

Landscaping the Subject: Virtuality, Embodiment, and the Discourse of the Interface

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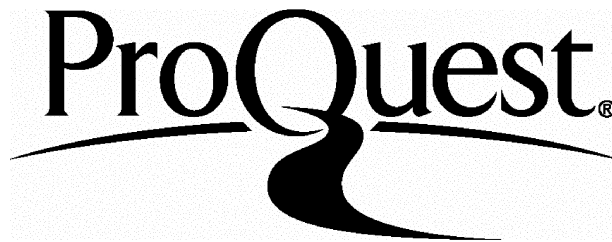
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This thesis examines the linear perspective interface as a key technology in the staging of Western subjectivity, and the body and 'nature' as critical terms in the description of the subject and its environment. It examines three historical moments in the discourse of the interface – Brunelleschi's perspective demonstration, eighteenth century landscape gardening, and the present-day virtual reality interface – and shows how, in each case, the discourse of the interface insists on a distance between the subject and its perceived environment. In this visualist paradigm, the body and nature are framed as excessive – uninvolved in the constitution of subjectivity. This is also the framework assumed by Lacan in his description of the subject.

Though this distinction may work in theory, in practice it is impossible to sustain – a fact that is made explicit in the eighteenth-century landscape garden. Focusing not only on the landscape view, but on the enclosed sections of the garden between the views, this thesis investigates the complex involvement of representation and the carnal body in the construction of the subject and (its) nature. Here, the relation of the subject to the anamorphic image becomes important. Against the distance and disembodiment implied in the perspectival view, the anamorphic relation is one of embodiment and proximity – suggesting that phenomenology, rather than psychoanalysis, is the most effective approach to the discourse of the interface and its subject.

This hypothesis is developed through an examination of the virtual reality interface. The latter both assumes and exceeds a/the actively viewing subject, foregrounding the ontological complexity of subjectivity and the failure of theory to fully describe or prescribe it. Psychoanalytic models in particular fail to address interfaced being as embodied being. The notion of 'anamorphic subjectivity' – interfaced being as a multistable condition of technological embodiment – is put forward as a possible alternative to perspectival models.

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Frontispiece: Reconstruction of Brunelleschi's perspective demonstration, c.1429
(in Hubert Damisch, *Théorie du Nuage: Pour une histoire de la peinture*, Paris, Editions du Seuil, 1972, p167.)

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This project began as an investigation of eighteenth century English landscape gardens, and took the direction it did in part out of my own perplexity – and disappointment – with the garden as a historical object. Though it is naïve to imagine that the past can speak clearly to us through artifacts, the garden is nonetheless strangely lacking as a historical object, an oddly dis-integrated mixture of the vegetative and the architectural, the transient and the enduring. Alongside period features, appropriately decayed, much of it is made up of materials – plants and trees – that lie within the span of our own years. It is difficult to bring this kind of ephemerality to terms with a conventional understanding of the past, to find the correct 'distance' from the garden as an artifact. If the desire of historical investigation is animated, in part, by the irrecoverable plenitude of the historical object, then the garden brings this desire out into the open. This goes some way towards explaining why descriptions of gardens (both historical and contemporary) are characterized by a peculiar insufficiency – a sense of hidden complexity, the feeling that there is something more going on in the landscape than such representations are able to disclose.

This is precisely the point that I wish to pick up on. While there is little question that the landscape garden is enjoying a public popularity – particularly in the UK – that is perhaps unprecedented in its history, much of this renown is due to its perceived innocuousness – its suitability for afternoon walks with aged relatives, or gentle outings with the children. The field of garden history – and the broader discourse of *landscape* within which it is situated – suffers a similar sort of neglect; landscape gardening can hardly be said to have cut a swath through recent critical discourse. The following discussion is, in part, an attempt to redress this: to speak to the historical and semiotic complexity of landscape as a category, and to argue for its reintroduction as an active term in critical and theoretical discourse.

Visuality and virtual space: Alberti's *costruzione legittima*

We can begin this investigation into the unobserved complexity of landscape by examining the structural foundation upon which it is built. Though not obviously subject to mathematical ordinance, the space of landscape – a balanced, symmetrical space incorporating a gentle movement from foreground to background¹ – is described most frequently in treatises on perspectival composition and stage design, and objectifies the meticulous artifice that characterized these practices:

In sketching landscape from nature, the truth of linear delineation depends chiefly on the exact observance of the vanishing points of the lines by which buildings, or other regular objects in the scene are bounded, and the horizontal line. When these are found in nature, and their places ascertained upon the paper intended to contain the sketch, the eye is easily enabled to direct the hand in the performance with sufficient accuracy.²

Like the theatrical space upon which it is modeled, a landscape is a fraction of a larger, less decisive space; a synthetic space, enclosed if not by walls then at least by conspicuous conceptual boundaries.³ Like theatrical space, the deep space of landscape unfolds in/as a movement of the gaze away from the spectator. The horizon line and vanishing point are the fundamental elements of the directed look that characterizes this space. The landscape view, in other words, shares its essential terms with a figurative paradigm renowned in Western art history: Leon Battista Alberti's rules for perspectival construction.

¹ "A characteristic both fundamental and common to all [landscape] pictures is a type of pictorial space in which receding strata create an impression of depth; foreground, middle ground and background are seen as a series of layers parallel with the picture plane and linked together by gently zigzagging diagonal lines. The framing side sections are similarly composed, balancing one another in symmetry or contrast and leaving the centre free to focus on the action." Lagerlöf, Margaretha Rossholm. *Ideal Landscape: Annibale Carracci, Nicolas Poussin and Claude Lorrain*. New Haven and London: Yale University Press, 1990, p20.

² Nicholson, Francis. *The Practice of Drawing and Painting Landscape From Nature*, J. Booth, 1820, p1. Earlier texts by Joseph Priestley, Thomas Bardwell, and an unnamed commentator all include recommendations for the composition of landscapes alongside rules for perspective composition. Though they avoid mathematical rules, all are insistent on the correct choice of point of view, the careful placement of the horizon line, and the disposition of a proportionally consistent space between the two. See *The Artist's Assistant in Drawing, Perspective, Etching, Engraving, and Metzotinto-scraping*, 4th edition, R. Sayer & J. Bennett, London, 1786; Bardwell, Thomas, *The Practice of Painting and Perspective Made Easy*, S. Richardson, London, 1756; and Priestley, Joseph, *A Familiar Introduction to the Theory and Practice of Perspective*, 2nd edition, J. Johnson, London, 1780.

Linear or Albertian perspective lays claim not only to the territory of Renaissance and Classical representation but to hundreds of years of Western thought. Within the realm of the pictorial, Alberti's 'legitimate construction' is a means of presenting a particular spatial logic to vision. Linear perspective is a *dioptric* art; it does not merely transmit vision, but directs it, bending visual rays to create an illusion of spatial depth, enabling the creation of a perfectly homogeneous and repeatable space. Structured around the variables of vanishing point and distant horizon, perspectival space is also, typically, experienced monodirectionally, as an *over there*, given in relation to the *here* of the spectator. The world that is framed by perspective is ontologically distinct from the material space occupied by the viewer and can be understood, in this sense, as a *virtual* space.

Virtuality describes a condition in which perceived or experienced space and physical space part company with one another. The subject engages with virtual space any time sensory awareness or self-presence is disengaged from the physical body – out of body experiences, for example. *Costruzione legittima* is a means of presenting a specific kind of virtual space to vision – a means of linking visuality (the social and cultural coding of physiological vision) to virtuality. In this sense, it functions as an *interface*. The latter term is a key one in the following discussion; its increasing popularity in recent critical discourse conceals a history which goes back considerably further. Broadly speaking, an interface is a means of accessing a virtual space: a site where two systems meet and interact, and/or a formation that enables them to do so. Language – both written and spoken – is an interface; it allows the reader or listener to share the thoughts and ideas of another. More recently, the interface has been characterized as a means of mediating between physical location and perceived reality; “between the human body (or bodies) and an associated 'I' (or 'I's).”⁴ The issue of ‘mediation’ is an important one, and merits closer examination. To argue that the interface – whatever its form – *mediates between* body and subject is to presuppose these two as prior conditions, and to infer the interface as little more than an arbitrator. As the following discussion will demonstrate, the interface is an active agent in the *constitution* of both body and subject, and of the relation between them.

³ See Jackson, J.B. 'The Word Itself' in *Discovering the Vernacular Landscape*. Yale University Press, 1984.

The perspective interface, in other words, is much more than a spatial archetype. Seeing in perspective is a highly specific mode of visibility; a means of rendering virtual space by and for the eye. As such, it demands an equally specific subject, one whose relation to the material world is, typically, a relation of *refusal*. This differentiation between the material body and the seeing eye/I provides the subject's ontological footing; the means by which – as well as the terrain within which – it locates itself. Assuming *costruzione legittima* as its governing paradigm, the *discourse of the interface* endorses not just a particular way of seeing, but an ideologically potent model of subjectivity – a form of 'scopic Cartesianism'. In other words, the perspective interface functions simultaneously as a *technology of vision*, and as a *subjectifying relation*: both a 'power of technique' over the world, and a way of understanding the relation between the self and the world – a visual and ontological paradigm which posits a split between body and subject.⁵ In part, and in the most general terms, what follows is a 'history' of the perspective interface.

Before proceeding, let me specify exactly what I intend by the 'discourse of the interface', and by the term 'discourse' itself. De Bolla's distinction between the 'discourse on' and the 'discourse of' a particular category allows us to discriminate between the way that a field of enquiry is identified at a local level, and how it is situated within knowledge in general. A *discourse on* a particular subject is a specific body of knowledge that designates itself as such; a discourse that "both signals its detachment from neighbouring discourses, and is founded upon its own sense of itself as a discrete form."⁶ The discourse on linear perspective, for example, consists of those texts that concern themselves with the theory and practice of *costruzione legittima* at a particular historical juncture – instruction manuals, philosophical and literary commentaries, and the like. To refer to a *discourse of*, on the other hand, is to take into account more broad-reaching affiliations between discrete discourses – the manner in which the latter are 'networked'. The discourse of linear perspective thus comprises not only all of the sorts of works noted above, but all of the affiliated disciplines (painting, gardening, and poetry, for example) in which the structural and theoretical

⁴ Stone, Allucquere Rosanne, 'Will the Real Body Please Stand Up? Boundary Stories about Virtual Cultures' in *The Cybercultures Reader*, pp504-525, p508.

⁵ For a detailed study of linear perspective as a key technology in the development of the modern sense of self, see Romanyshyn, Robert D., *Technology as Symptom and Dream*, Routledge, 1989. Many of Romanyshyn's claims regarding the effects of this technology – in particular, the way in which it constructs a disembodied subject – run parallel to my own.

⁶ De Bolla, Peter, *The Discourse of the Sublime: Readings in History, Aesthetics, and the Subject*, Blackwell, 1989, p9.

principles of *costruzione legittima* are active in some way. To refer to the discourse of a particular category is thus to indicate the breadth of its influence, and to point up the extent to which it is dispersed throughout the field of knowledge in general.

The discourse of linear perspective enjoys a special kind of historical resonance. Certain ideas attain a status that Hubert Damisch describes as paradigmatic – objects or structures which ‘traverse history’, which serve a regulatory function with respect to thought, and which remain “resolutely unembarrassed ... by being declared obsolete”.⁷ A paradigm is an exemplary form which animates the subject’s understanding of, and relation to, the world.⁸ Damisch singles out Alberti’s ‘discovery’ as one of these paradigmatic forms; though it was within the domain of painting that *costruzione legittima* initially imposed itself on thought, “the ascendancy of the paradigm has made itself felt well beyond the borders of the regional domain within which it first made an impact ... and this without its having lost, to this day, any of its capacity to convey information or its power to attract.”⁹ As the following discussion will establish, the legacy of the perspective paradigm continues to be felt in present day discourses, many of which stake their claims to legitimacy on their investment in this paradigm and the model of subjectivity that it endorses.

As a paradigm, linear perspective is active not only within the realm of visibility, but within that of epistemology as well; our involvement with the interface is both instrumental and existential. It is beyond the scope of the present work to attempt a comprehensive survey of all of the various disciplines which adopt *costruzione legittima* as a paradigmatic form. An analysis of some of its less well represented – but no less potent – manifestations is a more manageable, and perhaps more useful project. Accordingly, the following study will concern itself with a historical copula which might at first seem a bit unlikely: the link between the eighteenth century discourse of landscape, and the present-day discourse of virtual reality. Both are discourses of the interface, and both, as I will argue, are instrumental in the historical persistence of *costruzione legittima*.

⁷ Ibid., pxx.

⁸ “[Perspective] is given to our thought not only as a “form” bound up with an entire epistemological constellation, but ... as a singular paradigmatic structure, one that is rife with paradoxes...” Damisch, Hubert, *The Origin of Perspective*, John Goodman, trans., MIT Press, 1995, p19.

⁹ Ibid., pxxii.

The continued resonance of the perspective paradigm is in part an effect of its perceived neutrality – a perception secured through its seclusion within the medium of landscape and its consequent association with nature and so-called ‘natural’ vision. Recent art historical scholarship, though it has paid close attention to the ideological content of landscape imagery, seems less concerned with the way that this content inheres in the spatial archetype that defines landscape. As John Dixon Hunt points out, “the recent use of *landscape* by professionals (along with the general public) tends ... to infer a neutral world of topography, a zone of “nature,” that is deemed to be their concern.”¹⁰ Though the alleged ‘naturalness’ of perspectival vision is, and has long been, an open secret, Western culture nonetheless chooses to understand viewing (a) landscape as an unaffected way of seeing nature rather than a highly codified cultural practice.

This understanding of space – as a neutral matrix which antecedes human activity, a benign medium which serves as the backdrop for the subject’s actions and its history more generally – continues to hold sway in other disciplines as well. As Henri Lefebvre claims, most contemporary philosophy is conspicuously undiscerning in its assumption of a space – literary, psychic, social, or otherwise – that is both perspectival, and apparently extra-ideological.¹¹ This same naivete characterizes discussions of virtual reality, most of which neglect to address the ideological overcoding of electronic space and spatiality. As a result, in the ‘landscape’ of VR, being and meaning tend to be articulated, as they were for the eighteenth century subject, around the ability to establish, maintain, and master the distance between the subject and the visible world.

As discourses of the interface, both landscape and virtual reality are concerned with the technological disembodiment of the subject: the purposive creation of an image-body through the operation of the perspective paradigm, and the maintenance of a *distance* between this image-body and its corporeal complement. The carnal body – and, as we will

¹⁰ Hunt, John Dixon, *Greater Perfections: The Practice of Garden Theory*, University of Pennsylvania Press, 2000, pp1-2. Most histories of landscape, although they go into great detail about the ideological content of landscape imagery, tend to ignore the way in which the structure of this space itself is ideologically charged.

¹¹ “The [scientific/philosophical] attitude, understood as the application of ‘epistemological’ thinking to acquired knowledge, is assumed to be ‘structurally’ linked to the spatial sphere. This connection, presumed to be self-evident from the point of view of scientific discourse, is never conceptualized. Blithely indifferent to the charge of circular thinking, that discourse sets up an opposition between the status of space and the status of the ‘subject’, between the thinking ‘I’ and the object thought about. It thus rejoins the position of the Cartesian/Western Logos, which some of its exponents indeed claim to have ‘closed.’” Lefebvre, Henri, *The Production of Space*, Donald Nicholson-Smith, trans. Blackwell, 1991, p4.

see, the field of 'nature' with which it is associated – is packaged as *excessive*: unrepresentable or uncontainable by discourse, a “remainder, that which cannot be appropriated or included within the present discursive network of control.”¹² For the discourse of the interface, excess describes that which lies outside the ambit of visibility, that which is excluded from the event of seeing, but which is liable to reappear within this event and interfere with it. Excess also refers to a technologically innocent or 'dis-organized' condition most often attributed to the material body. The framing of the body and nature as excessive is a concern specific to the discourse of the interface, and is one of its distinguishing factors. The placement of such phenomenological variables is neither accidental, nor, as one might imagine, is it ideologically neutral.¹³ As the following discussion will demonstrate, the association of the body and nature with a technologically unmediated condition is a strategy to limit the competence of the material in the constitution of meaning and subjectivity.

the interface and the problematic of the body

In operating a technology of vision, it is crucial that the technology itself remain imperceptible. In order to prevent the interface itself from becoming the object of vision or thought, the subject must learn not just to see, but to see *through*. The perspective interface acts in/on the interval between the observer and the observed, altering the apparent position of bodies and objects, modulating the accommodative demands of the eye itself. Imagine putting on a pair of glasses that are too strong – there is a marked variation not only in the way that one perceives space, but in the way one relates to it on a corporeal level.¹⁴ By incorporating a technology of vision into our familiar actions, we soon learn to overlook these slight shifts in perception. The fact remains, nonetheless, that the character of the event of seeing is both ontological and material.

¹² De Bolla, op. cit., p6.

¹³ “In semiotic terms, the ... interface acts as a code that carries cultural messages in a variety of media. ... In cultural communication, a code is rarely simply a neutral transport mechanism; usually it affects the messages transmitted with its help. ... A code may also provide its own model of the world, its own logical system, or ideology; subsequent cultural messages or whole languages created with this code will be limited by its accompanying model, system, or ideology.” Manovich, Lev. *The Language of New Media*. The MIT Press, 2001, p64.

¹⁴ “[The] transformation of vision through lenses changes, however slightly, our sense of bodily space.” Ihde, Don, *Bodies in Technology*, University of Minnesota Press, 2002, p48.

Leonardo's fascination with the camera obscura arose in part from his observation of its operation as analogous to that of the human eye.¹⁵ The structural and optical principles of this technology rapidly crystallized into a governing metaphor for the mind, and went on to allegorize an entire epistemology – that of modernity.¹⁶ It is important to remember, however, that the relationship between visuality and epistemology is grounded in more than simple analogy or metaphor.¹⁷ If, as Crary claims “the structural and optical principles of the camera obscura coalesced into a dominant paradigm through which was described the status and possibilities of an observer,”¹⁸ then this status is attained in/as a *reflexive* relation between body, I/eye, and instrument. If the subject is the medium through which the perspective interface secures being, it is around the carnal body that the interface takes shape as an instrument. *Costruzione legittima*, as Lefebvre implies, is a material as well as an abstract tool and operates, as such, within the domain of the body:

The body does not fall under the sway of analytic thought and its separation of the cyclical from the linear. ... For the body indeed unites cyclical and linear, combining the cycles of time, need and desire with the linearities of gesture, perambulation, prehension and the manipulation of things – the handling of both material and abstract tools. *The body subsists precisely at the level of the reciprocal movement between these two realms...*¹⁹

Perceiving, understanding, and acting (in) space are partly the effect of historical protocols of visuality. Nevertheless, all of the terms which comprise Western culture's understanding of space – location, territory, landscape, environment, and nature, among others – originate not simply as *concepts*, but out of the way that individuals live and enact space as a dynamic medium. Space, in other words, is a material condition that emerges alongside the subject; subjectivity itself is ‘presuppositionally and ontologically spatial’: articulated in space; *spatialized*, as Henri Lefebvre suggests, in and through individual and collective

¹⁵ “When the images of illuminated bodies pass through a small round hole into a very dark room, if you receive them on a piece of white paper placed vertically in the room at some distance from the aperture, you will see on the paper all those bodies in their natural shapes and colors, but they will appear upside down and smaller ... the same happens inside the pupil of the eye.” Leonardo, cited in *Ibid.*, p73.

¹⁶ “The *camera obscura* began as an experimental model for the eye and became a ruling metaphor for the mind. By offering a way of picturing the Cartesian inside *cogito* with a sensory channel admitting pictures from the outside extension, the image of skulls darkroom shifted from a suggestive experimental analogy to a concealed methodological paradigm.” *Ibid.*, p72.

¹⁷ As Lefebvre remarks, “[the] quasi-logical presupposition of an identity between mental space (the space of the philosophers and epistemologists) and real space creates an abyss between the mental sphere on one side and the physical and social spheres on the other..” Lefebvre, *op. cit.*, p6.

¹⁸ Crary, Jonathan. *Techniques of the Observer: On Vision and Modernity in the Nineteenth Century*. MIT Press, 1995, p27.

¹⁹ Lefebvre, *op. cit.*, p203.

spatial practices, among which looking is but one.²⁰ Despite perspective theory's best efforts, it is looking as *praxis* that shapes the subject, and this praxis takes place within a larger envelope of social, political, gender, and material considerations. Looking is not the theoretically secluded and politically innocent activity that the discourse of the interface makes it out to be.

Technologies of vision are shaped by, and for, material bodies. In this sense, the 'history of the interface' might be better understood as an account of various attempts to bring a particular technology of vision – that of *costruzione legittima* – to terms with the body as a phenomenological variable. As such it is always, in a sense, a history of failure. Nowhere in the history I'm about to relate is there anything but vexation to be met with in the attempt to tease apart or prioritize the material and the theoretical. This is not to suggest that such attempts have not been made. In part, the history of the interface is a history of the efforts of perspective theory to legislate the practice of looking and to (over)determine both space and the subject. The subsequent discussion identifies materiality as a historically persistent term in the failure of perspective theory. This does not mean, however, that I wish to restore some sort of spurious ontological priority to the material. My interest is in examining the historical trajectory of a body that persists as a dialectical and unstable form – partially visible, partially invisible – within the discourse of the interface, and a nature whose ontological and signifying status is characterized by nothing more historically constant than uncertainty. I will begin by identifying some of the key historical moments in the discourse of the interface, foregrounding the problematic of the 'visible' body.

The paradigmatic and contradictory character of the perspective interface is declared in an innovative gesture that has long been taken as the inauguration of Renaissance pictorial space. Brunelleschi's perspective demonstration of 1429 consisted of a simple apparatus: a

²⁰ "That 'everything' occurs in time and is inherently historical, that our actions always play a part (amidst significant constraints) in constructing sequential temporality and making histories, in the construction of individual and societal "biographies," seems unremarkably true, even if frequently outside of our conscious awareness or submerged in enfolding ideologies. What Lefebvre is arguing for is a similar action-oriented and politicized ontology and epistemology for space: "everything" also occurs in space, not merely incidentally but as a vital part of lived experience, as part of the (social) production of (social) space, the construction of individual and societal spatialities." Soja, Edward W., *Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places* Blackwell, 1996, p46.

mirror held in one hand; a small painted panel, pierced at the vanishing point by a small hole, held in the other. In order to see the image on the panel, the viewer was required to “place his eye on the reverse side where the hole was large, and ... hold it against his eye with one hand and with the other hold a flat mirror directly opposite in such a way that the painting was reflected in it.”²¹ Looking in this way, the viewer saw a magically realistic and apparently three-dimensional facsimile of the Baptistry of San Giovanni. The sky above the Baptistry, however, was not a painted image, but a mirrored one; reflected in a plate of burnished silver which Brunelleschi inserted at the top of the painting, clouds and other celestial phenomena appeared as the ‘real’ counterpart or necessary complement to the perfectly coherent space of representation.²²

Brunelleschi’s apparatus is a demonstration of perspectival vision *in action*. It is an enactment of the event of seeing in perspective; a staging of the subject of representation in/as a simple gesture – the taking in hand of a pair of objects. This demonstration can be understood, as Hubert Damisch has pointed out, as a phenomenological reduction²³ – an intentional act that isolates the viewer from the surrounding environment and from its own corporeal body. Yet it is equally apparent that the event of seeing in perspective is underwritten by the carnal body as its necessary condition. As Brunelleschi’s biographer Manetti confirmed,

[To] look at it, under the various specified circumstances ... it seemed that one was seeing truth itself; and I held it in my hands and saw it several times in my own day and so can testify to it.²⁴

The perfect consistency of this technology – its ability to reproduce visible ‘truth’ identically for each viewer – is subverted, in theory, by the body of the user, for whom the correct viewing distance between the panels (which corresponded “roughly, in small *braccia*, to the

²¹ Manetti in Damisch, op. cit., p115.

²² “Or le ciel, Brunelleschi n’a pas prétendu le *figurer*, mais seulement le montrer (*dimostrare*); et il aura eu recours, a cette fin, a un subterfuge qui introduit dans le circuit représentatif une référence direct à la réalité extérieure ... il avait recouvert la partie correspondante du panneau d’une surface d’argent bruni où se reflétaient l’air et les ciex réels, et de même les nuages qui s’y laissaient voir, poussés par le vent, quand celui-ci soufflait.” Damisch, Hubert, *Théorie du Nuage: Pour une Histoire de la Peinture*. Editions du Seuil, 1972, p169.

²³ “Far from capturing the real directly ... this “view” corresponded to a bracketing, to a veritable phenomenological reduction: within the brackets established by the panel and the mirror the real was excluded, was outside the circuit ... As was the subject itself, which gained access only by abstracting itself out of the specular relation. Thus a system that however empirically open it may have been, was theoretically isolated, closed in on itself, save for ... this hole, this “gaze” which the eye, held up against it, obstructed, or sutured. This “light” from which it received its meaning and function, which was to render visible not reality but “truth,” or its semblance.” Damisch (1995), op. cit., pp139-140.

²⁴ Manetti in *Ibid.*, pp115-6.

distance in regular *braccia* from the place [Brunelleschi] appears to have been when he [painted it]"²⁵) had to be found by trial and error, by adjusting the distance between them to suit individual vision. The illusion is impossible to sustain without the presence of a body which nonetheless must be made to conform to 'specified circumstances' in order for the illusion to function. The body, in other words, is both vital and excessive: necessary to the event of seeing in perspective, fit to stand witness to this event, but banished from the space of representation. Brunelleschi's demonstration assumes a body that is present only *outside* of the illusion – a body which belongs more properly to a state of 'nature' which is visible only as a reflection of a reflection.

The codification of this event by Alberti, in 1435, installed *perspectiva artificialis* as a model; "constitutive, within the register of representation, of the order and even the meaning of things."²⁶ As the scenographic depiction of rationalized space, Albertian perspective is a key agent in the marriage of visual and spatial praxis to theories of representation. A regulatory as well as a descriptive protocol, it operates to equate the circuit of representation with the event of seeing, and subjective boundaries with those of the enclosure of visibility. Directing the relation between point of sight and horizon, the centric ray – Alberti's 'prince of rays' – behaves as a *vector*, determining the position and declination of points in space in terms of their relation to a single, fixed point, and creating the conditions for movement between them. For the representation to appear true to the eye, one had only to take up the proper position in front of it. Though it was proclaimed as a sort of 'natural magic', the successful operation of linear perspective – its "efficacy as a technical and artistic instrument to organize knowledge and define its criteria"²⁷ – was contingent, as it was in Brunelleschi's experiment, upon the precise positioning of the viewing body as a static, monocular eye. The material conditions of the viewing event – the corporeal body and its surround – lie outside the boundaries described by the circuit of representation.

As it is given by *costruzione legittima*, the relation between this circuit and its exterior is *isomorphic*: the order of representation and what is excluded from it, are conceived as

²⁵ Manetti in *Ibid.*, p116.

²⁶ *Ibid.*, p9.

²⁷ Judovitz, Dalia, 'Vision, Representation and Technology in Descartes', in *Modernity and the Hegemony of Vision*, David Michael Levin, ed., University of California Press, 1993, p66.

“mutually exclusive and jointly exhaustive.”²⁸ This sort of exclusivity is characteristic of the perspective interface and acts, within representation, as the guarantee of its integrity. The clouds in Brunelleschi’s demonstration present the exterior of the circuit in/as the amorphous or incoherent: “the thing that cannot be fitted into a system but which nevertheless the system needs in order to constitute itself as a system.”²⁹ The regulatory and descriptive force of linear perspective is thus a function not simply of what it legislates or contains, but of its excess – that which it *cannot contain*.

Recognized by Brunelleschi as the necessary material precondition for representation, and distinguished by Alberti as an unruly material concern which must be excluded from its space, the body disrupts the isomorphism of the circuit of representation, refusing to sit comfortably either inside or outside. The body, in short, actualizes the antagonistic relations between the material and the theoretical, or what Lyotard terms the *discursive* and the *figural* – between “the rule of representation by conceptual oppositions” and those singularities or differences “which cannot be rationalized or subsumed within the rule of representation.”³⁰ It is not enough, then, to posit the body simply as an ‘undifferentiated reality’ which stands outside of representation. As Alberti was likely aware, *costruzione legittima* is more than a simple encryption of Brunelleschi’s demonstration: it is a tactic, a technology which intervenes to secure the body as excessive to representation and simultaneously to conceal its indebtedness to the body as the material precondition of its operation. Alberti literally puts Brunelleschi’s demonstration *in order*, renders it infinitely reproducible, transfigures event into strategy. This transformation conceals the machinery that furnishes the privilege of seeing in perspective; it renders a material technology as discourse, and prescribes a subject whose consistency is, in theory, fully determined in and by the circuit of representation.

²⁸ “The usual regime of spatial relations is guaranteed by one crucial condition: that the registers of inside and outside fit. This is both a logical and a topological point. Logically, inside and outside must be considered as mutually exclusive and jointly exhaustive. The topological correlate of this is that the inside and the outside coincide in an unproblematic form; they are completely isomorphic. ... [Isomorphism] applies not only to the spatial categories of inside and outside but also to all those infamous pairs of occidental thinking habits – mind/body, essence/appearance, subject/object, male/female. ... To subject any of these pairs to an anamorphic process is to reveal the extent to which each term of the pair is not in contradiction to the other term and the extent to which the relations between them, far from conforming to a clean-cut isomorphism, are strewn with strange thresholds and hybrid forms.” Adams, Parveen, *The Emptiness of the Image: Psychoanalysis and Sexual Differences*. Routledge, 1996, pp141-2.

²⁹ Krauss, Rosalind. ‘The /Cloud/’ in *Agnes Martin*, (exhibition catalogue), Barbara Haskell, ed. Whitney Museum of Modern Art, 1991, p159.

³⁰ Readings, Bill, *Introducing Lyotard: Art and Politics*, Routledge, 1991, p4.

It is in the eighteenth century English landscape garden that the problematic status of the body-as-excess is realized in its most lavishly theatrical form. Bringing together the discourses of painting, poetry, and architecture, but belonging entirely to none of these, the landscape garden is a site where a socially sanctioned subject is incorporated and enacted in and through the re-presentation of a nature that is understood to be ontologically distinct from the subject as such.³¹ Inasmuch as it was contrived within the field of the visible, however, the subject of landscape was understood (though rarely explicitly admitted) to take shape through the alliance of spatial and visual custom with a corporeal body.

The garden reached its acme of development during what Foucault terms the 'Classical' *episteme*³² – an age characterized by its ardent espousal of the perspective paradigm as a figure for the relation between the knowing subject and the world. Classical thought moved in the spaces of identity, difference, measurement, and order; knowledge was largely a matter of classifying observed phenomena, assigning them a place within the field of the knowable. Knowledge was understood to operate within the space of representation: a tabular field, "unmodified by [the subject's] own sensory and physiological apparatus, on which the contents of the world can be studied and compared."³³ Rational thought interposed itself between the subject and the world in order to fix the latter under its gaze; the world was apprehended indirectly, as an image formed in the eye and 'read' by the mind. Classical knowledge, in other words, is a mode which "concerns not the being of things but rather the manner in which they can be known."³⁴ Within such representationalist

³¹ "It is essential to observe that the functions of 'nature' and 'human nature' are in opposition to one another, term by term, in the Classical *episteme*: nature, through the action of a real and disordered juxtaposition, causes difference to appear in the ordered continuity of beings; human nature causes the identical to appear in the disordered chain of representation, and does so by the action of a display of images." Foucault, Michel, *The Order of Things: An Archaeology of the Human Sciences*, Vintage Books, 1973, p309.

³² Although Foucault's notion of the *episteme* is useful in marking large-scale transformations in Western thought, it is less much credible as a periodizing concept. As the following discussion will indicate, Foucault makes some highly questionable claims regarding the stability of such historical boundaries; what he characterizes as specific to the Classical *episteme*, for example, can be shown to be equally applicable to early and even late modernity. Though these terms will be employed throughout the following discussion, they are intended in a broad descriptive sense and should not be understood as denoting precise historical periods.

³³ Crary, op. cit., p55.

³⁴ Foucault, op. cit., p54.

accounts, the perspective paradigm furnishes the (explicitly metaphorical) relation between the subject and the observed world.

Here, viewing a landscape is not an objective means of examining the world, but a means of constructing and solidifying the latter in/as representation. As such, it is a discursive space, and viewing, a specifically theoretical concern – a regulatory protocol. For the subject of landscape, the observance of this kind of regulation was synonymous with subjective agency. For the eighteenth century viewer, both subjectivity and spatial praxis are extravagantly bound up with (and overdetermined by) visuality – the production of the visual field; the social manufacture of seeing, looking and of being seen as capable in these respects.³⁵ Physiological vision is distinct from agency within the scopic regime:

The eye can only function within visuality; the 'truth' of the scopic regime is not some hypothetical neutral science of optics, ... but on the contrary a contingent truth implicated in and by our entry into the theatrical spacing of the spectator... the evidence of the eye is completely constrained and determined by the enclosure of visuality...³⁶

Social, class, and gender attributes are constituted, in part, in and by the activity of looking; subjectivity is contingent upon the position (both real and virtual) that one takes up vis-à-vis the scopic field and the way that one performs as a viewer. The regulation of visual social praxis – the visual field and the activities of looking that it solicits – is thus a means of describing an ideal subject as well as the space within which it functions. Sites for the enactment of specific class-based subjectivities – formal and landscape gardens, picture viewing events, and the like – were designed in part as platforms on which to exercise and display one's subjectivity in/as the mastery of specific modes of looking.

Viewing, for the subject of landscape, is a means of mastering the perceived environment by framing it in/as an image of nature. Consequently, the authority of the landscape interface is a function of the kind of 'spectatorial work' it solicits;³⁷ the manner in which the creation of milieu is aligned with the work of identification and the presentation and location of the self

³⁵ "[The] social, cultural and discursive construction of the visual field ... all determine singly or in combination and to varying extents the grammar of forms which constitute the activity of looking as well as the parameters within which an individual is to be understood as a viewer, spectator or looker." De Bolla, Peter. "The Visibility of Visuality: Vauxhall Gardens and the Siting of the Viewer." in *Vision and Textuality*. Stephen Melville and Bill Readings, eds. London: MacMillan Press, 1995, pp282-295; pp282-3.

³⁶ *Ibid.*, p289.

³⁷ Mitchell, W. J. T., 'Introduction' in *Landscape and Power*, W. J. T. Mitchell, ed., University of Chicago Press, 1994, p3.

as a spectator.³⁸ For the eighteenth century subject, this involved not only the direction of the look, but the disciplining of a carnal body that was understood to belong to the domain of nature rather than that of representation. If the denial of the body as the grounds of an objective or truthful vision is based in the shapeless materiality that it shares with nature, then the insistence on the *management* of the body within representation is a means of fending off this shapelessness and of staging a specific relation to nature. Representation, in this instance, is a defensive measure, and functions to shield the subject from a confrontation with a material nature over which it can have no genuine control.

As the garden demonstrates, however, the distinction between material nature and human nature is by no means clear-cut. Nature, within eighteenth-century discourses of landscape, comprises both the contrived and the extradiscursive; both an ideal state, the model and the matrix of civil society, and an irredeemable other, alien and excessive.³⁹ Nature is understood, in other words, as simultaneously interior and exterior to the circuit of representation. The garden plays with this border, deliberately blurring the boundary between itself and the 'wide fields of nature' which lie beyond it.⁴⁰ Joseph Addison's concern for the inadequacy of Art is expressed in the face of this uncertainty:

[Though the works of Art] may sometimes appear as Beautiful or Strange, they can have nothing in them of that Vastness and Immensity, which afford so great an Entertainment to the mind of the Beholder. ... The Beauties of the most stately Garden or Palace lie in a narrow Compass, the Imagination immediately runs them over, and requires something else to gratifie her; but, in the wide Fields of Nature the Sight wanders up and down without Confinement, and is fed with an infinite variety of Images, without any certain Stint or Number.⁴¹

³⁸ "[The] production of 'landscape,' ... is not simply a question of environment ... but the *mediation* of environment. ... [Landscapes], whether we focus on their making or the experiencing of them long after their creation, are a combination of object and subject, of the place made and the place-maker or place-user. ... [Landscape] comes into being as the creative coupling of a perceiving subject and an object perceived." Hunt, *op. cit.*, pp8-9.

³⁹ "[One] of the main divisions which can be drawn is between those ethical, political and aesthetic arguments that are constructed upon a view of culture as offering as essential corrective to 'nature', or providing the milieu in which alone it acquires any definitively human form, and those that view nature as releasing us from the repressions or determinations of culture and as itself a source of wisdom and moral guidance." Soper, Kate, *What is Nature? Culture, Politics, and the Non-Human*, Blackwell, 1995, pp28-9.

⁴⁰ "The word 'garden' originally described an area enclosed by a fence or wall, but the essence of creating a landscape garden is to hide the bounds, thus turning the garden into part of the surrounding countryside and the countryside into an apparent extension of the garden." Bevington, Michael, *Stowe: The Garden and the Park*. Capability Books, 1996, p28.

⁴¹ Joseph Addison in *Ibid.*, p141.

'First nature' – the raw material out of which the garden was fashioned – consists, at its most basic level, of the 'not-human': the distant, the wild and untouched; literally, that which 'bewilders', that which is hostile to human presence and which frustrates human intention.⁴² First nature, for Addison, is a borderless terrain through which the eye moves freely, fed with images whose source is something other than cultural. The nature that Addison conspicuously opposes to Art is the *alterum naturam*, an unmediated and vital – if ill-defined – primal sphere that resists human intervention.⁴³ This is, and is not, the same Nature that is visible in the garden. Though first nature is representation's necessary condition – the ground on which it operates, the anarchic condition over which Art must prevail – it is also in need of human improvement in order to become meaningful for the visitor. The nature that is viewed through the interface of landscape is first nature as the latter is domesticated by the hand of Art. What this suggests is that although nature might *exist* outside of representation, it can only *appear* within it.⁴⁴ It is, in part, the engagement of this paradox – the depiction of nature as simultaneously wild and domesticated, as both interior and exterior to representation – within the experience of viewing, that fascinates the eighteenth century eye. Though natural history may conceive of nature as a category that possesses an agency of its own, outside of representation, the corporeal body is granted neither the same visibility, nor the same kind of ontological fluidity. Critical to representation but never fully 'within' it, the body of the subject of landscape persists, disturbingly, as a hybrid form.

As we have seen, however, it is impossible to fully abstract the body from the space of representation. Though the view and its subject figure prominently in the history of garden design, the latter discipline has paid considerably less attention to the Shades – the enclosed regions of the garden, where the practice of viewing is momentarily suspended,

⁴² "In its commonest and most fundamental sense, the term 'nature' refers to everything which is not human and distinguished from the work of humanity. ... [An] a priori discrimination between humanity and 'nature' is implicit in all discussions of the relations between the two, and thus far it is correct to insist that 'nature' is the idea through which we conceptualize what is 'other' to ourselves. ... But for the most part, when 'nature' is used of the non-human, it is in a rather more concrete sense to refer to that part of the environment which we have had no hand in creating." Soper, *op. cit.*, pp15-6.

⁴³ Admitting to a degree of difficulty in actually defining the term 'first nature', John Dixon Hunt maintains that "[it] is important only to insist that some notion of a first nature, of wilderness, or of a territory of the gods seems to have been an essential ingredient in the ways that humans viewed and treated the physical world; it helped them organize their experiences. Indeed, a first nature or wilderness is inevitably constructed by a given culture as a means of differentiating kinds of identity or behaviour, or of protecting parcels of territory for special purposes." Hunt, *op. cit.*, p51.

⁴⁴ "We must ever recollect that nature is most defective in composition; and *must* be a little assisted. Her ideas are too vast for picturesque taste, without the restraint of rules." Gilpin, William, *On the Art of Sketching Landscape*, L. Blemire, London, 1792, p65.

the screen of representation temporarily disabled. In moments such as these, visibility no longer functions in quite the same way to regulate the body and shape the subject, and the garden visitor finds her/himself in an unregulated and excessive space. In the Shades, as we shall see, the distance between the subject and the image becomes much more difficult to maintain, and risks collapsing entirely, allowing the body to (e)merge into the space of representation. Here, as I will argue, the engagement with 'nature' has none of the appeal that Addison remarks on above. As it is articulated in/by the circuit of representation, the subject has an integrity that material nature lacks. Outside of representation, on the other hand, the subject is quite simply annihilated, absorbed into nature, undistinguished. It is the appearance of this formless outside in the Shades that threatens the integrity of the subject.

Both Brunelleschi and Alberti elided the body, insisting on its absolute exteriority to representation. The situation in the garden is slightly different. Although equally reluctant to openly acknowledge the role of the carnal body in representation, eighteenth century discourses on gardening are a great deal more plain in their attempts to codify this body. Such attempts are emblematic of the ideological investment in the maintenance of the distinction between the carnal body and subjectivity proper.

Inasmuch as vision and visibility are not 'natural' phenomena, then, excess must be understood as ideological. Viewing is a praxis in which the most stringent discipline is enacted on the body under the rubric of 'natural' behaviour. The landscape garden could be seen properly only by those with *taste* – an allegedly natural aptitude which required the viewer to distance himself from material concerns in order to grasp the relations between objects in the field of vision. Viewing nature was a matter of laying on a specific structural idiom, and could only meet with success if the eye was properly trained: if it had acquired a 'power of seeing' based in a familiarity with the works of the great masters of Classical landscape.⁴⁵ This competence was legible on the surface of the viewing body itself, conspicuously displayed not as a carnal being, but as an aggregate of propriety and

⁴⁵ "When the [aspiring landscape painter] is become familiar with the works of [the] masters, he will readily perceive in nature what would otherwise have been unnoticed: the mind so prepared on that sight of what is grand or beautiful, feels this to be like Wilson or Poussin, or that like Salvator Rosa, and by finding what the

decorum – a 'signifying surface'.⁴⁶ It was of some concern for the integrity of the subject that this demonstration be witnessed by others. Making visible one's status as subject meant putting oneself on display in the space of the social.⁴⁷ To style oneself a subject of landscape was in effect to *present* oneself as such – a presentation which served the simultaneous function of distancing the subject from (its) material nature, and of inscribing its membership in nature by displaying its conformity to the 'natural' laws governing the practice of viewing. A 'correct' taste for landscape was an index of both the ability and the divine right to exercise political authority. To experience the 'emotion of taste' was thus to demonstrate one's federation with nature, as well as one's competence to rule over it.⁴⁸

The 'nature' of the aristocratic subject, however, was profoundly and demonstrably different from that of its social inferiors. The carnal body and its functions were affiliated with an alien subjectivity, with a social class and a way of being more generally that was the antithesis of the cultured viewer. Identified almost exclusively with the underclasses – conflated, in fact, with the subjectivity of the labourer – the carnal body is treated as nameless, vulgar or farcical in order to disguise its hermeneutic potency. Beyond the boundaries of the garden, the body was mortal, dangerously real and increasingly difficult to control. It hinted at the spurious character of so-called natural law and emblemized a burgeoning social class who refused to be incorporated within it.⁴⁹ By dismissing corporeality as a/the matrix of subjectivity – by limiting the likeness between bodies – the practice of landscape viewing

choice of those and other great artists has been, learns to prefer similar forms and combinations of objects wherever they present themselves." Nicholson, op. cit., p15.

⁴⁶ Louis Marin discusses the aestheticization of power in this way. Citing Pascal: "Sound opinions of the people. - To be elegant is not overly vain, for it shows that a great number of people work for one. It is to show by one's hair that one has a personal valet, perfumer, etc., by one's bands, thread, braid, etc. But it is not simply superficial, nor is it a simple harness, to have several arms, [in one's service]. The more arms one has, the stronger one is. To be elegant is to show one's force (95-316)." See Marin, Louis. *Portrait of the King*, Martha M. Houle, trans., University of Minnesota Press, 1988, p27.

⁴⁷ The space of the subject is "given contours by the recognition of others and defined in the social, for the circuit of vision here is not an interior private affair, an inward sight which is compounded by the imagination or fancy, but an exterior social experience, in which the place of the subject is necessarily mediated by and inserted within society." De Bolla (1989), op. cit., p198.

⁴⁸ "[There] is no doubt, too, that the idea of a 'human nature' cannot be so readily divorced from the assumption of humanity's sameness with the animal world and rootedness within the order to nature. This is in part because the notion of our having a 'nature' carries with it something of that same necessity we attribute to animal and inorganic models of being: to speak of 'human nature' is to imply that we are possessed of preordained features, and subject to their order of needs in the way that other creatures also are." Soper, op. cit., p27.

⁴⁹ I am referring specifically to the emergence, throughout the eighteenth century, of the labouring class as a dissatisfied and vociferous player in the political arena. Alongside the enclosure of common land and the dissolution of the feudal system, increase in poverty and unemployment among the rural population was the subject of much concern and political debate. See Barrell, John, *The Dark Side of the Landscape*, Cambridge University Press, 1980; and Thompson, E. P., *The Making of the English Working Class*, Penguin Books, 1980.

functions to contain difference, and, as John Barrell has noted, to disavow a body that bespeaks too closely the growing affinity between the viewing subject and its social inferiors.⁵⁰

The landscape interface is both the medium through which the perspective paradigm acts to bring together virtual space and a virtual subject, and the means by which this merger is presented as 'natural'. Substantial effort is expended to naturalize the landscape interface and its subject; to conflate the *performance* of subjectivity with 'natural' behaviour, and perspectival visuality with 'natural' vision. For the eighteenth-century subject, the truth of representation is grounded not in the material body but within the 'social thickness of the visual' and the "virtual space of cultural forms."⁵¹ If the physical undertaking that attends the construction of the spectatorial body – the bondage, costuming, and pantomime involved in the presentation of an acceptable self – guarantees the integrity of the subject of landscape, it exacts a price in doing so. The physical discomfort that accompanies this elaborate self-presentation, I will argue, makes it impossible for the landscape interface to fully isolate the subject from its own materiality. If the landscape interface naturalizes perspectival vision, then it also foregrounds the embodiedness of perception, and of subjectivity. It is this dialectical movement between embodiment and disembodiment, between the interior and the exterior of the circuit of representation, that characterizes the virtual reality interface as well.

Virtual reality proper is a subset of cyberspace more generally. Typically, VR describes "a three-dimensional, interactive, realistic, real-time computer generated simulation providing direct input to the senses via a head-mounted display (HMD), Binocular Omni-Oriented Monitor (BOOM), DataGlove and similar devices."⁵² Though they are neither as complex nor as physically involving, less sophisticated VR interfaces, such as those used in video

⁵⁰ As Barrell notes in *The Dark Side of the Landscape*, it was as early as 1710 that the stability of Pastoral landscape "was being used, however obliquely, to describe an ideal of aristocratic life, and ... as such it was being felt to be threatened by an intrusive awareness of the world beyond the circles of the court; exactly as the primacy of 'natural' property in land was being challenged by the more mobile power of money, the hierarchical coherence of 'paternalist' society by what is perceived as a 'new' economic individualism." Barrell, op. cit., p15.

⁵¹ De Bolla (1989) op. cit., p285.

⁵² Kolasinski, Eugenia M., 'Simulator Sickness in Virtual Environments', U.S. Army Research Institute, 1995, www.cyberedge.com/4a7a.html

games, can also be understood as belonging to this category. Both, I will argue, stand to gain by being re-examined in light of the discourse of landscape. If the body and nature continue to figure into the description of the VR interface and its subject, however, our understanding of these terms differs profoundly from that of the eighteenth century subject. The postmillennial consciousness claims to have moved beyond simple accounts of ontological alterity. Both the body and nature have been thoroughly and repeatedly penetrated, both by technology and by poststructuralist semiotics. Whatever mystery they comprised has long since surrendered to a more sophisticated vision of the world and the subject.

The technology of vision may be structurally analogous to its eighteenth century counterpart, but it sits differently on the body, and acts on a different subject. Technological modernism recognized the subjectivity of vision, revealed the workings of the optical, re-evaluated our figurative understanding of it, and thus identified an opportunity for the economic and institutional (over)determination of vision. Modernity is characterized, in part, by its attempts to instrumentalize this sense, to refit the body to serve the needs of industrial capitalism:

This autonomization of sight, occurring in many different domains, was a historical condition for the rebuilding of an observer fitted for the tasks of "spectacular" consumption. Not only did the empirical isolation of vision allow its quantification and homogenization but it also enabled the new objects of vision ... to assume a mystified and abstract identity, sundered from any relation to the observer's position within a cognitively unified field.⁵³

The visual technologies of the industrial age differ from Brunelleschi's vision machine in their ability to reproduce optical truth independently of the capabilities of the individual observer. This distinction is actualized in the ongoing efforts to normalize the human subject; to constitute it as "something calculable and regularizable and ... human vision as something measurable and thus exchangeable."⁵⁴

Decking out the eighteenth century self was a form of semiotic practice; its purpose was to make subjectivity visible on the surface of the body. The costume of the garden visitor was less a display of the technology of vision *per se* than it was an indication that one possessed the means (both financial and rational) to administer it. The cybersubject decks itself out not in order to construct the body as a sign (and thereby to ratify the subject within an exterior

⁵³ Crary, op. cit., p19.

social circuit of vision), but to enable the body within a field of pure data – an hermetic space which presupposes a subject who is already thoroughly familiar with the perspective paradigm. In its assumption of a subject that enters its space knowingly, knows how to conduct itself as a virtual being, knows how and where to find itself in the view, VR could be described as an interface 'with' *costruzione legittima*. The space of VR, in other words, is designed for a postmodern subject whose ambient condition is one of technological colonization.⁵⁵ The gradual decline of the eighteenth century preoccupation with representation as a model for physiological vision indicates a 'shift of focus', away from the imposition of a specific *technology of vision*, and towards the thoroughgoing *technologization of vision*. Despite the similarities between Brunelleschi's device and VR simulation, it is clear, then, that one cannot simply map the discourses of landscape or Albertian perspective onto that of virtual reality.

