensed can be known.

While the hyper/aesthetic approach that I have pursued has enabled me to attend to the ways in which subjectivity is exceeding the logic of Cartesianism in my examples, there is also room to develop the notion of hyper/aesthetics further. That other writers are also attending more positively to the 'hyper-' – such as Bolton and Grusin, and some theorists of hyper-reality – points to the importance of this endeavour. However, these writers tend not to attend to aesthetics, so a more fully developed theory of hyper/aesthetics would be useful for describing and analysing aspects of the current nexus between aesthetics, technology and affect, as well as extending the hyper debate itself somewhat. As Haraway urged theorists to learn to describe some of the new possibilities that technologies introduce, I hope that my work will contribute to encouraging an attention to the many points of ambivalence which characterise these concerns, and I would suggest that a more developed hyper/aesthetic theory would be useful in this.

Appendix 1: "Praying to the Gods of Office Ceiling Sprinklers on Juniper Street"

I've got a headache THIS FUCKIN' BIG
And it's thanks to you, you, you, you, you
And me and none of your useless white pills
Is going to set me free.
Think of needles through pinched skin
With lead weights hanging off the tips.
Think of every body position known to humankind
And every time you move to try and get comfortable,
You've got a leech gripping to each muscle,
Sucking life-blood out, injecting painful poisons in
So that every step, every turn of the head
Is a spasm of muted agony
As you try to pretend that nothing is going on.

So with that in mind,
Think of sitting in an office trying to work,
And the more you try, the further behind you fall
And the pain – remember the pain?
So as the leeches multiply on your neck,
You're just sitting and staring up at the ceiling
And you notice, like you do every once in a while,
The sprinkler above the desk
So you just sit and stare into this metal god
And you start praying and praying with all the strength
You have left and you're praying that it will start spraying
Now, now, now and all of the papers and useless clutter,
Including you melting away in your chair, will start to drown,
And the door is closed so no one knows,
And it just sounds like a waterfall and everyone loves waterfalls
So no one thinks much of it – it's just those middle of day dreams,
And you like waterfalls too, and to be frank, you couldn't give a shit
If you get washed away and die along with all the stuff
You tried to do. So the office becomes a human fish tank
With you and everything else just floating around in it,
Because the water's been coming for many hours now
And the sun is setting over the stone city
And in one final burst, the window explodes
And all the paper fishes, and human fishes (you), and filing cabinet fishes
Gush out into the frozen automobile air
And everything lands SPLAT! on the pavement and in the trash bin below
But suddenly you yell NO! NO! NO! NO! NO! 'cause not a single thing
Has happened and you're still just sitting there praying
With the leeches exhausting your soul and you're just staring
At that damn little grey god that doesn't act and you're thinking
"It's all over, Baby Blue." and then you leave.

Beth Greenspan, in *In the Realms of the Unreal: 'Insane' Writings*, John G. H. Oakes (ed.) New York: Four Walls Eight Windows, pp. 39-41.

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