This is not to suggest that the similarities between the two should be ignored. Though the paradigm is often said to have collapsed with the advent of Modernity,⁵⁶ linear perspective is far from obsolete, either as a technology or as an epistemological archetype. The serial transformation of Brunelleschi's device into the VR interface marks the progressive embedding of *costruzione legittima* not only within Western visual and spatial praxis but also within the very fabric of post-Renaissance subjectivity. For cybertheorist Mark Pesce, distance and direction typify the postmodern consciousness; they are precisely what distinguish it from animal consciousness – a form of sentience "unmediated, direct, and bound to the objects of perception", discontinuous, lacking in narrativity, unable to separate

⁵⁴ Ibid., p17.

⁵⁵ Crary characterizes the modern body as "a component of new machines, economies, apparatuses ... social, libidinal, [and] technological... [Subjectivity is] a precarious condition of interface between rationalized systems of exchange and networks of information." Ibid, p2. Similar claims can be made for the status of the postmodern subject; Adorno's critique of the 'technological veil and the myth of the positive' is conditioned by his perception of the penetration of everyday life by the 'pseudopoetry' of technology, "now so present in every detail that it no longer even needs to express itself as such. It is solely the power which stands behind this everyday poetry today and impresses us with its colourfast and lavish presentation..." see Adorno, Theodor, 'The Schema of Mass Culture' in *The Culture Industry: Selected Essays on Mass Culture*, J.M. Bernstein, ed., Routledge, 1991, p63.

⁵⁶ "Modernity ... coincides with the collapse of classical models of vision and their stable space of representations. Instead, observation is increasingly a question of equivalent sensations and stimuli that have no reference to a spatial location. ... [Almost] simultaneous with this final dissolution of a transcendent foundation for vision emerges a plurality of means to recode the activity of the eye, to regiment it, to heighten its productivity and to prevent its distraction." Crary, op. cit., p24.

this from *that*.⁵⁷ Pesce is not alone in understanding the postmodern consciousness as fundamentally perspectival in character.

As a means of depicting a reality apart from the material, the VR interface is clearly aligned with other, earlier modes of representation. So-called 'navigable' space is now a prevailing way to visualize and work with data. The space that is profiled in Gibson's *Neuromancer* and Disney's *Tron* – two of the earliest and most instrumental depictions of information space – is a direct, and privileged, descendent of Renaissance space.⁵⁸ The synthetic space that Gibson and Disney studios portrayed to their respective audiences twenty years ago holds out, virtually unchallenged, against other possible models for the visual re-presentation of data.⁵⁹ Typically, the visual field of VR is a deep space that extends outwards from the fixed point of the subject. This space is engaged in a manner which paraphrases the sequential movement from foreground to horizon that is theorized in/by the landscape interface. Both the simulation event and the view coalesce around the renunciation of materiality, bracketing off the 'real' world, installing in its place a system that, although it may appear empirically open, is nonetheless "theoretically isolated, closed in on itself".⁶⁰ This maneuver – known to philosophy as the phenomenological reduction – emblemizes the 'theorization' of vision that typifies both the landscape and the VR interface. The postmodern subject's continued dependence on this sort of visuality in order to make sense of its environment is

⁵⁷ "The consciousness of the animal - insofar as we might come to understand that which may not be *understood* - can be characterized as unmediated, direct, and bound to the objects of perception; unlike the philosophical gulf which divides the human self from the other under observation, animal consciousness regards the seer and the seen as one. It has not come to the consciousness which separates *this* from *that*. Information flow through the unconscious organism is episodic and driven by external stimuli. The primary attitude of the unconscious is indifference; things become worthy of attention when they change - presenting either a danger or an opportunity. The perception of events is entirely discontinuous, lacking the narrative which creates causality, the internal story-telling that reifies expectation into world-view." Pesce, Mark, 'Ritual and the Virtual' (1997) <http://www.hyperreal.org/~mpesce/caia.html>

⁵⁸ See Veltman, Kim H., 'Electronic Media: The Rebirth of Perspective and the Fragmentation of Illusion,' in *Electronic Culture: Technology and Visual Representation*, Timothy Druckrey, ed. Aperture Books, 1996, pp209-227. By organizing data in particular ways, claims Manovich, VR interfaces "privilege particular models of the world and the human subject. ... Interfaces also privilege particular modes of data access traditionally associated with particular arts and media technologies. ... Thus interfaces act as "representations" of older cultural forms and media, privileging some at the expense of others." Manovich, op. cit., p16.

⁵⁹ "In the first part of the 1990s, this vision has survived among the original designers of VRML [Virtual Reality Modeling Language]. In designing the language, they aimed to 'create a unified conceptualization of space spanning the entire Internet, a spatial equivalent of WWW.' They saw VRML as a natural stage in the evolution of the Net from an abstract data network toward a "'perceptualized' Internet where the data has been sensualized," that is, represented in three dimensions." Ibid., p250.

⁶⁰ Damisch (1995), pp139-140.

countenanced by its ubiquity in new media practice.⁶¹ Western science's reliance – from the Renaissance onwards – on 'evidence' in the form of visualizations has led Bruno Latour to characterize scientific instruments as "inscription-making devices that produce visual displays."⁶² Situated within this trajectory, VR is simply the latest and most sophisticated means of duplicating reality: the latest development in the progressive evolution of technologies of vision.

Lev Manovich's recent history of new media practice situates the VR interface in such a trajectory. Easel painting and cinema figure prominently in Manovich's history, which, in many respects, conceives of the interface as little more than a highly evolved instance of the pictorial screen. Such claims for the perspectival disposition of virtuality are, however, more often than not cast in the antiquated frame of Cartesian epistemology. As Crary has pointed out, the cinematic apparatus, like the camera obscura and the Enlightenment visuality that it allegorizes, merely reembodies the epistemological premises of bourgeois humanism – its hierarchical structure and its transcendental subject – rather than reconfiguring them.⁶³ As it took hold in late modernist scientific enterprises such as molecular biology and information science, Cartesian epistemology propagandized the idea that information patterning (genetic coding) takes precedence over its material substrate – the body or the hardware – in determining meaning and subjectivity.⁶⁴ VR pioneer Jaron Lanier insists that it is a mistake for technology to assume control over material life in this way:

Lanier has always clung ... to the belief that technology must enhance human life and opportunities for human contact, not supplant them. "If we allow our self-congratulatory adoration of technology to distract us from our own contact with each other," he says, ... "then somehow the original agenda has been lost."⁶⁵

⁶¹ Jeff Malpas has remarked that "[the] image of knowledge, and of our access to the world, that is projected by the Internet can ... be viewed as a continuation, perhaps even an exemplification, of a set of ideas that lie at the heart of modern epistemological thinking (and this is so in spite of the "postmodern" rhetoric that surrounds much contemporary discussion of the Internet)." Malpas, Jeff, 'Acting at a Distance and Knowing from Afar: Agency and Knowledge on the Internet.' in *The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet*, Ken Goldberg, ed., MIT Press, 2000, pp108-125, p110; 'Modern' epistemology in this instance clearly suggests the perspectival epistemology that is associated with eighteenth century thought.

⁶² Ihde, op. cit., p48.

⁶³ Crary, op. cit., p27.

⁶⁴ According to N. Katherine Hayles, this dualism emerged shortly after WWII, see Hayles, N. Katherine, 'The Condition of Virtuality' in *The Digital Dialectic: New Essays on New Media*, Peter Lunenfeld, ed. MIT Press, 1999, pp69-94.

⁶⁵ Burkeman, Oliver 'The Virtual Visionary', *The Guardian*, Saturday December 29, 2001; Guardian Unlimited website; http://www.guardian.co.uk/saturday_review/story/0,3605,625402,00.html (visited 3.01.02).

Virtuality is often described as a condition to which the material belongs as a substrate, but within which it has no active significance. Here, the virtual is not simply *opposed* to the real or physical, but has a profoundly different sense of finality; as the 'latent or potential', the virtual "can be realized as many different actualities."⁶⁶ It is this quixotic shading of virtuality that is responsible, in part, for the extent to which a visually overcoded technological imaginary informs contemporary descriptions of the interface, as well as the perception and praxis of space that such descriptions invite. If the discourse on VR is to do more than restate a superannuated philosophical agenda, however, it must pay attention to the way that present-day technologies of vision support and enable contact with *living* reality – the manner in which they signal the presence of the body in the subjectifying relation and the event of seeing.

Neglecting, by and large, the manner in which VR involves its subject kinaesthetically and with manifest sensuality, Manovich frames the history of interfaced being as a sort of creeping paralysis. Like the discourse of landscape, however, the simulation event demonstrates both the desirability and impossibility of ignoring materiality as the constitutive condition of interfaced being. As any neophyte gamer is well aware, the experience of VR is often less about euphoria than it is about frustration over the body's failure to perform: to act on time, to match the speed and complexity of the simulated world. The body is also susceptible to more radical forms of failure: VR sickness, for example, is an involuntary physiological response that returns the subject of the simulation to a state of helpless carnality. The allegedly indifferent postmodern body is still a site of anxiety and a force of nature, and the discourse of VR still embodies an imperative to control it.

Though virtual reality technologies may be responsible for the persistence of the perspective paradigm, they also have the potential to effect a profound transformation of the discourse of the interface, and thus to radically refigure Cartesianesque models of subjectivity. The figure of collapse is an important one here. Telescopy and microscopy brought visually remote objects into the range of human vision. Communications technologies accomplish a

⁶⁶ Canny, John, and Eric Paulos. 'Tele-Embodiment and Shattered Presence: Reconstructing the Body for Online Interaction,' in *The Robot in the Garden*, pp277-294, p294.

similar substitution of a 'technological near distance' for actual physical distance.⁶⁷ In the arts, it is Cézanne, and his efforts to 'suppress and dispel the sculptural',⁶⁸ that is generally credited with bringing about the collapse of Renaissance pictorial space. The collapse that concerns us here, however, is neither a transcendence of physical distance nor a transformation of the space of the image. It is the collapse of the 'distance of the picture': the disappearance, in the VR simulation, of the distance between the plane of the image and the eye that encounters it – a seemingly minor change in the body's relationship to the image which in fact signals a profound change in the way that the technology of vision is embodied, and in the way that embodiment itself is understood.

The issue of embodiment is a complex one. Certainly there is little doubt that material body would remain meaningless without the discursive or cultural markers that make the subject legible as such. This is the body as it is contoured by discourse; the "body upon which is written or signified the various possible meanings of politics, culture, the socius."⁶⁹ For Judith Butler, this 'performed' body is the site of a kind of virtual idealism. In *Bodies that Matter*, she argues for the materiality of the body as an effect of power: materiality, she claims, cannot be thought apart from the regulatory norm of 'sex' that makes the body culturally legible.⁷⁰ By assuming the body as a discursive effect, and thus as having no ontological status apart from the various acts which constitute its reality, Butler's constructivist argument provides the philosophical underpinnings for the idealization of virtuality and cyberspace more generally. Clearly, this formulation of embodiment needs to be rethought if it is to be of any use in the subsequent discussion.

If Cézanne was responsible for the collapse of Renaissance pictorial space, he was also responsible for the revelation that "the lived perspective, that which we actually perceive, is

⁶⁷ See Cairncross, Frances, *The Death of Distance: How the Communications Revolution Will Change Our Lives*, Orion Business Books, 1997. Electronic technologies, Cairncross claims, represent the 'world's third great transport revolution' (the first being the nineteenth century development of the railway and steamship, and the second, the personal mobility brought about by the automobile). The global movement of ideas and information, claims Cairncross, will have a widespread impact on the speed of innovation, the structure of the global economy, and the shape of culture itself.

⁶⁸ see Greenberg, Clement, 'Modernist Painting' in *Art in Theory 1900-1990: An Anthology of Changing Ideas*, Charles Harrison and Paul Wood, eds. Blackwell, 1992, pp754-760.

⁶⁹ *Ibid.*, p70.

⁷⁰ "The regulatory norms of "sex" work in a performative fashion to constitute the materiality of bodies..." Butler, Judith, *Bodies That Matter: On the Discursive Limits of 'Sex'*, Routledge, 1993, p2.

not a geometric or photographic one."⁷¹ Though postmodernity might claim have reduced the body to a constellation of codes, it has also – often unintentionally – acknowledged its hermeneutic density as well. The material or phenomenal body is the necessary condition – the ‘anthropomorphic invariant’, as Ihde terms it – of all technologies of vision. As an ‘invariant form’, the phenomenal body is

the existential body of living, here-located bodily experience, the sense of being elicited by Husserl as *Leib*, but much better descriptively developed by Merleau-Ponty as the *corps vécu*. ... [The] perceiving, active, oriented being-a-body from which we experience the world around us. It is the experience-as-body that is a constant of all our experiencings.⁷²

The meaning of the phenomenal body is “not directly or introspectively grasped – rather, it is interactively grasped by way of and in relation to the experienced environment or enviroing world. Its sense must be *reflexively* recovered.”⁷³ It is by means of this body that the subject experiences the phenomenal world.

Knowledge and experience, in other words, are *relational*. Since both the subject and the object(s) of its experience are situated in the world, subjectivity is always negotiated in/as a relationship with the material world to which one belongs. Contra the claims of various foundationalist philosophies, there is no reliable means of abstracting oneself from this relation or from one’s environment more generally. The same holds true for the interface through which the subject experiences the world. Technologies of vision – *costruzione legittima* and its various descendants – are not simply inert instruments operated by subjects. Whether or not these technologies take the material shape of artifacts, the relation between a technology and the subject who operates it is simultaneously discursive and material, perceptual and bodily. *This is the awareness that is suggested in the garden, and brought to light in VR and its discourses*. Rethinking the issue of embodiment, in other words, is more than a matter of deciding whether it is a discursive or a material condition. The body is both an invariant form and a cultural palimpsest; embodiment takes the form of a dialectical relation between the material substrate of the subject, and the cultural particularities which mark its materiality. With this in mind, let us turn to the issue of

⁷¹ Merleau-Ponty, Maurice, ‘Cézanne’s Doubt’ in *The Essential Writings of Merleau-Ponty*, Alden L. Fisher, ed., Harcourt, Brace, & World, Inc., 1969, pp233-251, p238.

⁷² Ihde, op, cit., p69.

⁷³ *Ibid.*, p69.

methodology in order to show how this dialectical movement between the cultural and the material is also played out in the form of the relation between theory and practice.

Methodology and plan of the present work

If subjectivity is a function of the relations that humanity maintains with the technologies it uses, then the abuse of these relationships can be seen as a threat to the subject. This threat is foregrounded in the c17th debate between Poussin and Caravaggio over the proper use of a particular technology of vision – linear perspective – in the practice of painting. Poussin sought to foreground the nobility of his subjects by approaching painting as a learned practice. For Poussin, relating a story through painting was a matter of structural consistency; remaining true to one's subject meant taking up a *perspective* and relying on this frame to confer *depth* to the narrative:

According to the discourse of the Master [Poussin], theory is not sight and cannot be reduced to aspects. Rather, it is a judgment involving a *prospect*. The fundamental condition of possibility of such judgments, then, is the prospective governing the entire surface of the canvas, the network or frame that, by constructing depth in and through the surface, builds the story itself...⁷⁴

Caravaggio, on the other hand, was captivated by the proximate. He showed little interest in constructing 'depth in surface', and even less interest in painting landscape.⁷⁵ Working from life, following no rules and exercising no rational judgement, Caravaggio was "carried away by the truth of nature as it appeared to him."⁷⁶ His permissiveness in the face of nature was more than a simple eschewal of rules, however: Caravaggio's refusal to adopt a *prospect* was a threat not only to the institution of painting but to the very configuration of subjectivity itself. As far as Poussin was concerned, theory and contemplation, the emblems of subjectivity, are explicitly opposed to the carnality of the undirected look.⁷⁷

The same anxiety over the theoretical status of the body is inbuilt in all discourses of virtuality, which share in their assumption of a distinction between the situation of the real

⁷⁴ Marin, Louis, *To Destroy Painting*, Mette Hjort, trans. University of Chicago Press, 1995, p6.

⁷⁵ Landscape, when it does appear in Caravaggio's work, is confined to background detail, such as in *The Sacrifice of Isaac* (1603), or *The Rest on the Fight into Egypt* (1596-7). Most often, however, his backgrounds are both featureless and distanceless, his figures suspended in depthless space, or emerging out of darkness – see *The Fortune-Teller* (c. 1598), or *Madonna dei Palafrenieri* (1605-6). As Timothy Wilson-Smith remarks, Caravaggio "was not like a nineteenth-century landscapist, forever painting in the fresh air; instead he had a love for gloomy cellars, lit usually by a single shaft of light high up on the wall to the left." see Wilson-Smith, Timothy, *Caravaggio*, Phaidon, 1998, p5.

⁷⁶ Félibien in Marin (1995), op. cit., p3.

body and that of its image. Consequently, the following discussion will pay close attention to the way that the relation between the subject and the technology of vision is constituted *in theory*. My concern is less to determine the actions of particular individuals than it is to examine the way that subjects are *intended to behave*, how the subject is theorized; how it is produced or intended by the discourse of the interface as "a position, a space or an opening within discourse."⁷⁸

As Ihde remarks, however, much of the history of epistemology itself "is one of different attempts to *disembody* the knower or to hide his or her embodiment."⁷⁹ The history of the perspectival interface, as it will be related here, is not simply a recital of various theories of representation, it is a history of the 'visible and invisible roles of bodies' in the operation of the interface and the constitution of its subject. What concerns us here, therefore, is not just the theoretical elaboration of the body/technology relation, but the way that this relation is played out in *practice*. As the following discussion will demonstrate, it is in the *failure* of theory to fully describe or contain practice – the lacuna within the discourse of the interface; the impossibility of completely isolating the carnal body in the event of seeing – that the character of this relation emerges most clearly. The discourse of the interface, I will argue, consistently links theoretical excess to the materiality of praxis.

This dialectical approach to the theory/practice relation will be carried through into my own methodology, which comprises two distinct critical approaches. Both psychoanalysis and phenomenology address the mutual articulation of subjectivity, visibility, and – to a greater or lesser extent – materiality, within the event of seeing and the discourse that surrounds it. In adopting these two approaches, my concern is neither to attempt to uncover a historical real, nor to revisit the calculated relation between historically specific technologies of vision and the subjects that operate them. History above all discourses points to the ultimate failure of representation to touch the historical real; to account for the material condition of past subjects and the constitution of past excesses. The bearing of present-day models of subjective formation on historical analysis takes on a different significance once we acknowledge this failure. Historical analysis, as De Bolla points out, is never "innocent in

⁷⁷ "The choice is between nobility and truth, between the subject and what is natural. ... between theory and contemplation on the one hand, the gaze and sight on the other." *Ibid.*, p3.

⁷⁸ De Bolla (1989), *op. cit.*, p5.

⁷⁹ Ihde, *op. cit.*, p68.

regard to our own legislative theories and policed practices."⁸⁰ In order to function as more than retrospective imposition, then, the theories of subjective formation employed by the historian must themselves be put under analysis; the model which is brought to bear on actions which appear related to the eye of the historian must itself enter the picture as a historical form.⁸¹ Both phenomenology and psychoanalysis are useful means of unpacking the discourse of the interface and its subject, but neither of these models, as I will show, is completely free of the determinations of the perspective paradigm.

The development of technologies of vision is not uniform over time. The movement of history, as Hayles points out, is less transformational than *seriation* – an archaeological term which describes “an uneven process of change in which new artifacts or ideas emerge by partially replicating and partially innovating upon what came before.”⁸² If *costruzione legittima* persists as a governing paradigm in the discourse of the interface, this tenacity is accompanied, as we shall see, by some profound transformations. VR suggests new models of subjectivity, different ways of conceptualizing self and body in/and space. While there is no question that the perspective paradigm is still an active term in present day economies of meaning, it persists in altered form; it is both historical and utterly contemporary. It is with this understanding of the ‘reflexive’ character of history – and in the interest of avoiding a strictly comparative approach – that I will be reading eighteenth century discourses of landscape and present day discourses of VR ‘through’ each other. In this context, and as they appear in the following discussion, then, the terms ‘Classical’, ‘modern’, and ‘postmodern’ should be understood as descriptive idioms, rather than strict periodizing concepts.

If VR and its discourse point to a profound lack within Cartesianesque theories of subjectivity, they are also born of these theories, emblems of their assumed authority and cultural resilience. The same can be said of the analytical tools that are brought to bear on the question of the self and its situation. Like the models of vision they are used to examine, analytical tools are more than ‘innocent technologies’. Psychoanalysis, as just such a tool, is by no means free of the epistemological determinations of *costruzione legittima*. Indeed, it is

⁸⁰ De Bolla (1989), op. cit., p15.

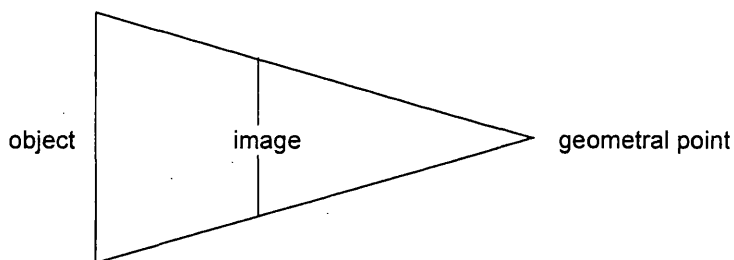
⁸¹ “The object for our analysis, then, is clearly not the past, but the interconnections between two discourses, historically distinct but contaminated by the present of analysis, and their participation within the larger network of the discourses informing, controlling, enabling and requiring the subject.” *Ibid.*, p17.

Lacan's model of the subjectifying relation that will serve as the fulcrum for much of the subsequent discussion – an archetypal example of the interface, as the latter functions in the *perspectival* mode.

Lacan and the screen of representation

If Alberti's *costruzione legittima* is the paradigm case of the perspectival interface, it is in the work of Lacan that we find this model most clearly indicated as an active force in the construction of the subject in/of visibility. Lacan's schema points up not only the depth at which the perspective paradigm is embedded in visual, spatial, and epistemological practice – the level at which a representational archetype informs the fabric of being and the contours of the self – but the extent to which this structure is shot through with relations of alterity. With this in mind, the model outlined below will serve as the reference point for all subsequent discussions of the perspective interface as the latter functions paradigmatically, in the mode of the screen of perspectival representation.

Lacan's 'double dihedron' of representation results from the superposition of two simple triangular figures. The first, modeled after the optical schema better known as the Classical circuit of representation, conceptualizes the way that the subject's relation to the world is constituted – *directed* – by means of vision.



This familiar arrangement – which is structurally analogous to Alberti's legitimate construction – schematizes "that form of vision that is satisfied with itself in imagining itself

⁸² Hayles, op. cit., p92.

as consciousness.”⁸³ Kaja Silverman has aptly described this state of perception as one of ‘scopic Cartesianism’, a conflation of seeing and being by which the look emanates from a subject situated as/at the ‘geometral point’, the null point of visible space. As Lacan himself remarked, this optical system – the geometral dimension of vision – has little to do with physiological vision; here, mastering the visible is a matter of looking in a particular way. Inasmuch as this model is aligned with Alberti’s, the formal apparatus it presupposes is

equivalent to that of the sentence, in that it assigns the subject a place within a previously established network that gives it meaning, while at the same time opening up the possibility of something like a statement... [Words] are but points, while propositions are arrows that have meaning, which is to say direction.⁸⁴

‘Direction’, in Damisch’s quote, has to be understood in terms of both administration and orientation. It refers in the first instance to the ordering and management of space in/as representation; the making of meaning out of the world and the simultaneous inscription of the self into the world through this act. Additionally, it refers to the manner in which the subject is invited to conceptualize the mode of its relation to the world: in/as the operation of a look which is oriented *away* from the point of the subject. The subject of geometral representation is thus animated by two apparently contradictory desires, each intricately embedded in the other – synthesis with the world it perceives, and an equally powerful aspiration to differentiate itself from the same. As the null point of the circuit of representation and the medium through which vision encounters the world, the subject is thoroughly integrated with what it perceives. As a being whose perceptions are always already determined by the system that underpins the event of seeing, the subject is necessarily, irreconcilably, separate from the world of its perceptions.

The image is the result of a point-by-point correspondence established between an object in space and the likeness (real or virtual) which appears on a plane interposed between this object and the eye of the observer. All points in the image are linked to the point occupied by the subject – the geometral point – inasmuch as the visual rays running from the object to its image all converge here, at the point of the subject.⁸⁵ It is along the centric ray, however

⁸³ Lacan, Jacques. *The Four Fundamental Concepts of Psychoanalysis*, Jacques-Alain Miller, ed., Alan Sheridan, trans. Penguin Books, 1994, p74.

⁸⁴ Damisch (1995), op. cit., p446.

⁸⁵ “Vision is ordered according to a mode that may generally be called the function of images. This function is defined by a point-by-point correspondence of two unities in space. ... That which is of the mode of the image in the field of vision is therefore reducible to the ... relation of an image, in so far as it is linked to a surface, with a

– Alberti's 'prince of rays', the ray that runs perpendicular to the plane of the image – that the synthesis of the subject with the field of the visible is established most categorically. The centric ray establishes the place of the subject in the circuit of representation by linking the viewing position outside the picture with the vanishing point 'inside' it.⁸⁶ According to Damisch, the demonstration of this link is the most significant aspect of Brunelleschi's experiment:

What Brunelleschi's experiment demonstrates ... is that the point we today call the "point of view" coincided, in terms of projection, with the one we call the "vanishing point": both are situated at the intersection of the perpendicular sight line and the picture plane – this perpendicular itself ... dubbed ... the centric ray; the same ray that ... pierces the picture plane, ... coming straight from the eye to that spot in the image homologous to the point from which a spectator established at the designated place would perpendicularly "pierce" the real object.⁸⁷

Here, vision serves an urge to unification – part of the very organizing function that defines the I as such – which "increases in proportion as the "I" develops and differentiates itself from the "that.""⁸⁸ This compulsion to synthesis is played out in the form of the purposeful, directed look; the gaze that aligns itself with the centric ray, the copula between the subject and that which it perceives:

Among all the rays which emanate from the eye, the centric ray pierces right to the heart of vision. By extension, on the far side of the object the lines of sight begin to converge once again, establishing the vanishing point of its perspectival representation. While the centric ray is not precisely equated with the vanishing point, the alliance between the most distant point in the painting ... and the initial ray emanating from the eye at the origin of the "look" is an obvious one.⁸⁹

Depth of field in the image is constructed through the convergence of orthogonals towards the vanishing point – the 'reinscription' of the geometral point within the depths of the image.

certain point that we shall call the 'geometral' point. Anything that is determined by this method, in which the straight line plays its role of being the path of light, can be called an image." Lacan, op. cit., p86.

⁸⁶ As Norman Bryson points out, inasmuch as both painter and viewer are subject to this reduction, Alberti's conception of the subject is, apparently, rigorously Cartesian: "[The] eye of the viewer is to take up a position in relation to the scene that is identical to the position originally occupied by the painter, as though both painter and viewer looked through the same viewfinder on to a world unified spatially around the centric ray..." see Bryson, Norman, *Vision and Painting: The Logic of the Gaze*, MacMillan, 1983, p104.

⁸⁷ Damisch (1995), op. cit., p120.

⁸⁸ Ibid, p124.

⁸⁹ Holly, Michael Ann, *Past Looking*, Cornell University Press, 1996, p18.

The subject-as-position is not simply mirrored in this distance,⁹⁰ it is implicated in its very formation – an involvement which, as Silverman remarks, “calls radically into question the possibility of separating vision from the image – of placing the spectator *outside* the spectacle, in a position of detached mastery.”⁹¹ The look is a vector, an extension of the self into the field of the visible, a means of grasping the visible, finding oneself within it and making it one’s own.

If the constitution of the self within language is the foundation of subjectivity, then the screen of representation also acts to *differentiate* the subject from its surroundings by organizing subjectivity as the effect of a signifying relation. Emile Benveniste has pointed up the exclusivity of this relation by drawing attention to those instances in discourse where the subject is announced by constituting itself as I – an ‘empty’ linguistic form, proper to no real individual but available to all in/as an act of appropriation, a means of identifying oneself as unique, distinct from *you* or *them*.⁹² All such terms are “defined only with respect to the instances of discourse in which [they occur], that is, in dependence upon the I which is proclaimed in the discourse.”⁹³ If the subject of discourse is situated by designating itself as the I within language, the subject of perspectival vision does so in analogous fashion, locating itself as the I/eye by taking up the position of the viewing subject. Subjectivity, in Benveniste’s argument, is fluid and intermittent: held in abeyance outside of the specific discursive moments in which it emerges, and in need of constant discursive renegotiation. Within both the Benvenistian and Lacanian arguments, there is no such thing as an experience unmediated by discourse; the symbolic order always intervenes to separate the subject from that which it sees.⁹⁴

Benveniste’s model, however, allows us to see a little more clearly how this differentiation is spatialized. Within his argument, the *here* of the subject is “coextensive and contemporary

⁹⁰ Technically, of course, the geometral point is not *mirrored* at all; as Damisch remarks, it is “thrown far back behind the image of the observer, who will have it, so to speak, *at his back* – or ... behind his head.” Damisch (1995), op. cit., p121.

⁹¹ Silverman, Kaja, *Male Subjectivity at the Margins*, Routledge, 1992, p146.

⁹² “In some way language puts forth “empty” forms which each speaker, in the exercise of discourse, appropriates to himself and which he relates to his “person,” at the same time defining himself as I and a partner as you. The instance of discourse is thus constitutive of all the coordinates that define the subject...” Benveniste, Emile, *Problems in General Linguistics*, Mary Elizabeth Meek, trans., University of Miami Press, 1971, p227.

⁹³ *Ibid*, p226.

⁹⁴ “[It] is a structural fact, if not a structural effect, that when man comes to terms with the symbolic order, his being is, from the very start, entirely absorbed in it, and produced by it, ... as *subject*.” Damisch (1995), p20.

with the present instance of discourse containing I.”⁹⁵ Articulated alongside one another, *here* and *I* congeal in a subject for whom difference is framed, implicitly, in/as *distance* from the self: *over there* describes a situation both spatially and temporally remote from the subject. If subjectivity is declared in the instatement of a distance between here/I and there/you, then agency is given, in part, as mobility within this distance.⁹⁶ As we will see, however, this movement between self and other has a specific, monodirectional character.

As the preceding paragraphs suggest, the operation of the perspective interface is not confined to the realm of the visual. *Costruzione legittima* is more than simply a structural analogy for Lacan’s schema; this particular technology of vision also has its own, specific *discursive* function. The perspective interface imposes a spatial arrangement upon objects by means of a system of conceptual oppositions. It is not only within written and spoken language, then, that the ‘virtual grid of oppositions’ operates; this grid is assumed by any system of representation which aspires to the conceptual enclosure of objects of knowledge and experience:

Language is understood ... as linguistic representation, in terms of the tabular system of opposed elements which make up language. In the field of figurative space, the order and proportion of Renaissance perspective performs a parallel discursive reduction of the visible to the representable. ... [The] geometrization of perspective determines the visibility of objects as their relation to other objects on the spatial grid of the perspectival plane. The rule of discourse is thus the claim to order being as a structure of meanings, to identify existence with the representable by the establishment of the exclusive rule of a network of oppositions between concepts or signifiers.⁹⁷

Visuality – the geometral space of vision – is, as Lacan was quick to point out, not about physiological optics at all, but about the mapping of space.⁹⁸ Panofsky makes a similar claim when he characterizes perspectival construction as a mathematical abstraction of psychophysical space.⁹⁹ Like mathematics and cartography, which are concerned with

⁹⁵ Benveniste, op. cit., p219.

⁹⁶ “Perspective ... has this in common with language, that in and by itself it institutes and constitutes itself under the auspices of a point, a factor analogous to the “subject” or “person” in language, always posited in relation to a “here” or “there,” accruing all the possibilities for movement from one position to another that this entails.” Damisch (1995), p53.

⁹⁷ Readings, op. cit., pp3-4.

⁹⁸ “[The] geometral space of vision ... is perfectly reconstructible, imaginable, by a blind man. ... What is at issue in geometral perspective is simply the mapping of space, not sight.” Lacan, op. cit., p86.

⁹⁹ “Exact perspectival construction is a systematic abstraction from the structure of ... psychophysical space. For it is not only the effect of perspectival construction, but indeed its intended purpose, to realize in the representation of space precisely that homogeneity and boundlessness foreign to the direct experience of that

regulation and enclosure, inscription and transliteration, the perspective interface constructs space theoretically. This theoretical construction – or ‘discursive reduction’ – orders being by situating it in a homogeneous space that can be read, identically, over and over again.

In order to be read properly, however, the space constructed by means of the perspective paradigm must be set apart from its surroundings, and engaged by a particular kind of subject. Whether it takes physical or conceptual form, the frame around an image is vital in establishing the space in/of that image as worthy of the subject’s focussed attention:

[If] all aspects of the painting are to be properly considered, then a frame must effectively separate the pictorial space from the space that surrounds it. ... Being part of neither the viewer’s nor the painting’s space, the frame can neutralize the surrounding world. This neutralization directs the eye’s rays toward the painting, locking them into its space. From that moment on, the optical pyramid consists only of the painting.¹⁰⁰

The space that opens up for the viewer is a virtual space, designed to be experienced by a virtual body; an insubstantial, infinitely mobile self as uniform as the space it inhabits. As I will go on to argue, the impression that the subject is ‘free to move’ within this space is entirely spurious, however. Though the circuit between *here* and *there* can be traversed at will, *ad infinitum*, the relation implied by this movement is a strangely static one – that of a subject-in-theory to an immanent and homogeneous visual field, designed for a particular kind of engagement. But the maintenance of this ordered ‘interior’ is not the sole function of the frame: the circuit of representation has an ‘outside’ as well, and this outside plays a vital role in describing the limits of being as such. If the latter is identified with the interior of the circuit of representation, what sort of existence is attributed to those things that cannot be represented?

We might phrase this question a bit differently by asking what the subject gives up in order to participate in the circuit of representation. Rather a lot, as it turns out: under Lacan’s argument, being is incompatible with meaning. The subject’s entry into signification takes place at the cost of a permanent alienation from the condition of imaginary plenitude which

space. In a sense, perspective transforms psychophysical space into mathematical space.” Panofsky, Erwin. *Perspective as Symbolic Form* Christopher S. Wood, trans. Zone Books, 1991, pp30-31.

¹⁰⁰ Marin (1995), p33-4.

characterizes the presymbolic state. It is this pre- or extrasymbolic state that Lacan calls the 'real'. As that which lies outside of the circuit of representation and which, in that sense, always threatens to destabilize it, the real consists, in part, of the subject's "organic nature, ... [its] phenomenal experience."¹⁰¹ The real describes that which cannot be integrated into the symbolic order, an incoherent condition which it is the task of representation to conceal. We should be cautious, however, in understanding the category of the real as unequivocally 'outside' (or, as I will go on to argue, in conflating the real with 'nature'). Lacan's own use of the term was characterized by a radical indeterminacy, and part of my intent here is to demonstrate just how difficult it is to pin down exteriority as a condition, particularly when this exteriority is linked, as it is in the discourse of the interface, to the question of the subject and its constitution. Parveen Adams captures something of the innate mutability of the term when she describes the real as "an order ... in respect to which 'existence' itself lacks."¹⁰²

Whatever the texture of presymbolic being, it is the rupture with this being that is the genesis and motivation of desire in the Lacanian subject. Because it is directed towards ideal representations – such as the imagined integrity of the specular image, for example – desire is destined never to be satisfied but rather to persist unfulfilled and to be reproduced as such. It is this permanently unfulfilled desire that generates lack in the subject.¹⁰³ Representation plays a vital part in defining for the subject what it lacks: "Not only does language provide the agency of self-loss, but cultural representations supply the standard by which that loss is perceived."¹⁰⁴ Though representation may not be up to the task of picturing the subject's desire *per se*, it is nonetheless vital in specifying the subject's lack – and thus in manufacturing its desires.

If it is the task of representation to veil the real, to prevent it from appearing within representation, this is not to suggest that it is entirely successful in doing so. It is the unanticipated appearance of the real within representation that is detailed by Lacan in *The*

¹⁰¹ Silverman, Kaja. *The Subject of Semiotics*, Oxford University Press 1983, p164.

¹⁰² Adams, op. cit., p55.

¹⁰³ "Desire has its origins not only in the alienation of the subject from its being, but in the subject's perception of its distinctness from the object with which it earlier identified. It is thus the product of the divisions by means of which the subject is constituted, divisions which inspire in the subject a profound sense of lack." Silverman (1983), p177.

¹⁰⁴ Ibid., p177.

Four Fundamental Concepts of Psychoanalysis, in his discussion of the anamorphic image. In Holbein's *Ambassadors* (1533), the vanishing point and corresponding position of the viewer in front of the picture are clearly indicated by the precise rendering of the various objects in the foreground. From this position, the anamorphic skull in the foreground appears as nothing more than a meaningless shape, a formless incursion into the theatrical space of the image. In order to disencrypt this odd apparition, to render it legible to the eye, the viewer must approach the painting and look obliquely, from a position on the right, about halfway up the frame.

Looking at the picture from this position, the image of the skull is neither close nor distant; neither confined within the frame, nor sharing space with the viewer, who is left with the uncomfortable feeling of being unable to establish a specific distance from it, unable to superintend its appearance. Standing next to the painting, face to face with it, the subject is no longer a subject of representation – that condition has been momentarily suspended, and if the subject finds itself at all, it is in/as a transgressive position very near the limits of representation. The anamorphic image forcefully alters the subject's relation to the frame, and thus to itself. To see in this condition, as Foster remarks, is "to be blinded by the gaze or touched by the real."¹⁰⁵

With this brief glimpse of the real, the subject of the anamorphic image (if it can be called a subject at all) has been revealed in its true light: not as the agent of vision, but as the captive of the gaze. The latter dimension – always eluded in the figures of representation, rarely visible to the subject and, in fact, having "nothing to do with vision as such"¹⁰⁶ – comprises the reflexivity of vision and visibility: how the condition of looking is always accompanied (pressurized) by the sense of *being looked at*:

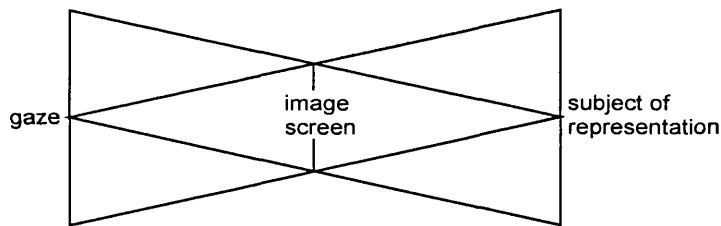
We are beings who are looked at, in the spectacle of the world. That which makes us consciousness institutes us by the same token as *speculum mundi*.¹⁰⁷

The notion of the gaze changes the 'lines of force' that organize the world around the geometral subject. Because it signals a consciousness of being looked at by others – an awareness of being made visible as a subject – the gaze shatters the illusion of ownership

¹⁰⁵ Foster, Hal, 'Obscene, Abject, Traumatic' in *October* 78 (Fall 1996) pp. 107-24, p109.

¹⁰⁶ Lacan, op. cit., p88.

¹⁰⁷ *Ibid.*, p75.



that characterizes the directed look, and reveals the subject of visuality as *lacking* in agency. Outside of the circuit of representation, the subject no longer exists as such; instead, it is 'mere animal, caught up in the gaze of the world', on display as the object of (the) others' vision.

If the gaze is the 'underside of consciousness', that which forms or structures seeing,¹⁰⁸ then it is rarely revealed as such to the subject. Clearly there are compelling reasons for concealing the reflexivity of vision, for ensuring that the gaze never makes its way into the circuit of representation proper. As Holbein presents them, the 'inside' and an 'outside' of representation comprise, respectively, that which is visible from the proper viewing position, and the shapeless – and menacing – ruins of another image *visible from the wrong place*. As they are given in/by *The Ambassadors*, inside and outside require and complete each other and between them describe the full measure of representation. This, as we will see, is the isomorphic relation that is insisted upon by the discourse of the interface.

The anamorphic image is, as De Bolla remarks, the excessive image par excellence; included in almost all treatises on perspective up to the end of the eighteenth century, it is widely recognized as a means of proclaiming the limits of the perspectival gaze, describing its necessary conditions, and revealing the instrumentality of the perspective paradigm itself.¹⁰⁹ The anamorphic image is 'native' to the picture plane; it maintains a merely superficial resemblance to its object in that the latter is not to be found, alongside the other

¹⁰⁸ "The gaze, as conceived by Sartre, is the gaze by which I am surprised – surprised in so far as it changes all the perspectives, the lines of force, of my world, orders it, from the point of nothingness where I am, in a sort of radiated reticulation of the organisms. As the locus of the relation between me, the annihilating subject, and that which surrounds me, the gaze seems to possess such a privilege that it goes so far as to have me scotomized, I who look, the eye of him who sees me as object. In so far as I am under the gaze ... I no longer see that eye that looks at me, and if I see the eye, the gaze disappears. ... The gaze I encounter ... is, not a seen gaze, but a gaze imagined by me in the field of the Other." Ibid., p84.

¹⁰⁹ Anamorphosis, as Dalia Judovitz remarks, reveals the relationship between "vision understood as a theory of representation, and its instrumentalization as a technical device." Judovitz, op. cit, p64.

represented objects, in the space 'behind' the plane of the image. The anamorphic image seems to belong to a different register of reality than the rest of the image; it is both an aberrant element *within* representation and an phantom object with strange density and agency outside of it. As I will go on to argue, it is this ability to destabilize the border between inside and outside, and to reveal the participation of the material body in this transaction, that is the 'real' power of enchantment of the anamorphic image.

plan of the present work

Inasmuch as it details the operation of a/the perspectival interface as such, Lacan's model is particularly well suited to an analysis of the eighteenth century English landscape garden. Chapter one will take up this model in an examination of the landscape interface and its subject, establishing the affinity of Lacan's geometral subject with the eighteenth century subject of landscape. Here, I will show how the landscape view functions in the manner of Lacan's screen of representation, and how the monodirectional relation of the geometral subject to the perceived world is also that of the subject of landscape. Both of these models, I will argue, are theoretical elaborations of physiological vision that confine the subject to a unique position in order to secure and maintain the distance not only between the subject and what it sees, but between the subject and its own materiality. In this way, both models act to guarantee the integrity of the boundary between the interior and the exterior of the event of seeing.

If the landscape interface functions to secure the subject in theory, it has much less to say about the consistency of the subject in practice. This chapter will also address those aspects of the garden experience which point up the difficulty of maintaining distinct boundaries between theory and practice, the interior and the exterior of representation, and which thus hint at the limits of the Lacanian model. The experience of the subject in the Shades, as I will demonstrate, is comparable to that of the anamorphic image. Not only do the Shades point up the mobility of the subject – and hence the difficulty in confining it to a single 'correct' viewing position – they also threaten to collapse the distance between the subject and its field of vision. In the Shades, it is not so much what one sees, but the *proximity* that one suddenly enjoys with it, that is troubling. The Shades bring the subject face to face with

the territory outside of representation – the Lacanian real. As it is framed by the discourse of landscape, the field of the real is affiliated with unaltered nature – the extracultural, that which is shapeless or formless by definition.

Though the Shades can be understood as a simple presentation of representation's other, this interpretation is less successful in accounting for those aspects of the garden experience that brought the eighteenth century subject into uncomfortably close contact with the material body – and thus with an exterior of representation that was more than simply formless. The Shades threaten the stability of the subject by bringing it into close proximity not only to the objects of vision, but to its own carnality. For the garden visitor, the materiality of the body was occasionally brought to light as an unwelcome awareness of the heat and sweat of restrictive garments, the discomfort occasioned by the movement of the costumed self from one scene to the next. It is the irrefutable experience of pain that exposes the impossibility of fully divorcing the body from the subject of representation. The Shades, in other words, gesture towards the limits of the Lacanian model: its insistence on the solidity of the boundaries of representation, and its failure in accounting for subjectivity in anything other than theoretical terms.

Whether or not this awareness was present as such to the eighteenth-century consciousness is a question that is beyond the scope of the present work. Rather than a retrospective imposition of contemporary theory onto historical content, the affinity between the landscape interface and the Lacanian model will be understood, in this instance, as an indication of the debt owed by Lacan to eighteenth century visuality. What this first chapter will establish, then, is the extent to which the discourse of the interface, the discourse of landscape, and the Lacanian model all share some fundamental presuppositions about the character of vision, space, and the body, and about the disposition of subjectivity amongst these three terms. From this point in the discussion, the three can be assumed, for purposes of argument, to stand for the same thing.

Whatever the durability of the material and mathematical foundations of the perspective interface – and the Cartesianesque ontology and epistemology that it endorses – the

historical codes that are appended to it are, clearly, subject to change. Vision, as Crary points out, is historically determined.¹¹⁰ So, I will argue, are excess and materiality. If the observing subject, as he remarks, cannot exist outside of “an irreducibly heterogeneous system of discursive, social, technological, and institutional relations,”¹¹¹ then nor can it exist in the absence of a carnal body. Clearly, however, claiming the body as an anthropomorphic invariant is not necessarily to imply it as a historical invariant as well. Indeed, as I will go on to argue, the understanding of materiality as a historical constant is ideologically linked to the homogenization of the carnal body by the discourse of the interface – a project that is motivated, in the eighteenth century, by social factors, and in the twentieth century, by economic ones.

Chapter two addresses the historical transformation of the key terms associated with the discourse of the interface in the two centuries separating landscape gardening from virtual reality. It details, in necessarily abbreviated form, the shift from Classical to (post)modern epistemology and the allied distinctions between the subject of the garden, and the subject as it is conceived by technological modernity. As we shall see, this entails a shift in the production and recognition of excess: the ‘framing’ of excess by the discourse of landscape gives way to the recognition, on the part of the postmodern subject, of excess as a constructed term. Nonetheless, this epistemological shift does not necessarily imply a wholesale transformation of values. As we have already established, the history of the interface is characterized by persistence and transformation. By way of illustration, and in order to introduce the second methodological model into the discussion, this section will conclude with a brief discussion of Husserl’s phenomenology. As we will see, Lacan’s dependence on perspectival models of subjectivity is shared by Husserl as well.

The third and final chapter will begin by establishing the structural correspondence of the landscape interface and that of VR. It will demonstrate the way in which the former provides

¹¹⁰ “What changes are the plural forces and rules composing the field in which perception occurs. And what determines vision any given historical moment is ... the functioning of a collective assemblage of disparate parts on a single social surface. ... There never was or will be a self-present beholder to whom a world is transparently evident. Instead there are more or less powerful arrangements of forces out of which the capacities of an observer are possible.” Crary, *op. cit.*, p6.

¹¹¹ *Ibid.*, p6.

the figurative paradigm for the spatialization of data in/as cyberspace, for the 'direction' of the subject by the interface, and for the naturalization of the VR interface itself. Like the landscape view, the simulation functions as a closed circuit of representation, depicting data as territory to be explored, and appearing, at least superficially, to fully isolate the carnal body from the event of seeing. Inasmuch as it accomplishes this, then VR surely represents, as some claim, the 'embodiment of postmodern disembodiment'.

Discursive excess is framed similarly within both landscape and virtual reality. Though the distinction between the postmodern subject and its Classical counterpart is clear in many respects, the consistency of the exterior – the condition of exteriority – in the simulation is still understood to consist of the linked variables of nature-as-extent, and nature in the form of the corporeal body. It is this 'natural' body which is most often held responsible for the failure of the VR interface; the first section of this chapter will examine how VR sickness is attributed to the 'natural' responses of a body that has no ontological responsibility within the circuit of representation.

Despite the similarities between the VR interface and that of landscape, the two nonetheless differ profoundly in important respects. In VR, the placement of viewing screens within a few centimetres of the eye means that the distance between the body and the image no longer exists. In the simulation event, 'you are the screen' – a radical contraction of the distance between body and image which promises a concomitant expansion of the terrain of representation. The collapse of this distance means the removal of the space given to the body to act within the circuit of representation, to engage the image anamorphically. Rather than the 'doubled' identity of the subject of representation, (its simultaneous engagement of virtual space and physical space), Manovich claims that the subject of the simulation thus exists in a single 'coherent' space – that of the physical space and the virtual space that continues it.¹¹² This is clearly not the case, as I will argue; the amalgamation of physical and virtual space by the simulation is anything but 'coherent'. The elimination of the body's capability for movement within the space of representation does not mean that it is no longer present within the event of seeing. The second section of chapter three will re-examine the

¹¹² "[Painting] presents a virtual space that is clearly distinct from the physical space where the painting and spectator are located. At the same time, it imprisons the spectator through a perspective model or other techniques so that she and the painting form one system. Therefore, if in the simulation tradition, the spectator

phenomena of VR sickness and Alternate World Syndrome, suggesting how these should be framed not as failure, but as an indication of the involvement of the body in the creation of meaning and subjectivity. As the simulation event demonstrates, the event of seeing is not necessarily reducible to the event of seeing *in perspective*.

This, as it turns out, is the point where the Lacanian model fails: his model was designed and destined for a technology of vision does not take the form of an instrument, and his subject is, consequently, a subject *in theory* alone. The VR interface, by contrast, is not, and can never be, wholly theoretical; in VR, the technology acts on the body, the technology is present on and to the body, and the subject acts through it. Though he may deal in the reflexivity of perception, Lacan ignores the subject's reflexive material relation with the instrument, and what happens when the reflexivity of perception goes from an abstract relation to a structural reality. If a discourse can be seen as actively calling for the theoretical approach by which it is examined, then the critical approach demanded by the VR interface is, by and large, a phenomenological one. Here, Merleau-Ponty stands out in his attempt to bridge the gap between the body and the perceived world: to re-evaluate the notion of the 'thinking I', the viewing/knowing subject.

The phenomenological method enables the understanding of the relation between the individual and technology as more than a Cartesian account of the relation between a subject and a distant and neutral object. The relation between body and technology in VR is not one of distance, but one of radical proximity. If distance is a fundamental concern within the discourse of landscape, I will suggest that *proximity* is the key figurative paradigm within VR technologies. Phenomenology espouses this relation of proximity, allowing us to take as the 'primitive' unit not the technological object itself, but the reflexive *relation* between the technology and its operator. In this way it avoids assuming technologies as neutral objects which are then given their meanings by subjects, and understands their uses – both practical and ideological – as 'ambiguous and multistable'.¹¹³ By critically engaging the notions of proximity and reflexivity, I will show how anamorphosis can be re-appropriated as a model for cybersubjectivity and cyberontology.

exists in a single coherent space, in the representation tradition, the spectator has a double identity. She simultaneously exists in physical space and in the space of representation." Manovich, *op. cit.*, p113.

The human/computer interface may be, as Manovich claims, a direct descendent of the printed word and the cinematic image, but it also suggests new ways of conceptualizing the relation between the subject and its technologies. Manovich frames this dialectic in terms of the reciprocal influence of 'cultural' and the 'computer' layers of the interface:

The computerization of culture gradually accomplishes [a] transcoding in relation to all cultural categories and concepts. That is, cultural categories and concepts are substituted, on the level of meaning and/or language, by new ones that derive from the computer's ontology, epistemology, and pragmatics. New media thus acts as a forerunner of this more general process of cultural reconceptualization.¹¹⁴

I wouldn't quite describe it as a forerunner. Manovich is a little too eager to see new media as the shock troops of cultural change. But it is impossible to ignore the fact that VR and its discourse raise questions about the disposition of reality and actively challenge the perspective paradigm as an epistemological model. Increasingly, VR discourse is moving towards a different kind of ontology, and a different relation between theory and practice.

The perspectival interface functions on both the material and the theoretical plane. In the latter case, this takes more than the inert form of a proposition: it is the lived experience of the Cartesian subject. Whether it takes material or theoretical form, in other words, the interface is not a passive technology brought to bear by a subject on an equally benign material body. The body, as Lefebvre reminds us, "subsists precisely at the level of the reciprocal movement between [the material and the abstract]."¹¹⁵ The same can be said of the technologies through which the subject engages the world. As we will see, questions raised by the actions and reactions of the body within the simulation event point the way towards potential new forms in the discourse of analysis. The event of looking in VR suggests its own, different interpretive framework, one which differs profoundly from Lacanian and Cartesian models of subjectivity, and parts company with the visually biased discourses which associate themselves with this model. Ihde uses the figure of the

¹¹³ "Technologies do not determine directions in any hard sense. ... [While] humans using technologies enter into interactive situations whenever they use even the simplest technology ... the possible uses are always ambiguous and multistable." Ihde, op. cit., p131.

¹¹⁴ Manovich, op. cit., p47.

¹¹⁵ Lefebvre, op. cit., p4.

'epistemology engine' to describe technologies that function along these lines, devices that bring "human knowers into intimate relations with technologies or machinic agencies through which some defined model of what is taken as knowledge is produced."¹¹⁶ The perspective interface is just such an 'epistemology engine'. In part, it is the visualist bias of interface technologies – their concern with image quality and information and the technological constructionism that accompanies these concerns¹¹⁷ – that is under examination in the present study. There are, however, 'new realities' to be met with in our interaction with the interface; realities which, as Ihde maintains, will be revealed by examining such technologies not simply as instruments, but as embodied praxes, means of engaging the world. Indeed, it is around the notion of the interface, as Ihde argues, that the critical phenomenological approach to knowledges takes shape.¹¹⁸ The praxis of looking itself suggests new analytical tools.

This dialectical approach to the relation between theory and practice is also borne out in the way I will approach the garden as a historical object. The various voices that make up the discourse of eighteenth century landscape garden speak clearly to the issue of the body, and its problematic presence in the circuit of representation – both pictorial and historical. Historical investigation in/of the garden is less a matter of *theorizing* a history or of laying bare a particular truth, than it is a matter of reconsidering history as an embodied practice involving choices – political, aesthetic, etc. – which determine the present. As historical discourse, the garden makes quite explicit the power of historical investigation – the interface through which the subject engages with the past – to shape both the subject and (its) nature in the present. It is in light of this redistribution of historical intentionality – the need to account for the reflexivity of the relation between the historian and the objects she/he studies – that the phenomenological model again suggests itself. I will conclude this introductory chapter by taking a brief look at the garden and its history, in order to

¹¹⁶ Ihde, op. cit., p69.

¹¹⁷ "The better the image and the better the information revealed, the more highly constructed and the more thoroughly technological has been the process of producing this knowledge. ... [We] are today a very long way from the simplistic notions of objectivity and mechanical representationalism of the late nineteenth century. Were we to develop an epistemology based upon current science praxis, we would have to include a deep and critical analysis of precisely this instrumental, technological constructionism." Ibid., p49.

¹¹⁸ In the "interconnection of embodied being and environing world, what happens in the interface is what is important. At least that is the way that a phenomenological perspective takes shape." Ibid., p87. Oddly, this is the only time in the entire book that he uses the word 'interface.'

underscore its significance within the following investigation, and in order to introduce a phenomenological approach that will be developed in more detail in the final chapter.

The garden and (its) history

Because of its extensive and well-documented history, the following discussion will focus largely (though not exclusively) on the landscape garden at Stowe, in Buckinghamshire. Restoration of the Stowe landscape garden has been under way since the late 1950s.¹¹⁹ These efforts have been justified in part through the identification of the landscape itself as an art object,¹²⁰ and thus of its many views as historical artifacts of considerable aesthetic and political merit.¹²¹ Consequently, restoration efforts have focused not only on the conservation and preservation of architectural features, but on the reconstruction of historical views. The latter project involves both the removal of certain 'poorly placed' features (mostly trees), and the careful screening of nineteenth and twentieth-century development which interferes with these views.¹²² Screen planting, in particular, is a complex concern; the most effective means of concealing later additions to the landscape is not always the most aesthetically coherent. Evergreens, in particular, were not widely used in landscape gardening until the late eighteenth century – even then, they were generally thought to be better suited to a wilder, more 'gothic' environment than deciduous trees – and the well-meaning efforts of some of the garden's stewards has created difficulties for restorers:

It should be emphasized that the object of those in charge of the Stowe woodlands is not, as seems commonly supposed, merely to plant trees to hide new buildings some of which are, aesthetically speaking, unfortunate

¹¹⁹ see Cornforth, John. 'Achievement and Challenge: the Preservation of the Stowe Landscape.' *Country Life*, April 24, 1996, pp1108-1110.

¹²⁰ "Apart from a certain dissension about cleaning, it is universally agreed that one does not destroy or deface a great painting; but a living, designed landscape is in far greater peril, for few recognise it for a work of art, and few have any qualms about destroying or defacing it." Mounsey, Michael. 'Preserving a Landscape: Restoration of Stowe's 18th-Century Design.' *Country Life*, September 4, 1958, pp464-466, p464.

¹²¹ Championing the restoration of Stowe, the architect Clough Williams-Ellis made the following remark in a 1921 letter to the editor of *The Spectator*: "Properly arranged and wisely administered Stowe might become a great cultural centre, a place where the arts and the humanities as well as history might have an effective civilizing influence on a democracy that is in danger of missing just those things that made the old aristocracy its superiors." in Hall, Michael. 'Stowe Landscape Gardens - II' *Country Life*, February 29, 1996, p36.

¹²² The view from the top of this hill looking back is one of the loveliest at Stowe. ... The ground sweeps down to the lake and the road carries the eye in a most satisfying way down, over the bridge and up to the gate, framed by a bank of trees on either side. These trees hide the new residential development and must therefore be treated with the utmost care. Mounsey, op. cit., p466.

and have created formidable screening problems; for buildings are not always erected where trees are otherwise wanted, and a solid quick-growing evergreen screen can look almost as unsightly as that which it is grown to hide; not everything green is beautiful.¹²³

Implicitly, such restoration efforts seek to reconstruct not just the view, but its subject; to position the contemporary visitor in the same manner as the eighteenth century subject of landscape. Whether or not this is actually possible is not the point; what is of most concern here is the unquestioned assumption of a technology of vision that is assumed to be both ideologically neutral, and exempt from historical change. While this kind of approach may tell us something about the view as a historical way of seeing, it neglects to address the way that the view continues to function in the present. The view itself also functions as a paradigm for an idealized way of looking into the past; a figure of history that orders itself "in relation to a horizon of ideality from which ... it [derives] its meaning – in other words, something like perspective."¹²⁴ Inscribing the garden within a trajectory that derives its shape and its momentum from the perspective paradigm effectively positions the historian as/at the origin of a retrospective look, an objective historical gaze that immobilizes its objects at the same time as it grants them a kind of immortality. Assuming that eighteenth century views are perfectly legible to twentieth-century visitors overlooks the extent to which the consistency of the present-day subject is informed by this sort of historicized vision – and thus ignores some of the more interesting tensions that are played out in the contemporary garden visitor.

This sort of historical approach to the garden also neglects to address the ways in which the latter works to secure a nostalgic (and ideologically expedient) vision of nature within present-day discourse. To view, as we have seen, is also to assume a particular definition of, and attitude towards, nature. The latter, as a concept, "is certainly always employed as if it referred us to what is 'essential', 'true', or 'authentic' to us, but it is a usage that at the same time necessarily denies the historicity of what has been believed at any time to be the dictate of nature."¹²⁵ At any point in time, what counts as nature "is seen to be the upshot of such processes as argumentation and negotiation in which are deployed rhetoric, discourse,

¹²³ Mounsey, p464.

¹²⁴ Damisch (1995), op. cit., p77.

¹²⁵ Soper, op. cit., p33.

representation."¹²⁶ The facticity of nature is also dependent on resources such as "funding, materials, equipment, [and] human allies in the form of funders, consumers, [and] legislators."¹²⁷ As a site which brings together all of these variables, the garden functions as a microcosm of the heterogeneous range of resources that work together to establish the contours of postmillennial nature. Nonetheless, the remnants of Enlightenment descriptions of nature persist in the means by which we engage the garden visually and aesthetically, and the historicity of such descriptions is largely overlooked in contemporary literature. This reduction of nature's semiotic complexity finds its way into the design and preservation of so-called 'natural' landscapes as well, inflecting the way in which we respond, as a culture, to the environment which surrounds us.¹²⁸

Approaching a historical artifact as such involves positioning oneself in the present: choosing (implicitly or explicitly) to orient oneself towards the past and its objects in a particular way; assuming certain things in order to render these objects legible to the contemporary imagination. We have seen what is at stake, politically and ontologically, in the notions of 'correct' positioning, and legibility within the event of seeing. These issues, when brought to bear uncritically on the construction of (a) history, tend to reduce historical investigation to the production of "descriptions which, although they may be regarded as primarily and properly historical, tend to be reduced to appropriations of a past age by the powerful operation of our own controlling myths of selfhood."¹²⁹ These kind of descriptive models ignore the degree to which historical objects are themselves active in soliciting a particular kind of historicized look.

The most important question facing (art) historians today, as Michael Ann Holly understands it, is not whether one should focus on the objectivity of the artworks themselves or the subjectivity of their interpreters, but how this dualism itself can be unsettled. This is *ethos* of the anamorphic model. As a paradigm for historical investigation, anamorphosis speaks not

¹²⁶ Michael, Mike, *Reconnecting Culture, Technology, and Nature: From Society to Heterogeneity*, Routledge, 2000, p19.

¹²⁷ *Ibid.*, p20.

¹²⁸ see Crandell, Gina. *Nature Pictorialized: The 'View' in Landscape History*. Baltimore: Johns Hopkins University Press, 1993.

¹²⁹ De Bolla (1989), p5.

just to the way that the subject positions itself in relation to the work, but to the way that the work itself positions the spectator. Historical objects work to prefigure what is said about them, and the way in which it is said. Such objects, claims Holly, "have seductively "set us up" as spectator-historians to say certain things in certain rhetorically persistent ways."¹³⁰

In the context of historical research, then, the anamorphic or phenomenological model shifts attention away from perception as an objectifying activity that sets out to determine what an object *is*, and redirects it, as Melville remarks, towards a highly general and consequential way of understanding one's experience of an object, one's 'attachment' to it. Historical investigation, in this sense, is less about taking up a 'proper' position than it is about entering into a reflexive relation with the object or objects of study. This emphasis on reflexivity; as Melville remarks,

alters the relation between the critic or historian and what one might be tempted to call "the work itself" – when an object is understood as given only and always in experience, we can no longer separate subject ... and object ... in the way that a more "scientific" ... history might prefer; ... this means that the field in which the historian operates is itself thoroughly historical, and so the historian's activity cannot be imagined as the discovery, restoration, or delivery of the work from something that might be imagined as its historical corruption, forgetting, or transformation – rather, it is itself part of those processes.¹³¹

This model frees interpretation from dependence on notions of authorial intention, and of delimitable and stable context. In this sense the anamorphic model functions as a figure for examining the consistency not only of the historical object itself, but of the subject who would look 'objectively' at its history. This subject, claims Holly "is compelled to repeat, or at least react to, the conceits of spatial and temporal positioning, the logic of figuration, in his or her historical account."¹³² Anamorphosis, as we will see in more detail in the final chapter, foregrounds the *mobility* in/of subjectivity; it points up the shifting character of the relation between the subject and the objects it encounters, and questions the extent to which the subject (in theory) can be said to be 'in control' of its relationship to these objects. Against the idea of an 'isomorphic' history – a narrative into which is written the notion of interior and exterior; a screen through which the past is viewed by a static, neutral observer – the

¹³⁰ Holly, Michael Ann, *Past Looking*, Cornell University Press, 1996, p8.

¹³¹ Melville, Stephen, 'Phenomenology and the Limits of Hermeneutics' in *The Subjects of Art History: Historical Objects in Contemporary Perspective*, Mark A. Cheetham, Michael Ann Holly, Keith Moxey, eds., Cambridge University Press, 1998., pp143-154, p152.

¹³² Holly, op. cit., p24.

anamorphic or phenomenological model allows us to conceive history as a discipline which admits of both 'movement and stasis': the formation and re-formation of the subject within the event of looking.

It is impossible to establish a history, Mark Cousins argues, unless the object of investigation has a relatively stable identity.¹³³ Both the spatial and historical identity of the garden are difficult to establish; establishing a precise history is a problematic project. Historically, the garden has always been distinguished by the fluidity of its spatial boundaries and its unstable spatial context. If the boundary between the garden and its surrounds was deliberately indistinct at the time of its creation, in the present it is even less clear. Typically occupying vast tracts of land, there are very few gardens in existence today whose space has not been given over, at least in part, to housing developments, highways, industrial parks, or other more 'productive' use. The question of what to conceal and what to preserve is a vexed one. With very few exceptions, the status of the historical garden is that of a ruin – a dis-integrated object, the emblem of the transience and fragility of capitalist culture.¹³⁴

The same uncertainty also characterizes the garden's temporal boundaries. The claims of historical scholarship to truth, Cousins contends, are based in the production of evidence. The latter category, in turn, "is one which profoundly privileges the notion of the *event*, a singular entity in time whose existence and identity it is the task of investigation to establish."¹³⁵ It is the category of the event that is the "central if unacknowledged *a priori* of historical thought. ... [it] is the condition which enables historical discourse to establish the truth of alleged facts."¹³⁶ Clearly, the garden resists periodization or objectification in/as an event. Typically, it has no single 'author' and no precise moment of origin or completion; no amount of excavation or reconstruction will reveal it exactly as it existed at a particular point in time. As an object in constant evolution, it is difficult, if not impossible, to establish definitive boundaries for the garden as a historical event:

¹³³ "The impossible project of establishing an infinite series of differences would in effect prevent any object from having a history." Cousins, Mark, 'The Practice of Historical Investigation' in *Poststructuralism and the Question of History*, Attridge, Bennington, & Young, eds. Cambridge University Press, 1987, p128.

¹³⁴ Buck-Morss, Susan, *The Dialectics of Seeing: Walter Benjamin and the Arcades Project*, MIT Press, 1999, p164.

¹³⁵ Cousins, op. cit., p131.

¹³⁶ *Ibid.*, p133.

To the extent that gardens depend on natural material, they are at best ever-changing ... but at worst they are destined for dilapidation and ruin from their very inception. Given this fundamental contribution of time to the being of a garden, it not only exists in but also takes its special character from *four* dimensions.¹³⁷

Though documentation – garden plans, receipts, accounts, etc. – may exist, there is almost never any reliable means of corroborating this sort of evidence; no indication in or on the garden itself to indicate precisely when works were carried out. The ‘truth’ of the garden’s origin, in other words, is impossible to establish. The garden eludes the traditional understanding of historical time. As an object, it is neither fixed nor finished, and can revert to an unimproved state in a relatively short space of time.¹³⁸ Its constitutive elements – the vegetative and the architectural – are always at odds with one another. Not only does overgrowth of plants significantly reduce the lifespan of buildings,¹³⁹ but standard archaeological research is more or less useless in verifying historical planting – once again, the evidence is thin on the ground.¹⁴⁰ Even while actively maintained, the garden, by definition, exists in a state of constant flux, it exhibits a fluid materiality that the historian would rather not acknowledge.

Claremont, in Surrey, stands out as an example of the heterogeneity of period and authorship in the landscape garden. Described as a ‘microcosm of eighteenth century garden history’, Claremont was worked on by Sir John Vanbrugh, Charles Bridgeman, William Kent, and Capability Brown, among others. The site was originally purchased by Vanbrugh in 1708, and then sold on to Thomas Pelham-Holles (later Earl of Clare and Duke of Newcastle), who consulted Bridgeman when he enlarged the grounds in 1716. Bridgeman’s original design was added to and ‘deformalized’ by Kent between 1730 and 1750. Further deformalization was undertaken by Brown between 1768 and 1774; these

¹³⁷ Hunt, op. cit., p15.

¹³⁸ Heligan garden, in Cornwall, was in active use until around 1920, abandoned shortly after the end of the First World War, and put under restoration beginning in 1990. The seventy years which intervened were enough to almost completely eradicate any indication that the garden had ever existed. See Smit, Tim, *The Lost Gardens of Heligan*, Orion Books, 1999.

¹³⁹ “The growth of trees in the landscape has not only caused problems in terms of architectural composition, in the relation of buildings (such as the Temple of Friendship) to their surrounding flora, but in the conservation of stonework, which is strongly influenced by the micro-climate in which it finds itself. The recent removal of overgrown trees surrounding structures such as Queen Caroline’s Monument has already played a significant role in arresting the decay of the stone.” Inskip, Peter, ‘Discoveries, Challenges, and Moral Dilemmas in the Restoration of the Garden Buildings at Stowe’, *Huntington Library Quarterly*, Vol. 55 (1992), pp511-525, p520.

¹⁴⁰ see Wheeler, Richard ‘The Park and Garden Survey at Stowe: The Replanting and Restoration of the Historical Landscape,’ in *The Huntington Library Quarterly*, Vol. 55 (1992).

works included the planting out with evergreens and cedars of the massive turf amphitheatre, designed by Bridgeman, and built around 1725. Further modifications, mostly in the form of additional buildings, were carried out throughout the nineteenth century; the property was acquired by the National Trust in 1949, and restoration work began in 1975.¹⁴¹

Historical incongruities aside, many gardens that are still extant today have a strongly integrated feel. This appetite for aesthetic homogeneity is apparent in a great many instances and could still be said to characterize preservation efforts in general. At Packwood House in Warwickshire, restorations undertaken between 1850 and 1930 were designed to integrate seamlessly with the remains of the original seventeenth century house and garden. At both Chatsworth and Wilton, the addition of new features is deliberately in keeping with the garden's historical feel. Chatsworth is a particularly good example of the sort of effort that is expended in order to ensure that twentieth and twenty-first century alterations fuse seamlessly with earlier period features.

As a historical object in the traditional sense, the landscape garden presupposes and sustains specific (historical) notions of subjectivity and epistemology. The reconstructed historical view is, in effect, an attempt to position to the subject both spatially and historically; a theoretical conflation of space and time that ignores the way that both the view and its subject act in the present. In practice, however, the garden-as-artefact cannot avoid undermining its own agenda, pointing up the impossibility of occupying a 'real' historical body. The anamorphic approach to history that is suggested by the garden demonstrates how the meaning of historical objects emerges in/as the reflexive engagement of the subject and the lifeworld. The carnal body will always act as a limit to historical knowledge; the very material of which it is made – the mortality that it shares with the art historian – is the very thing that problematizes the latter's objectivity.

History is a dialectical process. More recently, restoration efforts have begun to take this into account, to focus on the chimerical character of the garden as a historical event, and to articulate an approach to history that is more 'painterly' than perspectival. At Claremont,

¹⁴¹ see Beharrell, C.H., *The Claremont Landscape*, National Trust Publications, 1984.

restoration efforts have concentrated on restoring individual features “to whichever period ‘spoke’ most strongly from the ground,”¹⁴² rather than restoring the entire garden to a single period datum. Peter Inskip, discussing the restoration of garden buildings at Stowe, suggests that this non-periodizing approach to history is the most effective way for restoration work to proceed. Work on the conservation of historic buildings, as he remarks, “can be put on a scale, graded between preservation and re-creation, with conservation, consolidation, restoration, and anastylosis [the practice of piecing together dismembered remains of buildings] falling (in that order) between the two extremes.”¹⁴³ Straightforward restoration is the preferred alternative only in cases of loss through decay, or to reverse twentieth-century alterations. In most situations, however, restoration efforts must contend with changes in taste and the consequent aesthetic alterations in garden buildings during the active period of the garden’s history. Modifications carried out during this time have their own historical significance in the context of the developing landscape; as Inskip remarks,

it would not be desirable ... to reinstate the obelisk finial [on the East Boycott Pavilion at Stowe] that was replaced by Borra’s dome in 1758, as this would negate an aesthetic decision of one of the formative owners to remodel the building so that it was more in harmony with the developing landscape.”¹⁴⁴

This sort of approach to conservation is concerned that different historical strata should remain visible, and works against the desire for a sense of historical or aesthetic closure in the present. It also suggests how the garden, as *ruin*, can be politically productive:

The debris of industrial culture teaches us not the necessity of submitting to historical catastrophe, but the fragility of the social order that tells us this catastrophe is necessary. The crumbling of the monuments that were built to signify the immortality of civilization becomes proof, rather, of its transiency. And the fleetingness of temporal power does not cause sadness; it informs political practice.”¹⁴⁵

Conducting the subject between a sited and a calculatedly ‘unsited’ vision, the garden points up the ‘correct’ point of view as an attitude that must be purposively taken up, both historically and within representation. Frustrating attempts on the part of the subject to ‘know’ it; it suggests, inevitably, the limits of the historical subject. With these caveats in mind, let us now turn to the garden, and its history.

¹⁴² Ibid., p26.

¹⁴³ Inskip, op. cit., pp521-2.

¹⁴⁴ Ibid., p522.

¹⁴⁵ Buck-Morss, op. cit., p170.

Though it is difficult to say precisely when landscape was first recognized as a subject worthy of aesthetic consideration, the prestige of English landscape gardening began to rise early in the eighteenth century, when 'men of taste' – of leisure and education, schooled in the practice of philosophical criticism – began to appreciate the countryside in terms of painting.¹ By the 1730s, ideas put forward earlier in the century by commentators like Lord Shaftesbury, Sir William Temple, Joseph Addison, and Alexander Pope, had crystallized into a new fashion in 'natural' landscape gardening.² Along with poetry and painting, gardening was one of the three 'sister arts', or, as Horace Walpole dubbed them, "the Three New Graces who Dress and adorn nature."³ The significance of the English landscape garden is both aesthetic and political. Its informality emblemized the liberty of English society; aesthetically and ideologically, it was a response to the geometrical rigor of French gardens and the autocracy that they symbolized.⁴

John Dixon Hunt has remarked on the lack, within the discourse of landscape, of a set of 'first principles' that served for garden art the same purpose that Vitruvius, for example, served for architecture. Instead, the garden functions as a condensation, in three dimensional space, of many of the formal and aesthetic principles shared with its sister arts. As I will argue, it was the perspective paradigm, by and large, which served the function of a more specific legislative discourse in shaping both the landscape and its subject. Given the relative stasis of perspective theory throughout this period,⁵ the following discussion will focus less on stylistic differences that emerge over the century (the distinctions between, for instance, Charles Bridgeman's rectilinear designs of the 1720s, Capability Brown's

¹ See Ross, Stephanie, 'Ut Horsus Poesis – Gardening and her Sister Arts in Eighteenth-Century England.' *British Journal of Aesthetics*, Vol. 25, No. 1 (Winter 1985); pp17-32. See also Martinet, Marie-Madeleine. *Art et Nature en Grande-Bretagne au XVIII^e Siècle*. Paris: Aubier-Montaigne, 1980.

² see Thacker, Christopher, *The Genius of Gardening: The History of Gardens in Britain and Ireland*, Weidenfeld and Nicolson, 1994, p159.

³ cited in *Ibid*, p17.

⁴ As William Chambers remarked, the dominion of the garden was a politically inclusive one: "[Its] effects upon the human mind certain and invariable; without any previous information, without being taught, all men are delighted..." from 'A Dissertation on Oriental Gardening', in *The Eighteenth Century: Art, Design, and Society 1689-1789*, Bernard Denvir, ed., Longman Group Ltd., 1983. See also Franklin, Jill, 'The Liberty of the Park' in *Patriotism: The Making and Unmaking of British National Identity*, Volume III: National Fictions, Raphael Samuel, ed., Routledge, 1989, pp141-159, p142; and Fabricant, Carole, 'The Aesthetics and Politics of Landscape in the Eighteenth Century', in *Studies in Eighteenth-Century British Art and Aesthetics*, Ralph Cohen, ed., University of California Press, 1985.

⁵ De Bolla (1989) *op. cit.*

minimalist landscapes of the 1750s, and the taste for picturesque gardens that developed in the final decades of the century), in order to concentrate on the structural paradigm that unites them. Though the vogue for large-scale private gardens had passed by the turn of the nineteenth century – aesthetic, political, and economic factors led to the gradual abandonment of such projects in favour of smaller private gardens and public parks – the way of seeing that they endorsed continues to influence the design and perception of landscape.

Even at their most formulaic, landscapes are notably less authoritative than other types of images in dictating a single 'correct' viewing position – that point from which the image appears undistorted. The characteristic forms of landscape – topography, foliage, water – lack the geometrical precision of architecture or the conventionally delimited shape of the human body; it is difficult to say whether what one is seeing is distorted or not, and thus the issue of the correct viewing position is always, to some extent, a vexed one. In the garden, this indeterminacy is heightened by the fact that the body is not materially distinct from the canvas surface or from the representation as object. In the landscape garden, the subject is literally 'in the picture'; the viewing body is immersed in the very illusion that the I/eye seeks to create, and subjectivity, as we will see, is constantly open to the possibility of rearticulation.

The first part of this chapter will examine the landscape interface as it operates in the paradigmatic guise of the landscape view, considering the various means by which landscape interface creates distance, frames nature, and directs the spectatorial gaze. Here, as I will demonstrate, space is ordered by and for a spectator whose disposition can be compared to that of Lacan's geometral subject. Consequently, the management of excess consists, in large part, in the re-presentation of nature as external – as ontologically distinct from the subject as such.⁶ Framing nature is a tricky operation, however; by definition, the landscape interface is concerned with representing that which, for most of the eighteenth century, is characterized precisely by its unrepresentability – that which is 'shapeless by nature'.

This is the problematic that will be examined in the second half of this chapter, which concentrates on the Shades – the enclosed sections of the garden – and the various

difficulties associated with the representation of the amorphous. No longer directed by the protocols of viewing, the material body risks emerging into the circuit of representation, threatening the integrity of the border between the interior and the exterior of representation. Excess, as it shows itself in moments such as these, is a less manageable concern: the very 'uncodifiability' of this excess suggests that it be understood in light of the Lacanian real. Here, the failure of the interface to maintain the various conceptual oppositions that sustain subjectivity poses a threat to the subject itself. The Shades thus demonstrate how the garden functions not simply as a platform on which to stage one's subjectivity, but as a site where the subject risks disintegration.

⁶ see Ritvo, Harriet, 'At the Edge of the Garden: Nature and Domestication in Eighteenth- and Nineteenth-Century Britain', *Huntington Library Quarterly*, Vol. 55 (1992), pp363-378.

1.1 The View

Of Nature's various scenes the painter culls
That for his favourite theme where the fair whole
Is broke into ample parts and bold;
Where to the eye three well-mark'd distances
Spread their peculiar colouring. Vivid green,
Warm brown and black opaque the foreground bears
Conspicuous; sober olive coldly marks
The second distance; thence the third declines
In softer blue, or less'ning still, is lost
In faintest purple.⁷

Advising Chantelou on the best possible way to read a painting, Poussin pointed up the need for a frame "so that, in considering it in all its parts, the eye shall remain concentrated, and not dispersed beyond the limits of the picture by receiving impressions of objects which, seen pell-mell with the painted objects, confuse the light."⁸ Post-Renaissance visual culture insists on this concentration of the look, and of the frontal viewing position that it invited – idiosyncrasies which went on to become structural requirements of the discourse of landscape. While not conspicuously mathematical, the space of Classical landscape painting is nevertheless highly systematic,⁹ and it is the subtle authority of this spatial geometry that serves as the archetype for the landscape gardener. As Alexander Pope announced famously, 'all gardening is landscape painting'. Horace Walpole's estimation of the genius of William Kent fixed the gardener's debt to painting in even more explicit terms:

The great principles on which he worked were perspective, and light and shade. ... Thus selecting favourite objects, and veiling deformities by screens of plantation; sometimes allowing the rudest waste to add its foil to the richest theatre, he realised the compositions of the greatest masters in painting.¹⁰

The understanding of landscape painting as a model for the landscape garden was articulated as early as the 1730s – detailing the features of Wooburn Farm in Surrey, Philip Southcote makes repeated reference to the techniques of landscape painting – and

⁷ William Mason, *The English Garden*, 1772

⁸ Marin (1995), p33.

⁹ "A characteristic both fundamental and common to all [Classical landscape] pictures is a type of pictorial space in which receding strata create an impression of depth; foreground, middle ground and background are seen as a series of layers parallel with the picture plane and linked together by gently zigzagging diagonal lines. The framing side sections are similarly composed, balancing one another in symmetry or contrast and leaving the centre free to focus on the action." Lagerlöf, op. cit., p20.

persisted until the end of the century.¹¹ Arguably, it is the 'naming' or codification of environment via the conventions of painting – the *framing* or '*pictorialization*' of '*nature*' – that characterizes the landscape interface as such.¹²

Ideally, the frame is intended to effect a "rupture in the perceptual continuum. This rupture constitutes a new space, the unique function of which is to manifest a range of shapes and colors before the gaze of the attentive viewer."¹³ To view a landscape is, in effect, to be in 'two places at once': the carnal body present in front of the representation, the viewing self in the imaginal space of the landscape. The view, in other words, is a virtual space, 'homogeneous and boundless' (to paraphrase Panofsky), invested with the all of the sense of possibility that characterizes the virtual. 'Prospect', in this sense, refers to both the compass of the field of vision and to its anticipatory mien. Whether or not this virtual space opens up for the subject is a matter of the latter's imaginary identifications and its location in real space. Though the one is not reducible to the other, both are articulated around the notion of *distance*.

Before any identification with the image can take place, the subject must, of course, be in a position to see the image correctly. In principle, all representations constructed in perspective – even a perspective as apparently unregulated as that of the Classical landscape view – require the subject to position itself at a specific distance from the plane of the image. This distance is known to the discourse of painting as the *distance of the picture*. The latter term, taken from Brook Taylor's *Linear Perspective* of 1715, refers to the prescribed mathematical distance between viewer and image plane – the measure

¹⁰ See Walpole, Horace. 'The History of the Modern Taste in Gardening' in Chase, Isabel Wakelin Urban, *Horace Walpole: Gardenist*. Princeton: Princeton University Press, 1943, p44.

¹¹ "'Perspective, prospect, distancing and attracting' - 'perspective' meaning 'looking *under* trees to some further object', 'prospect' meaning 'looking *by* trees', and 'by distancing you may make an object *look three times as far off* as it is. This is done by narrowing the plantation gradually on each side, almost to a point at last.'" cited in Thacker, op. cit., p190. Writing in 1798, Uvedale Price made the following remarks: "In all I have written on the subject of improvement, one great purpose has been to point out the affinity between landscape-painting, and landscape gardening; in this case, the affinity is very close indeed. The landscape-gardener would prepare his colours, would mix and break them, just like the painter; and would be equally careful to avoid the two extremes of glare and monotony: Every aim of the painter, with respect to form, and light and shadow, would likewise be equally that of the gardener." in *An Essay on the Picturesque, as Compared with the Sublime and the Beautiful; and, on the Use of Studying Pictures for the Purpose of Improving Real Landscape*, (2 Vols.), London, 1798, Vol II, pp44-5.

¹² For an interesting take on this, and an examination of how nature and landscape continue to be conflated in present-day economies of meaning, see Crandell, Gina, *Nature Pictorialized: the 'View' in Landscape History*, Johns Hopkins University Press, 1993.

¹³ Marin (1995) p34.

demanded by the image in order to be seen 'correctly'.¹⁴ In theory, this distance must be maintained in order for the subject of representation to be articulated as such.¹⁵

Identification, on the other hand, refers to the subject's positioning *within* the image: the work done by the subject in establishing a relation to the image, and the consequent transformation undergone by the subject in assuming this image. In the case of landscape representation, this involves not the incorporation of an image-body as such, but the incorporation of a *distance from the self*. To be fully articulated as a subject of landscape is to discriminate between where one *is* and where one *could be*; the subject of landscape works to create and maintain the distance between the *here* of the eye/I and the *there* of the horizon. Viewing is thus not simply a matter of identifying a particular virtual space, but of siting oneself as/at the null point of this space.

Viewing, however, is about more than simply identifying point of view and horizon, it is about traversing, visually, the distance between the two. For the subject of landscape, *movement* within the interval between here and there is typically monodirectional; the function of the horizon, in this sense, is not simply to limit the gaze, but to polarize it, to figure the subject as the absolute 'here' in relation to a 'there' which is both indistinct and promissory. For the viewing subject, the horizon figures pure possibility: it guarantees that everything that lies beyond the frontiers of the seen and the known will at some point submit to the dictates of reason. Here, the horizon is less a figure of mystery and enigma than it is a metaphor for the apparently limitless potential of the human intellect – and thus of the civil subject. Joseph Addison, in *Pleasures of the Imagination*, remarked that 'a spacious Horizon is an Image of Liberty';¹⁶ the mobile gaze, in other words, is the property of a subject that is both

¹⁴ "[No one] can form a proper judgement of the beauties or defects of either portrait or landscape, unless he knows exactly the centre and *distance of the picture*; as it cannot possibly appear to the eye of the spectator in any other point of view, agreeable to the painter's intention..." (italics added) Clarke, H., *Practical Perspective: Being a Course of Lessons Exhibiting Easy and Concise Rules for Drawing Justly All Sorts of Objects*, Vol. 1, London, 1776, p94. As De Bolla terms it, the distance of the picture is "the space perspective theory deems the only true one..." De Bolla (1989), p198-9.

¹⁵ "The viewer does not take to the picture his or her subjectivity, rather, the opposite case pertains in which the subject is produced in the space between the eye and the canvas in the distance of the picture. Therefore the subject in the circuit of vision becomes the subject in and of representation, and the task perspective theory addresses is to restrict the subject to its proper place, its subject position in the 'real' of viewing: the true point of sight." Ibid., p197.

¹⁶ "The Mind of Man naturally hates every thing that looks like a Restraint upon it, and is apt to fancy it self under a sort of confinement, when the Sight is pent up in a narrow Compass, and shortened on every side the by the Neighbourhood of Walls or Mountains. On the contrary, a spacious Horison is an Image of Liberty, where the Eye has Room to range abroad, to expatiate at large on the Immensity of its Views, and to lose it self amidst the Variety of Objects that offer themselves to its Observation. Such wide and undetermined Prospects are as

intellectually capable and politically emancipated.

The great trick, of course, was getting 'real' space to behave in this way. It was common knowledge that the eye had a predisposition to wander; adopting the landscape interface was, in part, a means of curbing this inclination. Viewing, in the landscape garden, required a concerted effort on the part of the viewer: the cataloging and meticulous disposition of features in order to concentrate and direct the look.¹⁷ 'Eyecatchers', as Horace Walpole noted, were necessary both to incite the gaze and to limit it: to 'animate the horizon' and to bestow 'immediate termination' on the look.¹⁸ Lord Shaftesbury gave explicit instructions for the organization of sightlines in his garden at Wimborne St. Giles – "Only for ye guiding of ye Eye up that Hill and so to ye end of ye reset Fields where ye great old Yew Tree stands"¹⁹ – and Gilpin's admiration for the View of the Pyramid at Stowe in his 1748 *Dialogue on the Gardens* was directed towards its structure as much as its content:

You must know I look upon this as a very noble Prospect! The Field is formed by that Semi-circle of Trees into a very grand Theatre. The Point of Sight is centred in a beautiful manner by the Pyramid, which appears to great Advantage amongst those venerable Oaks...²⁰

What is at stake here is the creation of a space that appears homogeneous to the eye. The body's relation to this space is less important, a bias that is revealed in the design and placement of garden architecture. In most gardens, the scale and disposition of architectural features was dictated by their appearance from specific locations in the garden; their apparent distance from the viewer had no necessary connection with their actual physical size. At times, this disjunction between appearance and reality can be quite jarring. At Stowe in Bucks, for instance, the Lake Pavilions are deliberately undersized in order to elongate the view from the house; what appears grand from a distance turns out to be disappointingly modest as one approaches more closely. The peculiar sense of the

pleasing to the Fancy, as the Speculations of Eternity or Infinitude are to the Understanding." Addison, Joseph. 'On the Pleasures of the Imagination,' *The Spectator*, N^o 411-421 (June 21 - July 3, 1712).

¹⁷ John Claudius Loudon, writing in [date] commends quality landscapes in terse, synoptic prose: "This view contains a large piece of water, a wooded hill to the right, a portion of distance to the left, a church steeple beyond a wood in the centre, and is, on the whole, as well managed and as striking as a view ... can be." Loudon, John Claudius. *In Search of English Gardens: The Travels of John Claudius Loudon and His Wife Jane*, Priscilla Boniface, ed. Lennard Publishing, 1987, p35.

¹⁸ "Eyestoppers define exactly the area of delimitation that the eye searches for when confronted by an otherwise undefined and un-terminated 'perspective'." Pugh, Simon, *Garden - Nature - Language* Manchester University Press, 1988, p66.

¹⁹ Shaftesbury in Hunt, op. cit., p42.

²⁰ Gilpin, William. 'A Dialogue Upon the Gardens of the Right Honourable the Lord Viscount Cobham at Stow in Buckinghamshire.' (1748) Introduction by John Dixon Hunt. *The Augustan Reprint Society* No. 176, University of California Los Angeles 1976, pp15-16.

miniature that one feels on crossing the Palladian Bridge disappears when it is viewed through the Doric Arch. Similar disjunctive effects occur with the Rotunda at Stourhead, the Gothic Temple at Painshill Park, and at any number of other locations. Material consistency is clearly not the issue here. Space, as it is structured by the landscape interface, is designed to appear homogeneous to the eye and available to the intellect. For the garden visitor, taking up the landscape interface was an issue of theoretical and discursive, as well as material, positioning.

reading (the) landscape

Here future Lovers, when in Troops they come,
Venus, to visit thy distinguished Dome,
As thro' this consecrated Shade they pass,
Shall offer to the Genius of the Place.
Shift now the closer Scene: and view around,
With various Beauties the wide Landskip crown'd.
Here level Glades extend their length'ning Lines,
There in just Order the deep Quincunce shines.
Here chrystal Lakes reflect contiguous Shades,
There distant Hills uplift their azure Heads.²¹

[The] hypothesis, with regard to paintings constructed "in perspective," that the latter has a privileged relation to description, perhaps constituting its most fundamental ground, is reinforced by the fact that the set of discrete elements included in the description are organized as a progression commencing on the ground, ... which is the foundation of the representation, thence proceeding from bottom to top and from foreground to background; the synchronic configuration of which perspective is an example functioning, simultaneously, as a model for the successive articulation of the components of the image in the three dimensions of projective space.²²

For the Classical subject, the function of reason is linked to the establishment of a perspective or prospect. Arguing for the dependence of the function of reason on "the eye, on the visual ray, and on the distance between the eye and the object,"²³ Poussin spatializes this function in/as the landscape view. This notion of the view as a 'reasoned space' (or space of reason) is carried forward into eighteenth-century discourses of landscape. In

²¹ Gilbert West, from 'The Gardens of the Right Honorable Richard Lord Viscount Cobham' (1732) in *Descriptions of Stowe*, p46

²² Damisch (1995), pp272-3.

²³ in Marin (1995), p11.

taking views from nature, the painter's first consideration, according to William Gilpin, was "to get the best point of view."²⁴ The situation of the self in the landscape, in other words, begins with the mutual articulation of eye and I.

The view asks of its subject to see, to *read* (a) landscape into variations (and negations) of the simple configuration of station point and horizon line. To *view* is not simply to look in the natural attitude, but to practice a form of reasoned sight, to judge an image through a 'system of anticipations':

In the gaze the eye fixes on an object ... and in so doing it organizes the visual field... This activity of gazing ... can be described in shorthand as a readerly or semiotic practice: the gaze penetrates and organizes the visual field in order to arrive at 'meaning'.²⁵

It is in the passage between *here* and *there* that meaning emerges; the interval between subject and horizon is not simply an inarticulate distance, but the "space in which the gaze becomes discursive."²⁶ The view's 'three distinct distances' are like poetic stanzas, lending rhythm and cadence to the look. Capability Brown insisted on this sort of syntactical pacing; of his own designs, he remarked that 'there I make a comma, & there, where a more decided turn is proper, I make a colon'. As Hunt points out, "In those few brief words he registered how his own art paralleled that of rhetoric by virtue of its skills at representing a site, as a skilled writer uses all resources including grammar and punctuation to represent an argument."²⁷ The view is a discursive space, and finding its meaning was less a matter of unschooled optics than it was a matter of interpretation.

Viewing, in other words, is a narrative concern – a judgement is not formed in an instant, it is an effect of a/the *reading* of an image. Meaning emerges in/as the articulation of a narrative, a "major proposition or judgment spread across the entire surface of the painting."²⁸ Reading a painting in such a manner is like reading a sentence. What distinguishes landscape from historical painting is, in part, the extent to which this narrative movement is deployed in/as *depth of field*, and mobilized by leading the gaze towards a 'free center', the distance inscribed into the image. Description and narration condense in the figure of the 'path of

²⁴ Gilpin (1792), p63.

²⁵ De Bolla (1995), p284.

²⁶ Marin (1995), p44.

²⁷ Hunt, op. cit., p81.

²⁸ Marin (1995), p31.

reading';²⁹ advancing "along the lines of a promenade offering successive partial glimpses of the surrounding landscape, or [taking their] place within a view from above, the pathway being inscribed into the encompassing geography."³⁰ Ideally, it is this latter path that is imposed by the landscape interface as screen.

The art of landscape design is concerned, in part, with the inscription of this path of reading into the 'real' space of the garden. From the sixteenth century onwards, discourse on gardens tended to recognize the cultivated areas of the garden as a 'third nature' – distinct from the unmediated wilderness of 'first nature', and a more refined form of intervention than the 'second nature' of agriculture.³¹ Typically, the look is animated by leading the eye sequentially through these three zones of management. Renaissance and post-Renaissance gardens took this idea to its geometrical extreme, planning the garden around a sightline originating in the center of the house. From here, the eye was drawn outwards along an axis which moved from formal parterre to orangerie, water garden to paddock, and terminated in the distance with areas of 'wilderness'.³² Though this sort of explicit environmental management had passed out of fashion by the early eighteenth century, the *direction* of the look is the very ethos of formal landscape gardens as such.³³ As William Gilpin remarked in a 1772 letter to William Mason:

In the transient view of a country, all that appears needful ... is to mark the shapes, & nature of objects; & their relative distances. The shapes & nature of an object are easily marked; the distance is more difficult. ... Few views, at

²⁹ "Describing a painting amounts to clearing a path, laying out a route through it for discourse." Damisch (1995), p261.

³⁰ *Ibid.*, pp262-3.

³¹ "[Gardens are] more sophisticated, more deliberate, and more complex in their mixture of culture and nature than agricultural lands. ... By implication, the first nature becomes ... the territory of unmediated nature, what today we might (provisionally and awkwardly) call wilderness." Hunt, *op. cit.*, p34.

³² "[The] Renaissance garden saw the establishment of axial lines of sight leading from the geometry of the central palace or villa and through gardens where the regular forms associated with architecture and its decoration were applied. Eventually this line would be extended outward, past perhaps less clearly formalized spaces of groves, orchards, or "wildernesses," into agricultural lands and even into relatively untouched countryside where the axis would usually discover its other termination, in some distinctive feature of the topography. In this way ... the garden's order and harmony were experienced at a strong focal point near the house, at one end of a scale of human control of the natural world, the other end of which might be wild territory beyond even agrarian intervention." *Ibid.*, pp34-5

³³ If the axis became less fashionable as a means of plotting out the three natures, the idea of zones of different engagement with nature was a persistent one. In his *Observations on Modern Gardening, Illustrated by Descriptions*, Thomas Whately noted that "choice, arrangement, composition, improvement, and preservation, are so many symptoms of art, which may occasionally appear in several parts of a garden, but ought to be displayed without reserve near the house; nothing there should seem neglected; it is a scene of the most cultivated nature; it ought to be enriched; it ought to be adorned; and design may be allowed in the plan, and expence in the execution. ... [however, if] regularity is not entitled to a preference in the environs or approach to a house, it will be difficult to support its pretensions to a place in any more *distant parts* of a park or a garden." see Whately, Thomas, *Observations on Modern Gardening, Illustrated by Descriptions*, Dublin, 1770, pp109-115. Humphrey Repton, in the early nineteenth century, made similar remarks concerning terraces leading from the house out into the 'wilder' sections of the garden.

least few good views, consist of more than a foreground & 2 distances; all of which should be carried off with great distinctness, or the spirit of the view will be infallibly lost.³⁴

The 'difficulty' of indicating distance speaks to its exclusivity as a discursive practice. Persuading objects to behave as spatial indicators is an actualization of rational thought; above and beyond the mere making of marks, the organization of space into distinct distances is the act of a reflecting subject. Conspicuous or concealed, the axis, as Hunt remarks, enforces a *perspective* – "both a line of sight and an organization of things within that sight for purposes of better understanding."³⁵ Reading a painting or viewing a landscape requires a subject capable of viewing from above, of navigating the path that is inscribed into the 'encompassing geography'.³⁶

Directing the look, revealing it as a function of reason, is a matter not only of its mobilization, but of its *termination*. This involves more than simply allowing the look to come to rest on the horizon: it is equally a function of the activity of the gaze in establishing limits *within* this distance. If the enclosure of space is an essential function of the seventeenth-century formal garden, then locating the boundary of this enclosure – or finding delight in its concealment – is a constitutive feature of the eighteenth century landscape garden.³⁷ Lord Perceval, reflecting on his visit to Stowe in 1724, noted that "what adds to the bewty of this garden is, that it is not bounded by Walls, but by a Ha-Hah, which leaves you the sight of a bewtifull woody Country, and makes you ignorant how far the high planted walks extend."³⁸ Perceval's 'ignorance' is entirely spurious, of course – the 'concealment of bounds' is a feint, a visual extension of property into the apparently unlimited distance of the horizon. But this distance that presents itself to the eye/I as measureless is, in fact, intensely limited; condensed, as West's verses demonstrate so clearly, into a movement between *here* and

³⁴ William Gilpin, letter to William Mason, 25 April 1772. in Denvir, Bernard. *The Eighteenth Century: Art, Design and Society 1689-1789*. London and New York: Longman Group Ltd., 1983, pp260-261.

³⁵ Hunt, op. cit., p39.

³⁶ Interpreting a garden, as Stephanie Ross points out, placed considerable demands on the visitor. "The process is in fact very much like that of interpreting a poem, and many writers use the term 'reading' to describe our relationship to emblematic gardens. Thomas Whately, a garden theorist writing some forty years after Kent's work at Stowe, speaks derisively of the difficulties involved in such interpretation: 'All these devices are rather *emblematical* than expressive; ... they must be examined, compared, perhaps explained, before the whole design of them is well understood...'" Ross, op. cit., pp19-20.

³⁷ "The word 'garden' originally described an area enclosed by a fence or a wall, but the essence of creating a landscape garden is to hide the bounds, thus turning the garden into part of the surrounding countryside and the countryside into an apparent extension of the garden. To link the garden visually with the enclosing countryside required replacing the traditional brick wall or iron or wooden fence with a new feature. This was the ha-ha, the dry ditch lined with a wall on the garden side so that neither ditch nor wall was usually visible; the grass of the garden seemed to be continued by the grass of the pastures beyond." Bevington, op. cit., p28.

³⁸ *Ibid.*, p29.

there. Though the view presents this repetitive movement as variety and freedom of choice, its rhetoric is that of a sentence spoken over and over, varied only in its inflections.

The privilege of the subject, as Lacan remarks, is established through that relation “by which, as soon as I perceive, my representations belong to me.”³⁹ The informed look is a kind of visual proprietorship; investment in the ‘limitless limits’ of the rational gaze is paid off in the form of a visual amalgamation of one’s property with the surrounding countryside. This understanding remains unspoken, however; if the ‘reality’ concealed by the landscape interface is both socioeconomic and material, then possession, as Addison frames it above, is more aptly clothed in the rhetoric of appreciation than staked as a material claim:

[The] Man of a Polite Imagination ... feels a greater Satisfaction in the Prospect of Fields and Meadows, than another does in the Possession. It gives him, indeed, a kind of Property in every thing he sees, and makes the most rude uncultivated Parts of Nature administer to his Pleasures.⁴⁰

Looking functions as a form of vicarious ownership only inasmuch as the spectator, disinterested⁴¹ by nature, “understood that wealth could produce and control action at a distance.”⁴² The garden spatializes a highly specific social reality, and the mastering gaze is the property of a class and gender-specific subject. The ha-hah – which prevented the passage of livestock and other undesirable elements into the garden, but was invisible from within the garden itself – is an apt metaphor for this veiled ideological exclusivity. Reading the landscape is a means of both inscribing and concealing the relations of property which underpin this reality.

³⁹ Lacan, op. cit., pp80-1.

⁴⁰ Addison, in Fabricant, Carole, ‘Binding and Dressing Nature’s Loose Tresses: The Ideology of Augustan Landscape Design’ in *Studies in Eighteenth Century Culture* 8, Roseann Runte, ed., University of Wisconsin Press, 1979. pp109-129, p117.

⁴¹ see Bohls, Elizabeth A. ‘Disinterestedness and Denial of the Particular: Locke, Adam Smith, and the Subject of Aesthetics,’ in *Eighteenth-Century Aesthetics and the Reconstruction of Art*, Paul Mattick Jr., ed. Cambridge University Press, 1993, pp16-51.

⁴² Berger in Fabricant (1979), p115. “The owner of fixed property, even when conscious ... of consulting only his own interests, would also necessarily be consulting the true, the permanent interests of the country in which his family had a permanent stake. Whether, therefore, his independence and his leisure actually enabled him to see the public interest, or whether he was conscious only of consulting his own, made little difference: inasmuch as his own interests were those of the public at large, he was, to all intents and purposes, disinterested in a way that others, more dependent for their income on the fluctuating value of moveable property ... could not be.” Barrell, John, ‘The Public Prospect and the Private View: the Politics of Taste in Eighteenth-Century Britain’ in *Reading Landscape: Country-City-Capital*, Simon Pugh, ed. Manchester University Press, 1990, pp19-40, p29.

the problem of the exterior

If the view into distance is the effect of reasoned sight, the shape and nature of the objects that fill this distance are less responsive to the injunctions of the rational intellect. Shape, it turns out, is less 'easily marked' than Gilpin suggests, the 'nature of objects' rather more difficult to specify. Gilpin's casual remark conceals a complex dynamic between shape and shapelessness: between the nature in/of landscape representation, and the first nature – the rock, wood, or broken ground⁴³ – that it attempts to describe. Perhaps unintentionally, he touches on the problematic issue of representing the excessive or unrepresentable from *within* the circuit of representation, and of the character ascribed to the exterior. As we will see, the exterior of representation is allied with the unrepresentable quality of 'nature', and it is by means of the emblematic presence of the *amorphous* within the landscape that this exterior is signified.

The paradox of the unrepresentable exterior is structurally necessary to the Classical circuit of representation. The integrity of the screen is more than a function of the control exerted by the viewer; the stability of the circuit of representation – its isomorphic character – is a function of its subjection to an equal and opposite pressure from *outside*. The relation between the two is not one of simple opposition, but of mutual necessity; as David Carroll points out,

[The] unbounded itself needs to be set off in terms of a frame it exceeds; without the frame, the immeasurable could not be measured in any way and the unrepresentable would not be a problem for presentation but its negation.⁴⁴

For the subject of landscape, engaging the unrepresentable is more than a simple matter of breaching of borders. Rather, it is about the instatement of these borders themselves as susceptible to breaching, a certain 'osmotic' quality inherent in the notion of interior and exterior. Excess, in this case, describes a condition of radical mobility; it is embodied in those terms which resist capture by the interface, which refuse to be situated definitively either inside or outside its limits.⁴⁵ Nature, as it is framed by the landscape interface, is one such term.

⁴³ As Thomas Whately noted, "Nature, always simple, employs but four materials in the composition of her scenes, *ground, wood, water, and rocks*." Whately, *op. cit.*, p2.

⁴⁴ Carroll, David, *Paraesthetics: Foucault, Lyotard, Derrida*, Methuen, 1987, p143.

⁴⁵ It is worth pointing out how this troublesome issue of framing the exterior is articulated in the notion of the Kantian sublime: "[What] is sublime, in the proper meaning of the term, cannot be contained in any sensible form but concerns only ideas of reason, which, though they cannot be exhibited adequately, are aroused and called to mind by this very inadequacy, which can be exhibited in sensibility." (in Kant, Immanuel. *Critique of Judgement*.

In its most general terms, the excess associated with the perspective paradigm is figured in/as the *amorphous*, the shapeless or formless. The silvered mirror in Brunelleschi's perspective demonstration reflected only the sky and the clouds – elements displaying neither identifiable shape nor measurable distance; matter without surface, limit or stable location.⁴⁶ Such forms could be neither known nor shown within the perspective order, but could appear only by means of reflection, (as) 'outside' the picture:

[The] cloud mirror functioned as the index ... of a discontinuity between the order of that susceptible to representation by the means of *perspectiva artificialis*, and another element which, admitting of no term and no limit, seems to escape capture, demanding to be presented "in its natural form" ...⁴⁷

The painted panel showed a closely framed view of the Baptistry of San Giovanni; the background, if it was present in the image at all, consisted only of the facades of the two buildings on either side.⁴⁸ Here, the architectural – the 'geometric body' of the Baptistry, the emblem of rational thought – is played off against a 'natural form' which is visible only as a reflection of a reflection. In contrast to the theoretical consistency of the built environment, the cloud appears as a nebulous and inconsistent form, simultaneously inside and outside of the system:

[If] the /architectural/ came to symbolize the reach of the artist's "knowledge", the /cloud/ operated as the lack in the center of that knowledge, the outside that joins the inside in order to constitute it as an inside.⁴⁹

The mirror, as Damisch remarks, functions as an 'epistemological emblem' of the limits of the perspectival order: though painting might aspire to scientific consistency, these

Werner S. Pluhar, trans. Hackett Publishing Company, 1987, p246.) Sublimity, for Kant, depends upon on a relation between perceptual and imaginative *excess* and rational *containment*. This particular (and paradoxical) disposition of excess is characteristic of much writing on landscape in the eighteenth century, and is symptomatic, as De Bolla points out, of the latter discourse's thoroughgoing penetration by the discourse of the sublime. The latter, as he understands it, is a 'transformational technology': "If we take the technical discourses of instruction for reading, or looking at landscape or oratorical performance, discourses legislating activities in which sublime affect may well be encountered, we find that the discourse of the sublime infiltrates these neighbouring forms and transforms both itself and the host discourse." see *The Sublime: A Reader in Eighteenth-Century British Aesthetic Theory*, Andrew Ashfield and Peter de Bolla, eds., Cambridge University Press, 1996, p6.

⁴⁶ "La perspective n'a à *connaître* que des seules choses qu'elle peut ramener à son ordre, les choses qui occupent un lieu et dont le contour peut être défini par des lignes. Or le ciel n'occupe pas de lieu, il n'a pas de mesures; et quant aux nuages, on n'en saurait fixer les contours, ni analyser les formes en termes de surfaces: le nuage ressortit à la classe des *corps sans surface* ... des corps qui n'ont ni forme ni extrémités précises, et dont les limites s'interpénètrent." Damisch (1972), p170.

⁴⁷ Damisch (1995), p94.

⁴⁸ "[Either] the panel provided a view, in addition to the baptistry, of the two facades framing it on either side, whose disposition was more or less perpendicular to the picture plane; or the view concentrated squarely on the solid volume, the geometric body of the building itself, encompassing only two narrow strips representing the far reaches of the piazza." *Ibid.*, p105.

⁴⁹ Krauss, *op. cit.*, p161.

aspirations are always conditioned by the inconsistency of the unknowable. *Costruzione legittima*, as it is demonstrated by Brunelleschi, is an isomorphic system 'founded on a series of refusals'; the cloud "has no meaning that can be properly assigned to it; it has no other value than that which comes to it from those serial relations of opposition and substitution that it entertains with the other elements of the system."⁵⁰ Without the integrity of the architectural to set it off, the cloud would have been not simply meaningless but illegible, invisible. Brunelleschi's demonstration reveals *costruzione legittima* as a system that exerts control only over that which is *designed* to conform to its reason, and names 'nature' as that which lies beyond its purview. It is this vision of nature as simultaneously formed and formless, interior and exterior, that captivates the subject in the landscape garden.

But tho' there are several of these wild Scenes, that are more delightful than any artificial shows; yet we find the Works of Nature still more pleasant, the more they resemble those of Art: For in this case our Pleasure rises from a double Principle; from the Agreeableness of the Objects to the Eye, and from their Similitude to other Objects: We are pleased as well with comparing their Beauties, as with surveying them, and can represent them to our Minds, either as Copies or Originals. Hence it is that we take Delight in a Prospect which is well laid out, and diversified with Fields and Meadows; Woods and Rivers ... in a Word, in any thing that hath such a Variety or Regularity as may seem the Effect of Design, in what we call the works of Chance.⁵¹

William Gilpin, cataloguing the beauties of Stowe landscape garden, remarked on how its "enchanting Views up and down the River, which winds itself in such a manner as to shew its Banks to the best Advantage, which, together with very charming Prospects into the Country, terminated by the blue hills at a Distance, make as fine a Piece of Nature, as perhaps can any where be met with."⁵² Nature, as Gilpin admires it here, is compliant and demonstrative, amenable to management, essentially submissive. This is the view advanced by Carole Fabricant, who compares Nature in the garden to a 'kept woman,' expected, in return for the care lavished on her, to "yield Satisfaction to the Eye of the Beholder" and "Entertain the Sight every Moment."⁵³ Art, in this instance, functions as a sort of mentor, preparing wild nature for presentation to polite company:

⁵⁰ *Ibid.*, p163.

⁵¹ Addison in Hunt, *op. cit.*, p41.

⁵² Gilpin (1748), p25.

⁵³ Fabricant, (1979), *op. cit.*, p114.

[It] was generally assumed that a major function of Nature was to “perform” as if on stage for the benefit of spectators. Words such as *scene*, *theatre*, *platform*, and *entertainment* echo throughout contemporary writings on landscape design, and ... they invariably suggest on some level the idea of spectacle and theatrical display.⁵⁴

Though nature might momentarily return to a feral state for the entertainment of the visitor, such displays took place within limits imposed by an implicitly masculine viewer.⁵⁵ As Fabricant understands it, the landscape interface functions to contain and enslave a feminized nature; viewing, in the garden, here takes on the sinister shadings of voyeurism. Simon Pugh approaches the question of gendered nature from a different angle: in his argument, nature in the garden is emasculated by the hand of Art.⁵⁶ Whatever the gender assigned to it, the ‘nature’ that is assumed in both of these arguments is legible only because it is represented in/as the forms of landscape. By transforming first nature into a representation of itself, Art levels the kind of asystematic distinctions which characterize the former; it replaces variety with consistency, reduces unfathomable diversity to reiterative rhetoric.⁵⁷ Brought within the boundaries of the garden, nature exists as a demonstration of human superiority over its counterpart beyond the walls. Beyond these borders, there is simply nothing: first nature is nothing more than the absence of form, its threat diminished by framing it as servile or incoherent or both.

The third nature that is created by the hand of Art may be different *in theory* from the first nature that it emulates, but in practice this distinction is much less clear. If Art takes shape as a discourse distinct from nature, then the garden is a site which challenges this distinction. Compared to the regulated space of the landscape image, nature in the garden is a little more open, a little less paranoid in its subterfuge. Here, the distance between nature and Art is deliberately left unsettled, the border between them constantly under inquiry. First nature is never completely excluded from the garden; it functions alongside the

⁵⁴ Ibid., p114.

⁵⁵ “Throughout the eighteenth-century treatises on landscape, Nature was given her due, allowed to assert - indeed, *flaunt* - her superiority over the quaint and rigidly confining forms of art, before she was, as it were, put in her place, subordinated to the spectator’s critical eye and the re-creator’s shaping hand.” Ibid., p113.

⁵⁶ “Nature is neutralised in the garden to become an object of detached contemplation. ... Nature is forced to assume the role of imitating what purports to imitate it and becomes a victim of radical systems of social domination...” Pugh, op. cit., p103.

⁵⁷ “The metamorphosis of countryside into landscape proposes that all views are essentially the same, whatever their minor differences. Nature is confined to a numerical aggregate of views which are all ultimately reducible to the same single formula.” Ibid., p63. He comments further on this tendency: “Nature previously protected by obfuscation and a cloud of unknowingness, is controlled and repressed, exposed to ‘full lighting and the eye of a superior’. The control of nature is achieved through its illumination and the obligation to ‘keep an eye’ on it, to keep it under surveillance, and (in the case of the individual) to police it within the self. This enlightened

hand of man to complete the work of representing itself. Nonetheless, the educated visitor brought to the experience a kind of cynicism, an acknowledgement that what one saw was not first nature itself.⁵⁸ It is the obfuscation of boundary, the uncertain provenance of the nature that presents itself to the eye, that delights the eighteenth century imagination.

In representing nature, the garden is a highly self-reflexive form, stressing the manner and means of its making as well as its subject matter. So-called 'naturalistic' landscaping was, in fact, an open secret; whence Joseph Addison's 1711 description of a Lady's country seat:

The Rocks about her are shaped into Artificial Grottoes, covered with Woodbines and Jessamines. The Woods are cut into shady Walks, twisted into Bowers, and filled with Cages of Turtles. The Springs are made to run among Pebbles, and by that means taught to murmur very agreeably.⁵⁹

Here, nature is shaped, cut, twisted, and taught: overtly and unabashedly manipulated. Though the hand of man might not be visible as such, it is always present in the garden. To function as a subject of landscape is to continually reaffirm one's awareness of the *work* in/of representation, and of one's own activity within it. The mutability of the boundary between Art and Nature is itself a demand, an invitation to the viewer to *act* on this boundary, to adopt a proper position in relation to nature, to limit its appearance and make sense of it. As Merleau-Ponty remarks, Classical art functions as "the representation of a Nature that it can at best embellish – but according to formulas taught to it by Nature herself. ... speech has no other role than finding the exact expression assigned in advance to each thought by a language of things themselves; and this double recourse to an art before art, to a speech before speech, prescribes to the work a certain point of perfection, completeness, or fullness..."⁶⁰ Nature, for the eighteenth century subject, is both the model, and that which requires modeling; that which cannot be improved upon, and that which is in need of improvement.⁶¹ The traffic between these two realms – between the excessive and the

approach achieves through rational means what is essentially irrational with regard to human existence, since the subjugation has no meaningful motive other than expediency." *Ibid.*, p104.

⁵⁸ As Hunt puts it, the garden experience would have been described as "the garden is showing us a nature." Hunt, *op. cit.*, p79.

⁵⁹ Joseph Addison in *The Genius of the Place: The English Landscape Garden 1620-1820*. John Dixon Hunt and Peter Willis, eds. London: Elek Books Ltd 1975, p141.

⁶⁰ Merleau-Ponty, Maurice, 'Indirect Language and the Voices of Silence' in *Signs* Richard C. McCleary, trans. Northwestern University Press, 1964, pp39-83, p47.

⁶¹ "Art must expect applause in proportion to her imitation of Nature, and from Nature must procure all her material; her highest glory is, to produce in the mind the same sensations as the original objects themselves might produce if actually present. But though art must ever draw her materials from Nature, she is not forbid to exercise her fancy or her skill in disposing them. Nature may sometimes be improved by Art, and Art may often exercise her own creative imagination with success." anonymous, *The Landscape Magazine: Containing Perceptive Principles of Landscape: Also, a Series of Interesting Landscapes; and views of Remarkable Objects, and Places*, London, 1793, p15.

obedient, the codified and the anarchic – suggests that if nature is 'framed' in/by the garden, the character of this frame is less divisive or exclusive than *parergonal*.

The *parergon*, as the term is used by Derrida in relation to works of art, designates an 'exteriority which is necessary to the interior integrity of the work': the frame of a painting, for instance, which is not clearly inside or outside and which cannot easily be separated from the artwork itself.⁶² First nature in the garden may be understood as *parergonal* in precisely this sense: though it may 'cooperate with the operation from a certain outside', though it may supplement the Art of the gardener, first nature is never, so to speak, the theme of this Art. The obscurity of boundaries that delighted Lord Perceval, above, speaks to the *parergonal* quality of first nature, and to the very *ethos* of the garden itself – the fact that it raises "the whole problematic of inscription in a milieu, of the marking out of the work in a field of which it is always difficult to decide *if it is natural or artificial...*".⁶³ Fixing the limit between nature and culture is not the point, however. The gratification of the garden experience is less about the fixing of these boundaries than it is about taking a disinterested pleasure in one's ability to do so. Close scrutiny of the boundaries between nature and culture is best avoided, raising, as it does, a number of disquieting questions as to the criteria engaged in this sort of delimitation, and of the 'value of naturalness' which it presupposes.⁶⁴

Thus, though nature might exceed the power of rational thought, though it allegedly comprises an agency other than the human, this recognition is charged with ambivalence. We can read something of this perplexity in Joseph Addison's alliance of Nature with the borderless and the movement of the unconfined I/eye:

The Beauties of the most stately Garden or Palace lie in a narrow Compass,
the Imagination immediately runs them over, and requires something else to
gratifie her; but, *in the wide Fields of Nature the Sight wanders up and down*

⁶² "A *parergon* comes against, beside, and in addition to the *ergon*, the work done [*fait*], the fact [*le fait*], the work, but it does not fall to one side, it touches and cooperates with the operation, from a certain outside. Neither simply outside nor simply inside." Derrida, Jacques. *The Truth in Painting*, Geoff Bennington and Ian McLeod, trans. University of Chicago Press, 1987, p54.

⁶³ *Ibid.*, p59. (italics added)

⁶⁴ "The question of the representative and objectivizing essence, of its outside and its inside, of the criteria engaged in this delimitation, of the value of naturalness which is presupposed in it..." *Ibid.*, p57. The possibility that the aspiring freeholder might educate himself in the modes of 'self conscious observation' called into question the naturalness of the distinction between the common man and the 'man of taste. The cost of 'democratization' of the view, however, was the erosion of some of its deeper meaning. In 1750, John Macclary, head gardener at Rousham, wrote a letter to its absent owners detailing some of the views in the garden. As Pugh remarks, the letter "suggests that he, Macclary, ... understands how a garden works as the representation of nature and as a series of effects. He describes what he saw but he cannot explain the implications of what he has seen. ...Macclary knows the rules but does not quite know how to play the game..." Pugh, op. cit., p82.

without Confinement, and is fed with an infinite variety of Images, without any certain Stint or Number.⁶⁵

Here, both the imagination and sight move back and forth across the border between representation and its other. In this passage, Addison is clearly hungry for kind of gratification that Art cannot provide, and the space outside of representation promises a kind of extracultural plenitude that he is not quite able to name. It is only through the intervention of Art, however, that this plenitude becomes 'representable to the mind:' though sight may wander unconfined in the wide fields of nature, it continues to operate in the mode of the image. Here, the look penetrates a nature that is spatialized in a specific, and recognizable way. Whatever their admiration for ungoverned nature, neither the artist nor the garden designer intended to represent the latter in its true form. Regardless of its ostensibly privileged access to the interior or representation, despite any agency it might possess outside of representation, the discourse of landscape frames this agency as a lack, insisting – despite appearances to the contrary – on a conventionalized depiction of nature as *real* in the Lacanian sense: as a power of incoherency, inarticulate and unshaped.

Though nature may enjoy a degree of mobility between the inside and the outside of representation, the carnal body enjoys no such privilege. Once again, the ha-hah furnishes an apposite metaphor for the physical breaching of boundaries in the garden. Though the subject finds delight in a nature that appears to breach the boundaries of representation, the 'amiable wish' to embrace nature materially is, as Thacker points out, "tactfully but firmly stopped by the sunken wall, however great the visual enchantment beyond may be."⁶⁶ The liberty of the eye is not shared by the body; the popularity of the ha-hah, and the success of its design, speak to some misgivings about engaging with the real, despite appearances.

The subject of landscape, however, is not always a viewing subject. If the garden represents nature, it does so not simply in the form of the view, but, as Damisch reminds us, in the form of 'a promenade offering successive partial glimpses of the surrounding landscape'. It is in the intervals between these 'partial glimpses' – in the moments between vision as it is described, and vision in/as the real – that the problematic of the body surfaces most plainly. Managing this excess, as we shall see, involves conflating the body with nature: casting it as exterior to representation, as a site of failure, shapeless and inarticulate. Though it might share in the shapelessness of nature, however, the body is amorphous in a subtly different

⁶⁵ Addison in Hunt, op. cit., p141. (italics added)

way; possessed of an agency that is not so easily dismissed. Controlling it is a matter of codifying not simply the interior, but the *exterior* of representation.

⁶⁶ Thacker, op. cit., p168.

1.2 the Shades

When I plan a Garden, I believe, I shall deal much in Shady Walks; wherever I open out a grand Terrace, I intend to lengthen out by its Side a close Vista.

William Gilpin, *A Dialogue Upon the Gardens at Stowe*, 1748

[The visitor] sees nothing to amuse him, nothing to excite his curiosity, nor anything to keep up his attention. At his first entrance, he is treated with the sight of a large green field, scattered over with a few straggling trees, and verged with a confused border of little shrubs and flowers; upon farther inspection, he finds a little serpentine path, twining in regular esses amongst the shrubs of the border, upon which he is to go round, to look on one side at what he has already seen, the large green field; and on the other side at the boundary, which is never more than a few yards from him, and always obtruding upon his sight: from time to time he perceives a little seat or temple stuck up against the wall; he rejoices at the discovery, sits down, rests his wearied limbs, and then reels on again, cursing the line of beauty, till spent with fatigue, half roasted by the sun, for there is never any shade, and tired for want of entertainment, he resolves to see no more...

William Chambers, *A Dissertation on Oriental Gardening*, 1772

The tour through the garden was intended to be experienced as a journey through a series of pictures. Sand or gravel pathways – ‘walks’, adorned with shrubs and flowers – led the viewer, on foot, on horseback, or in a carriage, through a succession of views.⁶⁷ The talent of the garden’s designer was reflected in the variation amongst individual views – diversity of framing and content, distance and horizon line – and manifested in the rhythm and pace of the garden as a whole. There was little praise for those gardens that consisted of nothing *but views*:

Variety is what we next admire
In every Garden; hence the various Forms
Of gravely Terrasses and verdant Slopes,
Fountains and Statues, Cataracts and Grots,

⁶⁷ In this sense, the garden ‘walk’ is distinct from the ‘ride’ – the larger, less evidently ‘managed’ tracts of parkland that sometimes extended for miles around the house.

The airy, open, and the covered walks⁶⁸

As well as views, the well-designed garden also included more enclosed areas, where open prospect was exchanged for 'minute beauties' that revealed themselves to the closer look. The 'Shades', as they were known, were necessary if the garden was to reproduce the chiaroscuro – the play of light and shade – that characterized Classical landscape painting: "As the skill'd painter captivates the sight, By nicely intermingling shade and light; So in these happy scenes, each object plac'd, Throws beauty round, and charms the finest taste."⁶⁹

The significance of the Shades extended beyond their capacity as a formal or pictorial device, however; their function was more than that of mere interval or 'dead space' between views.⁷⁰ It was not only the variety they brought to the garden circuit that distinguished the Shades, it was the privacy they promised, the temporary release they allowed from the conventions of viewing. The garden visitor, it was understood, should not be a viewer all of the time:

I am a great Admirer of walking in a Shade; it is a kind of Emblem of the most Agreeable Situation in Life, the retired one: Every fantastic View is hid from us, and we may if we please, be Poets or Philosophers or what we will. ... [A] glaring sun-shine neither in the World, nor in a Walk, is agreeable to my way of thinking.⁷¹

As Gilpin suggests, the Shades provided respite not only from the sun, but from the gaze of others. Alongside the awareness of being in command of representation was a reciprocal awareness of being looked at, and the Shades cater to the need to take oneself 'out of the picture', as it were – to leave off the pose of the spectator, and adopt the manner of the

⁶⁸ Sir John Clerk of Penicuik, Bt, from 'The Country Seat' (1731), in Dixon Hunt and Willis, op. cit., p200. Stephen Switzer made a similar remark: "Some there are that esteem nothing well in a Design, but long, large, wide, regular Ridings and Walks... [It] is an unpardonable Fault, as we see it almost every where, (let the Expence be what it will) to have scarce any Thing in a whole Design, but carries open Walks; so that be the Garden 40, 50, or 60 Acres, one shall scarce find any private or natural Turn in the whole; if the Wood be grown, down come all the noble Trees that stand in the Way of the Scheme." from *Ichnographia Rustica*, Volume II, 1718 and 1742, cited in Hunt and Willis, op. cit., pxx. And finally: "In a garden ... continuation of shade is very acceptable; and if the views be sometimes interrupted, they may still be caught from many points; we may enjoy them there whenever we please; and they would pall if constantly in sight." Whately, op. cit., p127.

⁶⁹ Boyse, Samuel, 'The Triumphs of Nature', in *Descriptions of Lord Cobham's Gardens at Stowe, 1700-1750*, G. B. Clarke, ed., Buckinghamshire Record Society, 1990, pp95-111.

⁷⁰ "The garden circuit is a precursor of the many picturesque guides ... that showed the way to read landscape by moving from one site to another: the interstices between are dead spaces full of ordinary lives and activities that are of no interest or importance either in theatre or in picturesque scenery. ... In the garden the dead spaces are merely dull moments that highlight the next event, curtains lowered while the scene is changed." Pugh, op. cit., pp66-7

⁷¹ Gilpin (1748), op. cit., p31.

privately reflecting subject.⁷² If the view was the domain of the 'public man', then the Shades addressed his private virtues; they represented a state of temporary release from civic duties and, implicitly, from the forces of corruption that potentially hindered those duties.⁷³

The absence of such opportunities did not go unremarked. As Jemima, Marchioness Grey, observed of the Stowe landscape garden following a visit at mid-century:

The Vanity of making what shall be seen and talked of by Strangers carries [Lord Cobham] on to new Enlargements and Buildings from Year to Year, while those that are done are neglected, and he just affords some Hours of a Sunday being a long idle Day to go round his Garden. Indeed it is only fit for a Public One, there is scarcely any Shade or Retirement to be found in it: You are seen from One End of it to the Other, and there is always Company of various sorts to see you.⁷⁴

Marchioness Grey's disapproval of Stowe is conditioned by its popularity – and her evident distaste for visiting a Public Garden – and by the fact that the visitor is always under the gaze of others. There is nowhere for the cultured viewer to retire, no place where the 'disconsolate Lover' might hide himself, no situation where private thoughts do not risk interruption. Variety is both a formal and a political issue; here, the Shades speak to the exclusivity of the landscape garden as a mode of political discourse.⁷⁵ Though the Shades most often refer to identifiable locations in the garden, they are perhaps better understood as indicating a particular *situation* of the garden visitor, one less easily managed than the view. Secluding oneself in a Shade meant disabling the active look: abandoning the correct viewing position, and entering into a more intimate relation with the objects of vision. It is this same condition of *proximity* to what one sees that captivates the viewer of the anamorphic picture, though the itinerant body in the Shade is not limited to movement between the proper viewing position and the frame. Indeed, the distance of the picture is absent, or at least indistinct, in the Shades. Vision is no longer the explicitly legislated sensory modality that it is for the viewing subject, and no longer functions to 'situate the self as such:

⁷² If ornaments, thou slight, and pomp displease,
[Art] then retires; – and leaves thee to thy ease:
Leaves thee to take thy evening walk unseen,
O'er the sequester'd shade, or lonesome green;
Where meditation soothes thy thoughtful breast,
And birds and waters lull thee to thy rest...

see Boyse, op. cit., p96.

⁷³ This subtle distinction, detailed by Barrell in 'The Public Prospect and the Private View', differs from more standard readings of 'occluded' landscapes as representing the confined view of the private citizen, whose experience was too narrow to permit him to participate in public life.

⁷⁴ from *The Letter Book of Jemima, Marchioness Grey, 1748* in *Descriptions of Lord Cobhams' Gardens at Stowe*

⁷⁵ see Bermingham, (1994).

It seems that one of the features of the anamorphic moment is that the confidence in how we sense is shaken and a synaesthetic mobility is introduced. Above all, the day-to-day fluency of the world and our place in it is radically overthrown.⁷⁶

The anamorphic image requires the subject to breach the distance of the picture in order to see, to approach the image and engage it 'face to face'. This same condition holds true in the Shades. Here, it is impossible to take up a prospect: the 'materials of nature' gather closely around the viewer, their presence has the immediacy of the tactile and the olfactory. *Being* in the Shade means seeing in the absence of a point of view; it is not a transaction effected by a disembodied eye, but a persistent state of radical mobility – a search for the 'proper' way to perceive one's surroundings. Propriety, as we shall see, is intimately bound up with issues of proximity in the Shades, which threatened to reveal the objects of the look in their sensual materiality; "not in terms of their relations, ... but in and for themselves, as objects of consumption and possession."⁷⁷ This kind of propinquity to the material is disturbing both ideologically and ontologically, and it is for this reason that the secluded state often took on a slightly menacing cast. We can better understand this menace by looking more closely at the various ways in which enclosure – the inability to distance the self – threatens to disrupt subjectivity.

the risks to the subject: pain, animality, shapelessness

Describing a visit to one of Capability Brown's gardens, above, William Chambers is troubled by the sparse visual attractions; by a look disappointed in its search for distance, novelty, and concealed delights. 'Looking at what one has already seen' describes a reiterative visual experience, a narrative that repeats over and over without variation. The absence of Shade and the disproportionate distance between architectural features only points up the obnoxiousness of the visible boundary, 'never more than a few yards' from him. For Chambers, what is troubling about Brown's garden is its failure to provide the means for the visitor to distance himself – not only from the objects of the look, but from his own bodily discomfort. Pain was an unwelcome effect of the garden tour, undertaken by a subject that was more often than not corseted, bewigged, and wearing shoes inappropriate

⁷⁶ Adams, op. cit., p115.

⁷⁷ Barrell (1990), p23.

for extended walking. Pain, for the subject of the garden, threatens to destroy both meaning and experience by disclosing the proximity of the subject to its own carnality.

Pain is the treacherous response of a heterogenous subject: an individual reaction that is not amenable to legislation. Beyond the simple ability to inflict it, pain is neither social nor manipulable. The subject in pain occupies a state somewhere between comprehensive subjectivity and brute corporeality; pain is the emblem of an incarnate, yet disabled, intelligence. As Scarry affirms, pain resists language, destroys it, reduces the intentional subject to a state of inarticulacy.⁷⁸ This shattering of language is essential to pain, and it is its only content:

Physical pain – unlike any other state of consciousness – has no referential content. It is not *of* or *for* anything. It is precisely because it takes no object that it, more than any other phenomenon, resists objectification in language.⁷⁹

Here, the subject's essential content or ambient condition is not the social and rhetorical fluency of the viewer, it is the irrefutable experience of a physical distress that inscribes and identifies the body as its medium. This kind of discomfort is a property not of the rational subject – the subject as it is *theorized* – but of an embodied subject “whose guarantee of truth is grounded in the painful state.”⁸⁰ Pain, in other words, is a/the property not of a subject, but of an abject body:

According to the canonical definition of Kristeva, the abject is what I must get rid of in order to be an I at all. It is a phantasmatic substance not only alien to the subject but intimate with it – too much so in fact, and this overproximity produces panic in the subject. In this way the abject touches on the fragility of our boundaries, of the spatial distinction between our insides and outside as well as of the temporal passage between the maternal body and the paternal law. Both spatially and temporally, then, abjection is a condition in which subjecthood is troubled, “where meaning collapses”...⁸¹

Not only language and meaning, but distance, as well, break down under the influence of pain.⁸² Chambers describes an experience that clearly surpasses his expectations: heat, exhaustion, and fatigue make it impossible for him to distance himself, to function as a subject of landscape. Instead, he finds himself in a condition in which the active look is not

⁷⁸ “Physical pain does not simply resist language but actively destroys it, bringing about an immediate reversion to a state anterior to language, to the sounds and cries a human being makes before language is learned.” Scarry, Elaine, *The Body in Pain: The Making and Unmaking of the World*, Oxford University Press, 1985, p4.

⁸⁰ Kelly, Mary, ‘Re-viewing Modernist Criticism’, in *Art After Modernism: Rethinking Representation*, Brian Wallis, ed. The New Museum of Contemporary Art, 1989, pp87-103; p97.

⁸¹ Foster, op. cit., p114.

simply disabled, but all too evidently grounded in a carnal body. That the garden does not enable the subject to overlook this abject condition is, as far as Chambers is concerned, a failing of Brown's design; his empty, borderless landscape fails to fully sequester the body from the event of seeing.

Chambers' experience is that of an individual not adequately profiled by representation. Clearly, the limits of the event of seeing are not enforced with enough authority to prevent the unwanted irruption of this sort of excess. Brown's gardens blur the distinction between nature and its various emblems to the point of concealing entirely their own role and function as representation.⁸³ His taste for naturalness erred on the side of understatement; an obfuscation of boundaries taken to such an extreme that the distance between medium and message was effectively collapsed, along with the distance between the subject and its material nature. It is this condition of 'overproximity' that is signaled by pain. Pleasure in seeing, by contrast, is concerned with the displacement of pain, and its simultaneous reinscription onto an abject body, and into the space of the social.

The garden visitor willfully submitted to codes of gesture, dress, and deportment that marked her/him as subject to the rule of representation – a 'material redesign' of the body by and for the look, that set the viewer of nature apart from those who were merely subject to it. If there was work in representation, however, there was also a proper way of carrying it out. The landscape interface is a technology of vision but it is not an artifact. As such, it cannot be owned; instead, its presence is announced in/as the re-presentation of the carnal body as a signifying surface. The rule of representation is naturalized through what appears, at least to the twenty-first century eye, to be a deliberately 'unnatural' presentation of self. Elegance, in this instance, is less about vanity than it is a show of force,⁸⁴ a demonstration of the extended reach of the rational subject:

⁸² "As the body breaks down, it becomes increasingly the object of attention, usurping the place of all other objects, so that finally ... the world may exist only in a circle [a few] feet out from [the self]..." Scarry, *op. cit.*, pp32-3.

⁸³ "It is something of an irony that Brown's consummate artistry and ambition lost for gardens their claims to the status of a fine art, which the concept and practice of representation had earned them." Hunt, *op. cit.*, p81.

⁸⁴ Marin, citing Pascal: "Sound opinions of the people. - To be elegant is not overly vain, for it shows that a great number of people work for one. It is to show by one's hair that one has a personal valet, perfumer, etc., by one's bands, thread, braid, etc. But it is not simply superficial, nor is it a simple harness, to have several arms, [in one's service]. The more arms one has, the stronger one is. To be elegant is to show one's force." Marin (1988), p27.

The clothes, the lace, the ribbons, the wig and its curls are not an addition, supplement, ornament, or decoration of the body. It is the body that is multiplied, the organic "instrument" that, passing into the architecture of the signs that cover it, acquires through it an ordered, instituted, and legitimated plurality, a power.⁸⁵

Subjectivity is a purposeful affair, a matter of decoration and discipline. The fluency of one's performance is a register of privilege, an emblem of one's natural right to survey one's surroundings rather than live and work within them. It was of some concern, then, that this decorum not be seen as affectation. The technology that animates the look must remain hidden; self-presentation must take on the appearance of a 'law that is not a law.'⁸⁶ The practice of 'manners', as Ann Bermingham suggests, thus sanctions a particular sort of encounter with nature.⁸⁷ To landscape is to spatialize a particular social real, one in which informality and anguish are understood as 'states of nature'. Offloading the repugnance of carnality onto the image of labour, the discourse of landscape naturalizes pain as the condition of beings – the labouring classes – whose animal nature is antithetical to that of those who represent them.

The discipline of the interface shapes the both the body and its activities in the space of the social. If one is not looking actively, then one is 'caught in the gaze of the world, on display there'. This is the condition of the labouring body: though the latter may be present as an object in the view, it can never, itself, take up the commanding position of the viewer. Ostensibly lacking in the higher functions, the labourer is trapped by her/his carnality, a slave to instinct and material need, incapable of judgement or refined sensibility. Though the figure of the worker is almost always present in eighteenth-century landscape representation, it rarely returns the active look. This preoccupation with the immediate is the emblem of its difference – an alterity registered in the downturned faces of the fishermen in Turner's *Aldeburgh, Suffolk* (1826), and in the ferocious concentration, fuelled by hunger, of

⁸⁵ *Ibid.*, p27.

⁸⁶ The aestheticization of virtue is taken up in detail by Terry Eagleton, who frames the latter as "that cultivation of the instinctive habit of goodness of which social fluency is the outward expression." The aristocratic subject lives "with all the instinctual rightness of the artefact. Like the work of art, the human subject introjects the codes which govern it as the very source of its free autonomy, and so comes in Althusserian phrase to work 'all by itself, without need of political constraint.'" see Eagleton, Terry, *The Ideology of the Aesthetic*, Blackwell, 1990, pp40-42. see also Bermingham, Ann, *Landscape and Ideology: The English Rustic Tradition, 1740–1860*. University of California Press, 1986.

⁸⁷ "The whole range of eighteenth-century discourse on manners and gestures was characterized by [the] refusal to separate nature from a certain culture, the informal form a certain formalized social code. The natural was a touchstone for eminently social behaviour, justifying and articulating such behaviour in terms other than social ones." Bermingham (1986), p20.

the apple-eating children in George Morland's *Gathering Fruit* (c.1791-95).⁸⁸ Absorbed into the middle distance and the background in Constable, or taking the shape of its environment, as it does in Gainsborough's landscapes, the body of the worker is represented – along with rocks, water, and broken ground – as part of the 'materials of nature'.⁸⁹

The inability of this body to take up a prospect is detailed, by Richard Jago, as a kind of abjection. In *The Scavengers: A Town Eclogue*, a streetsweeper and his wife discuss their contributions to the muckhill outside their door – their only improvement to the surrounding landscape.⁹⁰ If such creatures are capable of 'creative' acts, then the latter, as Jago implies, are confined to the excretory or reproductive: the disagreeable exigencies of the abject body. Indeed, in comparison to the work of the intellect, manual labour, as Eagleton points out, is classed as a kind of pain. Writing at mid-century, Burke announced this condition as inimical to the 'agreeable labour' undertaken by the reflecting subject:

As common labour, which is a mode of pain, is the exercise of the grosser, a model of terror is the exercise of the finer parts of the system.⁹¹

By linking it with the inarticulacy of pain, Burke robs labour of its voice. Shapeless and mute, the figure of the worker in the landscape sustains the fiction of an homogeneous and manageable social other. Inscribing disordered being into visibility in this way is a normalizing gesture that keeps the underclasses visible not as subjects, but as objects under government. In Constable, the worker is figured with monotonous regularity – the impossibility of reading character into the faces or personality into their gestures speaks to their presence, in his landscapes, as little more than tokens of industry.⁹² Suitably distanced from the social and political real of the ruling classes, labour stands for nothing more

⁸⁸ We might want to note the contrast between the sort of active look that characterizes the depiction of the aristocratic subject: the direct address of the viewer in Gainsborough's *John Plampin* (1756-7), or the play of gazes within group portraits such as Zoffany's *The Colmore Family*, 1775.

⁸⁹ See, for example, Constable's *Branch Hill Pond, Hampstead Heath* (c.1828), or Gainsborough's *Wooded Upland Landscape with a Village and Distant Mountains* (n.d.)

⁹⁰ "The growing mount I view'd with joyful eyes, And mark'd what each load added to its size. Wrapp'd in its fragrant steam we often sat, And to its praises held delightful chat. Nor did I e'er neglect my mite to pay, To swell the goodly heap from day to day." in *The Penguin Book of English Pastoral Verse*. John Barrell and John Bull, eds. London: Penguin Books, 1974, pp314-317.

⁹¹ see Burke, Edmund, *A Philosophical Enquiry into the Origin of our Ideas of the Sublime and the Beautiful* (1757), cited in Eagleton, op. cit., p56.

⁹² "If they obtruded more, if they became less symbolic, more actualised images of men at work, we would run the risk of focussing on them as men – not as the tokens of a calm, endless, and anonymous industry, which confirm the order of society; and not as objects of colour, confirming the order of the landscape." Barrell (1980), p149.

threatening than the certainty of profit.⁹³ The management of the amorphous was not confined, however, to its simple delegation as social and material other. Inbuilt in the garden is a deeper subterfuge: those moments in the Shade where the encounter with the amorphous is less well administered. This is not the exterior as the landscape interface would like the subject to see it, but the exterior that sustains the rule: the shapeless other of the Lacanian real.

Brunelleschi effectively sidestepped the task of representing excess by handing this task over to a mirror – a tautological maneuver that attempted to contain rationally only those forms that were amenable to such containment. If the discourse of landscape does not have recourse to such contrivances, it nonetheless carries on the affiliation of the amorphous with the *failure* of the interface. Most often, it is a landscape that suggests itself in the absence of any other recognizable image. Certainly this insight was not lost on painters of anamorphic pictures; there are few other options when trying to make sense of the puzzling shapes that present themselves to the eye when viewing an anamorphic picture from the obverse position. Erhard Schon's *Anamorphic Print of Four Portraits* (c. 1535) conceals portraits of Charles V, Ferdinand I, Pope Paul III and Francis I within an oddly disposed vista of lakes, rivers, buildings and figures. The indecisive shapes and strangely skewed contours which comprise the scene – vegetable and mineral forms in peculiar patterns and textures, lakes of dark liquid with impossibly poised waves, fields ploughed up in vivid stripes – resolve themselves into a slightly mysterious, but nonetheless recognizable, landscape.⁹⁴

Less scrupulous in their outlines, natural forms tend to be associated with so-called 'accidents' of representation. Alexander Cozens used this tendency to great effect, favouring the use of 'blots' or 'accidental shapes' in the depiction of landscape. Rather than making a detailed outline sketch, Cozens preferred to structure his composition around 'forms without lines' – indistinct masses suggesting the natural contours of water, foliage, or topography:

⁹³ "No painter offers us a more civilised landscape than Constable, but the existence of the men who have civilised it has for the most part to be inferred from the image of what their effort has achieved." *Ibid.*, p133.

⁹⁴ Daniel Barbaro's *Practica della Perspettiva* (1559) included instructions for creating an anamorphic picture by projecting light through a perforated drawing onto another surface. This tactic reduced the original drawing to a collection of 'straight and curved lines with no recognizable form', which Barbaro recommended disguising as 'ground, water, mountains, rocks, and other forms': "Pour mieux dissimuler ce que l'on peint selon les pratiques indiquées, le peintre ... doit savoir ombrer et recouvrir l'image afin qu'elle montre, au lieu de deux têtes, de pays,

To blot, is to make varied spots and shapes with ink on paper, producing accidental forms without lines, from which ideas are presented to the mind. This is conformable to nature; for in nature, forms are not distinguished by lines, but by shade and colour. To sketch, is to delineate ideas; blotting suggests them.⁹⁵

As well as the study of nature, Cozens suggests borrowing her means, as it were, to 'enlarge the powers of invention' in the viewer. He notes the especial efficacy of the blot in composing landscapes or 'taking views from nature': 'harmony, contrast, light and shade, effect &c.' are all responsive to this technique.⁹⁶ Cozen's 'cheat' is an algorithm, the accidental forms of nature figured by means of nature's own chaotic logic.

Cozens' technique was not totally without discipline, however. Blotting represented only the first stage of the work; the second involved filling in the outlines with a brush to complete the composition. If blotting suggests an abdication of agency on the part of the painter, then the subsequent stages of the composition ensure that this surrender is not total. Later landscapes, however – notably those of the Romantic period – do away with this kind of control. Here, the inclusion of shapeless or illegible forms in the image itself threatens to completely disenfranchise the viewing subject by presenting an image that cannot be read as such. This sort of failure – where the representation of excess gives way to the breakdown of representation itself – is perhaps most clearly articulated in Romantic depictions of natural disasters.

In Philip De Louthembourg's *An Avalanche in the Alps* (Figure 1), the entire upper right of the picture plane is given over to a turbulent mass of cloudlike shapes, an uncongealed mass which surges towards the viewer, frustrating the eye's attempts to move into the distance. The very nature of matter is subsumed by the violence of its descent; it is impossible to tell whether it is rock, snow, or ice that hurtles down the mountainside. The destruction of the

des eaux, des monts, des rochers et autres choses diverses..." Baltrusaitis, Jurgis, *Anamorphoses, ou Magie Artificielle des Effets Merveilleux*, Olivier Perrin, 1969, pp33-4.

⁹⁵ Cozens in Denvir, op. cit., p262. Cozen's method was unusual enough to merit special mention: "The drawings of this artist are, for composition, keeping, and effect, superior to any thing of the kind. They have a peculiar excellence, in which they resemble painting; for the effect is not, as it usually the case, produced from outlines filled up, but is worked into light, shade, and keeping, by a more artful process, the masses being determined in the first making out, or designation of the parts, and afford an harmonious effect, very unlike the ordinary compositions of scratches and lines, which are just connected and embodied by a flimsy washing." see Pott, J. H., *An Essay on Landscape Painting, with Remarks General and Critical, on the Different Schools or Masters, Ancient and Modern*, London, 1782, p77.

⁹⁶ "In doing which, as well as composing landscapes by invention, the following principles are necessary, viz. A proper choice of the subject, strength of character, taste, picturesqueness, proportion, keeping, expression of parts or objects, harmony, contrast, light and shade, effect &c. ' so that what remains necessary, for drawing

bridge – the only architectural object in the painting – is emblematic of that moment when system dissolves into anarchy, when ‘distancing oneself’ is no longer a matter of choice but of self-preservation. The reactions of the hapless climbers are the only indication of how close the avalanche has passed; a few metres beyond them, the solidity of the physical world dissolves into chaos. Turner’s *The Fall of an Avalanche in the Grisons* effects a similar refusal. Only the merest section of the horizon is visible in the disordered space of this image. Veils of mist appear both to rise up into the sky and to rain down from it. The gently zigzagging planes which normally function to lead the eye into distance have been turned on end; boulders fly through the air, no longer bound by the laws of physics. Here, the viewer teeters on the brink of an unnamed disaster, unable to establish a reliable spatial relation between her/himself and the represented scene. Though it is built around a slightly more conventional spatial framework, John Martin’s *The Great Day of his Wrath* contains neither horizon line nor vanishing point. Rather than drawing the gaze into the distance, the pair of coulisses that girdle the foreground open, menacingly, onto a void into which tumble armies of flesh, the conceits of a dissipated humanity. No trifling with collapsed bridges or crushed cottages here: entire cities are uprooted, shown by Martin in their last moments of recognizable form, before they smash to pieces in the abyss below.

Here, nature and the ‘natural’ escape codification; they are registered in/as the breakdown of constructed space – not simply that of architectural forms, but of the rational space of representation itself. If the horizon is the emblem of the distance that sustains the subject of landscape as such, then the absence of a horizon in images such as these – the substitution of an incoherent proximity for a legible distance – signals the *collapse* of the very spatial system that sustains the landscape interface and its subject. This puts the viewer in a difficult position, one in which the certainty of proper placement gives way to an uneasy awareness of one’s own proximity to the image plane. This is the kind of unsettling immediacy that threatens the subject of the anamorphic picture, and the subject in the Shades. Within the Lacanian argument, this sort of recognition – the undoing of the certainty of visual space – is concurrent with the annihilation of the subject:

Usually, I am transfixed by the fascination of the picture. It feels as though I am looking there where I desire to look. But at the anamorphic moment I become aware of something else, that seeing and the gaze within which I am caught are different. The gaze and the picture have become detached...⁹⁷

landscapes from nature, is only a habit in the draughtsman, of imitating what he sees before him...” Cozens, in Denvir, op. cit., p264.

⁹⁷ Adams, op. cit., p111-2.

Holbein's picture demonstrates quite clearly what is due the subject who strays away from the proper viewing position. To breach the boundaries of the circuit of representation is to find oneself suddenly 'under the gaze of the world', addressed by a 'dimension that has nothing to do with vision as such'; adrift in the field of the real. Here, it is not individual agency, but the operation of the gaze, that articulates the subject as such within the sphere of the visible:

What determines me, at the most profound level, in the visible, is the gaze that is outside. It is through the gaze that I enter light and it is from the gaze that I receive its effects. ... the gaze is the instrument through which light is embodied and through which ... I am photo-graphed.⁹⁸

The consequence of transgressing the boundaries of the circuit of representation is the abdication of one's very presence and agency as a subject. For the subject of landscape, then, anamorphic seeing is not a form of control; on the contrary, it is a *loss* of property, an abdication of ownership over what one sees. The gaze shatters the frame, it reveals the instrumentality of the landscape interface, denaturalizes the technology of vision that structures the view and its subject, and announces the latter as little more than an *effect* of the encounter with the visible. The moment in which the gaze is discerned is the instant in which the subject of landscape is negated as such.⁹⁹

The landscape interface constructs both a virtual space and a virtual body, it gives shape not only to what one sees, but to what one *is*. Within the Lacanian argument, what is brought to light in the Shade is the real that lies concealed behind the landscape interface – a real whose emergence collapses the distance that sustains the subject in/as theory. What is revealed to the subject in the Shades is a kind of alterity that representation can do little more than paper over; an order altogether different from that of the subject, an order "in respect to which 'existence' itself lacks."¹⁰⁰ This is not first nature viewed from a safe distance, this is first nature up close, unframed and unbidden, and the subject is powerless to limit its appearance. With the collapse of the distance of the picture, there is nothing to prevent the subject from being absorbed into the real, no prohibitions to shape it. For the discourse of landscape, the *reality* of body and environment is their utter inconsistency

⁹⁸ Lacan, op. cit., p106.

⁹⁹ "The world is all-seeing, but it is not exhibitionistic – it does not provoke our gaze. When it begins to provoke it, the feeling of strangeness begins too. ... [In] the so-called waking state, there is an elision of the gaze, and an elision of the fact that not only does it look, it also shows." Ibid., p75. Joan Copjec puts this in slightly less opaque terms: "At the moment the gaze is discerned, the image, the entire visual field, takes on a terrifying alterity. It loses its "belong-to-me aspect" and suddenly assumes the function of a screen." see Copjec, Joan, *Read My Desire: Lacan Against the Historicists*, MIT Press, 1994, p35.

¹⁰⁰ Adams, op. cit., p55.

outside of the practice of viewing. Without the dress, the deportment, the various social codes that formed it, the body is as formless and inarticulate as the nature it attempts to distance itself from. Here, the body is both exterior (material, raw, inaccountable), and *obscene*, loose in the field of the real, “presented as if there were no scene to stage it, no frame of representation to contain it, no screen.”¹⁰¹ It is not that the body occupies the position of the gaze, or that it is necessarily aligned with it, but that it wanders unrestricted within its field, threatening the screen of representation with vandalism, and the subject with a protracted erosion which over which ‘propriety’ has no legislative power.

There is much more going on in the Shades, then, than the simple staging of representation’s formal antithesis. Here, the viewing subject risks not merely social, but ontological dissipation; the reflexive character of visibility is much more than a simple awareness of being looked at, and judged, by others. In the Shades, this awareness is multiplied and transformed: the subject finds itself under the gaze, subject to a reflexive ‘look’ that threatens it with annihilation. Here, the shapeless materials of nature show themselves not in need of management, but in/as a state of plenitude that representation can never hope to model – an organic sufficiency which the subject, by definition, lacks. The subject is unable to find itself at one with this nature; the latter cannot be emblemized, it does not ‘offer itself up’ to the rational intellect. If the function of the view is to veil this insufficiency in the subject, then the reality that is glimpsed in the Shades, has precisely the opposite effect: that of revealing the subject as lacking both *in nature* and *by nature*.

the remedies: prohibition, codification, imagination

Though we cannot assume that this awareness was present as such to the eighteenth-century consciousness, the anxiety of the subject in the Shades makes more sense if we presuppose a subject that is mindful not only of the instrumentality of vision, but of the consequences of the failure of the interface. Certainly the efforts, on the part of the subject, to sustain the illusion of isomorphism speak to a somewhat more informed investment in representation than is usually attributed to the Classical subject. Formal gardens such as

¹⁰¹ Foster, op. cit., p111.

Versailles went to great lengths to 'pre-order' nature for the subject. The very *ethos* of the English landscape garden, on the other hand, is that the subject must work in order to see. As we have seen, the event of vision depended, for its success, upon the facility with which the subject mobilized and directed the look, its competence in fixing of the limits of vision. As Hunt reminds us, the deliberately self-conscious presentation of nature in the garden "involves above all an answering self-consciousness on the part of viewers; they find an object, like a garden, and make it a sign by analyzing it and acknowledging that it derives meaning by virtue of that analysis."¹⁰² Landscape, as I've already suggested, is both a noun and a verb: if the work of viewing involved the codification of the amorphous within the space of the visible, then the challenge in the Shades was to carry out this legislation in the absence of vision. In the Shades, the subject must take measures to warding off the collapse of the subject into the corporeal body, and to prevent this body from leaking into the space of representation.

If the enclosed landscape invites privacy, it also comprises a degree of suggestiveness, and hints at a carnality charged with the forbidden. Here, the concern of the landscape interface is the normalization of the private subject; not unexpectedly, this normalization is forged along class lines. In works such as *The Harvest Wagon* (1767), Gainsborough's workers appear to merge not only with their environment, but, implicitly, with each other. The tenor of their behaviour – the drinking, the casual exchanges of touch and of glance – is both libidinous and anticipatory. Linked, by implication, to that of the restless horses, this kind of behaviour is the natural response of any warm-blooded creature to the season and the situation.

Naturally the aristocratic subject behaves rather differently. The indiscretion of Gainsborough's workers is quite distinct from the sort of supervised transgression that was encouraged of the subject in the Shades. Though there is no avoiding the sexual tension in pictures like Fragonard's *The Swing* (1765), this is a chaperoned encounter, and, as such, must remain unconsummated. Here, 'proper' behaviour consists in the displacement of lust onto a fetish object – the single cast-off shoe which flies towards the young gentleman –

¹⁰² Hunt, op. cit., p79.

while the real object of desire remains invisible and untouched beneath the lady's skirts.¹⁰³ Here, the absence of perspective is framed as an arid and eminently controllable sensuality. Fragonard's image speaks to what De Bolla terms the 'erotics' of the scopic field and the codification of visual pleasure.¹⁰⁴ For the eighteenth century spectator, entering into the spacings of visuality meant not just looking, but being looked at. Self-display, as we have already seen, was a vital part of the construction of the subject in the garden, and if the lady in Fragonard's picture appears to reveal a little more than her lover expected, the pair nonetheless play out to perfection the dialectic of voyeurism and exhibitionism that characterizes the event of seeing. This ostensibly intimate exchange is not only less private than it appears (the entire event is supervised by the young lady's chaperone, pushing the swing, and voyeuristically, by the viewer) but constitutes, in and of itself, a form of codified and condoned scopophilia.

This is the sort of calculated disobedience that tempted the private subject in sites such as the *Randibus* at Stowe, and the temples to Venus at West Wycombe Park and Rousham. The erotic discharge that is invited in such locations is, as Patrick Eyres points out, "usually articulated within an iconographic framework that addressed moral and political issues."¹⁰⁵ Framed as 'natural', erotic pleasure, for the governing classes, was associated with liberty. Although it was presented in deliberate contrast to the repressive politics of more traditional Christian values that proclaimed sexuality as wicked, carnal excess in the garden is confined within a single – and eminently controllable – discourse of acceptably indecorous behaviour.¹⁰⁶ No matter how licentious this behaviour might appear, it is disciplined behaviour nonetheless, a means of codifying the natural and diminishing the hermeneutic potency of the material body by suggesting programmatic acts to take place in moments of privacy.

¹⁰³ For a more complete discussion of desire and displacement in this image, see Norman Bryson, *Word and Image: French Painting of the Ancien Régime*, Cambridge University Press, 1981, pp98-9.

¹⁰⁴ see De Bolla (1995).

¹⁰⁵ see his editorial in the *New Arcadians Journal* No. 49/50 (2000), p8.

¹⁰⁶ As Wendy Frith points out, the 'naturalness' of sex had its limits: "Just as Whig liberty did not mean total license, but an adherence to specific social and ideological laws, codified as the 'laws of nature', so 'natural sex' meant self-regulation and conformity to the rule of the norm and referenced a highly specific, carefully delineated, and fully cultural, though naturalised, set of practices, activities, and meanings." Frith, Wendy, 'When Frankie Met Johnny: Sexuality and Politics in the Gardens of West Wycombe and Medmenham Abbey', *New Arcadians Journal*, No. 49/50 (2000), pp62-104, p68. see also Wheeler, Richard, "Pro Magna Charta", or "Fay ce que Voudras": Political and Moral Precedents for the Gardens of Sir Francis Dashwood at West Wycombe', *New Arcadians Journal*, No 49/50 (2000), pp26-60.

If the view is concerned with the codification of material nature in/as visuality, then the Shades are concerned, in part, with the codification of the body by means of imaginative effort – whence Robert's Morris's 1734 description, from his *Lectures on Architecture*, of what should take place there:

Here a Mind innocently employ'd by its Starts and Sallies, and its Excursions into philosophic Depths, by a Propensity to Solitude, always meets with Entertainment. Every Sprig of Grass may afford a multitude of fine Thoughts, to employ the Imagination; and by a Genius turn'd to microscopical Speculations, a Way is open'd to entertain the Fancy with unbounded Reflections...¹⁰⁷

As early as the sixteenth century, garden experience was linked with the rhetorical codification of sensibility. As Jacopo Bonafido wrote, "many things can be seen [in the garden] that require a diligent eye and much consideration. Thus it happens that no matter how often a man returns there, he finds new marvels and new pleasures."¹⁰⁸ This statement, Hunt tells us, marks a crucial acknowledgement of the movement from the visual to the textual – the slippage from material thing to mental experience – that is a distinguishing feature of the discourse of landscape. It is by means of this slippage that the discourse of landscape colonizes the virtual space of the private subject: the disciplining of the subject, and the enabling of a perspective, in the absence of vision.

Rather than directing the gaze outwards over the landscape, however, the subject in the Shade reverses this relation, replacing the visual with the imaginative, and incorporating depth of field as philosophical speculation. The 'excursion into philosophic depth' meant turning the look inwards, engaging the 'mind's creative eye', or the 'philosophic eye' – a kind of inner vision that could "avoid seeing."¹⁰⁹ It is the power of this sort of speculation that Coleridge appeals to in *This Lime Tree Bower My Prison* (1797), which opens with its author sitting in the bower with an injured foot while his friends 'wander in gladness' in the landscape. Coleridge's longing to share in their experience is eased only when he turns his attention to his immediate surroundings. Nature, as he discovers, is not manifested solely in

¹⁰⁷ Morris in Hunt, op. cit., p235. Joseph Heely, describing his experience of a bower in the garden at Hagley: "I stepped into the midst of it, to a simple bench under a tree; and from the gaiety of a park, open, and filled with cheerful objects, found myself in a moment immersed in a wild, disordered, and savage solitude. ... Stuck with agreeable novelty, I knew not when to leave it: it is one of nature's own bowers. I sat in pleasure – cool, refreshing breezes played around me – the birds in ceaseless songs soothed my ear; - I was lost in contemplation, and forgot the design I came about." Heely, Joseph, *Letters on the Beauties of Hagley, Envil, and the Leasowes, with Critical Remarks and Observations on the Modern Taste in Gardening*, Vol. 1, London, 1777, p130.

¹⁰⁸ Bonafido in Hunt, op. cit., p32.

the ordered distances of the view, but also appears proximately, revealed in a wealth of detail that is equally responsive to the enterprise of the philosophic eye:

A delight
Comes sudden on my heart, and I am glad
As I myself were there! Nor in this bower,
This little lime-tree bower, have I not marked
Much that has soothed me. Pale beneath the blaze
Hung the transparent foliage; and I watch'd
Some broad and sunny leaf, and loved to see
The shadow of the leaf and stem above
Dappling its sunshine! And that walnut-tree
Was richly tinged, and a deep radiance lay
Full on the ancient ivy, which usurps
Those fronting elms, and now, with blackest mass
Makes their dark branches gleam a lighter hue
Through the late twilight: and though now the bat
Wheels silent by, and not a swallow twitters,
Yet still the solitary humble bee
Sings in the bean-flower! Henceforth I shall know
That Nature ne'er deserts the wise and pure;
No plot so narrow, be but Nature there,
No waste so vacant, but may well employ
Each faculty of sense, and keep the heart
Awake to Love and Beauty!¹¹⁰

It is the power of fancy that allows the incapacitated poet not simply to shape imaginatively the landscape in which his friends wander¹¹¹, but to contemplate 'joys he cannot share', and thus to find himself in Nature alongside them. If nature is freed of its dependence upon distant vision, it remains nonetheless under the directed gaze of the subject: despite their anticipatory character, such imaginative excursions were no less directed than the view. William Collins' *Ode to Evening* (1746) is a response to a poetic preoccupation, earlier in the century, with didactic or 'public' themes at the expense of private feelings. As Barrell points out, Collins' work addresses these extremes by apprehending its author in a moment of silent contemplation. Passing the last moments before sunset in the stillness of a glade, the

¹⁰⁹ Fabricant (1985), p65.

¹¹⁰ Coleridge, Samuel Taylor. 'This Lime Tree Bower My Prison' in *Samuel Taylor Coleridge: A Critical Edition of the Major Works*. H.J. Jackson, ed. Oxford and New York: Oxford University Press, 1985, p39.

¹¹¹ Coleridge plays out the dialectic of View and Shade in rhetorical form: after pausing in a damp and shadowy dell, "only speckled by the mid-day sun", his friends move on to the view of a

[Many]-steeped tract magnificent
Of hilly fields and meadows, and the sea,
With some fair bark, perhaps, whose sails light up
The slip of smooth clear blue betwixt two Isles
Of purple shadow!
Ibid., p38.

poet consults Eve – his muse, the ‘tutelary deity’ of the evening – to guide him in forming the appropriate reflections and making sense of an otherwise disordered experience:

Now teach me, *Maid* compos'd,
To breathe some soften'd Strain,
Whose Numbers stealing thro' thy darkning Vale,
May not unseemly with its Stillness suit
As musing slow, I hail
Thy genial lov'd Return!¹¹²

Collins' plea to Eve to accompany him as he looks at the darkening landscape is a bid for assistance in ordering the objects of experience: only by observing his surroundings under her guidance, as it were, can he bring consistency to them. The muse, as Barrell observes, is an “active agent harmonising the landscape;”¹¹³ she is invoked, in those moments when the environment is not illuminated by brilliant sunlight, in order to help the subject position itself, find its distance. The power of reading, Marin tell us, is its ability to subordinate the look to the ‘murmur of language’ and thereby to summon “a new image, causing it to penetrate and disturb the one seen here and now.”¹¹⁴ Here, in a space apart from the view, Eve helps the poet to organize his environment, and thereby to escape the moment, and the body, in which he finds himself.

Collins' ode thus transacts not only between the public and the private, but also between the distant and the proximate. The rhetorical discipline and codes of conduct suggested by Eve ensure that the more annoyingly material aspects of the experience are kept at a distance – they are the guarantee, in effect, that the private and the proximate do not collapse into one another. Barrell, in his reading of the poem, pays special attention to the following passage detailing the nocturnal activities of bat and beetle:

Now Air is hush'd, save where the weak-ey'd Bat,
With Short shrill Shriek flits by on leathern Wing,
Or where the Beetle winds
His small but sullen Horn,
As off he rises 'midst the twilight Path,
Against the Pilgrim born in heedless Hum...

¹¹² Collins, William, cited in Barrell, John, ‘The Public Figure and the Private Eye: William Collins' ‘Ode to Evening’, in *Teaching the Text*, Susanne Kappeler and Norman Bryson, eds., Routledge, 1983, pp1-17, p1.

¹¹³ “The property of evening becomes the ability to harmonise what, in the full light of day, seems discordant; that property is observed by the poet himself, as he organises by means of syntax the objects imaged as seen from the hut; but the inclusion of the ‘Dewy Fingers’ of Eve, among the images observed, works to validate, on the basis of his own imagined observation, the representative power of the personification, and the harmonising property by which it discovers similarity in difference.” *Ibid.*, p15.

¹¹⁴ Marin (1995), p2.

'Mean' images such as these had an appropriate place in satire, but are less often found, Barrell notes, in poems like the *Ode to Evening*. In the latter case, the proximity that such images invoke threatens the 'sense of propriety' in the work: "they are pulled almost as uncomfortably close to the reader as the beetle is to the pilgrim, the evening rambler, into whom the beetle crashes in mid-flight."¹¹⁵ Played off against the allegorical tone of the opening passages, descriptive stanzas such as these, argues Barrell, draw attention to the work that the reader must do to discover the 'proper' meaning of the experience, as well as the consequences of failing at this task. It is this same kind of imaginative work that allows Coleridge to transcend his physical encumbrances.¹¹⁶

This concern for the management of the immediate is evident, as well, in the attention paid by James Thomson to the responses of the body in its passage through the Elysian fields at Stowe, where the proper rejoinder to the melancholy atmosphere consists in "the sudden-starting tear, the glowing cheek, the mild dejected air, the softened feature, and the beating heart."¹¹⁷ The Temple of British Worthies was intended to have a similar effect on blood pressure and body temperature: Thomson asks of his reader, "Does not your Pulse beat high, while you thus stand before such an awful Assembly; is not your Breast warmed by a Variety of grand Ideas, which this Sight must give Birth to?"¹¹⁸ These reactions can be understood as simple recommendations: indications, to be read on the surface of the body as the guarantee of a 'correct' response. Yet they could equally be said to demonstrate an almost surgical concern for what goes on beneath its surface – an aspiration to regulate its very heartbeat. The shaping of the subject in the *Shades* meant more than simply fashioning it for the eyes of others: it meant colonizing its interior space, prescribing its emotional responses – codifying the body, inside and out, in order to distinguish it from the domain of the real.

¹¹⁵ Barrell (1983), p11.

¹¹⁶ Early in the poem, Coleridge laments the fact that, by remaining behind, he has "lost Beauties and Feelings, such as would have been Most sweet to my remembrance even when age Had dimmed mine eyes to blindness!" Here, it is implied that clarity of recollection that would have enabled him to overcome the eventual failure of vision. Coleridge, op. cit. p39.

¹¹⁷ see Thomson, James, 'The Seasons: Autumn,' in *The Seasons and The Castle of Indolence*. James Sambrook, ed. Oxford: Clarendon Press, 1984, pp89-126; p116.

¹¹⁸ Gilpin (1748), p29.

Were we to trace a history of the interface from Brunelleschi's perspective demonstration, through Alberti's legitimate construction, to the landscape garden, we might declare this history to be one of the progressive dematerialization of the technology of vision and its subject. Situating the Lacanian model on this same trajectory not only brings to light Lacan's debt to eighteenth century visualist epistemology, it also attests to the theoretical affinity between his model and the landscape interface. Subsequent references to the 'interface' in the following discussion should thus be understood to encompass both of these models.

The interface spatializes subjectivity by re-presenting distance – extension in real space – in/as the theoretical figure of *distanciation*. This, as we have seen, is both a visual/rhetorical and an ontological concern. De Bolla uses the term 'metaphorics of the eye' to describe those figurative expressions used to describe the movement of the look in discussions of eighteenth-century visual experience.¹¹⁹ The here/there movement that characterizes the perspective interface allows the subject, as we have seen, to get its bearings both visually and ontologically; in this sense, the movement of the look from foreground to horizon comprises a sort of 'metaphorics of the eye/!'.¹¹⁹

In creating and sustaining this distance, the interface functions to bring material nature – both environment and body – from the domain of the real into that of the imaginary – the domain of images with which we identify. Cultural representations, however, also supply the standard by which loss is perceived; if representation structures the imaginary, then it is equally active in manufacturing lack. This lack is inscribed into the most basic constituents of the landscape interface – the configuration of station point and horizon. If the latter is a figure for the civil liberty of the subject, it also emblemizes the anticipatory and perpetually frustrated movement of desire – and the existential ache that accompanies the subject's entry into the realm of the symbolic.¹²⁰ The landscape interface mitigates this lack by inciting the subject to *incorporate* this distance, to form an identification not with another human being, but with a spatial and environmental other.

¹¹⁹ The metaphorics of the eye is "the collection of figurative expressions generated within eighteenth-century discussions of specific forms of visual experience. These figurative expressions have a considerable range: in the viewing of landscape, for example, the eye is 'thrown' to a particular point, or sometimes it is 'drawn' towards an object in the landscape known as an 'eye-catcher'." De Bolla (1995), p283.

¹²⁰ "The gaze is presented to us only in the form of a strange contingency, symbolic of what we find on the horizon as the thrust of our experience, namely, the lack that constitutes castration anxiety. The eye and the gaze – this is for us the split in which the drive is manifested at the level of the scopic field." Lacan, op. cit., pp72-3.

Perception, of course, is an issue both of vision and of desire. The subject sees what it needs to see in order to see itself as complete.¹²¹ The landscape interface keeps the exterior visible in/as the shapeless materials of nature, and in the form of a body which effects a simple refusal of perspectival representation. This is the ungovernable 'natural' body that is suggested by the garden and its discourse: the body given as simple exterior, that body that sustains the fantasy of perceptual isomorphism. In the Lacanian account, the exterior of the visual field – the real – comprises nothing at all.¹²² What is made present in the Shade, however, is a real body which is not 'nothing' – the exterior as power of annihilation – rather, it is the awareness of a certain consistency to this exterior and thus of a certain instability of boundaries. What the Shades demonstrate is the simultaneous participation of the body in both registers – representation and its exterior – and the perilous inadequacy of the boundary that separates the two. The display of the body's hermeneutic density – the indication that it is never fully colonized by discourse – outside of this republic is unwelcome evidence of the viewing subject's investment in maintaining a position of 'distance'. What is revealed in the Shades is thus the extent to which the gaze shows me 'what I want to see', the extent to which exteriority is less a structural requirement than a function of desire¹²³ – and, subject as such, to the pressure of competing ideologies. If the subject of the view finds itself at a distance from nature, the subject in the Shades is suddenly presented, up close, with the contingency of selfhood, the brute materiality of its own nature and the inevitability of its own death.

Lacan has little to say about this body, or about its activity within representation. Whether or not the body is present as a *substrate* to his subjectifying relation is not the issue here. The homogeneous body that is theorized by Lacan as representation's other is not the singular body that intervenes in the event of seeing. It is this latter body that is presented in Brunelleschi's experiment, which proclaims the perspectival gaze as an *apparatus*; literally, an attitude which must be 'taken up'. Here, the object of the gaze is also an object grasped in the hand; the subject of the look is also a carnal body, both 'inside' the representation and

¹²¹ "The question of perception must take up the problem of what I want to see, and the way in which it structures the gaze which captures me. Instead of thinking of perception as just a visual field, it must be thought of as the field that is structured by the relations and forces of objects and desires." Adams, op. cit., p111.

¹²² "Lacan argues ... that beyond the signifying network, beyond the visual field, there is, in fact, nothing at all. The veil of representation actually conceals nothing; there is nothing behind representation." Copjec, op. cit., p35.

¹²³ "[The] regime of representation ... is described by the fact that it ties together my wish to see and what is presented to me, a unity of the scopic field and the spectator. But when the gaze as an object becomes detached from this scene, a dislocation occurs. A gap opens up – the circuit is broken. The illusion of wholeness has been as it were castrated." Adams, op. cit., p114.

outside of it, its mainstay and necessary condition. Here, the body is a hybrid form, complexly involved in representation but neither inside nor outside the circuit proper; the necessary condition of the subject's constitution as both viewer and viewed.

The failure of the interface in the Shades is a discursive one, involving the breakdown of the 'rule of representation by conceptual oppositions' on which the interface depends. If the Shades draw attention to the insufficiency of the perspective paradigm, however, they do so in terms not only of the failure of the latter relation, but in terms of the inability of the perspectival interface to contain the impression of persistent personality engendered in and by the social space of viewing. Unlike the regulated narrative of the view, the *duration* of perception in the Shades presents problems for the stability of the relationship between representation, its exterior, and the subject that finds itself as/at the junction of these two terms.¹²⁴ Theoretically, the period of tenure of the subject of the view is that during which it is lead through the image. The self that is manifested in the tour round the garden, on the other hand, "has a persistence, a residue which is carried over from point of sight to point of sight, one moment of production to the next; it not only has a spatial location, but also a temporal persistence."¹²⁵ The excess comprised in/by this space – that of the subject itself – cannot be categorically ascribed to 'nature'. As I will detail in the following chapter, the recognition of the self as socially produced, and the sense of persistent personality that is both the effect and necessity of the garden experience, are the hallmarks of the modern subject.

¹²⁴ "In viewing a landscape, ... the time of sight clearly conditions the space of viewing as the spectator moves through the 'real'; the distance of the subject is, therefore, a coefficient of a temporalized viewing experience." De Bolla (1989), p208.

¹²⁵ *Ibid.*, p209.

The discourse of the interface undergoes profound transformations across the two historical epochs presently under examination. The two centuries which separate the landscape garden from the virtual reality simulation see both material changes in the character of the interface and ontological changes in the texture of its subject. Although perspective theory itself changes little between the eighteenth and twentieth century, the same is not true of the means by which perspectival vision is operated and enabled. Perhaps the most profound transformations are those affecting the material character of the interface itself, and its consequent relationship to the body. The technologization of vision which begins in the late nineteenth century, radically alters the subject's relationship to the interface and to its own corporeality. The garden demonstrates quite clearly the failure of perspective theory to accommodate the subject as it is given in and by the social conditions of viewing. It is, in part, the acknowledgement of theory's incompetence in the face of a mobile or multiple subject – and thus the drive to technologize vision itself – that marks the passage from Classical or early modern, to late modern epistemology.

The recognition of the failure of perspective theory to legislate the modern subject thus takes place in the context of emerging technologies of vision which regulate the body in radically invasive ways. This technological emergence is not restricted to the development and dissemination of material artifacts, however. Perhaps more importantly, technology itself is taken up as a crucial term in the constitution of the modern subject. In both cases, however, the effect on the carnal body is the same: rather than the potentially seditious concern that it was for the eighteenth century subject, the modern body is recast as determinable, manipulable, and malleable. The reordering of the relation between theory and practice is paralleled, however, by a marked consistency in the character of excess, and of the various attempts by the discourse of the interface to describe and manage this excess.

2.1 the technologized subject and the refiguration of excess

Within Classical epistemology, perception and representation are the property of a distanced subject, and take place “through a preferred visual form of observation that is often, at least implicitly, taken to be monosensory.”¹ The camera obscura – as an analogy for the workings of the human eye and the human mind – is often identified as the ‘engine’ of Classical epistemology; certainly it plays a paradigmatic role in sustaining the latter’s visualist bias. The subject, lodged inside the camera of the mind, looks out over a world of which it can have no direct knowledge, but only a representational one, by means of mental images. Though it would be a mistake to conflate the operation of the camera obscura with that of Albertian perspective, both models assume a distanced and disembodied subject that enjoys a monosensory and monodirectional relation with the world; as ontological and epistemological paradigms, both could be described as Cartesianesque. Though such models are generally associated with a Classical epistemology, they have by no means disappeared from postmodernity.

An epistemology that refuses to acknowledge the agency of the body will inevitably have to concern itself with various means of policing it. As it is articulated in/by the practice of viewing, the Classical subject is understood as non-persistent, as “produced by and residing within a particular instance of discourse or speech.”² Here, control of the material is enacted indirectly, by conceiving the subject as an effect of the event of looking:

The viewer does not take to the picture his or her subjectivity, rather, the opposite case pertains in which *the subject is produced in the space between the eye and the canvas in the distance of the picture*. Therefore the subject in the circuit of vision becomes the subject in and of representation, and the task perspective theory addresses is to restrict the subject to its proper place, its subject position in the ‘real’ of viewing: the true point of sight.³ (italics added)

Inasmuch as this sort of event-specificity does not preclude the collateral presence of other modes of subjectivity (classed, gendered, etc.), what distinguishes the subject of representation as such is its dependence on the precise positioning of the material body in representation⁴, and the affirmation of this positioning by the look of others.

¹ “Its ideal observer is, moreover, placed in as high or godlike a position as possible and is motionless, the point of view from which any world may be seen.” Ihde, op. cit., p56.

² De Bolla (1989), p39.

³ Ibid., p197.

⁴ “[Perspective] rules determine positionalities, both within the image and exterior to it ... they also control the possible productive excess of the image. If the image itself were to produce multiple points of sight ... then a

Within the social spaces of viewing (gardens, exhibitions, and the like), however, the strict positioning of the subject was seldom observed. Clearly this was a problem for the garden designer; apart from recommending particular positions, there was little the designer could do to enforce specific, singular viewpoints. The practice of viewing in the garden “fractures the authority of theory; the space which opens up in the ‘real’ viewing situation is excessive, plural in regard to theory.”⁵ The discourse of the interface is not designed for a subject whose sense of self is formed in/as the social; once this socially produced self begins to resist the terms imposed on it by *costruzione legittima*, the relations which define the subject as such begin to break down.⁶

The temporality of the viewing experience in the garden made the legislation of corporeal excess even more problematic:

In viewing a complicated visual network which cannot be taken in ‘at a glance’, such as a landscape or a series of pictures, the ‘true point of sight’ shifts both spatially and temporally in ways that closely imitate the movement of the subject who views.⁷

The temporal attenuation of the viewing event not only brings to light the problematic of the ‘wandering body’, as we have seen, it also tends to constitute an explicit verification of the autonomous subject.⁸ Efforts to manage this sort of irruption by invoking an ‘inner vision’ of the mind or imagination inevitably come face to face with a body that refuses to be incorporated into the point of view thus conjured.⁹ The garden shows clearly the various faultlines that pervade both the discourse of the interface-as-screen, and of the visually biased epistemology that it allegorizes. Whether or not this constitutes an explicit acknowledgement of the subjectivity of vision is a moot point, and one that will not be argued in detail here. What is certain, however, is that as the eighteenth century drew to a close, the garden visitor’s obsession with the corporeal discipline took place against a backdrop of an interface that was increasingly understood to be subject to failure.

number of forcefully maintained relationships between the image and its maker, the image and the viewer, and the viewer and the image’s maker are liable to disintegrate.” Ibid., p201.

⁵ Ibid., p201.

⁶ “[Perspective] rules determine positionalities, both within the image and exterior to it ... they also control the possible productive excess of the image. If the image itself were to produce multiple points of sight ... then a number of forcefully maintained relationships between the image and its maker, the image and the viewer, and the viewer and the image’s maker are liable to disintegrate.” Ibid., p201.

⁷ Ibid., p207.

⁸ In this way the time of sight is equated to the time of the subject; and the gaze of subject, its distance to the view increasingly becomes the gaze in the subject, the look which bounds the view, stretched out through time, through the sense of self.” deb207

The transition to late modernity thus consists, in part, of an admission of the failure of the perspective interface either to control the carnal body or to fully describe the subject. This admission is articulated in/as the reorganization of the subject's internal dynamic, and the transformation of its relations both to the technologies it operates, and to its own materiality.

De Bolla frames the passage from Classical to late modern epistemology in terms of the recognition of the subject itself as a form of discursive excess. Here, the distinction is made between a subject which is contained in and by the event of looking, and one which is not – a subject whose sense of self takes the form of an enduring and consistent sense of personality, rather than being framed as a/the property of a specific discourse or event. This distinction is centered on a subtle shift in the way that the productive power of discourse is understood – a shift that, as we saw in the last chapter, is linked to the recognition not simply of the power of the subject to produce discourse, but, reciprocally, of discourse itself to produce the subject. The admission of discourse as a productive force in the constitution of the subject and (its) excess indicates a profound shift in the way the mind/body relation is prioritized and policed. As an 'I' that "enters into the experiential domain rather than being produced by it,"¹⁰ the subject of late modernity clearly does not conceive of corporeality as a limiting condition in the same way that the eighteenth century subject did. The subject of late modernity is constituted and sustained as such through the agency of discourse, which takes the place of the carnal body as the necessary condition of subjectivity and the 'ambient' level at which it is articulated. Rather than a material threat to the integrity of the subject, the body, as we will see, is recast as a site of failure. Clearly, the circuit of representation can no longer function either as a means of producing the subject, or of bringing the body to law.

In the garden, the technology of vision did not take the form of an artifact *per se*; the embodiment of the perspective interface took the form of a performance – the visibilization of one's facility with the technology – rather than a physical engagement. For the modern subject, this kind of performance is no longer necessary. Though optical devices were not unknown in the eighteenth century, the widespread emergence of such artifacts from the early nineteenth century onwards indicates a profound shift in the way that technology is

⁹ "The placing of the body at the point of sight becomes problematic, ... once vision becomes an internal as well as external faculty, once one sees as much with the mind or the imagination as with the eyes." *Ibid.*, p194.

¹⁰ *Ibid.*, p44.

incorporated. Here, as Crary points out, the technologization of vision demands more passive and rationalized forms of embodiment.¹¹

Late modernity demanded a subject that was capable of functioning within emerging regimes of visibility structured by new technologies of representation such as photography and film, as well as one that was amenable to increasingly centralized systems of production and consumption. It is in the context of such demands that we can situate the ongoing scientific and technological colonization of the modern subject. Released from its confinement in the 'closed room' of the mind, the observer itself came under scrutiny as an object of scientific knowledge: Goethe's study of optical effects, Schopenhauer's identification of colour as a retinal phenomenon rather than an exterior impression, and Helmholtz's investigation of light as an electromagnetic phenomenon rather than a property of human vision, all pointed to the heterogeneous character of vision and visual experience:

Vision, rather than a privileged form of knowing, becomes itself an object of knowledge, of observation. From the beginning of the nineteenth century a science of vision will tend to mean increasingly an interrogation of the physiological makeup of the human subject, rather than the mechanism of light and optical transmission. It is a moment when the visible escapes from the timeless order of the camera obscura and becomes lodged ... within the unstable physiology and temporality of the human body.¹²

It was in part the recognition of the subjectivity of vision, and of its implication in the operation of social, institutional and discursive power, that fueled the development of scientific instruments designed to correct and discipline the senses. Technological objectivity and 'machine produced facticity' take the place of a human observer whose accuracy and objectivity was now known to be questionable. Vision is abstracted from a body (both observing and observed) that is increasingly understood as 'a component of new machines, economies, and apparatuses' – social and libidinal, as well as technological. Here, the technologization of vision is imposed upon a subject that, although ostensibly self-determining, is increasingly, as Crary points out, the object of 'procedures of control and normalization'.¹³ It is the fragmentation of the look and its subject that gives rise to modern

¹¹ Optical devices such as the diorama, the zootrope, and the phenakistiscope were designed for an immobile subject. Others, such as the kaleidoscope, were seen to be aligned the modernist bias for productivity and efficiency; the latter instrument was understood by some as a "mechanical means for the reformation of art according to an industrial paradigm." see Crary, *op. cit.*, p116.

¹² *Ibid.*, p70.

¹³ Crary describes the late modern subject as a "composite structure on which a wide range of techniques and forces could produce or simulate manifold experiences that are all equally "reality." Thus the idea of subjective vision here has less to do with a ... subject who is "the organizer of the spectacle in which he appears," than it does with a process of subjectivization in which the subject is simultaneously the object of knowledge and the object of procedures of control and normalization." *Ibid.*, p92.

regimes of visibility as such: institutionalized forms of vision operating in the service of often competing ideologies.

Crary's argument for a decisive rupture with Renaissance models of vision and a wholesale transformation from geometrical to physiological optics is not entirely convincing, however. Suren Lalvani argues, more plausibly, that Cartesian perspectivalism continued – and continues – to operate powerfully within certain institutions.¹⁴ Late modernist economies of vision, he argues, are articulated around the mutually reciprocal orders of spectacle and surveillance, and a spectator that is both 'susceptible to illusion and open to manipulation'.

It is in the context of the persistence of Cartesian models of vision and subjectivity that the technologization of vision takes on a slightly different significance. Here, it refers not simply to transformations in the subject brought about by the development of optical instruments, but to the naturalization of perspectival vision as a necessary component of a functioning and functional subject. Technologies such as photography and film demand a certain facility, on the part of the subject, with perspectival vision – rather than a privileged way of seeing, perspectival vision is assumed as an attribute of the modern subject: a way of seeing that is embedded in this subject as 'natural'. Within the orders of spectacle and surveillance, the reality effect of technologies like photography was critical to the operation and success of disciplinary practices such as criminology and psychology, as well as innumerable scientific enterprises. It is on account of its social definition as 'objective' within such discourses, claims Bourdieu, that photography – and the legitimate construction that it realizes – presents itself with the appearance of a 'natural language'.¹⁵ Christian Metz makes a similar point when he argues for the 'double movement' of vision – a movement which entails the "projection of a purposive human consciousness, [and] the introjection ... of a particularly technologized space, a space which the camera mediates and assimilates to the terms of vision."¹⁶

¹⁴ [Instead] of arguing for a wholesale transformation from one model of vision to another, it is more appropriate to speak of the increasing coexistence of two radically distinct models of vision. For the "fictions of realism," wherein vision is grounded to a referent, (the regime of surveillance), and the increasing abstraction and mobility of vision (the regime of the spectacle), are both crucial for the construction of a new kind of observer/observed spectator adequate to the emergence and operation of a complex modern visual order." Lalvani, Suren, *Photography, Vision, and the Production of Modern Bodies*, State University of New York Press, 1996, p174.

¹⁵ "Photographic representations only really appear 'lifelike' and 'objective' because they obey laws of representation which were produced before the media for creating them mechanically existed. Used by painters from the beginning of the sixteenth century [...] the camera obscura became very widespread as the ambition to produce 'lifelike' images was reinforced. [...] Photography was predisposed to become the standard of 'realism' because it supplied the mechanical means for realizing the *vision of the world invented* several centuries earlier, with perspective." Bourdieu, Pierre, 'The Social Definition of Photography', in *Visual Culture: The Reader*, Jessica Evans and Stuart Hall, eds., Sage Publications, 1999, pp162-180, p180.

¹⁶ Bukatman, Scott, 'Terminal Penetration', in *The Cybercultures Reader*, David Bell and Barbara M. Kennedy, eds., Routledge, 2000, pp149-174, p163.

From late modernity onwards, then, the subject is characterized by an ambiguous subjective vision. On the one hand, subjective vision is understood as unreliable. On the other hand, the very act of looking is assumed to comprise an inbuilt perspectival visuality – an eighteenth century technology that sits so comfortably on the twenty-first century body that the subject naturally (mis)takes this overcoded visuality for physiological vision.

The penetration of the body and its environment by technology indicates a profound shift in the meaning of nature in late modernity. Rather than being understood as an uncontrollable external force, nature is now recognized as a product of discourse. Despite this, nature, even within postmodern economies of meaning, is still epitomized by relations of alterity. Classical and early modern epistemologies operated on the idea of an external nature, ontologically distinct from human culture and possessed of an agency that, although recalcitrant and unpredictable, would eventually succumb to human regulation. The transition to modernity – Kant's Copernican revolution – entails, in part, the recognition of nature as a semiotic rather than an ontological category, and, as such, as shot through with social and political determinations. Modern and postmodern nature plays a key role in “mediating access to the ‘reality’ it names, and [its] political critique is directed at the oppressive use of the idea to legitimate social and sexual hierarchies and cultural norms.”¹⁷

If nature still figures as an animating term in late modern and postmodern epistemologies, it is largely as a signifier for something we have lost. Walter Benjamin, though he refused a categorical separation between technology and nature¹⁸, saw industrial technology as the source of new ‘mythic forces’ in society. Arguably, it is the latter which is the source of sublime experience in late and post- modernity, the spectacle of ‘wild nature’ either having vanished, or having been surpassed by its cinematic reproduction. There is little question, however, that nature, within both modern and postmodern systems of meaning, is still understood as categorically and ontologically distinct from culture. This dualistic approach is active in discourses too numerous to mention here; suffice it to say that the relation between the two is ideologically potent, politically useful, and rife with contradictions. Social and environmental discourse, for instance, often participates in the implicit valorisation of the

¹⁷ Soper, op. cit., p3

¹⁸ Benjamin, as Susan Buck-Morss remarks, argued that “for the purposes of philosophical understanding these was no absolute, categorical distinction between technology and nature.” Buck-Morss, op. cit., p68.

cultural over the natural.¹⁹ The dystopic appraisal of technology as “the degrading metaphysics of late modernity and ... the primary cause of environmental degradation”²⁰ frequently relies on technologies such as the internet for its dissemination. Whatever their orientation – utopic or dystopic – such debates do little to unsettle the nature/culture binarism itself.

Unpicking the issue of ‘technologized vision’ is one way of doing this. The incorporation of technologies of vision into the fabric of being determines not just the texture of subjectivity, but of ‘nature’ as well. Though this might seem obvious in the context of the preceding discussion, the naturalization of perspectival vision persists as common practice across a range of disciplines too numerous to mention. The phenomenology of Edmund Husserl is a case in point. By way of an example, we will turn briefly to an examination of his work, in order to see how apparently forward-looking critical tactics remain entrenched, in many respects, in the modes of Enlightenment epistemology.

¹⁹ see Benton, Ted, ‘Why are Sociologists Naturephobes?’ in *After Postmodernism: An Introduction to Critical Realism*, José López and Garry Potter, eds., Athlone Press, 2001, pp133-145.

²⁰ Ihde, op. cit., p114.

2.2 Husserl and the phenomenological eye//

Early modern science tended, as Ihde reminds us, not to reflect on the 'near distance' of its own instrumentarium, to ignore the mutual implication of the observer and the observed within the process of observation – a visualist bias which has diminished only marginally in late modern and postmodern scientific practice.²¹ The instrumental realism of early phenomenology marks, as he points out, an attempt to redress the inattention of scientific practice to whole body perception – the 'forgetfulness of science', as Husserl framed it in the *Origin of Geometry*. Husserl's reflection on the instrumental mediation by which scientific knowledge secured its perceptions of the lifeworld was nonetheless based in a positivist understanding of the observer who made these claims.

Husserl's eagerness to impart scientific consistency to the practice of philosophy lends his own practice a techno-scientific optimism that shows up in his understanding of the reflecting subject – a 'god-like' observer, whose power to reflect is a function of its distance from the lifeworld. Husserl's debt to the discourse of landscape is evident not only in the configuration of space, vision, and knowledge that is made available to the philosophically reflecting subject, but in the remarkable efforts to which he goes to avoid acknowledging the body as active in the production of meaning. The essential structuring principles of the view – station point and horizon – are critical to his understanding of the relation between consciousness, vision, and the body, and of the space of Nature within which these three terms are situated. Naturalizing this purposeful positioning of the subject, Husserl "overlooks the way in which instruments as technological embodiments of science function to relate scientific praxis to the lifeworld in all its plenary richness."²² As a result, his phenomenology is as monosensory as the scientific reason in which he places so much faith, and as contingent upon the figure of distance as the space of landscape on which his argument is staged.

Husserl's philosophical project is simultaneously modernist in its operations and Cartesian in its structure. As such, it is a clear illustration of the extent to which modern (and postmodern) epistemology is shot through with the structure and the rhetoric of Enlightenment vision. Epistemological shift, as we have seen however, always takes place

²¹ The "visualist trajectory, set in motion in early modern science, continues unabated in many of the sciences most related to original physics and astronomy. This is so much the case that many of the instruments in the contemporary instrumentarium could well be called visual translation instruments." Ihde, op. cit., p54.

²² Ibid., p56.

in the context of epistemological stasis – a singularity which casts some doubt upon the totalizing character of the epistemological divisions that I have been using up to this point. The point is not whether it is possible to identify differences between one historical moment and another – clearly it is – but the extent to which such moments can be said to have precise boundaries. The purpose of the following short section should also be understood, then, as a simultaneous acknowledgement of the more or less arbitrary character of such periodizing concepts, and of their purely methodological efficacy within a project of this kind.

The concept of intentionality is key to Husserl's analysis of consciousness. Intentionality is the act of bestowing a meaning – an act which has representation as its basis. To maintain an attitude of intentionality to what one perceives is not, within Husserl's argument, to sustain a relation between a subject and a 'real' object. Rather, intentionality is the meaning-giving act of a consciousness that takes representation as its primary form; a means of *distancing* oneself from the objects of perception.²³

This distance from the world of objects figures prominently in Husserl's understanding of subjectivity. His examination of conscious experience – the constitution of meaning in the world – is methodologically dependent on the notion of a purified or 'reduced' consciousness: an ego-subject which, although lodged in the psychophysical body, can nonetheless be abstracted from it. The meaning of consciousness, and the constitution of meaning in the world, can be evaluated and understood only if the subject maintains a distance from the objects upon which it reflects, and from its own corporeality. Objects in the natural world are instantiations of essences immanent to the field of pure consciousness, but direct experience – reflection in the 'natural attitude' – is too closely engaged with the material to permit the intuition of these essences.²⁴

In the *epoché* or phenomenological reduction – the methodological fulcrum of Husserl's philosophical project – the reflecting consciousness attains its status as such by suspending the 'natural attitude', 'bracketing out' the world to which it belongs – the world "as placed

²³ see Levinas, Emmanuel, *Discovering Existence with Husserl*, Northwestern University Press, 1998.

²⁴ "Direct experience gives only singular elements and no generalities, and is thus insufficient. It can make no appeal to the intuition of essences..." Husserl, Edmund, *Ideas: General Introduction to Pure Phenomenology*, W. R. Boyce Gibson, trans., George Allen & Unwin Ltd., 1969, p85.

within the nature-setting and presented in experience as real".²⁵ This world continues nonetheless to exist as the substrate to phenomenological reflection,²⁶ but the 'straightforward' acts of consciousness which take place within it (perceiving, remembering, judging, etc.) are distinct from the reflective acts carried out by the phenomenologically reduced subject. The phenomenological attitude thus "consists in a *splitting* of the Ego; in that the phenomenological Ego establishes himself as "disinterested onlooker", *above* the naïvely interested Ego."²⁷ (italics added) As pure ego, the phenomenologically reduced subject is the pole of intentional acts and the matrix of being. Here, the *ego cogito* does not signify a particular body or person; the realm of natural being is ontologically secondary; the material world, in other words, functions as 'background' rather than 'encircling sphere'.²⁸

It is clear from the above that the phenomenological Ego shares the constitutive conditions of the viewing subject, but this is not the only point at which the landscape interface inflects Husserl's argument. Within the latter, every object is both a material thing – an object existing in physical nature – and an instantiation of the essence 'nature'. Since material things exist in space and time, spatiotemporality and nature are linked in essence: the reality of material nature, in other words, *is* its presence in space and time. Events of consciousness, on the other hand, are temporal, but because they are not spatial they are not real in the same sense as material nature is real.²⁹

Essential nature is abstractable,³⁰ the property of a reflecting consciousness which claims to know no perspectives. Material nature, on the other hand, appears exclusively in the form of perspective manifestations; it takes the form of a uniformly visible 'primal' sphere which is spatialized in a specific way, and revealed through a normalized and homogeneous vision

²⁵ "The whole world as placed within the nature-setting and presented in experience as real, taken completely "free from all theory", just as it is in reality experienced, and made clearly manifest in and through the linkings of our experiences, has now no validity for us, it must be set in brackets, untested indeed but also uncontested. Similarly all theories and sciences, positive or otherwise, which relate to this world, however good they may be, succumb to the same fate." Ibid., p110-111.

²⁶ "We put out of action the general thesis which belongs to the essence of the natural standpoint, we place in brackets whatever it includes respecting the nature of Being: this entire natural world therefore which is continually "there for us" "present to our hand", and will ever remain there, is a "fact world" of which we continue to be conscious, even though it pleases us to put it in brackets." Ibid., p110.

²⁷ Husserl, Edmund. *Cartesian Meditations: An Introduction to Phenomenology*. Dorian Cairns, trans. Dordrecht: Martinus Nijhoff Publishers, 1988, p35.

²⁸ "The two worlds are present together but disconnected, apart, that, is, from their relation to the Ego, in virtue of which I can freely direct my glance or my acts to the one or to the other." Husserl (1969)., op. cit., p105

²⁹ "Things in nature – material things – exist in space and time, in spacetime: they are in that sense "real" (reale). By contrast, experiences – events of consciousness – are temporal but not spatial and so are not "real". Their essence is that of being a consciousness of something, which does not entail their being spatial. Thus, the essence Nature includes the essence Spatiotemporal, while the essence consciousness does not." Smith, David Woodruff, 'Mind and Body', in *The Cambridge Companion to Husserl*, Barry Smith and David Woodruff Smith, eds., Cambridge University Press, 1995, pp323-393, p337.

that is lodged in a material body:

[It] follows from the essential nature of spatial thinghood ... that Being of this species can, in principle, be given in perceptions only by way of perspective manifestation; and it follows likewise from the essential nature of *cogitationes*, of [conscious] experiences in general, that they exclude these perspective shadings... [Spatial being] can "appear" only with a certain "orientation", which necessarily carries with it sketched out in advance the system of arrangements which makes fresh orientations possible...³¹

Here, perception, spatial thinghood and perspectival presentation are ontologically linked. As a spatial thing among others, it is the essential nature of the subject in the natural attitude to perceive the world by means of the 'system of orientations' that regulates the appearance of spatial being. Though the perceiving body may encounter the world in changing perspectives, these diverse perspectives nonetheless share a common system of arrangements which ensures that material nature appears identically to all monads. For the subject in the natural attitude, then, perspectival vision is a 'natural' condition, it has an authenticity that is grounded in the material. Similarly, perspectival manifestation is the 'natural' disposition of spatial being; the system of arrangements that orients the natural world does so by containing it in advance. Perspective, for Husserl, is thus lodged in the material world and in the body itself: it is 'perspective manifestation' that fashions both the subject's perceptions, and the space it perceives.

Perspectival perception, as we have seen, has its own specific kind of 'directedness' – a particular orientation towards the world of objects that is shared by the Husserlian subject. It is by means of the perceiving, kinaesthetic body that the ego becomes 'real', that it is able to locate itself in nature, to experience the world. This is the body that also makes one visible and experienceable to others.³² If the subject knows itself as an object of vision, Husserl nonetheless insists on the monodirectionality of perception:

As reflexively related to itself, my animate bodily organism (in my primordial sphere) has the central "Here" as its mode of givenness; every other body, and accordingly the "other's" body, has the mode "There". This orientation, "There", can be freely changed by virtue of my kinesthesias. Thus, in my primordial sphere, the one spatial "Nature" is constituted throughout the change in orientations, and constituted moreover with an intentional relatedness to my animate organism as functioning perceptually.³³

³⁰ "The world in itself is ... not identical with the world of nature. Nature is, rather, the world qua natural, or that part of the world that instantiates the essence Nature, an "abstractable" part of the world itself." *Ibid.*, p361.

³¹ Husserl (1969), *op. cit.*, pp134-5.

³² "On the other hand, I experience [others] at the same time as subjects of this world, as experiencing it (this same world that I experience) and, in so doing, experiencing me too, even as I experience the world and others in it." Husserl (1988) *op cit.*, p91.

³³ *Ibid.*, p116.

The spatiotemporal body functions as a marker, a 'here' which locates the subject absolutely in relation to a 'there' that can be changed at will. Although the body experiences different perceptions, the reduced subject is always located at a *here* that changes only within pregiven limits. It is by assuming not only that visual perception is identical to geometrical perception, but that this structure is replicated in/as the 'view' of the reflecting consciousness, that both 'primordial nature' and essential nature appear identically to all monads.³⁴ Although it appears differently from presentation to presentation, the system governing these presentations is unchanging; nature, for Husserl, is a static space.

The landscape interface also directs Husserl's understanding of epistemology; his argument is configured around the perceived 'horizontality' of knowledge (and, implicitly, of being). The direction of intentional acts towards objects in the world is seldom perfectly achieved in the first instance. Objects with which one is not yet fully acquainted comprise, in their 'determinate indeterminacy', that 'moment included in consciousness' that Husserl terms the horizon.³⁵ The latter figures the submission of the objective world in advance to a particular system of representation. Objects on the horizon are not unknown, but eminently knowable, their configuration anticipated in the very structure of the perceptions by which the ego sustains itself as a fixed, abiding, and self-identical. The concept of the horizon figures the acquisition of knowledge as a movement away from the subject's present condition:

[There] belongs to every external perception its reference from the "genuinely perceived" sides of the object of perception to the sides "also meant" – not yet perceived, but only anticipated ... a continuous protention, which, with each phase of the perception, has a new sense. Furthermore, the perception has horizons made up of other possibilities of perception, as perceptions that we could have, if we actively directed the course of perception otherwise: if, for example, we turn our eyes that way instead of this, or if we were to step forward or to one side, and so forth.³⁶

The horizon polarizes the relation between the subject and its representations, assuring that perception always proceeds from the originating point of the subject, out towards the world of objects. It implies that a particular system of representation is already in place *before*

³⁴ Ibid., p134. The following section stresses the point further: The other is appresented as governing mediately in the Nature that appears to him perceptively: "identically the Nature to which the body over there belongs, identically the Nature that is my primordial Nature. It is the same Nature, but in the mode of appearance: "as if I were standing over there, where the Other's body is". The body is the same, given to me as the body here, and to him as the body here, the central body ... "my" whole Nature is the same as the Other's. In my primordial sphere it is constituted as an identical unity of my manifold modes of givenness – an identical unity in changing orientations around my animate organism (the zero body, the body in the absolute Here)..." Ibid., p123.

³⁵ "[The] *cogitatum qua cogitatum*, is never present to actual consciousness as a finished datum; it becomes "clarified" only through explication of the given horizon and the new horizons continuously awakened. The predelineation itself, to be sure, is at all times imperfect; yet, with its indeterminateness, it has a determinate structure....This leaving open, prior to further determinings (which perhaps never take place), is a moment included in the given consciousness itself; it is precisely what makes up the "horizon"." Ibid., p45.

³⁶ Ibid., p44.

perception takes place. In this case, the concept of the horizon sustains the rift between the subject and the world it knows by imposing a screen of representation between the two. The very openness of the horizon promises infinite new perceptions, empowering both the knowing subject and the system of knowledge within which it is inscribed: the unknown is always referred back to a confident subject, at liberty know it. Here, the horizon sutures the rift between consciousness and its representations. In either case, experience is constituted in terms of a circuit of representation, assuring the disengagement of the subject from the immediate here and now.³⁷ Invoking the horizon as a figure for the 'determinate indeterminacy' of the not-yet-apprehended, Husserl's phenomenological project assumes and produces the visual and epistemological space it then claims to find in/as experience. Here, landscape is not simply a physical, but a discursive space – the space of argument on which much critical thought continues to be staged.

If early modern science no longer provides a workable model for a critical examination of the subject and its relation to the world, then late modern and postmodern science, as characterized by the emergence of relativistic and quantum physics, suggests a different approach to this issue. From Einstein onwards, science has questioned the status of space and time as fixed and absolute. Heisenberg's uncertainty principle – which established the impossibility of measuring simultaneously and precisely the position and velocity of a particle – shattered modern science's deterministic faith in its own ability to accurately predict the future of the universe. The growing dominance of chaos theory and non-linear dynamics indicates the degree to which the simplified, monodirectional models of early modern science have been superseded by reflexive forms that direct attention to the act of observation itself – a paradigm shift away from "naïve objectivism to an almost quasi-phenomenological relativity."³⁸ Broadly speaking, this signals the replacement of the mechanistic paradigm of modernist science by an 'ecological' one; a distinction, such as that put forward by David Bohm, between the 'explicate' order of reality, upon which physics has focused to this point, and a much more complex 'implicate' order which foregrounds the attribution of internal relations to individuals at all levels.³⁹ This is the kind of complex and

³⁸ Ihde, *op. cit.*, p60. See Arecchi, Tito, 'Chaos and Complexity', and Griffin, David Ray, 'The Reenchantment of Science', in *The Post-Modern Reader*, Charles Jencks, ed., Academy Editions, 1992.

³⁹ "In this implicate order, enduring things are not separate from each other, as they appear to be in the explicate order, but are mutually enfolded in each other. Each electron, for example, in some sense enfolds in itself the universe as a whole and hence all its other parts. Accordingly, internal relatedness to other things which we directly experience in our conscious experience is generalized analogically all the way down to the simplest

heterogeneous ontology that distinguishes the subject of virtual reality. Though the mobile gaze of modernity may have been attained, as some argue, at the cost of the progressive imprisonment of the viewer,⁴⁰ the VR user, as we will see, is nothing like the passive and distanced observer of nineteenth century optical technologies.

individuals." Griffin, *op. cit.*, p354. This paradigm – which has also been explored in the work of Charles Birch, John Cobb, and Frederick Ferré – goes some way towards breaking down the subject/object division that has traditionally been adopted by science.

⁴⁰ “[As] the ‘mobility’ of the gaze became more ‘virtual’ – as techniques were developed to paint (and then to photograph) realistic images, as mobility was implied by changes in lighting (and then cinematography) – the observer became more immobile, passive, ready to receive the constructions of a virtual reality placed in front of his or her unmoving body.” Friedberg in Manovich (2001) *op. cit.*, p109. Lalvani has also noted how nineteenth century optical devices involved the integration of a passive observer within a mechanical apparatus; see Lalvani, *op. cit.*, p176.

... the inexhaustible being crystallizes into an ordered perspective within which backgrounds resign themselves to being only backgrounds (inaccessible and vague as is proper), and objects in the foreground abandon something of their aggressiveness, order their interior lines according to the common law of the spectacle, and already prepare themselves to become backgrounds as soon as it is necessary. A perspective, in short, within which nothing holds my glance and takes the shape of a present. (...) The whole scene is in the mode of the completed or of eternity. Everything takes on an air of propriety and discretion. Things no longer call upon me to answer, and I am no longer compromised by them. And if I add the artifice of aerial perspective to this one, the extent to which I who paint and they who look at my landscape dominate the situation is readily felt. Perspective ... is the invention of a world which is dominated and possessed through and through in an instantaneous synthesis which is at best roughed out by our glance when it vainly tries to hold together all these things seeking individually to monopolize it.¹

Brunelleschi's apparatus illustrates the way in which a particular kind of virtual space – a mathematically homogeneous recessional space – is enabled by a specific technology of vision – that of linear perspective. As his experiment also demonstrates, a consequence of entering this space is the 'theoretical isolation' of the subject:

Far from capturing the real directly ... this "view" corresponded to a bracketing, to a veritable phenomenological reduction: within the brackets established by the panel and the mirror the real was excluded, was outside the circuit ... As was the subject itself, which gained access only by abstracting itself out of the specular relation.²

This configuration is common to all of the moments in the history of the interface that we have examined to this point. Not only is this paradigm shared, as Damisch points out, by Brunelleschi and Husserl, it is, as we have seen, the ideal form taken by the landscape interface as well. Arguably, it also describes the preferred situation of the VR user: as a technological reworking of Brunelleschi's device, the VR interface is an apparatus that not only excludes the material real, but negates it. Superficially, then, the VR interface could be situated on a trajectory that begins in the fifteenth century.

¹ Merleau-Ponty (1964) op. cit., p50.

² Damisch (1995) op. cit., pp139-140.

The first section of this chapter will examine exactly this situation. In assuming *costruzione legittima* as its structuring paradigm, the VR interface also takes on board much of the cultural baggage amassed by the former in its passage from easel painting in the Renaissance, to photography and cinema in the nineteenth and twentieth centuries. Limited, in this instance, to the realm of visuality, so-called 'telepistemology' is little more than a technologically sophisticated form of scopic Cartesianism, and reinforces the various dualist ontologies (subject/object, nature/culture, etc.) that are commonly identified with it. Though a great many writers on VR and cyberspace assume that the latter discourses have the potential to question 'previously incompatible systems of meaning', few, it seems, have thought to ask how these discourses themselves construct and sustain this 'incompatibility'. A great deal of recent literature on cyberspace and virtual reality technology discusses the relation of these technologies to 'nature', for instance, without asking how this discourse itself is active in the construction of nature. As we will see, there is considerable traffic between the eighteenth century discourse of landscape and present day discussions of VR; consequently, there is little doubt that a great many cyberspace theorists find their definitions of nature and culture precisely through the very space they assume as a neutral medium.

If we are to give due consideration to the part played by Brunelleschi's device in the history of the interface and its discourse, then, we need to examine it not just in terms of the 'theoretical isolation' it promises and the scopic subject that it sanctions, but in its function as an instrument in the lifeworld. If, as Damisch suggests, Brunelleschi's demonstration is an enactment of the phenomenological reduction, then it is also a confirmation of the latter's failure. Not even Damisch takes up the question of what might happen were Brunelleschi's apparatus to be held too long in front of the eye, how the technology of vision responds to the exigencies of the corporeal body. It is this aspect of interfaced being that is concealed by Alberti's legitimate construction: the material relation of the subject to the image-instrument through which space is experienced, and the failure of theory to fully describe or prescribe this relation.

Costruzione legittima involves the abstraction of whole body perception. Operating an image-instrument, on the other hand, is about a material exchange with an apparatus. The development of the telescope demonstrates how the transformation of vision and subjectivity took form around an embodied technology. This instrument, as Ihde notes,

“magnified Galileo’s own minute bodily movement just as much as it did the [objects he studied, and] Galileo had to learn to compensate for this by using a tripod, and by careful, and sometimes consciously developed, bodily motion.”³ The development of the technologies of vision – and thus of the knowledges they enable – must always involve the body as a material variable. Image-instruments evolve in concert with the physiological vision for which they are designed, and the knowledge we derive from them is a function of this material limitation.⁴ Brunelleschi’s device hints at the ways in which the interface can be recuperated as a model for subjectivity. If new technologies have the potential to resurrect Descartes’ epistemological doubts⁵ – to reinstate the ontological gap between human perception and the world of objects – they also suggest ways in which the discourse of the interface might be rethought.

³ Ihde, op. cit., p59.

⁴ “What the telescope magnified was thus that which was out there and that which was here, and the object seen and the way of seeing through one’s kinesthetic body yield both a sense of the technological transformation of vision and of the reflexive correlation of seen-seeing.” Ibid., p59.

⁵ “Now, as more and more of our perception becomes indirect, read off various sorts of distance sensors and then presented by means of various sorts of displays, we are coming to realize how much of our knowledge is based in inferences that go beyond the evidence displayed on our screens. We see that the reality mediated by this tele-technology can always be called into question. Indeed, skepticism is increasingly reasonable in the face of the growing variety of illusions and tele-experiences now available.” Dreyfus, Hubert, ‘Telepistemology’, in *The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet*, Ken Goldberg, ed. MIT Press, 2000, pp48-63, p54.

3.1 VR as Landscape

As 'citizens of the world' and inhabitants of nature, we too often forget that we also inhabit physical dimensions, the scale of space and the lengths of time of the life-size. The obvious degradation of the elements, chemical or other, that make up the substances comprising our natural surroundings has joined forces with the unperceived pollution of the distances that organize our relationships with others, and also with the world of sense experience. Whence the urgency of backing up the ecology of nature with an ecology of the contrivances of transport and transmission technologies that literally exploit the size of the geophysical environment and damage its scope.

...

So, the 'ecological' question of the nature of our habitat cannot be resolved unless we also try to find the connection linking 'space' and 'effort', the duration and extent of a physical fatigue that gives the world of tangible experience its measure, its 'life-size' quality.

Paul Virilio, Grey Ecology

To be fully enabled in the virtual environment, the user must be able to see (in) the environment, move through it, and communicate their direction of view. *Costruzione legittima* underpins all of these actions in some way. Embedded into the design of both the hardware and software systems by which the user interacts with data in electronic form, the perspective paradigm provides the means by which electronic information is visualised and spatialized for the user.⁶ Eliminating the gap between user and information – ensuring the transparency of the VR interface – is a matter of “transforming data into environment.”⁷ This transformation, as we shall see, involves linking the user’s functionality within the data environment to the apparently intuitive framework of the landscape interface. This section will touch on some of the ways in which the VR interface takes up the idiosyncrasies of the landscape interface (its rhetorical construction of distance, its disembodied subject, and its notions of exteriority), and replays assumptions about the subject, the body, and nature, that would not be unfamiliar to the eighteenth century consciousness. Within the landscape of VR, acting, being and meaning are articulated, as they were for the eighteenth century

⁶ “[The] Cartesian coordinate system is built into computer graphics software and often into the hardware itself.” Manovich, op. cit., p254. Stone makes a similar claim: “[Virtual] space is most frequently visualized as Cartesian. On-line conferences tend to visualize the conference system as a three-dimensional space that can be mapped in terms of Cartesian coordinates, so that some branches of the conference are ‘higher up’ and others ‘lower down’. ... Gibson’s own visualization of cyberspace was Cartesian.” Stone, op. cit., p519.

⁷ Bukatman, op. cit., p151.

subject, around the ability to establish, maintain, and master the distance between the self and the visible world.

Both the 'view volume' (the space of the simulation) and the objects inside it are generated by means of geometrical techniques not much different from those used by Alberti. First published in 1963, the algorithm for computer generation of perspectival projections was derived from formulae developed in the eighteenth century.⁸ Similar to traditional perspective drawing techniques, this algorithm works by transforming x,y,z co-ordinates representing end points of lines in three dimensional space, into two-dimensional x,y coordinate pairs representing end points of lines on the image plane.⁹ This enables the construction of wireframe models, which can then be rendered into representations of plane surfaces or solid objects.

Standard VR projection algorithms share their key parameters with the landscape view. The two most important criteria in a standard projection algorithm are station point or 'center of projection' and direction of view – the minimum information necessary to establish the position and orientation of the viewer in virtual space.¹⁰ Located at the station point, the disembodied eye/I of the VR user is analogous to that of the subject of landscape:

The point of contact with the interior spaces of VR ... is through an eye-level perspective that shifts as the user/patron turns her/his head... In most VR programs, a user experiences VR through a disembodied gaze – a floating, moving 'perspective' – that mimes the movement of a disembodied camera 'eye'. ... the camera simulates the movement of perspective that rarely includes a self-referential visual inspection of the body as the vehicle of that perspective. The disembodiment of the eye is accomplished through the manipulation of the camera to approximate the height and angle of the point of view of an eye; the body of that eye is repressed, in that is it rarely shown (revealed) and never felt.¹¹

Both fixed and mobile viewpoints are generated by modeling the intersection of the principal line of sight – Alberti's 'centric ray' – with a plane of projection. In almost all VR environments, the plane of projection – or, more precisely, the viewing screen onto which it

⁸ see Mitchell, William J., *The Reconfigured Eye: Visual Truth in the Post-Photographic Era*, MIT Press, 1998, p118. Manovich notes the same thing, adding that "Roberts had to refer to German textbooks on perspectival geometry from the early 1800s to get the mathematics of perspective." see also Manovich, Lev, 'The Mapping of Space: Perspective, Radar, and 3-D Computer Graphics', (1997), <http://www-apparitions.ucsd.edu/~manovich/text/mapping.html>

⁹ see Rogers, David F., and J. Alan Adams, *Mathematical Elements for Computer Graphics*, (2nd edition), McGraw-Hill International, 1990.

¹⁰ *Ibid.*, p134.

¹¹ Balsamo, Anne, 'The Virtual Body in Cyberspace' in *The Cybercultures Reader*, David Bell & Barbara M. Kennedy, eds., Routledge, 2000, p494.

is mapped – is perceived in the mode of the rectangular frame inherited from Western painting.

The landscape of VR is a space which is read or experienced, if not pictorially, then as *distance* in a more ecumenical sense. Transforming and varying the internal properties of the simulation (in fact, any sort of imaging technology which transforms perception: infrared photography, heat or light enhancement imaging, or spectrography) involves the manipulation of data that are meaningful only to a machine, and which are made legible through transcoding – reconfiguration according to a particular set of compositional rules. The rules which allowed the subject of landscape to distinguish its own position (*here*) from the *there* of the horizon are the same rules that enable the spatialization of data, allowing the user “to see the space of the computer, and to further figure it as a space one can *move through* and thereby comprehend.”¹² The 3d fly-through – used extensively in both geography and architecture – augments both the realism and the legibility of the modeled environment by presenting graphical information in/as depth of field.¹³ Three-dimensional renderings of paintings such as Masaccio’s *Trinity* allow the viewer to travel into the painting, and thus to “understand more about the artist’s geometrical skills and the history of the painting itself.”¹⁴ In sonar imaging, signals are displayed visually, in the form of a target figured against a topographical ground. The Super Cockpit flight simulator developed by the U.S. Air Force displays the pilot’s compass heading as “a large band of numbers on the horizon line, his projected flight path a shimmering highway leading out toward infinity.”¹⁵ In the latter case, even the most minimal information nonetheless furnishes a space which is not only recognizable, but within which the subject is able to move and to act. This variation and enhancement of perceptual features is, as Ihde remarks, “very like literary development.”¹⁶ If the landscape interface brought Alberti’s legitimate construction from the realm of the mathematical into that of the rhetorical, then the VR simulation closes this circle, marrying the rhetorical to the algorithmic. The world of the VR simulation conforms to a will whose techniques are quintessentially linguistic; it plays on Western culture’s

¹² Bukatman, op. cit., p155.

¹³ See Berger, Peter, Paul Meysenbourg, Jim Sales, and Carol Johnston, ‘Towards a Virtual Reality Interface for Landscape Visualization,’ http://www.ncgia.ucsb.edu/conf/SANTA_FE_CD-ROM/sf_papers/berger_peter/paper.html (visited 23.11.01)

¹⁴ Criminisi, Antonio, Liebowitz, David, Reid, Ian, and Zisserman, Andrew, ‘Three Dimensional Analysis and Reconstruction of Paintings’, *Front Page Research*, Department of Engineering Science, University of Oxford, <http://www.eng.ox.ac.uk/World/Research/Frontpage/2000-04/story.html> last update 21.3.00, visited 9.10.01.

¹⁵ Manovich (2001) op. cit., p111.

¹⁶ Ihde, op. cit., p61.

predeliction for spatial legibility, and on our tendency to read a recognizable and navigable environment into a space built around two or three key variables.

Viewing, is, as we now know, a narrative concern. If the subject of landscape finds itself in space by securing a position apart from the field of vision, then it is by moving *into* the image – following the 'path of reading' from foreground to horizon – that the visual field becomes meaningful. This conflation of spatial and temporal mobility – the embedding of story into space – is a characteristic of both the VR environment and the landscape view. The simulation environment, as Manovich claims, images time itself as a landscape;¹⁷ here, the mobility of the eye/I within the simulation is both a spatial and a temporal concern. Computer games provide perhaps the best example of this deployment of narrative movement in/as depth of field. In early platform games like *Super Mario Bros.*, the user controlled the up-and-down and side-to-side movement of a player that was visible as an icon on the screen. Though these sort of platforms have not disappeared, game development over the past decade has focused, by and large, on environments which support a different point of view and a different kind of movement. In games like *Doom*, *Quake*, *Half-life*, and *Deus Ex*, space is explored by 'entering' it. The fact that the gamer may also be free to move backwards and sideways within this space is beside the point. As Pauline Broekman remarks, the perceived realism of the virtual environment today is most often a function of the degree to which it supports 'propulsive physical movement'.¹⁸ The same kind of momentum drives game narrative as well; most are structured around increasingly difficult tasks to be overcome, attendant skills to be mastered, and some kind of reward to be earned. Here, the anticipatory character of the datalandscape – its availability to the subject – is a function of its availability to both the eye and the imagination. The open horizon finds its figurative equivalent in an active, directed look which frames both mobility and motivation monodirectionally, as movement *towards*. Videogames speak clearly to VR's promise to fulfil the desire of eighteenth century landscape by making this horizon available.

For Virilio, human subjectivity is articulated in and around geophysical distance. It is spatial amplitude that provides the measure of the subject's sense of self, other, and world; the

¹⁷ [Computer media] replaced sequential storage with random-access storage; hierarchical organisation of information with a flattened hypertext; psychological movement of narrative in novels and cinema with physical movement through space, as witnessed by endless computer animated fly-throughs or computer games such as *Myst*, *Doom*, and countless others. In short, *time became a flat image or a landscape*, something to look at or navigate through. (italics added) Manovich, op. cit., pxx

¹⁸ see Broekman, Pauline Van Morurik, 'Confessions of a Backseat Driver' in *ReadMe! Filtered by Nettime: ASCII Culture and the Revenge of Knowledge*, Josephine Bosma et. al., eds., Autonomedia, 1999.

pollution of this distance signals more than a simple degradation of habitat, it anticipates the attrition of subjectivity as it is presently understood. The technoscientific subject's inability to distinguish 'here' from elsewhere, the gap in human relations opened up by communications technologies, and the apparent obsolescence of a spatial agency that is given in and by the spacetime of the material environment; these are the catastrophes of a geophysical surround reduced to 'less than nothing.' For Virilio, the death of distance also signals the disappearance of a nature that is manifested in the form of "geographic grandeur [and] the vastness of natural space."¹⁹ Virilio situates elemental nature – the 'life-size' of body and environment – within the geophysical dimension of distance; his 'Grey Ecology' thus testifies to his own captivation by the discourse of landscape.

This vision of nature is shared by many commentators, most of whom do not share Virilio's anxiety about the power of technology to collapse distance. Indeed, the capability of electronic technologies to engage nature is often referred to their ability to capture events in remote areas of 'wilderness'. Some of the most compelling webcam installations, according to Tom Campanella, are those that are set up on mountaintops (such as Mount Everest, Mount Fuji, and Mount Washington) and those that allow remote observation of wildlife at various locations in Africa and the Americas.²⁰ Though Virilio has less to say about the way in which this sort of extent reappears *within* the space of the simulation, others have been quick to liken the 'nature' in/of electronic space to the nature in/of the external landscape. Manovich describes the internet user as a postmodern Robinson Crusoe,²¹ an explorer pitted, if not against material nature, then against a space which derives its understanding of depth and extent from the nature that was visible to the eighteenth century subject. Technophilosopher Michael Heim goes so far as to suggest nature as a 'psychic framework' for cyberspace. In a somewhat bizarre conflation of the romantic and the technological sublime, Heim equates the bafflement of the neophyte internet user with the panic that "overwhelms a human being who confronts vast stretches of raw nature."²² Cyberspace, claims Heim, shares the 'infinite' and 'primal' character of nature; like the wilderness, it calls out to the spirit of adventure in the human spirit – it is a space of fascination, a place where

¹⁹ Manovich (2001), op. cit., p173. "The life-size nature of *physical distances* having thus come under the law of the *microphysical power* of waves transmitting hearing and sight and soon touch (touch at a distance), how can we ignore the risk mankind runs of losing our own world? How can we but fear now a profound sense of being shut up in an environment deprived of both horizon and optical density?" Virilio, Paul, 'Optics on a Grand Scale', in *Open Sky*, Julie Rose, trans., Verso Press, 1997, p41.

²⁰ see Campanella, Tom, 'Eden by Wire', in *The Robot in the Garden: Telerobotics and Telepistemology in the Age of the Internet*, Ken Goldberg, ed. MIT Press, 2000, pp22-46.

²¹ see Manovich (2001), op. cit., p87.

²² Heim, Michael, *Virtual Realism*, Oxford University Press, 1988, p158.

we can 'expect the unexpected.' The uncharted space of nature reappears in electronic form in/as the figure of the electronic frontier.

This sort of pioneer mentality can be found in much recent discourse on cyberspace, particularly in the U.S., where the perceived democracy of the electronic frontier is fiercely protected. Groups like the Electronic Frontier Foundation are mandated to protect the 'wilderness of cyberspace' – to preserve the 'Jeffersonian freedoms' (privacy, diversity, and community-building) of the internet from corporate and government interests.²³ In this group and others like it, we find an electronic counterpart of the ecological movement, whose politics depend, as Addison's did, on the condensation of nature, landscape and distance into a metaphor for the rights of the individual.

As they are embodied in the cinematic gaze, the politics of the horizon take shape around the same democratic ideals that animated the eighteenth century discourse of landscape. If cinema, says André Bazin, is to be a truly 'realistic' art, it must conceal the very screen that defines it; it "must not interpose any filter, any refractive index, between the reader's mind and the story."²⁴ Bazin finds this 'perfect neutrality and transparency of style' in the films of William Wyler, where the use of deep focus and the long take embody both opportunity and choice. It is within the spacious image, Bazin insists, that the spectator finds the freedom to reflect.²⁵ In a maneuver that would have been familiar to the eighteenth century subject, the cinematic gaze cloaks the rhetoric of landscape in that of political emancipation. Similarly, the embedding of the 'natural' into the space of the simulation is a means of sustaining a culturally constructed and ideologically expedient desire for individual liberty. Both the environmental radicalism of the deep ecology movement, and less apparently political concerns, such as the development of national parks, take shape around the myth of nature's distance and difference from humankind – and the apparent freedom of the natural world from the dictates of politics and commercial capitalism.²⁶ As should be apparent by now, however, such liberty is a somewhat spurious affair; 'freedom of movement' more often than not restricted to a reiterative passage between foreground and horizon.

²³ Ibid., pp159-60.

²⁴ Bazin, André, 'William Wyler, or the Jansenist of Directing', in *Bazin at Work: Major Essays and Reviews from the Forties and Fifties*, Bert Cardullo, ed. Routledge, 1997, pp1-22, p10.

²⁵ "The frequency of depth-of-focus shots and the perfect sharpness of the backgrounds contribute enormously to reassuring the viewer and to giving him the opportunity to observe and to make a selection, and the length of the shots even leaves him time to form an opinion... Depth of field in Wyler aims at being liberal and democratic..." Ibid., p9.

²⁶ see Wall, Derek, *Green History: A Reader in Environmental Literature, Philosophy, and Politics*, Routledge, 1994.

Both Heim and Virilio understand nature not only in terms of *what* is perceived, but of *how* it is perceived. In and of itself, there is nothing wrong with this argument. Both, however, go on to conflate 'natural' perception with a vision of nature as distant; signified via the romantic notions of vastness, grandeur, and uncontrolled power. If communication technologies, as Virilio argues, threaten the spatial distance between the observer and the observed by disrupting the 'familiar patterns of perception' that ground culture and politics, then the familiarity of this perception is, as the above remarks suggest, a function of its *cinematic* character. In fact, as Manovich points out, the temporal structure of the space of information and the grammar of narrative film are embedded in one another. Movement within virtual space is most often described in terms of the common cinematic codes of framing, cutting, panning, and editing.²⁷ For the cybersubject, then, the reality of 'vast nature' is a cinematic one; distance is a matter of projection, grandeur a spectacular effect. This preoccupation with 'effect', as I will go on to argue, is the motivation behind the simulation of nature and the natural within the VR environment.

Reys is an image rendering system developed at Lucasfilm Ltd. and currently in use at Pixar. In designing Reys, our goal was an architecture optimized for fast high quality rendering of complex animated scenes. ... high quality means virtually indistinguishable from live action motion picture photography; and complex means as visually rich as real scenes.²⁸

Nature in the garden occupied a tenuous position both inside and outside of representation. We find none of this indecisiveness in the simulation event; what appears to the eye is not – nor is it designed to be – mistaken for material or physical nature. If the above quote suggests two realities – the cinematic and the actual – as standards by which naturalistic appearance and realistic behaviour are measured, then these standards are by no means equally weighted. The modeling of natural phenomena, notes James Foley, involves a trade-off between "scientific accuracy and clever manipulations for generating attractive pictures. ... It is essential that people creating these models understand the underlying

²⁷ "As computer culture gradually spatializes all representations and experiences, they are subjected to the camera's particular grammar of data access. Zoom, tilt, pan, and trace – we now use these operations to interact with data spaces, models, objects, and bodies." Manovich (2001), op. cit., p80.

²⁸ R. Cook, L. Carpenter, and E. Catull, in *Ibid.*, p191.

phenomena while recognizing the benefits of a good fake."²⁹ Though physically based techniques may generate more biologically accurate representations, such models are usually adapted to produce good pictures at the cost of some biological realism. As one designer put it, "one of the great advantages of modeling something like worms is that no one wants to look at them too closely."³⁰ In the simulation of nature, the optical almost always wins out over the ecological.

Superficially, the opposite might seem to be the case. At a fundamental level, it is Newtonian physics that provides the benchmark for the behaviour of objects within the simulation.³¹ To create a convincing environment, the designer must understand and incorporate many of the most basic laws governing the behaviour of objects in real space and time. Modeling things like the growth of vegetation, or the movement of water and clouds, for example, requires both a facility for coding, and a reasonable level of scientific knowledge.³² Nonetheless, the simulation of complex natural behaviour is often a matter of reducing environmental or behavioral intricacy to a narrow set of skills or rules. So-called 'flocking' algorithms, for instance, which model the intelligent behaviour of groups of birds in flight, are based on three simple guiding principles:

Flock centering; attempt to stay close to nearby flock mates. Collision avoidance: avoid collisions with nearby flock mates. Velocity matching: attempt to match the velocity of nearby flock mates.³³

Here, 'realistic' behaviour is simulated by modeling a visually complex, synchronous action which gives the impression of centralized control. Simulating natural functions by means of a simplified mathematical model is a postmodern reiteration of what is an essentially Cartesian notion of information (insubstantial essence) as privileged over materiality (presence).³⁴ The understanding of nature-as-data marks a particular kind of mastery and control over the material world – an understanding based, as Hayles points out, in a dualism which maps out

²⁹ Foley, James, et. al., *Computer Graphics: Principles and Practice* (2nd Edition in C), Addison-Wesley Publishing Company, 1997, p1043.

³⁰ Miller in *Ibid.*, p1048.

³¹ NOOPE, an open source physics engine written in Java, is based on the assumptions of 'independent and universal time', Euclidean 3-Space, and Newton's 2nd law ($F = ma$). see Evans, Paul, James Kermode, and Miklós Reiter, *NOOPE Physics Engine*, <http://www.srcf.ucam.org/nopel/>, last update 27/9/01, visited 3/2/02.

³² "In general, it is very hard to do a good job at modeling nature. ... It seems that you must ... turn to the scientific literature on the subject, and learn about how trees grow, or how waves form, or how clouds move, in order to simulate them well." Glassner, Andrew S., *3D Computer Graphics: A User's Guide for Artists and Designers*, The Herbert Press, 1989, p174.

³³ This algorithm was devised by Craig Reynolds in the early 1980s; early examples of its use can be seen in *Batman Returns* and *Cliffhanger*. See Holtzman, Steven, *Digital Mosaics: The Aesthetics of Cyberspace*, Touchstone Books, 1997, p81.

³⁴ "A message has an information content specified by a probability function that has no dimensions, no materiality, and no necessary connection with meaning. It is a pattern, not a presence." Hayles, op. cit., p73.

onto "the older and more traditional dichotomy of spirit/matter."³⁵ Accepting fractals and chaotic mathematics as a fair copy of nature is to buy into a culturally conscripted vision of the latter as both amorphous and infinitely complex. Nature, both in the simulation and in the garden, is a paradoxical quality: too intricate to emulate in every detail, but representable nonetheless by means of a number of variables (Gilpin's 'wood, rock, and broken ground'), and a system of rules with which to organize them. The affinity between this tactic and Cozens' 'blots' is striking: in both cases, a simple technique furnishes a result in which appearance makes up for a lack of structural finesse – it is not what is lost in the translation, but what remains, that is important. We might attribute the same sort of awareness to Brunelleschi, who re-presented the exterior of the simulation as a 'reflection of a reflection'; in both cases, the distance between nature and design is simultaneously infinitesimal and infinite.

Animating objects in the simulation is not necessarily, then, a matter of getting them to behave in a perfectly realistic way. The physics engine – a program which enables the realtime modeling of properties like mass, velocity, external force, gravity, and friction in 3D space³⁶ – is an important development in the simulation of nature, and a compelling indication of the way that realism and reality are understood by VR designers. "As you increase visual quality," says Seamus Blackley, who coded physics engines for DreamWorks Interactive before heading up Xbox development at Microsoft, "it becomes more important to make the dynamic reality as sophisticated as the visual reality."³⁷ Here, the goal is not the perfect simulation of Newtonian physics; indeed, as an early physics engine game demonstrated, 'too much reality spoils the fun'.³⁸ The designer's aim is not the scrupulous reproduction of real world physics, but the construction of an acceptable *emulation*; game physics is concerned with the consistency and accessibility of the simulation experience rather than perfect dissimulation. Most techniques for modeling nature, though based in physics, depend more on clever mimicry; within the simulation environment, it is visible reality, rather than material consistency, that provides the benchmark for dynamic reality.

³⁵ *Ibid.*, p73.

³⁶ see Fleischer, Christian, *SparkLight 3D Engine*, <http://user.cs.tu-berlin.de/~daydream/engine/physics.html>, last update 29.01.02, visited 5.02.02

³⁷ Frauenfelder, Mark, 'Smash Hits', *Wired*, (August 9, 2001), *Wired* online archive, visited 6.10.01, <http://www.wired.com/wired/archive/9.08/physics.html>

³⁸ *Trespasser*, published by DreamWorks Interactive in late 1998, was one of the first games to incorporate physics into the virtual environment: "Everybody was looking forward to *Trespasser* because of its advanced physics engine," recalls [game designer] Will Wright. "But when the game came out, it was just horrible. The

Not surprisingly, those aspects of visible reality that are most closely linked to the 'natural' appearance of the simulated environment are also those that were of most concern to the discourse of landscape. Military research devotes a great deal of time to the simulation of nature. The continued development of flight simulators and other training technology depends on attendant advances in the modeling of natural environments through the development of elements such as "clouds, rugged terrain, trees, and aerial perspective."³⁹ Here, the forms which typify simulated nature – clouds and foliage – are the same ones which emblemized wild nature in eighteenth century discourses of landscape. American company 3DNature Studios⁴⁰ offer two software packages for terrain modeling. 'World Construction Set' and 'Visual Nature Studio' allow the user to visualize and animate locations in photorealistic detail. The ability to model irregular landforms and terrain features are key selling points of such systems, which are rated, in part, on their ability to generate convincing representations of irregular surfaces such as water, rock, and broken ground.⁴¹ (Figures 2, 3) A 'good eye for appearance', Foley admits, "may be entirely sufficient to model a peripheral aspect of a scene."⁴² I would add a coda to this statement: in the modeling of nature, a good eye for *landscape* is absolutely necessary for creating a 'realistic' simulation. The 'natural world', as it is presented in and by VR discourse, is thus both external (the ontological other of eighteenth century discourse), and profoundly reduced – always already understood in terms of its representations. Somewhat perplexingly, the benchmark for the 'real' in virtual reality is both the cinematic screen and the undesirable and unrepresentable phenomenal world outside the simulation.

The nineteenth-century recognition of perspectival visibility as distinct from physiological vision has given way, in the twentieth, to the assumption of filmic perception as the basic level at which the subject perceives. If Benjamin hinted at landscape as a technologically

physical constraints overwhelmed everything else. Every time you'd walk through a door with a gun, it would catch the doorjamb and fall out of your hand." Ibid.

³⁹ Manovich (2001), op. cit. p193. see also Ervin, Stephen M., 'Digital Landscape Modeling and Visualization: A Research Agenda', online proceedings from *Our Visual Landscape*, conference, Ascona, Switzerland, September 1999;

<http://www.gsd.harvard.edu/~servin/ascona/>

⁴⁰ 3DNature International website, visited 12.10.01; see www.3dnature.com

⁴¹ "VNS gives you bump mapping for 3D Materials, Strata, Ground Effect Materials, Ecosystem Materials, Beach Materials and Waves in Water Materials. ... Bump mapping is great for irregular rocky surfaces, mud cracks and much, much more ... The Content Disk is included with Visual Nature Studio. This product adds hundreds of additional foliage objects, textures, pre-built Components and projects. This disk is designed to expedite work flow by allowing users to drag and drop skies, ecosystems, water features, Terrafactors, 3D Objects and other Components into their scenes." Ibid.

⁴² (italics added) Foley, op. cit., p1048.

unmediated or 'natural' mode of perception,⁴³ Virilio is even less equivocal, installing the cinematic visuality of landscape as "part of our human nature, the continuation of our natural sight."⁴⁴ For the cybersubject, perspectival visuality takes on the texture of the natural. The body remains, nonetheless, as a refractory variable. Inasmuch as Virilio is beholden to the discourse of landscape in his linking of space and nature, his recognition of the materiality of the body in the event of seeing signals a departure from this model. Comparing the siting of the subject in representation to the trajectory of a parachutist in free fall, Virilio engages the instrumentality of the paradigm in a manner that approaches the phenomenological: "The arrival of a *surface* is followed by the spreading of the vanishing lines of a *volume*; anticipating flattening at the *point* of impact; the *line* is the person, the being on the path of a fall free from all resistance."⁴⁵ Yoking perspectival vision to the force of gravity, and perspective to the "real time of falling bodies,"⁴⁶ Virilio walks a line between the carnal and the spectacular. If his argument supports the case for the naturalization of perspectival vision – "we 'fall' into the volume of the visible spectacle as though by force of gravity; literally, the world *opens up* before us."⁴⁷ – then it also signals the impossibility of teasing apart the spectacular from the material. This equivocality is not, in most cases, shared by VR discourse, where the mastery of space continues to be linked to the subject's ability to exceed the body, to *direct* the gravitational pull of space. If the body is present in the event of seeing, it is framed by the discourse of the interface as both excessive and lacking.

the body as excess

William Chambers' antipathy for Brown's garden was a consequence of the unseemly physical response that it occasioned: pain, for Chambers, was an unwelcome indication of the aristocratic subject's similarity to its social inferiors. Physical dysfunction limits the subject's experience of cyberspace as well; once again, it is the untimely intervention of the body-as-excess that brings about the ruin of the simulation. The issue of carnal incompetence is framed rather differently for the subject of VR, however. For the

⁴³ I'm thinking, here of the brief reference to landscape perception in *The Work of Art in the Age of Mechanical Reproduction*. The aura of natural objects, says Benjamin, is defined as the "unique phenomenon of a distance, however close it may be." The aura of a distant mountain range, in his example, is experienced in the instinctive movement of the eye over the horizon. see 'The Work of Art in the Age of Mechanical Reproduction', in *Illuminations: Essays and Reflections*, Hannah Arendt, ed., Schocken Books, 1968, pp217-251; p223.

⁴⁴ Manovich (2001), p173.

⁴⁵ Virilio, op.. cit., p30.

⁴⁶ Ibid., p30.

⁴⁷ Ibid., p29.

cybersubject, the body that intervenes in the cinematic world of the simulation is constructed by discourse as dysfunctional rather than threatening. Nevertheless, we can recognize in this dysfunctionality a colonized body, framed as simultaneously external, natural, and 'shapeless'. Once again, the discourse of the interface concerns itself with the discipline of the material. Now, however, it is not rhetoric, but technology, which is charged with the task of overcoming the unplanned intervention of the body in the event of seeing.

In *The Phenomenology of Perception*, Merleau-Ponty describes the material extension of perception through the body of an artifact – a phenomenon known as proprioception:

A woman may, without any calculation, keep a safe distance between the feather in her hat and things which might break it off. ... If I am in the habit of driving a car, I enter a narrow opening and see that I can 'get through' without comparing the width of the opening with that of the wings, just as I go through a doorway without checking the width of the doorway against that of my body. The hat and the car have ceased to be objects with a size and volume which is established by comparison with other objects. They have become potentialities of volume, the demand for a certain amount of free space.⁴⁸

Proprioception is the sense that tells us where the boundaries of our bodies are and how those boundaries are formed through habitual usage.⁴⁹ It is proprioception that enables a tennis player to feel the racket as an extension of her/his arm, or a motorcycle rider to sense the road surface through the machine. Proprioceptive *coherence* is a register of the user's fluency with the technology; her/his skill in embodying it as an instrument.

Proprioception was an issue for the subject of the garden only to the extent that it allowed an elaborately costumed viewer to move about with some degree of grace. If gesture was an issue in the garden, it was as part of the visible guarantee of one's skill with the technology of vision, but such gestures had no resonance within the space of representation itself, nor were they the guarantee of a satisfactory experience. In VR, however, the user's ability to function successfully within the space of the simulation depends upon proprioceptive coherence – the ease with which the user accepts the translation of bodily movements in real space and time into meaningful actions within the visual space of the simulation. For the hardcore gamer, such translations become automatic to the point where 'hitting a key is like reaching into your pocket for a gun', as one gamer remarked. For those that would thrive in the virtual environment, this aptitude need not be visible on the surface of the body; *visibility* as a subject is less important than *functionality*. Both proprioceptive

⁴⁸ Merleau-Ponty, Maurice, *Phenomenology of Perception*, Colin Smith, trans. Routledge, 2000 c.1962, p143.

coherence and embedded perspectival vision are prerequisites for satisfactory performance within the simulation. The more fully one satisfies these conditions – the extent to which the subject invests in an overcoded visuality and is prepared to accept certain programmatic surrogate actions in real space as intentional in the visual space of the simulation – the ‘better’ a time one will have.

Ideally, functionality in cyberspace should not be accompanied by the awareness that one is operating an interface; the merger between user and technology should be immediate, direct, and seamless. Proprioceptive coherence is a means of guaranteeing the transparency of the VR interface, ensuring that it functions as “a fantasized form of representation that no longer seems representational.”⁵⁰ In this sense, proprioceptive coherence involves the *subordination* of the body to the demands of the eye/I; the development of gestural skills that allow the user to answer to the exigencies of the visual/virtual environment. When the visible and the gestural get out of synch with one another, on the other hand, the subject of VR is reduced to the eminently carnal form of the body in the grip of simulator sickness.

Simulator sickness is a kind of visually-induced motion sickness. It results in similar symptoms – general discomfort, apathy, drowsiness, headache, disorientation, fatigue, pallor, sweating, salivation, stomach awareness, nausea, retching, and vomiting, and, less commonly, postural instability and flashbacks (a sudden recurrence of symptoms) – but can occur without any actual motion of the subject.⁵¹ Severe sickness can force the immediate termination of a simulation event, and the persistence of symptoms has motivated some US Army aviation units to prohibit pilots from flying an aircraft within 6 hours of a simulator flight.⁵² The theory of ‘sensory conflict’ (‘perceptual conflict’ or ‘cue conflict’) is the most

⁴⁹ “Associated with inner-ear mechanisms and internal nerve endings, [proprioception] makes us feel that we inhabit our bodies from the inside.” Hayles, op. cit., p88.

⁵⁰ Bukatman, op. cit., p171.

⁵¹ Estimates on the number of users affected by simulator sickness range from 30 to upwards of 50 percent of participants. Kennedy, Berbaum, Lillenthal, Dunlap, Mulligan and Funaro (1987) claim that only about 30% of individuals will become ill even under the worst simulator conditions. (costello) Crow, however, cites sources confirming that “potentially 60% of healthy users will be incapacitated by the throes of cybersickness (Stern, Hu, Anderson, Leibowitz & Koch, 1990; Regan & Price, 1994).” Costello, P.J. ‘Health and Safety Issues associated with Virtual Reality - A Review of Current Literature’, Advanced VR Research Centre, Loughborough University, 1997, <http://www.agocg.ac.uk/reports/virtual/37/report37.htm>. See also Crow, David, ‘Virtual Reality and Cybersickness’, http://www-2.cs.cmu.edu/~dccrow/uwaterloo/KIN_416.html; last update 26.01.96; visited 15.6.01

⁵² “[Symptoms] developed in a simulator/VE appear to last far longer than those developed in motion sickness. There are several reports of longer term symptoms and delayed after-effects in the literature. Kellogg, Castore

popular explanation for simulator sickness. Cue conflict occurs “when signals from the various spatial senses, the eyes, the balance organs and the non-vestibular position senses are in conflict with one another and do not correlate with signals received in past experience.”⁵³ Time lag in tracked HMDs is another cause of sensory conflict. All current VR systems incorporate a delay between head movement and its representation on the screen. In this case, sensory conflict occurs between the eyes, which register motion on the screen, and the balance organs, which fail to detect a corresponding bodily movement in real time.⁵⁴ In either case, the failure of the simulation event is brought about by a rupture – an inconsistency in the relation of the body to the space of the simulation; a breakdown of the relationship that is required between vision and the body (between the corporeal self and its representation in space) if the cybersubject is to perform as it should.

The actions of the subject in the simulation event are distinguished from ‘natural’ responses inasmuch as the latter are linked to instinct, expectation, and habit. If immersion symptoms occur, they are, more often than not, attributed an inability on the part of the user to transcend such responses – a lack of agency. Visual ability varies amongst users, and HMDs must be adjusted individually to avoid symptoms like binocular stress, which occurs in stereoscopic systems where the effect of three-dimensionality is provided by displaying slightly different images on screens close to each eye.⁵⁵ Binocular stress is framed as a discrepancy between natural viewing and stereoscopic viewing:

In the natural environment, ... [if] one accommodates (focuses) on a near object, the eyes will automatically converge. Similarly, if focus is changed to a distant object, the eyes will automatically diverge slightly. When using stereoscopic display devices such as shutter glasses or HMDs this is not the case. In this situation, the accommodative demand is always constant but the convergence demand changes as the user regards objects at different geometric depths in the virtual world. This accommodation/ convergence is not a natural occurrence and has been said to result in visual stress.⁵⁶

and Coward (1980) reported after effects following simulator use occurring 8-10 hours after leaving the simulator and experimentation carried out by the author has produced anecdotal reports from subjects that simulator sickness symptoms following immersive VR use have persisted for up to two days in some cases.” Costello, op. cit.

⁵³ Ibid.

⁵⁴ “If one executes a head movement and the screen image is not changed for 200 ms the eyes will detect no movement but the balance organs indicate that the head is moving. Similarly, the instant that a head motion stops, it will take 200ms for the screen image to stop moving. Here the eyes indicate movement and the balance organs indicate that movement has ceased.” Ibid.

⁵⁵ “Most people are not perfectly sighted meaning that the design of the HMD (or indeed shutter glasses) must allow the user to wear their normal optical correction or provide some sort of adjustability that allows each individual user to tailor the HMD to their own specifications. Some HMD manufacturers now provide focus adjustment on their models. However, providing this functionality does not mean that the user will adjust it correctly without adequate instruction and incorrectly-adjusted optics may be more detrimental to the user [than] optics with no adjustment at all.” Ibid.

⁵⁶ Ibid.

The 'natural' environment is that outside of the simulation; 'natural' occurrences are a peculiarity of the technologically innocent 'natural' body – an entity “not fabricated by outside agency”.⁵⁷ The latter body is not only exterior to the event of seeing, but acts, at times, outside of the sphere of culture itself. In and of themselves, the body's involuntary responses lack the cultural specificity that is associated with subjective agency. The vomiting or 'emetic response' sometimes experienced in simulator sickness, for example, is accounted for as the erroneous triggering of an innate response for dealing with ingested toxins:

[Nausea] and malaise responses may be viewed as an aversive conditioning mechanism which help the organism avoid future ingestion of such toxins. Treisman's hypothesis, which suggests an adaptive benefit for the occurrence of motion sickness, is one of the few explanations for why such effects may occur.⁵⁸

Vomiting is an instinctive response, a means of protecting the body against further harm. For the unfortunate victim of VR sickness, immersion is like being poisoned; in this instance, the real is not cinematic, it is nauseating. As we have already seen, pain and nausea are associated with an uncontrollable and inarticulate body; a body whose excessive character dictates that it must always be distinguished from the space of the subject and from the event of seeing. If nature takes the form of the 'expected stimuli' of real world tasks, VR sickness is an emblem of the body's lack of sophistication, its inability to adapt to the unexpected, its immersion not in the virtual or technological world, but in the realm of material nature.⁵⁹ Pointing to the 'natural body' as the basis of failure in the simulation event, the discourse of the interface frames corporeality as pathology.

Identifying depression as the primary psychic affliction of the postmodern subject, Christine Ross goes on to argue that this depression emerges out of a 'failure to perform' which is implicitly linked to the failing of the body.⁶⁰ Elizabeth Grosz is less equivocal in her

⁵⁷ Heim, op. cit., p153.

⁵⁸ Kolasinski, op. cit.

⁵⁹ “According to the cue conflict theory, sickness will occur in situations where there is a mismatch between experienced stimuli and expected stimuli. ... [Experience] with the real-world task ... plays a critical role in the cue conflict theory of simulator sickness: conflicts are thought to occur between the actual pattern of stimuli and the expected pattern of stimuli. The expected patterns likely result from repeated experiences, which Reason and Brand (1975) suggest may follow the same long-term learning pattern seen with other types of learning.” Ibid.

⁶⁰ “If the Freudian pathology par excellence was neurosis, the main pathology of the contemporary performative subject who has become the sole agent for his or her own subjectivity is depression. Depression derives from failure to perform, more specifically from identity insecurity, feelings of insufficiency, and responsibility fatigue. ... the contemporary viewing subject [is] performative yet insufficient, full of initiative yet tired, responsible yet anaesthetized, identified yet disidentified...” Ross, Christine, 'Vision and Insufficiency at the Turn of the Millennium: Rosemarie Trockel's Distracted Eye,' *October* 96 (Spring 2001), pp87-110, p88.

identification of the late twentieth century body as both docile and ductile, in need of both technological and discursive support. The body, insists Grosz, is

a concrete, material, animate organization of flesh, organs, nerves, and skeletal structure, which are given a unity, cohesiveness, and form through the psychical and social inscription of the body's surface. The body is, so to speak, organically, biologically "incomplete"; it is indeterminate, amorphous, a series of uncoordinated potentialities that require social triggering, ordering, and long-term administration.⁶¹

For Grosz, the body is a matrix in need of social formation, and subjectivity is something that one is compelled to *perform* in order to be socially visible at all. It is this body that is thematized in the work of performance artist Stelarc, whose technological interventions into his own body over the past 25 years epitomize the kind of theatrical denial of the material that characterizes the cybersubject. In early works, like the suspension performances of the 1970s, the artist's punctured flesh provides the means for the meditative abandonment of the self. Later works, in which the body is probed, bruised, and subjected to involuntary movement, explore the theme of the body as superannuated: vulnerable and pliant, degraded and disordered, its legibility and consistency due entirely to the imposition of a technological exoskeleton.⁶² As Stelarc himself is fond of saying, 'the body is obsolete.' Technofantasy, as it is enacted in works such as these, is deeply masochistic, articulated around a perception of the body as disabled by nature, and willingly violated by technology.^{63 64}

Stelarc would likely approve of current research into the development of the neurocomputer.⁶⁵ The integration of digital electronics with human and animal neural networks is the first step towards the creation of 'living machines', designed to perform tasks

⁶¹ Grosz, Elizabeth, *Space, Time, and Perversion: Essays on the Politics of Bodies*, Routledge, 1995, p104.

⁶² Obvious examples include performances such as *Exoskeleton* (first performed 1998), *Parasite (Event for Involuntary and Invaded Body)* (first performed 1997), and *Ping Body* (first performed 1996). see Stelarc website: <http://www.stelarc.va.com.au/>

⁶³ *Stomach Sculpture* (1992) is a particularly grisly example. In this work, the artist swallowed a small 'sculpture', tethered on a flexidrive cable, and equipped with camera, beeping sound, and flashing lights. The probe was designed to open inside the stomach, and insertion could only take place after an 8-hour fast. Once inside the stomach, an endoscope was used to suck out excess stomach fluid, the stomach was inflated with air, and the capsule was opened and extended. The event was documented using video endoscopy equipment. As the artist relates, "even with a stomach pump, excess saliva was still a problem, necessitating hasty removal of all the probes on several occasions. Although documentation was attempted on three separate occasions, for medical reasons it was not possible to completely image the opened and extended sculpture inside the stomach." Here, the body is literally hollowed out, "with no meaningful distinctions between public, private and physiological spaces. ... The hollow body becomes a host, not for a self or a soul, but simply for a sculpture." see <http://www.stelarc.va.com.au/stomach/stomach.html>

⁶⁴ It is worth noting the convergence of technofantasy and sadomasochism in the world of fashion. The enthusiastic incorporation of punk and goth trademarks – tattooing, piercing, and restrictive, bondage-style clothing – into so-called cyber-fashion over the past five to ten years speaks to the way that the extravagant disciplining of the body is used, in this instance, to signal its obsolescence.

– identifying handwriting, speech, and faces, for example – that today's silicon computers cannot cope with, but that humans accomplish almost instantly. The performing body is no longer a concern in machines such as these; all that is required is a smear of brain tissue in a petri dish. Wired up and trained, brain cells could potentially be used to control robotic prostheses: an organic brain acting through the agent of an inorganic body. Here, thought goes on without its corporeal anchor. In audacious response to the question posed by Lyotard in *The Inhuman*,⁶⁶ the functions of the mind indeed go on in the absence of a body.

Though we may still have a while to wait before the neurocomputer becomes a functional reality, it points to a deeply inculcated desire for a merger between an insufficient body, and a technology that can redress these insufficiencies. This is the same desire that was inscribed onto the body of the subject of landscape, where dress and decorum served as the visible guarantee of the subject's merger with the technology of vision – a merger which could not be *lived* as such, only acted out. If the 'technologized' body in the garden served as a signifier of the subject's freedom from the corporeal, then the technologically invaded postmodern body can be understood as the materialization of this freedom. In Manovich's estimation, current VR technology likely represents

the last act in a long history of the body's imprisonment. ... Eventually, the VR apparatus may be reduced to a chip implanted in the retina and connected by wireless transmission to the Net. From that moment on, we will carry our prisons with us ... The retina and the screen will merge.⁶⁷

Whether or not this actually materializes, there is little doubt that claims to eventually provide a plenary experience – a perfect synthesis of subject and technology – are articulated around an understanding of the interface as an instrument that can be made fully conformant with the intentions of its human operator. Finely honed, proprioception promises the total release of the subject from the confines of the body; the ultimate techno-fantasy – that of being downloaded into one's computer – turns vision and thought over to a machine. Here, the abandoned body is little more than a container for the self – an imperfect and ultimately temporary habitation that can be set aside in favour of a perfected machinic matrix. The technologically enabled subject is one with the instrument, more than the sum of its parts – a extraordinary amalgam of hardware, software, and wetware. Leaving the body behind, the cybersubject takes on the ideal form of the *embodied mind*:

⁶⁵ see Ananthaswamy, Anil, 'Mind Over Metal' in *New Scientist* No. 2331 (23 February 2002), pp27-29.

⁶⁶ see Lyotard, Jean-François, 'Can Thought Go On Without a Body?' in *The Inhuman: Reflections on Time*, Geoff Bennington and Rachel Bowlby, trans., Polity Press, 1988.

⁶⁷ Manovich (2001), op. cit., p114.

[The] duality between mind and body is superseded in a new formation that presents the mind as itself embodied. ... Through the construction of the computer itself, there arises the possibility of a mind independent of the biology of bodies, a mind released from the mortal limitations of the flesh.⁶⁸

Freedom, in this instance, is that of a Husserlian subject reduced to pure intentionality, an extended subject: the fantasy form of an 'objectified' consciousness, with similarly externalized and objectified powers of reason. In this vision of the body/technology merger, the subject enjoys a "sense of freedom from the body, and in particular perhaps, freedom from the sense of loss of control that accompanies ... embodiment."⁶⁹

The fantasy of the 'embodied mind' is VR discourse at its most utopic. The technobody promises to release the cybersubject from material concerns such as aging, illness, and death. Even the obscurity and abjection of the body in the grip of VR sickness is offset by confidence in design and technology: increases in computational power, we are told, will likely reduce the lags responsible for simulator sickness to the point where human vision no longer registers them. Here, the body's tendency to fail is offset by framing its disabilities as *curable*. If the failing of the body was linked, for the subject of the garden, to pain, and ultimately to death, the technologically invaded body is to a degree immortal. Disease is less of an exigency, because the body itself is framed as something less carnal, its incapacity offset by faith in human capability to make it well, or at least to make it *work*.

The precise limits of the space of representation are not as evident in the garden as they are in a picture. In the garden, the distinction between material and virtual space is dependent on the work of identification undertaken by the subject in order to make an 'unframed' environment conform to the demands of what one wants to see. Simulation does away with the need for this kind of spectatorial work:

VR typically uses a head-mounted display whose images completely fill the viewer's visual field. No longer is the viewer looking at a rectangular, flat surface from a certain distance, a window into another space. Now she is fully situated within this other space. Or, more precisely, we can say that the two spaces – the real, physical space and the virtual, simulated space – coincide. The virtual space, preciously confined to a painting or a movie screen, now completely encompasses the real space. Frontality, rectangular surface, difference in scale are all gone. The screen has vanished.⁷⁰

⁶⁸ Bukatman, op. cit., p159.

⁶⁹ Stone, op. cit., p521.

⁷⁰ Manovich (2001), op. cit., p97.

The VR interface replaces the distance of the picture with a radical proximity of image and eyeball, or even – in cases where the image is projected directly onto the eyeball, focusing at the back of the eye – an *invasion* of the organ by the technology of vision.⁷¹ It makes no sense to speak of the ‘distance of the picture’ in the simulation event, because this distance has vanished, collapsed into the infinitesimal interval between the surface of the eye and the images it perceives. Once the distance of the picture disappears, then so does the possibility of mobility within this distance. In the perfect simulation, there is no possibility of anamorphic movement, no means of moving beyond the frame, no chance of an encounter with the real. Nor, it seems, is there any chance of being seen by others. The space of virtual reality lies outside of the social circuit of vision. The carnal body is invisible within the space of the simulation; the image-body, in most cases, is visible only to a machine. VR provides the illusion of a perfected vision radiating from an invisible – and in many ways omnipotent – body. The choice of perspectives available to the subject – the ability to see oneself in the plane one is flying, for example – is a form of spatial authority specific to VR. Here, mastering space goes hand in hand with the mastery of technology – a Cartesianesque machinic fantasy in which the command of instruments is a metaphor for conquest of the world.⁷² Cyberspace, we are told, is “a concretization of the psychoanalytically framed desire ... to achieve [a] kinaesthetically exciting, dizzying sense of freedom.”⁷³ If there is a lack in the event of seeing, here, it is offloaded onto a body that is understood as the only thing standing between the subject and the plenary experience that the simulation promises. Where the garden tried to conceal the heterogeneity of bodies, VR discourse goes even further, trying to ‘cure’ their heterogeneity.

As the landscape interface demonstrated, however, ‘freedom’ is never quite what it seems. Total proprioceptive coherence is still a pretty one-sided affair; proficiency with the VR interface means adapting one’s movements to suit the demands of the interface, accepting standardized operations in order to function in electronic space. As well as more familiar operations such as cursor movement, keystrokes, and navigation, environments which

⁷¹ Liquid Crystal Shutter (LCS), used in semi-immersive systems, consist of a lightweight headset with a liquid crystal lens placed a short distance from each eye. A full immersion HMD “uses small monitors placed in front of each eye which can provide stereo, bi-ocular or monocular images. Stereo images are provided in a similar way to shutter glasses, in that a slightly different image is presented to each eye. The major difference is that the two screens are placed very close (50-70mm) to the eye.” see Costello, *op. cit.*

⁷² “The human proudly takes up a position within the machine, but almost always from a position of mastery, so that by entering the machine, the machine becomes a part of the human. The subject is, and is not, afraid to leave its body behind. The computer can become a new body, with its electronic sensorium extending far beyond human capacities.” Bukatman, *op. cit.*, p159.

⁷³ Stone, *op. cit.*, p521.

appear to solicit individual participation from the user more often than not require the user to follow preprogrammed links, to take up one of a few possible positions in a limited number of narratives whose structure is already decided. If it is an interiorized space, then cyberspace, as Bukatman points out, "is not the interiority of psychologized subjectivity, but rather of a fully technologized (cultural) space which overlaps and restates the vocabularies of a postmodern urbanism."⁷⁴ This is less a freedom of movement than it is an encouragement of the user to mistake the structure of somebody else's mind for their own – a kind of 'objectification of mental processes' which equates these processes with "forms that can easily be manipulated, mass produced, and standardized on their own."⁷⁵ The regulation, through transcoding, of individual operations such as association, reflection, problem solving, and recall risks depriving the individual of the means to form such associations independently – a kind of techno-psychic engineering that ultimately undermines the view of the individual as responsible and self-determining. Perfect identification with a machine is the goal in this case: the apparent freedom of the VR interface marks the total homogenization of the subject of simulation and the absolute anonymity of the technologized self. Here, the price to pay for the euphoria of disembodied consciousness is the loss of control over one's own being.

Clearly, there is more than one way to approach the issue of the body/ technology interface. If cyborg theory champions the cause of the technological human, and forecasts the collapse of the distinction between technology and nature, the discourse of the interface approaches this issue from the opposite direction. As it is detailed above, the latter is more concerned with the maintenance of a nature/culture division that "guarantees a proper order of things and establishes a hierarchical relationship between culture and nature."⁷⁶ In the garden, nature enjoyed an extrarepresentational potency that is denied it in twenty-first century economies of meaning. Though twenty-first century nature is recognized as a semiotic, rather than an ontological category, it is consistently linked, nevertheless, to the notion of the 'exterior':

Rather than representing some pristine category or originary state of being, [nature] has taken on an entirely different function in late twentieth-century economies of meaning. Not only has the character of nature as yet another construct of culture become more patent, but it has become nothing more (or less) than an ordering factor – a construct by means of which we attempt to

⁷⁴ Bukatman, op. cit., p166.

⁷⁵ Manovich (2001), p60.

⁷⁶ Balsamo, Anne, 'Forms of Technological Embodiment: Reading the Body in Contemporary Culture.' in *Cyberspace/Cyberbodies/Cyberpunk : Cultures of Technological Embodiment*, Mike Featherstone & Roger Burrows, eds., Sage Publications, 1995, p215-6.

keep technology visible as something separate from our 'natural' selves and our everyday lives. In other words, the category 'nature', rather than referring to any object or category in the world, is a *strategy* for maintaining boundaries for political and economic ends, and thus a way of making meaning.⁷⁷

What is critical in this dynamic is not whether or not nature is 'really other', but the fact that it is consistently framed that way by the discourse of the interface, and by culture more generally. This craving for nature-as-other shows up as the cult of immediate experience, of raw, intense reality by which we demonstrate both the awesome power of the natural world and the gritty determination of those who set out to master it.⁷⁸ The recent popularity of movies like *Twister*, *Deep Impact*, and *The Perfect Storm* celebrates – simultaneously, and from the safe distance of the armchair – the unimaginable power of external nature, the gory frailty of the natural body, and the indomitable character of the human spirit.

Fixing nature as an exterior obscures both its ideological expediency and its variability as a historical concept. Clearly, our ideological investment in the boundaries between the subject and (its) nature is not the same as it was in the eighteenth century. In the garden, the body was banished from the event of seeing because it bespoke too clearly the similarity between the subject of landscape and its social inferiors, and because it hinted at a lack, on the part of culture, to fully legislate the natural. In the twenty-first century, the boundary between technology and the natural world is sustained, in part, because it is the latter which is now at risk of being subsumed by the former. The natural world to which the body belongs must itself be 'kept visible', if only to assure ourselves of nature's continued presence as that through which culture and the cultural derive their meaning and motivation.

Framing nature as excess is a means of constituting a homogeneous cultural other. Understanding nature in this way is, on the one hand, a means of justifying an 'environmental management' approach to the planet – a positivist project which sustains an Enlightenment vision of nature as manageable, and of rational thought as the tool with which it is to be managed. In and of itself, this project has pernicious undertones; the control of nature, as Jane Bennett points out,

is one dimension of an Enlightenment quest to resecure a place for humans in a disenchanted world. The insistence upon control manifests itself also as an attempt to discipline the self by sublimating the nonrational, impulsive, or animal-like; as an attempt to order the social world by standardizing irregular

⁷⁷ Stone, *op. cit.*, p517.

⁷⁸ I'm thinking, in particular of the recent popularity of 'man against nature' stunts reality TV shows like *Survivor*.

beliefs, practices, or populations; and as an attempt to rationalize the economic system by rooting out inefficiency.⁷⁹

On the other hand, homogenizing nature has the ideological advantage of creating a world that is perceived as identical by all subjects. Its location and character verified by electronic technology, nature is one of the few categories left, in a world divided by difference, upon which we can all agree – an unquestionable moral authority and the source of a universal system of values.

As we have seen in the previous chapter, however, looking to nature for a system of values is a politically precarious concern. 'Natural law' is by no means ideologically neutral, and can be invoked as a stumbling block to social and political change: "Within liberal theory, the claim that a given feature is natural is a way of refusing to consider the possibility of doing, thinking, or being differently than one is."⁸⁰ In the hands of less imaginative advocates of the ecological movement, 'nature's way' is the yardstick against which all scientific and technological advancement should be measured – a maneuver which more often than not ends up demonizing technology for no reason other than its distance from nature. On a more general level, nature is often invoked in support of dualistic ontologies (nature/culture, female/male, primitive/developed) which uphold repressive ideologies.

The technologically colonized body is still understood as a sign of our distance and difference from a 'nature' whose character is uncertain. Our relationship to new technologies is one of "fear and hope alike, the loathing for the new beings we ourselves are bound to become in the shedding of the skins of all our current values, intimately intertwined, as in some DNA of the collective fantasy, with our quasi-religious longing for social transubstantiation into another flesh and another reality."⁸¹ The preservation of humanity's distance from nature is enacted in the face of fears over our growing distance from it; the collapse of the distance of the picture in VR emblemizes an overproximity to technology that goes hand in hand with the apprehension that we might also be too far from something else. It is this 'something else' that is framed as nature by the discourse of the interface.

⁷⁹ Bennett, Jane, *Unthinking Faith and Enlightenment: Nature and the State in a Post-Hegelian Era*, New York University Press, 1987, p47. See also Easterbrook, Gregg, *A Moment on the Earth: The Coming Age of Environmental Optimism*, Penguin Books, 1996.

⁸⁰ Phelan, Shane, 'Intimate Distance: The Dislocation of Nature in Modernity', *Western Political Quarterly*, Vol. 45, No. 2 (June 1992), pp385-402; p386.

⁸¹ Jameson, Fredric, *The Geopolitical Aesthetic: Cinema and Space in a World System*, Indiana University Press, 1995, p29.

The attrition of the distance between humanity and its technologies is the engine of both technofantasy and technoparanoia. If nature and the natural continue to be implicated in the ontology of technologies of vision and of the subject, they do so in partial fulfillment of a contradictory desire “to escape the newly extended body of technological engagement. In the wish there remains the contradiction: the user both wants and does not want the technology. The user wants what the technology gives but does not want the limits, the transformations that a technologically extended body implies.”⁸² As Ihde points out, the desire for a completely transparent interface is both contradictory and denunciatory, rejecting both the ‘natural’ body on which the technology rests, and the transformed body in/of the interface.⁸³

In early computers, such as the Universal Turing Machine, the recording of data onto tapes was modeled after the organization of visual images into cinematic sequences. In the 1960s, Konrad Zuse developed a method of using punched tape to control computer programs, using discarded 35mm movie film in his early prototypes. One of the surviving pieces of this film shows binary code punched over the original frames of an interior shot.⁸⁴ This ‘superposition of the binary over the iconic’ is more than just metaphor, it is a phenomenological reality: the functionality of Zuse’s prototypes relied upon the embedding of code in a material base.

An analogous situation pertains in the simulation – and, indeed, in all situations where a virtual space is accessed via a perspectival interface. Though the view in the garden was not a space that one was invited to experience materially – William Shenstone’s recommendation against attempting to walk into a view was a reminder of the boundary between the material and virtual worlds, and an injunction against violating this boundary⁸⁵ –

⁸² Ihde, op. cit., p76.

⁸³ “It is the doubled desire that, on one side, is a wish for total transparency, total embodiment, for the technology to truly “become me.” Were this possible, it would be equivalent to there being no technology... But that is only one side of the desire. The other side is the desire to have the power, the transformation that the technology makes available. Only by using the technology is my bodily power enhanced and magnified... [in ways] *different* from my naked capacities. The desire is, at best, contradictory. I want the transformation that the technology allows, but I want it in such a way that I am basically unaware of its presence. I want it in such a way that I it becomes me.” Ibid., p75.

⁸⁴ Manovich (2001), op. cit., p25.

⁸⁵ “When a building, or other object has been once viewed from its proper point, the foot should never travel to it by the same path, which the eye has travelled over before. Lose the object, and draw nigh, obliquely.” Shenstone, William, ‘Unconnected Thoughts on Gardening’ (1764), in Dixon Hunt, ed., op. cit., p291.

the Shades demonstrated the permeability of the boundary between the inside and the outside of representation, and the part played by the body in the violation of this boundary.

If the discourse of the interface insists on a Cartesianesque disposition of body and subjectivity, then contemporary discourses of virtuality imply other possible roles for the body. As the following discussion will make clear, they demonstrate that our involvement with technologies is both existential and instrumental, both material and theoretical. VR bodies, as Ihde reminds us, are “thin and never attain the thickness of flesh.”⁸⁶ As I will show, it is precisely the ‘thickness of flesh’ that makes it impossible to fully abstract the corporeal body from the site of representation or simulation.

⁸⁶ Ihde, *op. cit.*, p15.

3.2 alternate worlds

Videogames are getting seriously physical: The engine is the real-time force of nature. Now when you fight, the entire game environment fights back. ... After trying dozens of depressingly bad virtual reality systems over the past decade, for once I feel truly immersed. In [earlier] demos, I moved a cursor, and the cursor moved the simulation. Now I move the simulation, with one hand submerged in the virtual world. With equal amounts of giddiness and dread, I realize that the doors to the metaverse have been thrown open. Reality has a competitor.⁸⁷

Some early VR systems used a head-mounted display so heavy that it had to be suspended from the ceiling, with the user's head literally locked into it. The body, tied to the computer, was reduced to a 'giant mouse' as Manovich terms it – a scenario which epitomizes the argument that the allegedly mobile gaze of modernity is in fact attained at the cost of the progressive imprisonment of the viewer.⁸⁸ The subject in/of the simulation differs in important ways from the passive observer of nineteenth century optical technologies, however. Notable among these is the degree to which simulation systems solicit motive involvement from the user. Unlike cinema or picture viewing, in today's VR systems, the user 'has to work in order to see'. The success of the simulation is no longer measured by look alone, but by *feel*.

Mark Frauenfelder's experience of MathEngine and Havok's demos, above, foregrounds immersion as a matter of simultaneous presence in both simulated and external worlds. If the simulation is operating as it should, this 'doubling' of experience is not present to consciousness as such – the two worlds remain effectively separate. Occasionally, however, this boundary fails, and the interior and exterior of the simulation contaminate one another – a phenomenon known as Alternate World Syndrome. The simulation environment requires the user to gesture in real space and time in order to move about in the virtual world. These gestures are meaningful only on machine level, they have no intentionality in the world outside of the simulation. That is not to say, however, that they do not occasionally show up

⁸⁷ Frauenfelder, op. cit.

⁸⁸ "[As] the 'mobility' of the gaze became more 'virtual' – as techniques were developed to paint (and then to photograph) realistic images, as mobility was implied by changes in lighting (and then cinematography) – the observer became more immobile, passive, ready to receive the constructions of a virtual reality placed in front of

there. AWS describes a condition in which gestures that have meaning in the simulated environment spill over into the world outside the simulation – when a user exits the simulation and still expects to be able to fly by moving a hand, for example. AWS is a condition in which the responses ingrained in the one world step out of phase with the other; a situation where the image-body carries over into the here-body, or vice-versa.⁸⁹ It is the involvement of the gesturing body in this phenomenon that distinguishes AWS from simulator sickness or binocular stress. AWS is the consequence of redundant neurological responses, and, as such, is not simply an effect of the system per se, “but the system within the broader context of world entrance and exit.”⁹⁰

A more chronic ‘existential’ variant of AWS is AWD (Alternate World Disorder), where the reconfiguration of the senses from one world to the other no longer takes place at all. The resulting breakdown of the integrity and balance of the kinesthetic body ‘depletes somatic energy’, and brings about a total rupture “of the kinesthetic from the visual senses of identity.”⁹¹ Neither AWS nor AWD is ‘curable’ in the same way that simulator sickness is, because they involve not simply instinctive physiological responses, but lingering psychic effects. Alternate World Syndrome involves the meaningless and uncanny persistence of subjective traces from another reality: one’s own self ‘doubled’ and ‘seen from the outside’.⁹² AWD, on the other hand, is literally a breakdown of subjectivity: a disruption of personality; a dislocation of the (perspectival) self from the body; *an uncoupling of subjective models from actual experience.*

his or her unmoving body.” Friedberg in Manovich, op. cit., p109. Lalvani has also noted how c19th optical devices involved the integration of a passive observer within a mechanical apparatus; see Lalvani, op. cit., p176.

⁸⁹ “The human being entering a full-blown virtual habitat for work or play must exit and reconfigure the senses in order to resume life in the primary world, then later reconfigure when reentering the virtual world, etc. The psycho-physiological stress is greater than in previous technology syndromes. The mind and body become fully engaged in the artificial world and then they must reconfigure for the primary world. AWS occurs when the virtual world later obtrudes on the users’ experience of the actual world, or vice versa.” Heim, op. cit., p183. see also Johnson, R. Colin, ‘Lab Probes Effects of Virtual Reality Exposure’, *CMP TechWeb* (2.3.99), <http://www.mindlab.msu.edu/mweb/media/techweb.htm>

⁹⁰ Ibid., p186.

⁹¹ Ibid., p183.

⁹² The dislike of seeing one’s own double, within the Freudian argument is “because that image takes us back to a “surmounted” stage of psychic development, when the distinction between ego and image did not yet exist ... [It] is this “narcissistic” or “animistic” phase that returns so strangely in the image or figure of the Double. In the presence of this figure, I am once more in an absolutely familiar relation with the not-me, with the other – but in the form of a no less absolute uncanniness, since this other me is now seen on the *outside*... in an image all the more estranging because it is narcissistic, all the more alienating because it is perfectly similar.” Borch-Jacobsen, Mikkel, *Lacan: The Absolute Master*, Douglas Brick, trans., Stanford University Press, 1991, pp44-5.

If, as Žižek suggests, computer technology is changing the 'hermeneutic horizon of our everyday experience',⁹³ then VR simulation – and its attendant 'disorders' – foregrounds the hermeneutic density of the body in a way that other technologies of vision do not. Both AWS and AWD point to the significance of the body in the event of seeing, and in the formation of the subject. They imply that the interior and the exterior of this event are neither mutually exclusive nor jointly exhaustive. They confirm the suspicions that are aroused by Brunelleschi's demonstration: that landscaping the self, finding oneself in space, entering into an intentional relation with the world, is a great deal more than a theoretical issue. All of these raise questions about the applicability of the Lacanian model to a discussion of simulation.

For Manovich, the simulation event is, ideally, materially encompassing; an event of seeing within which 'actual physical reality is disregarded, dismissed, abandoned'.⁹⁴ If the perfect simulation is one in which the virtual subsumes the physical, then superficially, the collapse of the distance of the picture in VR appears to signal the ultimate victory of simulation over representation. Here, the subject of VR takes up the position of the subject of landscape – the fantasy form of the decorporeal eye/I: a perfected vision radiating from an invisible and intangible self. If the obscene is a condition "where the object-gaze is presented as if there were no scene to stage it, no frame of representation to contain it, no screen,"⁹⁵ then the obscene has no place in this vision of interfaced being. Indeed, it is difficult to determine where the gaze is in the simulation: Inside, in the circuit of vision? Outside, in the enviroing world? The foreclosure of the anamorphic relation suggests a rejection of the abject, an elision of the gaze, an evasion of lack. As we shall see, however, this is a projected and superficial plenitude.

Dreams, for Lacan, are typified by the "absence of horizon, the enclosure, of that which is contemplated in the waking state ... [In] the final resort, our position in the dream is profoundly that of someone who does not see."⁹⁶ By linking the restricted sight of the dreaming subject with enclosure and the lack of a horizon, this short passage suggests that

⁹³ see Žižek, Slavoj, 'Cyberspace, or the Unbearable Closure of Being' in *The Plague of Fantasies*, Verso, 1997.

⁹⁴ "In VR, either there is no connection between the two spaces (e.g. I am in a physical room while the virtual space is an underwater landscape) or, conversely, the two completely coincide (e.g., the Super Cockpit project) In either case, the actual physical reality is disregarded, dismissed, abandoned." Manovich (2001), op. cit., p113.

⁹⁵ Foster, Hal, 'Obscene, Object, Traumatic' in *October* 78 (Fall 1996), pp107-24, p111.

⁹⁶ Lacan, op. cit., p76.

for Lacan, the subject who *does* see, does so by means of the landscape interface. It is perhaps fitting, then, that the only illustration in the *Four Fundamental Concepts* is a hieroglyph of the same paradigm by which the subject is landscaped: Alberti's *costruzione legittima* – a technology of vision that gives the world to the subject in the 'paranoid' form of a "theoretical relation and [an] optic of representation."⁹⁷

As far as Lacan is concerned, vision is the only significant variable in the subjectifying relation, visibility the privileged term in the subject's relation with the world. Within the Lacanian argument, as Mikkel Borch-Jacobsen suggests,

no type of relation with the world or the other – except the specular, spectacular, scopic one, as it defines the subject of representation through and through – is ever taken into account. The Lacanian ego is the ego as it theorizes itself, never as it feels "itself" or experiences "itself".⁹⁸

Vision is the only sense in which there is no adjacency between the subject and the object; it "performs a distancing function, leaving the looker unimplicated in or uncontaminated by its object."⁹⁹ It is the same desire for a purified form of subjectivity that motivates Poussin's ideal subject – and the subject of landscape which models itself after the latter – to 'take up a prospect'. '*Distance between*' is both the figurative paradigm of the landscape interface, and the ontological fulcrum of the Lacanian subject. The 'splitting of the being to which the being accommodates itself'¹⁰⁰ is articulated around the maintenance of a correct distance between the real and the symbolic, between the subject and its representations, its specular image, and its other(s).¹⁰¹ It is the hiatus between the self and the Ideal-I that animates the subject and serves as the engine of its desire.¹⁰² Born out of distance, desire is, in this sense, always a *horizontal* movement: a movement away from the insufficiency of one's present condition, towards an anticipated and unattainable state of plenitude. The Lacanian subject is articulated, in other words, around the stasis of vision and the perpetual movement of desire.

⁹⁷ Borch-Jacobsen, op. cit., p61.

⁹⁸ Ibid., p57.

⁹⁹ Grosz, Elizabeth, *Jacques Lacan: A Feminist Introduction*, Routledge, 1990, p38.

¹⁰⁰ "For my part, I set out from the fact that there is something that establishes a fracture, a bi-partition, a splitting of the being to which the being accommodates itself, even in the natural world." Lacan, op. cit., p106.

¹⁰¹ Paraphrasing Catherine Clément, Foster remarks that "the mirror stage concerns the negotiation of a proper distance between the fledgling ego and its image as well as between the infant and its caretaker." see Foster, Hal, *The Return of the Real*, MIT Press, 1996, p214.

¹⁰² The form of the Ideal-I that the nascent subject encounters in the mirror state "situates the agency of the ego, before its social determination, in a fictional direction, which will always remain irreducible for the individual alone, or rather, which will only rejoin the coming-into-being (*le devenir*) of the subject asymptotically, whatever the success of the dialectical syntheses by which he must resolve as *I* his discordance with his own reality". Lacan, Jacques, 'The Mirror Stage as Formative of the Function of the I as Revealed in the Psychoanalytic Experience', in *Écrits: A Selection*, Alan Sheridan, trans., W. W. Norton & Co., 1977, pp1-7; p3.

Within Lacan's landscape of desire, it should not surprise us much to find the endless distance of the horizon linked with nature-as-other. In 'The Mirror Stage', Lacan lays out the narrative of adaptation that congeals the borderless ego into a functioning subject. The 'symbolic reduction' by which the specular I is established as the social I takes the form of a 'genetic order'; the genesis of the ego takes place against a backdrop of 'nature' against which the developing self musters its defenses. Prior to the social dialectic which shapes the subject, the 'spatial captation' manifested in the mirror-stage, argues Lacan, "is the effect in man of an *organic insufficiency in his natural reality* – in so far as any meaning can be given to the word 'nature'."¹⁰³ Nature, here indicates the originary state of the landscaped subject, both insufficient and superabundant, that which it must leave behind and that which nourishes its desire. We find the same link between desire and distance in VR, in the 'not now' of the simulation; the other space and time of the virtual self.

The landscape interface is a technology of vision that exists in theoretical form alone, and that operates, in theory, exclusively within the sphere of visibility. Though models such as these may claim, as did Husserl,¹⁰⁴ to assume the material as a substrate, such assumptions overlook the fact that the interface is also an instrument and linked, as such, to seeing as *praxis*. Within Lacan's 'optic of representation', on the other hand, the gaze which determines the subject is compared to a snapshot:

What determines me, at the most profound level, in the visible, is the gaze that is outside. It is through the gaze that I enter light and it is from the gaze that I receive its effects. ... the gaze is the instrument through which light is embodied and through which ... I am photo-graphed.¹⁰⁵

It seems more than coincidence that Lacan frames the gaze as a photograph; in a medium which stops time and freezes movement. His vision of the virtual is that of a world "strangely petrified and static, a sort of immense museum peopled with immobile "statues," 'Images' of stone, and hieratic' forms. ... [The] ego here takes its "pose" for eternity in what Lacan ... calls an "*instantané*" (snapshot), an "instance" (agency), ... a "statue", and a "stasis of being".¹⁰⁶ This is a subject hardened and pulled away from the body; a subject that insists

¹⁰³ *Ibid.*, p4. (italics added)

¹⁰⁴ Husserl's monosensory phenomenology "overlooks the way in which instruments as technological embodiments of science function to relate scientific praxis to the lifeworld in all its plenary richness." Ihde, *op. cit.*, p56.

¹⁰⁵ Lacan (1994), *op. cit.*, p106.

¹⁰⁶ Borch-Jacobsen, *op. cit.*, p59.

on the technology of vision as an abstract form – an interface that functions not *through* the body, but operates, from a distance, to *(re)place* the body.

By establishing a precise and reiterable relationship between the subject and its signs, perspectival images or 'image-instruments' as Bruno Latour terms them, enable the subject to mobilize resources across space and time, to manipulate reality by manipulating its signs.¹⁰⁷ Lacan's 'symbolic reduction' engineers a particular perception of the world. Situating the subject in this sort of landscape, however, also invites a particular spatialization of power. Concealed at its source and distanced in its effects, the power mobilized by the Lacanian subject depletes the actual and re-presents it in the form of an image. Though seeing in perspective is, ostensibly, no longer the exclusive property of the ruling classes, image-instruments themselves continue to enjoy this status. Ownership, control, and consumption of images is, by and large, the privilege of developed nations. The freedom, on the part of the viewing audience, to accept or deny responsibility for what it sees – to act on events or not – is, more often than not, a function of its distance from these events. If legibility as a subject now means visibility in the media, it is a distant audience, in large part, that is targeted by those who wish to be seen. Competition is fierce in the media landscape; picturing oneself and one's nation on the world scene is often a matter of imaging oneself in increasingly violent ways – images that will generate the media attention the subject needs in order to be recognized as such. It is, in part, the power of perspectival vision to deplete the actual, to distance the effects of power, that sustains both the western world's profound fascination with such images, and their consequent sense of 'responsibility' towards the subjects in/of these images.

Here, 'landscaping' – assuming space in/as the form of an image – holds the violence of the actual at a distance. Inasmuch as it conceals abuses inflicted on real individuals in battles over distant landscapes, it is a specifically political concern – one in which responsibility takes the abstract form of commitment from a distance. Insisting on the perspectival character of the media landscape – and, by extension, on one's mobility within it – comes dangerously close to a sort of fascism of visuality. Mobility, for the non-western subject, does not necessarily imply progress towards a horizon of possibilities, but out of the landscape, out of the picture, into a precariously shaped political and material real. Taking responsibility for what one sees is thus not simply about 'styling oneself' as a subject; it is

about situating and conducting oneself, as Merleau-Ponty makes clear, in an environment that is both media and material.

The flesh of the world: Merleau-Ponty and proximity

Suppose we construct, by the use of optics and geometry, that bit of the world which can at any moment throw its image on our retina. Everything outside its perimeter, since it does not reflect upon any sensitive area, no more affects our vision than does light falling on our closed eyes. We ought, then, to perceive a segment of the world precisely delimited, surrounded by a zone of blackness, packed full of qualities with no interval between them, held together by definite relationships of size similar to those lying on the retina. The fact is that experience offers nothing like this, and we shall never, using the world as our starting-point, understand what a *field of vision* is.¹⁰⁸

It is the body and it alone ... that can bring us to the things themselves, which are themselves, not flat beings but beings in depth, inaccessible to a subject that would survey them from above...¹⁰⁹

It was not by accident that the philosophy of science overlooked disciplines like anatomy, argues Ihde.¹¹⁰ Anatomy demonstrates the hazards of overproximity: too invasive an interest in the workings of a living body can result in its death. Philosophy of science concerned itself, instead, with physics and astronomy, a preoccupation with distance and abstraction that is crystallized, as we have seen, in the paradigmatic form of the landscape interface. It is Merleau-Ponty's reluctance to frame the body and its environment in this way that makes his philosophy so appropriate to a re-examination of the notion of the interface. His understanding of distance and proximity differs profoundly from Lacan's; for Merleau-Ponty, depth of flesh is not reducible to depth of field.

For the subject of landscape, consciousness of place is always the positional consciousness of representation; as such, it is always ontologically distanced from the world. Phenomenology's original goal was to collapse this distance, and to return philosophy "to

¹⁰⁷ "Bruno Latour proposes that certain kinds of images have always functioned as instruments of control and power, power being defined as the ability to mobilize and manipulate resources across space and time." Manovich (2001), op. cit., p167.

¹⁰⁸ Merleau-Ponty (1962), op. cit., p5.

¹⁰⁹ Merleau-Ponty, Maurice. *The Visible and the Invisible*. Alphonso Lingis, trans. Evanston, Illinois: Northwestern University Press, 1997, pp135-6

¹¹⁰ see Ihde, op. cit., p56.

the life of the living subject"¹¹¹ – to attend to the subjective bearing of experience, and to focus on the dialectical – rather than the strictly theoretical – relation between subject and object. This is the bearing of Merleau-Ponty's argument against the ontological priority of consciousness and the circuit of representation that sustains it as such. The meaning of one's environment, he argues, is not exclusively a product of conscious thought, nor of language or representation more generally. Instead, meaning refers

to the ways in which our world is non-indifferent for us. "Features of [the] world have meaning for an agent because [he/she] has purposes, goals, aspirations, and because they touch him in various ways. That one is so touched, concerned, non-indifferent is a primitive fact about subjects..."¹¹²

It is for this reason that Merleau-Ponty's phenomenology centers on the experience of perception itself: the *manner in which* events and objects become present to consciousness.¹¹³

Subjectivity, within the phenomenological argument, is not the product of a conceptual distance between the seeing subject and the object seen; indeed, the subject/object distinction itself is understood as constructed and distorting.¹¹⁴ Instead, subjectivity is understood as an irreducible ontological relation with the world, and perception as lodged in a body that belongs to the order of both subject and object – a body that is "from one side a thing among things and otherwise what sees them and touches them".¹¹⁵ Sharing the same substance, the subject and the world that it experiences are tangible and visible in equal measure:

We must habituate ourselves to think that every visible is cut out in the tangible, every tactile being in some manner promised to visibility, and that there is encroachment, infringement, not only between the touched and the touching, but also between the tangible and the visible... Since the same body sees and touches, visible and tangible belong to the same world.¹¹⁶

The body, in other words, is involved, at a fundamental level, in both the event of seeing and the subjectifying relation.¹¹⁷ Vision and visuality are subsets of the 'physiognomic

¹¹¹ Moran, Dermot, *Introduction to Phenomenology*, Routledge, 2000, p5.

¹¹² Taylor, Charles, 'Embodied Agency', in *Merleau Ponty: Critical Essays*, Henry Pietersma, ed., University Press of America, 1989, pp1-21, p2.

¹¹³ "We are caught up in the world and we do not succeed in extricating ourselves from it in order to achieve consciousness of the world. If we did we should see that the quality is never experienced immediately, and that all consciousness is consciousness of something." Merleau-Ponty (1962), op. cit., p5.

¹¹⁴ "Phenomenologists claimed that both the traditional concepts of subject and of object were philosophical constructions which in fact distorted the true nature of the human experience of the world." Moran, op. cit., p13.

¹¹⁵ Merleau-Ponty (1997) op. cit., p137.

¹¹⁶ *Ibid.*, p134.

¹¹⁷ "Our own body is in the world as the heart is in the organism: it keeps the visible spectacle constantly alive, it breathes life into it and sustains it inwardly, and with it forms a system." Merleau-Ponty (1962), op. cit., p203.

perception', which arranges the world around the subject. Rather than being confined to the realm of the 'I see', the subject's encounter with the world is given as 'I am part of a world that is experiencing itself' or 'I am the world experiencing itself through this body'. 'Experience', in other words, does not take the form of a penetration by the look, but rather of a 'palpation', an engagement and immersion of the subject in and by the world of which it is a part. At its most basic level, then, phenomenology is concerned with the *proximity* of the body to the lifeworld of the subject.

If *landscape* finds its way into Merleau-Ponty's argument, then, it does so in profoundly reconfigured form; its terms and its syntax taken up in the service of a reflexive ontology. Here, space and time are not abstract quantities 'synthesized by consciousness', but material qualities embedded in the subject and to which the subject belongs.¹¹⁸ Space, no longer assimilated to distance, is conceived instead as a power of connectivity:

Space is not the setting (real or logical) in which things are arranged, but the means whereby the position of things becomes possible. This means that instead of imagining it as a sort of ether in which all things float, or conceiving it abstractly as a characteristic that they have in common, we must think of it as the universal power enabling them to be connected.¹¹⁹

In the epistemological landscape of scopic Cartesianism, the look proceeds "imperiously, as though it knows things before knowing them;"¹²⁰ the trajectory of the eye/I is polarized by a horizon of 'predelineated potentialities' that situate the subject. Within the phenomenological argument, situating oneself in space means experiencing the world as simultaneously mediated or distant, and proximate or unmediated.¹²¹ Here, horizontality implies not a monodirectional relation between the subject and the world it perceives, but a reflexive one – a reciprocal openness, a reciprocal indeterminacy, a shared being that runs deep beneath a skin of a visibility that is nothing more than a momentary crystallization of being:

No more than are the sky or the earth is the horizon a collection of things held together, or a class name, or a logical possibility of conception, or a system of "potentiality of consciousness": it is a new type of being, a being by porosity, pregnancy, or generality, and he before whom the horizon opens is caught up, included within it. His body and the distances participate in one same

¹¹⁸ "In so far as I have a body through which I act in the world, space and time are not for me, a collection of adjacent points nor are they a limitless number of relations synthesized by my consciousness, and into which it draws my body. I am not in space and time, nor do I conceive space and time; I belong to them, by body combines with them and includes them." *Ibid.*, p140.

¹¹⁹ *Ibid.*, p243.

¹²⁰ Merleau-Ponty (1997), p133.

¹²¹ "The world is what I perceive, but as soon as we examine and express its absolute proximity, it also becomes, inexplicably, irremediable distance. The "natural" man holds on to both ends of the chain, thinks at the same time that his perception enters into the things and that it is formed this side of his body." *Ibid.*, p8.

corporeity or visibility in general, which reigns between them and it, and even beyond the horizon, beneath his skin, unto the depths of being.¹²²

Within Merleau-Ponty's thesis of perception, the horizon no longer stands for distance and depth of field. The subject, no longer conceived as the absolute here, experiences the world in a relation of 'difference without contradiction'.¹²³ If the self is polarized in its relation to the world, it is polarized by its *tasks*, not its perceptions.

Within Cartesianesque ontologies, meaning is "*ipso facto* conceived as an act of thought, as the work of a pure *I*." Rational thought can only account for monosensory (visual) experience; it is "unable to account for the variety of experience, for the element of senselessness in it, for the contingency of contents."¹²⁴ Knowing the world, however, is more than a matter of subsuming sense data under an idea. An examination of bodily motility and bodily experience, argues Merleau-Ponty, compels us to acknowledge "an imposition of meaning which is not the work of a universal constituting consciousness, a meaning which *clings to certain contents*."¹²⁵ Bodily mobility, for Merleau-Ponty, constitutes a kind of 'basic intentionality' and is thus part of the definition of the subject as such. Motility is not subordinate to thought,¹²⁶ nor is it

a handmaid of consciousness, transporting the body to that point in space of which we have formed a representation beforehand. In order that we may be able to move our body towards an object, the object must first exist for it, our body must not belong to the realm of the 'in-itself'.¹²⁷

For Merleau-Ponty, the body is never simply an image or a projected surface, but a *posture*, an "attitude directed towards a certain existing or possible task."¹²⁸ The subject's sense of self is not the product of a specular image (paralysed limbs, he notes, no longer count in the subject's body image); rather, the subject integrates its parts in relation to its *projects*. The

¹²² *Ibid.*, pp148-9.

¹²³ "The body interposed is not itself a thing, an interstitial matter, a connective tissue, but a sensible for itself, which means ... this paradox [?]: a set of colors and surfaces inhabited by a touch, a vision, hence an exemplar sensible, which offers to him who inhabits it and senses it the wherewithal to sense everything that resembles himself on the outside, such that, caught up in the tissue of the things, it draws it entirely to itself, incorporates it, and, with the same movement, communicates to the things upon which it closes over that identity without superposition, that difference without contradiction, that divergence between the within and the without that constitutes its natal secret." *Ibid.*, pp135-6.

Regarding the refusal or bracketing of the body: "We say therefore that our body is a being of two leaves, from one side a thing among things and otherwise what sees them and touches them; we say, because it is evident, that it unites these two properties within itself, and its double belongingness to the order of the "object" and to the order of the "subject" reveals to us quite unexpected relations between the two orders." *Ibid.*, p137.

¹²⁴ Merleau-Ponty (1962), *op. cit.*, p147.

¹²⁵ *Ibid.*, p147.

¹²⁶ "Movement is not thought about movement, and bodily space is not space thought of or represented." *Ibid.*, p137.

¹²⁷ *Ibid.*, p139.

¹²⁸ *Ibid.*, p100.

spatiality of the body is thus a “spatiality of situation;”¹²⁹ spatial habit “has its abode neither in thought nor in the objective body, but in the body as mediator of a world.”¹³⁰ Habit, in other words, is as much gestural and interactive as it is psychological; the actions through which we know space and the objects in it are “consecratory gestures: they draw affective vectors, discover emotional sources, and create a space of expressiveness.”¹³¹ Hermeneutically, then, the body is substantive and productive.

All of the above ideas crystallize in Merleau-Ponty’s concept of the ‘flesh of the world’, as this is articulated in *The Visible and the Invisible*. The concept of the flesh declares the intimacy of the relation between subject and world, vision and visible, representation and consciousness. The body is entirely implicated in that which it touches and sees, it is of the same substance of them; its being participates in theirs.¹³² Vision is not a means of distancing oneself from one’s environment, it is a condition of being in the world:

I feel myself looked at by the things, my activity is equally passivity... not to see in the outside, as the others see it, the contour of a body one inhabits, but especially to be seen by the outside, to exist within it, to emigrate into it, to be seduced, captivated, alienated by the phantom, so that the seer and the visible reciprocate one another and we no longer know which sees and which is seen. It is this Visibility, this generality of the Sensible in itself, this anonymity innate to Myself that we have previously called flesh...¹³³

Distance and proximity are not opposed to one another, but are fused in the figure of the flesh, which establishes a correspondence between them. As an attempt to redress the systematic distance of scopic Cartesianism,¹³⁴ the notion of ‘flesh’ expresses the hermeneutic density of the body, and a relation between subject and space that is organic rather than simply instrumental.

Merleau-Ponty’s own rhetoric is steeped, at times, in the romantic masochism of technofantasy; his self-sacrificing eagerness to immerse himself in the flesh of the world is

¹²⁹ Ibid., p100.

¹³⁰ Ibid., p145.

¹³¹ Ibid., p146.

¹³² The body “is not simply a thing seen in fact (I do not see my back), it is visible by right, it falls under a vision that is both ineluctable and deferred. conversely, if it touches and sees, this is not because it would have the visibles before itself as objects: they are about it, they even enter into its enclosure, they are within it, they line its looks and its hands inside and outside. If it touches them and sees them, this is only because, being of their family, itself visible and tangible, it uses its own being as a means to participate in theirs, because each of the two beings is an archetype for the other, because the body belongs to the order of the things as the world is universal flesh.” Merleau-Ponty (1997), op. cit., p137.

¹³³ Ibid., p139.

¹³⁴ “...we are separated from [things themselves] by all the thickness of the look and of the body; it is that this distance is not the contrary of this proximity, it is deeply consonant with it, it is synonymous with it. It is that the

strangely prescient of the cybersubject's desire for dissolution into the space of the machine. At the same time, however, phenomenology continues, in certain respects, to cling to the determinations of *costruzione legittima* and of the epistemology which it emblemizes. The opposition of the phenomenal body to the culturally mapped body is just such a determination, and a compelling tactic for those who take up phenomenology as an argument for a return to a state of pretechnological spontaneity, a 'primitive' and ostensibly more plenary and ingenuous engagement with the world.¹³⁵ Such calls are naïve at best; at worst, they take the aggressively anti-capitalist form of so-called 'eco-fascism'. Here, technophobia – the return to body one – is the emblem of those whose commitment to the ecological movement is motivated less by spiritual or political concerns than by commercial ones.¹³⁶

If the notion of the flesh hints at a religiously-conceived redemptive dissolution of the subject, however, this is not to suggest that Merleau-Ponty's phenomenology cannot be recuperated for a discussion of the VR interface. If we are to distinguish between the culturally marked body and the corporeal body, then this distinction needs to be understood as methodological rather than ontological. Embodiment is neither a historical nor an ontological constant. The interface is both artifact and symbol system; it supports modes of engagement with the virtual which range from the fully plenary (the as-yet unrealized dream of the perfect simulation) to the impoverished (a written description of a piece of music, for instance). 'Updating' phenomenology means acknowledging the multiple modes of engagement that characterize interfaced being. If there is such a thing as cyberontology, then it takes shape, as we will see, in/as the notion of the *anamorphic subject*.

thickness of flesh between the seer and the thing is constitutive for the thing of its visibility as for the seer of his corporeity; it is not an obstacle between them, it is their means of communication." Ibid., p135.

¹³⁵ The work of David Abram is a case in point. In *The Spell of the Sensuous*, Abram seeks to recuperate Merleau-Ponty's phenomenology as a conceptual tool for environmental activism. Although Abram's scholarship is considerable, his work is suffused with a shamanistic desire for 'communion with nature' that is difficult to take seriously. Describing the aftermath of a hurricane in 1985, Abram celebrates the momentary absence of technological mediation, and the consequent return to a more 'natural' state of engagement with the environment: "For those few days and nights our town became a community aware of its place in an encompassing cosmos. ... The breakdown of our technologies had forced a return to our senses, and hence to the natural landscape in which those senses are so profoundly embedded. We suddenly found ourselves inhabiting a sensuous world that had been waiting, for years, at the very fringe of our awareness, an intimate terrain infused by birdsong, salt spray, and the light of stars." see Abram, David, *The Spell of the Sensuous*, Vintage Books, 1996, p63.

¹³⁶ see Leach, Neil, 'No Logo Logo', in *Shelf Life* (exhibition catalogue), Gasworks Gallery, 2001, pp42-45. It is also worth noting here that the repudiation of technology and commercial capitalism by these groups is somewhat selective: whence the dependence of numerous ecological and anticapitalist concerns on mobile phones and the internet .

the anamorphic subject

Simulation games ... are creating some interesting by-products. Construct a taxonomy of the modern gaming arcade and the main growth area seems to be awkward, clunky, objects that go *in-between*. Consequently, we now have a burgeoning morphology of padded armrests, safety railings, skipoles, pool tables, bowling alleys, cardboard icicles, model airplanes and outsized footpedals. Their *raison d'être* is cushioning the physical (or ocular) transition between the analog/object world and that of the digital/screen. At the same time, they function to convince users that times haven't changed: you're still doing the same thing really ... your body hasn't changed, your adrenaline levels haven't changed, it's just that bit more dark in here and you need to be wired up to do it. It is hard not to see this push-me-pull-me game of denial, engagement, submission, and rejection as a far more interesting development than that positing a radical ontological break with the world that was popular a few years back.¹³⁷

Our organs are no longer instruments; on the contrary, our instruments are detachable organs.¹³⁸

In a recent article, Sarah Chaplin investigates the concept of cybervisuality – the 'conceptual modifications and recodings of perception' that occur as a result of computer-mediated interactions. These recodings are manifested in situations where conditions encountered in a virtual environment show up in physical reconfigurations of the 'real' environment. Cybervisuality, as Chaplin argues, "implies that we have to some extent absorbed or acquired the capacity to perceive and process visual information in a slightly different way, and that the visual logic of computer-mediated communication is in some sense becoming naturalised."¹³⁹ Though this argument is not without value, the very notion of visuality operates, as we have seen, on the isolability of vision. If the discourse of the interface is to move beyond its affinity with the landscape model, visuality cannot be considered apart from the gestural affect and motive suggestion that constitutes the event of seeing. In VR, the interface rests directly, and at times uncomfortably, on the body of the user; isolating the technology of vision from either the body or the subject is difficult if not impossible. Cybersubjectivity is not the static being endorsed by the landscape interface. As Pauline

¹³⁷ Broekman, Pauline Van Morurik, 'Confessions of a Backseat Driver' in *ReadMe! Filtered by Nettime: ASCII Culture and the Revenge of Knowledge*, Josephine Bosma et. al., eds., Autonomedia, 1999, p77.

¹³⁸ Merleau-Ponty, Maurice, 'Eye and Mind', in *The Essential Writings of Merleau-Ponty*, Alden L. Fisher, ed., Harcourt, Brace, & World, Inc., 1969, pp252-286, p273.

¹³⁹ Chaplin, Sarah, 'Cybervisuality: Recoding Perception' in *Designing for a Digital World*, Neil Leach, ed. Wiley-Academy, 2002, pp38-44, p38.

Broekman points out, above, interfaced being is better understood as a 'game of denial, engagement, submission and rejection' – the shifting and tensile relation between illusion and embodied being that characterizes the anamorphic subject.

Viewing Holbein's picture was a dramatic spectacle, a play in two acts. According to Baltrusaitis, Holbein was quite specific about the manner in which the picture should be hung: in a room with two doors, each one corresponding to one of the picture's two viewing positions. In the first act, the viewer enters the room and sees the picture from the obverse position. Captivated by the realism of the painted scene, the viewer is also perplexed by the indecipherable object at the bottom of the picture – pale and shapeless, it is an intrusion in an otherwise perfect painting. Leaving by the second door, the disconcerted viewer casts a brief backward glance at the painting, and it is at this point that the strange object resolves itself into an image, and the skull is revealed to vision.¹⁴⁰ If, in the transient state *between* points of view – in the anamorphic moment – the viewer exceeds the particular configuration of subject, body, and artifact upon which the discourse of the interface has insisted historically, then this does not necessarily mean that she/he is annihilated as a subject. This is the subject in its environmental sense: a mobile, embodied, acting subject, an agent. As a concept of transformation – from the Greek *anamorphoun*, to transform or 'form again' – anamorphosis allows us to understand subjectivity as a condition in/of constant adaptation and modification. The skull becomes legible because the viewer is motivated to take up a position other than the singular one that immobilizes her/him as a subject of representation. Holbein's theatre of representation admits a subject for whom being, as we shall see, is a matter of embodied agency; as such, it is a heterogeneous concern.

Cartesianesque models of perception hold that the idea or 'percept' of an object is in either the mind or the brain and is, as such, quite separate from the object in the world that the observer perceives. Such representationalist accounts of perception, and the ontological

¹⁴⁰ "Le premier acte se joue lorsque le spectateur entre par la porte principale et se trouve, a une certaine distance, devant les deux seigneurs, apparaissant au fond comme sur une scène. Il est émerveillé par leur allure, par la somptuosité de l'apparat, par la réalité intense de la figuration. Un seul point troublant: l'étrange corps aux pieds des personnages. Le visiteur avance pour voir les choses de près. Le caractère physique et matériel de la vision se trouve encore accru lorsqu'on s'en approche, mais l'objet singulier n'en est que plus indéchiffrable. Déconcerté, le visiteur se retire par la porte de droite, la seule ouverte, et c'est le deuxième acte. En s'engageant dans le salon voisin, il tourne la tête pour jeter un dernier regard sur le tableau, et c'est alors qu'il comprend tout: le rétrécissement visuel fait disparaître complètement la scène et apparaître la figure

distinction they introduce between objects in the world and the mental ideas the subject forms of these objects, fail in the simulation event, where the distinction between *res cogitans* and *res extensa* appears to break down. In VR, the three-dimensional worlds with which the user interacts have no corresponding extension in physical space; nor, however, can they said to be 'in the mind' or 'in the brain'. Clearly, the experience of perception needs to be characterized in a different way.

Max Velmans argues convincingly for a reflexive model of perception within the simulation event.¹⁴¹ Under Merleau-Ponty's argument, as we have seen, perception cannot take place in the absence of an object-as-perceived. To function as such, in other words, the visual system must be engaged by an object in the world. The event of seeing is, itself, also located in the world – an observer looking from the outside, for example, would not be able to locate the 'experience of an object' in the mind or brain of the observer.

Once engaged by the visual system, an entity in space – real or virtual – is subject to perceptual processing in the brain that can result in "experiences that have a subjective location and extension beyond the brain."¹⁴² Velmans uses the term 'perceptual projection' to describe the complex ways in which perceptual processing is bound up with spatial extension. Phantom limb syndrome, which supplies the illusion of a missing body part, is a well-known example of this phenomenon. Projected tactile sensations such as hardness and solidity – which are experienced on account of mechanical deformations of the skin surface – involve more complex interactions between the perceptual and the material. Sensations of numbness and tingling can also be produced in various parts of the body by direct stimulation of the brain itself.¹⁴³ Within the operation of vision itself, there is compelling evidence to suggest that the perception of distance is a matter of both physiological optics – projected retinal distance – and judgements which are formed not simply around cultural expectation but around material and sensory variables such as "retinal size, binocular disparity, ocular convergence, ... the interposition of other objects, motion parallax and so

cachée. Au lieu de la splendeur humaine, il voit le crâne. Les personnages et toute leur attirail scientifique s'évanouissent et à leur place surgit le signe de la Fin. Le piece est terminée." Baltruisitis, op. cit., p105.

¹⁴¹ "Within the reflexive model the physical world *as-experienced* is *part of* the contents of consciousness. The contents of consciousness are not in some separate place or space 'in the mind' or 'in the brain'. That is, no phenomenal distinction can be drawn between what we normally think of as the 'physical world' and the 'world as-experienced'. With our eyes open the 'physical world' *is* what we experience. This provides a completely different view of the mind/body relationship. Suffice it to say that once experienced physical reality is included within this extended view of psychological reality it no longer makes sense to split experienced physical reality from psychological reality." Velmans, Max, 'Physical, Psychological and Virtual Realities', in *The Virtual Embodied: Presence/Practice/Technology*, John Wood, ed., Routledge, 1998, pp45-60, p56.

¹⁴² *Ibid.*, p49.

on.”¹⁴⁴ The phenomenon of ‘size constancy’ – where the perceived size of a receding object decreases much less than its optical projection on the retina would suggest – is one example of the mutual implication of the material and the abstract in the event of seeing.

Whatever its character, the virtual world supplies perceptual data to which the subject orients itself multisensorially. Whether it is produced pictorially, through the Albertian schema, or by means of the more sophisticated tactics of VR simulation, the phenomenon of virtuality operates on the understanding that a particular pattern of objects in the perceptual field gives rise to a *lived* experience of space. What Velmans makes clear is that this experience – the condition of virtuality – resists partitioning along the lines of subject and object. Once again, we are drawn back to Brunelleschi’s demonstration, and his reminder that the event of seeing is simultaneously – and inseparably – psychological and physiological, material and abstract.

Within the simulation event, reflexivity operates not just within the realm of visibility; it is the operative paradigm for the subject’s relation with the instrument. In VR, the user inhabits technology as both ideogram and artifact; subjectivity is negotiated in terms of *functionality* – an expression that has appeared already, but that we are now in a position to examine a bit more closely. For VR technologists, functionalities refer to the modes of communication that are active in the interface:

If the user wears a data glove, for example, hand motions constitute one functionality. If the computer can respond to voice-activated commands, voice is another functionality.¹⁴⁵

This concept is a useful way of thinking through the reflexive relation between the subject and the instrument. The subject in/of VR cannot be entirely confined to the realm of the ‘in-itself’; the homunculus in the camera. The subject in the simulation is a phenomenological one, it ‘inhabits’ the spectacle. *Osmose*, a VR installation first exhibited by Montreal artist Char Davies in 1995, draws attention to the ontological heterogeneity of the subject in VR. *Osmose* is an immersive, interactive environment with 3D sound and graphics. The user wears a standard HMD, and – in place of the dataglove – a full-body ‘datavest’ fitted with

¹⁴³ Ibid., p50.

¹⁴⁴ Ibid., p52.

¹⁴⁵ Hayles, N. Katherine, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*, University of Chicago Press, 1999, p47.

breathing and balance sensors. Movement in the virtual environment is controlled by inhalation and exhalation, while bodily orientation controls the direction of movement. The hard-edged objects and figure/ground relationships that allow the subject to situate itself in the standard simulation environment have been replaced, in *Osmose*, by semi-transparent, shifting forms in spatially ambiguous surroundings.

Whereas in conventional VR, the body is often reduced to little more than a probing hand and roving eye, immersion in *Osmose* depends on the body's most essential living act, that of breath -- not only to navigate, but more importantly -- to attain a particular state-of-being within the virtual world. *Osmose* is a space for exploring the perceptual interplay between self and world, i.e. a place for facilitating awareness of one's own self as consciousness embodied in enveloping space.¹⁴⁶

Within this 'affect-laden' environment, participants are encouraged to focus on the proximity of the technology to the body – the opacity of the interface, as it were – and the subjective experience of "being-in-the-world – as embodied consciousness in an enveloping space where boundaries between inner/outer, and mind/body dissolve"¹⁴⁷ – rather than directing that world from a distanced viewpoint. The monodirectional relation between space the eye/ is replaced, in *Osmose*, by a three-way relation between vision, body, and environment: Merleau-Ponty's 'I am the world experiencing itself through this body'.

Functionality, then, is linked not simply to the user's ability to master the technology, but to the way that the user's sensory-motor apparatus accommodates the demands of the technology:

Working with a VR simulation, the user learns to move his or her hand in stylized gestures that the computer can accommodate. In the process, the neural configuration of the user's brain experiences changes, some of which can be long-lasting. The computer molds the human even as the human builds the computer.¹⁴⁸

The racing pulse and burning breast of the subject in the *Shades* were prescribed symptoms; a kind of purposive affect, a mime, a means of landscaping the subject. The experience of VR also comprises physical *effects* – the complex responses of an embodied subject to a technology that patterns physiological vision. *Snow Crash*, the killer virus in Neal Stephenson's novel of the same name, takes the form of a sequence of code, transmitted visually as a pattern of zeroes and ones on a screen.¹⁴⁹ Targeted at the brain

¹⁴⁶ see Davies, Char, 'Osmose', <http://www.immersence.com/osmose.htm>; see also Davies, Char, 'Changing Space: VR as an Arena of Being', http://www.immersence.com/eph_vrpaper.htm (visited 15.2.02)

¹⁴⁷ Davies: <http://www.immersence.com/osmose.htm>

¹⁴⁸ Hayles (1999b), p47.

¹⁴⁹ see Stephenson, Neil, *Snow Crash*, Roc Books, 1992.

structure of the elite hacker, the virus operates at the neurolinguistic level, manifesting itself initially as a breakdown of language and later as cult psychosis; in a small number of unfortunate individuals, it results in immediate brain death. Here, the pattern of objects in the perceptual field *disables* the victim's lived experience of space. Thus infected, the look is no longer a technology of vision mastered by a subject – the means by which it dominates space – but a sort of wound or invagination, a viral pathway into the body. Once inside, it is the neurophysiological affinity between machine language and the deep structures of the brain that sustains the infection.

For Stephenson, the future is one in which the reflexive relation with technologies of virtualization is not only recognized but mobilized in the service of ideology. Technology, in *Snow Crash*, is more than a tool, it is a material parameter in the world around which an operator can be shaped (and controlled) both physiologically and subjectively. It is this understanding of the 'organic' essence of technology that eludes Lacan:

Lacan ... describes the technological world "from within," following the subject's thought and resting content with stating the *alienation* of that subject in the objects of its fabricating. Hence Lacan's diagnosis, ... which really only "translates" into psychiatric terms the fundamental structure of the subject of representation: the "paranoia" of the modern world, the "persecutive" structure of technology.¹⁵⁰

Both Husserl and Lacan assume a Cartesianesque – and, arguably, a 'scientific' – model of the subject's relation to the lifeworld, installing the subject as the master of an instrument and embracing, by default, the visualist bias of the 'truths' that technology furnishes.¹⁵¹ Though technology may take the form of an instrument, ontologically, it is little more than an imposition, an 'unnatural' accretion. In both cases, this unwillingness to take into account the reflexive relation between subject and instrument means that the latter is understood as invasive rather than enabling. The technologically colonized subject is a paranoid subject: isolated from, and persecuted by, the very instruments it creates.

Gone are the claims to mental dissolution, cortex rewiring, or entire escapes from reality, aided and abetted by the power of the machine. In their place

¹⁵⁰ Borch-Jacobsen, op. cit., p61.

¹⁵¹ "Lens technology transforms the very sense of space that I experience, in a significant modification of both bodily and world space. It transforms it in to a kind of unreal, flattened, and narrowed "world." Its distance is always a peculiar kind of near-distance. But we "forget" this as we learn to embody the technology into our familiar actions." Ihde, op. cit., p50.

have come hesitant, ironic, acknowledgements of the frictious relationship between the phenomenological interactions of "real life" and those of game space: Nintendo 64's latest ad, tagged with the mantra "Feel Everything" has a player making mistakes in his handling of "real" scenarios, "real" – and often very basic – physical interactions due to his overfamiliarity with another set of phenomenological standards: those generated by the machine.¹⁵²

In large part, 'success' within simulated environments is understood to correspond to the user's level of proprioceptive coherence – her/his ability to incorporate a different set of 'phenomenological standards,' to accept the transcoding of intentionality and the transformation of the embodied self. As far as Nintendo is concerned, Alternate World Syndrome – the displacement of bodily meaning from one environment to another – is not an affliction, it is the mark of the elite gamer. Even the neophyte's wild gesticulations – or more radically ineffectual movements, like falling over sideways in an attempt to get Sonic the Hedgehog to turn a corner – speak to the level at which intentionality and motility are embedded in one another in the VR environment. Unlike the subject in the garden, who worked to sequester the physical body from the event of seeing, the aim of the game in VR is the greatest possible immediacy between the image-body and the corporeal body. The simulated world is not the distanced world of the Cartesian observer, nor the domain of the gaze as such; it is a world that not only looks back at us, but acts back at us. Here, moving one's body is not about orienting it towards some inner, prior, mental representation of a goal, it is about 'aiming at things through the body', responding to a situation by acting in and on it, rather than attempting to master it through representations.¹⁵³ The world of the simulation requires and reveals "an *embodied, seeing* subject ... that is ... equally adherent to contingency, temporality, and performativity."¹⁵⁴

What this suggests is that the subject's relationship to the simulated world is best described as an *affective* one. Both of the analytical models that have been brought to bear upon this discussion of the interface have touched upon the issue of affect, neither one entirely satisfactorily. Uncharacteristically, Lacan's early writing hints at the significance of affect in the subjectifying relation:

¹⁵² Broekman, op. cit., p77.

¹⁵³ "A movement is learned when the body has understood it, that is, when it has incorporated it into its 'world', and to move one's body is to aim at things through it; to allow oneself to respond to their call, which is made upon it independently of any representation." Merleau-Ponty (1962), op. cit., p139. Our perceptual field, argues Taylor, "has the structure it has because it is experienced as a field of potential action. We perceive the world, in other words, or take it in, through our capacities to act in it." Taylor, Charles, 'Embodied Agency', in *Merleau Ponty: Critical Essays*, Henry Pietersma, ed., University Press of America, 1989, pp1-21, p5.

¹⁵⁴ Massey, Lyle, 'Anamorphosis Through Descartes or Perspective Gone Awry', *Renaissance Quarterly* 50 (1997), pp1148-89, p1186.

Indeed, [Lacan] writes that the image forms the ego not because it is seen, *over there*, but rather because it 'intrudes,' *here*, in and as the ego: and this intrusion is that of an affect, experienced im-mediately, body and soul, as an "emotional or motive suggestion."¹⁵⁵

Lacan's flirtation with the affective is a brief one, superceded by an insistence on the purely specular nature of the maternal imago – an insistence that sets the tone for the subject's being as such. The Lacanian subject's sense of self emerges out of the *oppositions* it establishes and sustains between itself and the representations that surround it – its ability to distance itself from its environment – and the consequences of disturbing this relation between personality and space are nothing less than ontological catastrophe. Within the Lacanian argument, the assimilation of the self to its environment – the 'immersion' of the self – brings about what Roger Caillois describes as a form of psychosis, a 'decline in the feeling of personality and life'.¹⁵⁶ This rejection of the proximate is equally a refusal of technology as anything other than *techne*: materially inert, ideologically neutral, and ontologically distinct from the subject. This is precisely the relation that Lacan ratifies in his account of anamorphosis, where this 'exemplary structure' is explained via a simple demonstration:

Suppose there is a portrait on this flat piece of paper that I am holding. By chance, you see the blackboard, in an oblique position in relation to the piece of paper. Suppose that, by means of a series of ideal threads or lines, I reproduce on the oblique surface each point of the image drawn on my sheet of paper. You can easily imagine what the result would be – you would obtain a figure enlarged and distorted according to the lines of what may be called a perspective. One supposes that – if I take away that which has helped in the

¹⁵⁵ Borch-Jacobsen, op. cit., p69.

¹⁵⁶ For the schizophrenic, "space seems to be a devouring force. Space pursues them, encircles, them, digests them in a gigantic phagocytosis. It ends by replacing them. Then the body separates itself from thought, the individual breaks the boundary of his skin and occupies the other side of his senses. He tries to look at *himself* from any point whatever in space. He feels himself becoming space, *dark space were things cannot be put*. He is similar, not similar to something, but just *similar*. And he invents spaces of which he is "the convulsive possession." Caillois, Roger, 'Mimicry and Legendary Psychasthenia,' John Shepley, trans., in *October: The First Decade 1976-86*, Annette Michelson, Rosalind Krauss, Douglas Crimp, and Joan Copjec, eds. MIT Press, 1987, pp59-74; p72. This goes some way towards explaining our apparent underutilization of electronic technology. Despite the many display options that the latter makes available, the VR environment is still perceived, in somewhat retrograde fashion, as a pictorial representation, in the mode of the rectangular screen inherited from Western painting. Arguably, our unwillingness to abandon the perspectival interface signals a deeper reluctance to accept the change in self-description that the VR interface entails. Framing the effects of AWD as a kind of psychosis suggests we are, in effect, 'hard-wired' into a particular way of conceptualizing the self, and uncomfortable with an ontology that no longer moves, in predictable rhythms, between the *here* and *there* of subject and object, materiality and convention, nature and culture. Certainly this resistance to the notion of *simultaneity* in subjectivity is not a new thing. Gerald Mast has pointed out a similar reluctance, in early film, to accept the concurrence of natural (indexical) and conventional signs. Understanding a film, argues Mast, requires "a combination of the conventional and the natural, of reading and responding to both natural and arbitrary signs." Early attempts to effect such a combination in 'non-narrative' ways appear incoherent to our eyes – an indication not of our increasing sophistication with the medium of film, but of our need to conflate or 'resolve' these apparently 'conflicting' tendencies in the singular form of narrative. See Mast, Gerald, 'Kracauer's Two Tendencies and the Early History of Film Narrative', *Critical Inquiry* 6 (Spring 1980), pp455-476, p476.

construction ... – the impression I will retain, while remaining in that place, will be more or less the same.¹⁵⁷

In this demonstration, the anamorphic image appears 'by chance', and not as a necessary condition of the event of seeing. Moreover, it is seen by a static subject – one who 'remains in place', and whose relation to the image is 'more or less the same' whether or not the piece of paper is removed. The 'flat piece of paper' through which the image is projected is, of course, a simple interface, and Lacan's offhand treatment of it has some telling things to say about his relationship to technologies of vision. Here, perception is a matter of rationality and ideality; the subject observes the effect of the technology of vision but does not 'see through it'. We should be careful, however, of erring in the opposite direction. Affect is much more than a matter of total immersion, the concern of an isolated and ingenuous material body. This is the misapprehension that troubles Merleau-Ponty's understanding of affect, which he sees as a form of 'primitive' bodily response, exempt from historical change.¹⁵⁸ Clearly, this ascription of ontological or hermeneutic priority to the body does not adequately describe the latter as it acts in the VR environment.

The affective response of the anamorphic subject comprises aspects of both models. Affect is about getting the measure of one's environment. As such, it implies not just rational processing, but a certain inevitability – a persistent openness to the world, a subsidiary awareness that is different from reflection as such.¹⁵⁹ For this reason, the perceptive simultaneity that characterizes affective response always comprises an element of the inexplicable. Our way of being in the world, of having a world, as Charles Taylor points out, is

something that we can never properly focus, never completely grasp, never dominate, as we can an object of study, or a landscape laid out below us. It remains in fact something enigmatic, rather opaque, hard to formulate clear theses about.¹⁶⁰

The activity of perceiving – of orienting oneself as a subject – is affective inasmuch as it is inescapably bound up with the proximate. Merleau-Ponty uses the example of an organist

¹⁵⁷ Lacan (1994), op. cit., p85.

¹⁵⁸ Michel Haar argues convincingly against this ahistorical view of affectivity: "The empirical historicity of gestures, always doubled by a historicity (which is to say, an epochal determination), brings about that the gesture of expression does not come to pass, as Merleau-Ponty believes, at the heart of a simple, naïve, and ever new presence, such as perceptual presence is taken to be." See Haar, Michel, 'Painting, Perception, Affectivity', Véronique M. Fôti, trans., in *Merleau-Ponty: Difference, Materiality, Painting*, Véronique M. Fôti, ed., Humanities Press, 1996, pp177-193, p183.

¹⁵⁹ "Our life is directed to the things of the world on which we act. Hence as life-forms we are essentially open to the world, it is not an optional extra that we are so open, but essential to what we are as life-forms defined by our way of acting in and on things." Taylor, op. cit., p7.

¹⁶⁰ *Ibid.*, p19.

practicing on an unfamiliar instrument. An experienced organist, he argues, needs only a short time to adapt to a new instrument, even though it may differ considerably from the one he or she is used to playing. During this preparation time, the organist does not memorize the new positions of each stop and pedal, nor does he or she construct a representation of their relative positions in space. Rather, the organist adapts to the new instrument by “[getting] the measure of the instrument with his body, [incorporating] within himself the relevant directions and dimensions, [settling] into the organ as one settles into a house.”¹⁶¹ Against Lacanian models of subjectivity, shaped by notions of distance and defined by prohibition and guilt, Merleau-Ponty’s example reveals a subject that is “defined by norms of performance, responsibility, flexibility, and initiative. ... [A] subject in cleavage between the possible and the not-possible.”¹⁶² The anamorphic model suggests, in other words, that we consider subjectivity not simply in terms of what it is possible to be, but to *do*.

An example should clarify this. *Rez* (Figure 4) is a video game released by Sega at the end of 2001. At first glance, this game appears somewhat retrograde. Its wireframe visuals and tunnel-like spatial architecture are a throwback to *Tron* and other early depictions of cyberspace. Like many recent releases, ‘progress’ in the *Rez* environment takes the form of propulsive forward motion, and gameplay itself is not far removed from the standard shoot-‘em-up. What makes *Rez* so different is the way in which player performance influences the progress of the game. *Rez*’s soundtrack is directed by the player’s onscreen performance. Firing a laser beam or locking onto a target, for example, produces a sound (a drum hit or musical tone) that instantly synchronizes with the background music and that feeds back, in the form of rhythmic pulses, into the controller.¹⁶³ The more levels you complete, the richer and denser the soundtrack becomes, and the more hypnotic the visuals. Heavily influenced by club culture – the soundtrack was composed by leading DJs and house/trance artists – *Rez* elicits a specific kind of response from the player. Firing pattern and bodily movements take on a rhythmic pattern that is fed back and amplified by the visuals and the controller: basically, your activity creates the environment, and the environment makes you dance.

Dance – or any form of rhythmic perception and response – elicits a singular kind of attention which differs from intentional action as such. Attending to something, maintaining it

¹⁶¹ Merleau-Ponty (1962), *op. cit.*, p145.

¹⁶² Ross, *op. cit.*, p88. (*italics added*)

¹⁶³ PlayStation 2’s ‘Dual Shock’ controller (and similar models) adds vibration effects to increase the reality effect of various games. Sony also offers a ‘Trance Vibrator’ controller (sold separately), which apparently augments the *Rez* experience even more. See the *Rez* official website, United Game Artists/Sega 2001, <http://rez.uga.com/e/game/index.html>, (visited 13.9.02).

within the confines of our perceptual reach, is, as De Bolla points out, something like “holding the object at a correct distance ... and what is being attended to is, at least in part, the mechanics of maintaining the object as such a distance.”¹⁶⁴ In paying attention to something, however, we simultaneously *inattend* to other things. Inattention is not the same thing as distraction – a scattering or absence of attention – rather, it refers to the different distances at which we hold the rest of the perceptual field. Responding rhythmically to music is paradigmatic of this sort of simultaneity, and of the release of rational control that it calls for: it is more like being “held captive in a sound or set of sounds, more like being entranced by the world than taking a distance to or from it.”¹⁶⁵

‘Feel it, don’t think’ is the motto on Sega’s *Rez* website – an axiom that could apply just as easily to a dancer, or to Merleau-Ponty’s organist. Affective response, in other words, pertains to the way that the body performs not just on its own, but *with an instrument*. Canadian pianist Glenn Gould withdrew from public performance at the pinnacle of his career, to focus exclusively on studio recording. This was a relief for some, because Gould’s performances had been notoriously idiosyncratic, marked by odd gestures, contorted postures, and bizarre bodily movements.¹⁶⁶ For some concertgoers, the fascination of Gould’s performances lay precisely in the somatic resonance of these gestures: the strangely isolated motive suggestions, the actions that seemed to belong to the spacetime of the music itself. To see him at the keyboard was allegedly “to witness someone totally at ease in music, in his being-in-music: his physical presence is *part of the sound* he creates.”¹⁶⁷ This ‘being in music’ is what is evoked in *Rez*, which is “more about the actual experience of being absorbed into it rather than playing it.”¹⁶⁸ Derived, in part, from the e-generated fantasy that it is one’s own body that is bringing the music into being, the game world’s salute to club culture assumes a subject for whom agency consists of more than the simple handling or operation of instruments. Here, embodied subjectivity is a function of the affective dimension of proprioception and an awareness of reflexive relation that one

¹⁶⁴ De Bolla, Peter, *Art Matters*, Harvard University Press, 2001, p61.

¹⁶⁵ *Ibid.*, p62.

¹⁶⁶ “For some critics and concertgoers Gould’s retirement [from public performance] was a relief because it removed from the public domain a player of such pronounced idiosyncrasy that his ticks and mannerisms had become the “content” of his performances. Put bluntly, his playing style or technique – the posture, flattened hands, ridiculously low chair, humming, and self-conducting – distracted audiences from the task at hand: the realization and appreciation of the music. For others, these eccentricities only served to intensify the magic and mystique of Gould’s concert appearances.” *Ibid.*, p70.

¹⁶⁷ *Ibid.*, p73.

¹⁶⁸ Dangerboy, ‘Rez Review: It’s pretty. It sounds great, and um...’, *Gameshark*, posted 6.2.02, <http://www.gameshark.com/playstation2/articles/324031p1.html> (visited 13.9.02).

maintains with both technology and environment. As *Rez* demonstrates, anamorphic subjectivity is about *being (as) an instrument*.

For the human subject, "nothing is purely spontaneous and instinctive, nor yet purely conventional and instituted;"¹⁶⁹ affectivity is a matter of 'symbols borrowed from the epoch and the immemorial'. Anamorphic subjectivity, then, is lived in/as a multistable condition of *technological embodiment* – a way of being that is both active and passive, and that comprises more than one 'phenomenological attitude'.¹⁷⁰ As we have seen, this involves more than a body that functions primitively, somehow prior to the domain of representation. 'Pure' affect, as Michel Haar points out, is a fantasy, a discursive effect. The body is never innocent; it is inevitably of its time, its gestures and actions – incited by the instruments that have evolved alongside it, and which are themselves embedded in a particular history – have their own empirical historicity. As Haar notes: "there is a tradition not only *prior to the ... gaze*, but in this gaze itself, not only *prior to ... gesture*, but in this gesture itself."¹⁷¹

Similarly, anamorphic subjectivity implies a relation with technologies that is more than simply instrumental, more than just a means of 'transacting between' body and subject.¹⁷² It

¹⁶⁹ Merleau-Ponty (1962), op. cit., p221.

¹⁷⁰ This, apparently, was the method that Cézanne applied to painting: "First comes fusion, enchantment, a quasi-religious contemplation. Then the construction of a sketch, a drawing, a quasi-geometrical schema which breaks that spell. Finally, the painter, letting himself be carried away by 'color sensation,' brings about that, in a way, it eclipses the drawing, which he says 'melts away'; once the drawing is effaced, color replaces it, but only in finding it again in a sort of synthesis as to which the expression 'color logic' always conveys the will to coherence, from the point of view of form." Haar, Michel, 'Painting, Perception, Affectivity', Véronique M. Fóti, trans., in Merleau-Ponty: Difference, Materiality, Painting, Véronique M. Fóti, ed., Humanities Press, 1996, pp177-193, p187.

¹⁷¹ *ibid.*, p192.

¹⁷² A recent survey of mobile phone use indicates the extent to which our involvement with technologies is much more than simply instrumental. "A survey conducted on behalf of Woolworths in the UK indicates that the style people use to type text messages on their mobile phones reveals categories that relate to specific vocations. Researchers divided the messaging styles into four groups -- creatives, jugglers, controllers and facilitators. Creatives (actors, designers, advertising execs and landscape gardeners) used the latest text abbreviations and slang, mixed upper and lower case letters, used customized ring tones and screen settings, and lost their phones frequently. Jugglers (teachers, office workers and emergency service personnel) used capital and lower case letters and punctuation correctly, never lost their phones, and tended to nestle them between their chin and shoulder while talking, leaving their hands free. Controllers (military, lawyers and sales reps) favored brief, all-cap messages, never abbreviated, and tended to have loud ring tones and to speak loudly on public transportation. Facilitators (nurses, nannies, personal assistants) always used lower case and peppered their messages with emoticons like smiley faces. They tended to embellish their phones with colorful cases and were more likely to set their phones to vibrate in order not to disturb others. Psychologist Sidney Crown notes that messaging style is as revealing as handwriting, and suggested it could be used to predict vocational aptitude: "As fewer and fewer teens are using the written word nowadays, there is some validity in looking to other ways of determining the type of person they are, particularly with regards to what kind of job they are likely to be best suited to." The suggestion, arising from this research, that 'messaging style is as revealing as handwriting' is significant not just in its findings, but in its assumption that a pen or pencil is a more direct and truthful form of mediation, a standard against which 'technologically mediated' means of communication can be measured. Here, we can see quite clearly the mutual embedding of body and technology in the (historical) formation of the subject, and the difficulty of distinguishing between the two on material,

is the body, as Lefebvre remarks, that combines “the cycles of time, need and desire with the linearities of gesture, perambulation, prehension and the manipulation of things – the handling of both material and abstract tools.”¹⁷³ At the same time, it is these material and abstract technologies that shape us as subjects, both corporeally and ontologically. The interface, in other words, is not a monodirectional technology of vision, but a reflexive one; it acts as a ‘two-way linkage’, transacting between a subject and object that are conceived

not as megalithic total entities, but as assemblages or collections of parts, capable of crossing the thresholds between substances to form linkages, machines, provisional and often temporary sub-or micro-groupings. ... [The interrelation of terms across an interface] involves a fundamentally disunified series of systems, a series of disparate flows, energies, events, or entities, bringing together or drawing apart their more or less temporary alignments.¹⁷⁴

The body, the subject, and the technology are all sites where the negotiation between the material and the abstract takes place. The tension between these terms should be understood as productive, and the anamorphic subject as the site of a complex and shifting articulation of cultural coding, technological embodiment, and corporeal presence. As *Rez* demonstrates so clearly, perception is an event in which the subject never remains static. Simultaneously called to action and called into being, the anamorphic subject quite literally ‘forms, and forms again’ within the event of seeing.

By admitting the insufficiency of the subject/object relation, the anamorphic model also controverts the border between nature and culture upon which such dualist ontologies depend. Within twenty-first century economies of meaning, nature, as we have seen, functions as “an ordering factor – a construct by means of which we attempt to *keep technology visible* as something separate from our ‘natural’ selves and our everyday lives.”¹⁷⁵ Technology, in turn, has always been a means of keeping nature visible – arguably, this is the very ethos of the interface as we have understood it to this point. By admitting technology as a term in the subjectifying relation, however, nature takes on a slightly different consistency – one that is no longer tied to material excess, and which differs in this sense from the Cartesianesque concept of the ‘natural body’. Discussing artificial intelligence and other ‘thinking machines’, Sherry Turkle points out that the blurring of the boundary between human and machine is linked to the apparent ability of these machines to ‘think’, to act and to judge after human fashion. In such instances, the non-human world

theoretical, or ontological planes. Ananova online news service, 26 Jul 2002, http://www.ananova.com/news/story/sm_637803.html?menu=news.technology

¹⁷³ Lefebvre, op. cit., p203.

¹⁷⁴ see Grosz (1995), op. cit., p108.

attains a slightly different status; it is granted new capacities and privileges “on the basis of its animation if not its life.”¹⁷⁶ The boundary between the ‘natural’ and the ‘unnatural’ – the logical and the biological – is less clear-cut in such cases, where “what counts most is not what life is made of but the organizing processes behind it.”¹⁷⁷ With this observation, Turkle points up the historical (and historicist) character of the nexus between nature and the material – an attachment which is, as we have seen, less self-evident than it is ideologically expedient.

Making sense of our environment, acting in it and on it, means performing as an embodied agent – engaging the lifeworld by means of technologies that are neither inert, distinct from the body, nor ‘masterable’ as such. Perception occurs within a cultural context that is the product of human agency, but all such contexts find their fulfillment only within the range of bodily perceptual possibility. Our affective relations with these technologies – our performance with instruments both material and abstract – are heterogeneous; they embrace the corporeal and the cultural, the seen and the unseen, the tactile, the discursive, the historical. The instruments that we have built and through which we know the world are never merely adjunct to our being as subjects, but embedded into the body, the subject, and the look; *incorporated* into the fabric of subjectivity itself.

This reflexive relation pertains not just to the relation between the subject and the instrument, but to the broader relation between theory and practice. Understanding theory as abstract technology or “power of technique”¹⁷⁸ allows us to grasp a bit more clearly how theories, as technologies, shape our relation to the lifeworld. Linear perspective, as we have seen, involves “the transformation of the eye into a technology and a redefinition of the world to suit the eye;”¹⁷⁹ as a theoretical technology, it is a way of commanding the world in/by representation. But linear perspective also entails a transformation of the embodied self and of its way of knowing the world. As a theory, it is *instrumental* only in the sense that

¹⁷⁵ Stone, *op. cit.*, p517.

¹⁷⁶ Turkle, Sherry, *Life on the Screen: Identity in the Age of the Internet*, Phoenix Books, 1997, p83.

¹⁷⁷ *Ibid.*, p164.

¹⁷⁸ Slater, Don, ‘Photography and Modern Vision’ in *Visual Culture*, Chris Jenks, ed., Routledge, 1995, p219.

¹⁷⁹ Romanyshyn, *op. cit.*, p33.

it also takes the form of embodied praxis – it is a means of ‘shaping a world’¹⁸⁰ and of shaping the subject.

Arguably, it was postmodernity that conceded the reflexivity of the theory-practice relation, and postmodern theory that first took an interest in their mutual implication. What constitutes ‘practice’ is by no means self-evident, however, and postmodernity’s insistence on the latter’s *discursive* character often takes somewhat dogmatic form. Declaring the distance of discourse from the body, postmodernity – especially in the form of the cyber-discourse of the 1980s and early 1990s – celebrated the anonymity of the disembodied self; the new-found privilege of the individual to escape the confines of biological overdetermination, and to enjoy the freedom of a world in which race, gender, age, and appearance no longer seemed to matter. This is the world of Baudrillard’s hyperreal, and virtual reality was thought to be its quintessential form. Generated by models, hyperreality entails the loss of the ‘absolute’ real, and the substitution of signs of the real for the real itself. It describes “an operation to deter every real process by its operational double, a metastable, programmatic, perfect descriptive machine which provides all the signs of the real and short-circuits all its vicissitudes.”¹⁸¹ For Baudrillard, the real is “*that for which it is possible to provide an equivalent representation ... that which can be reproduced.*”¹⁸² Here, the real is no longer a threat, but a depleted category; no longer representation’s other, but its passive object.

In Baudrillard’s social landscape, technology operates as a formation of power, a disembodied and disembodied force. Here, the subject is a product of invasive technologies, crystallizations of power which claim an ontological distance from the body and from the social reality in which it dwells. This sort of technological determinism also prescribes a particular, and familiar, vision of nature – culture’s other, alongside which society itself takes the form of something very special, “something which is not governed by laws or causal mechanisms or generative structures.”¹⁸³ In this landscape, if technology makes contact with the body, it does so only in the form of penetration; if it engages the subject, it does so by assuming the latter’s submission. Technology moves in different

¹⁸⁰ To take up a position – philosophical, scientific, social – is, as Roy Bhaskar points out, to “presuppose a certain general shape of the world.” Bhaskar, *op. cit.*, p28.

¹⁸¹ Baudrillard, Jean, ‘Simulacra and Simulations’ in *Jean Baudrillard: Selected Writings*, Mark Poster, ed., Stanford University Press, 1988, pp166-184, p167.

¹⁸² Baudrillard, Jean, ‘Symbolic Exchange and Death’ in *Jean Baudrillard: Selected Writings*, Mark Poster, ed., Stanford University Press, 1988, pp119-148, p145.

¹⁸³ Bhaskar, Roy, in ‘How to Change Reality: Story v. Structure – A Debate Between Rom Harré and Roy Bhaskar, in *After Postmodernism: An Introduction to Critical Realism*, José López and Garry Potter, eds., Athlone Press, 2001, pp22-39, p29.

rhythms from that of nature, and it is up to the subject, willing or not, to keep up; as John Perry Barlow, founder of the Electronic Frontier Foundation, says of cyberspace: 'We are all going there, whether we want to or not.'¹⁸⁴ This claim is somewhat at variance with the promises of the latter technology to free the individual, and, as such, it is a revealing one. If postmodern discourses of virtuality promise to free the cybersubject, the kind of freedom they offer has little meaning outside of the simulation. Instead, the emancipation that postmodernity offers to the technologically overdetermined subject takes the dubious guise of freedom of responsibility for the forms that such technology takes.

Disembodiment and anonymity are not essential characteristics of interfaced being, however, but the properties of a particular stage of its development,¹⁸⁵ and the discourses of freedom which go alongside this notion of subjectivity have little meaning unless they are also causally efficacious in the real world.¹⁸⁶ It at this juncture – the awareness of a differently textured 'real' – that the theory/practice relation departs from the form it took under postmodernity. If linear perspective is the theoretical technology that has traditionally been brought to bear on the analysis of the interface, then this is no longer the model that this discourse demands. Indeed, it is difficult to see how persisting in the unquestioned assumption of perspectival models is not itself a kind of technological determinism. These claims are born out in recent practice, in the form of 'anamorphic' discourses that question the alleged depletion of the real, and that re-examine subjectivity and agency as embodied performative concerns. Broadly speaking, this is the approach favoured by what might be called 'critical realist' approaches to the notion of interfaced being.¹⁸⁷

Whether or not they take the form of artifacts, the relation between such technologies and the subjects that use them is, as we have seen, an embodied one – it comprises an

¹⁸⁴ quoted in Higham, Pam, 'Keeping it Real: A Critique of Postmodern Theories of Cyberspace,' in *After Postmodernism: An Introduction to Critical Realism*, José López and Garry Potter, eds., Athlone Press, 2001, pp159-168.

¹⁸⁵ As Hayles points out, "it is a *historical construction* to believe that computer media are disembodied technologies, not an obvious truth." Hayles (1999a), op. cit., p93.

¹⁸⁶ see Higham, p164.

¹⁸⁷ See *After Postmodernism: An Introduction to Critical Realism*, José López and Garry Potter, eds., Athlone Press, 2001. Many of the concerns articulated in this volume are shared by some of the most recent writing on virtual reality and cyberontology, whether or not the latter discourses identify themselves explicitly with the critical realist project. N. Katherine Hayles speaks for a broad cross-section of discourses of the interface when she remarks that computer technologies are not the 'disembodying technologies' that postmodern theory insists upon. As she remarks, the belief that computer media are disembodied "is almost never used as a working hypothesis by the people who are engaged in developing the technologies, for they cannot afford to ignore the materiality of the interfaces they create or the effects of these interfaces on their customers. If we articulate interpretations that contest the illusion of disembodiment, and if these interpretations begin to circulate through the culture, they can affect how these technologies are understood, and consequently how they will be developed and used." see Hayles (1999a), pp93-4

'intransitive' corporeal dimension that is neither reducible to, nor separable from, discourse. This is not, as we have seen, simply a matter of priority – of theory dictating practice – but of the coetaneous and reflexive emergence of subject, body, and technology. The theoretical model I have elaborated here has taken shape through my engagement of landscape via a variety of material and discursive praxes. In this spirit, it is my hope that the notion of anamorphic subjectivity will furnish the possibility of landscaping the subject in a different way: articulating a more complex understanding of interfaced being and of the diverse formations – conceptual and material – which animate it.



Figure 1: Philip de Loutherbourg, *The Fall of an Avalanche in the Alps*, 1803
(London: Tate Gallery)

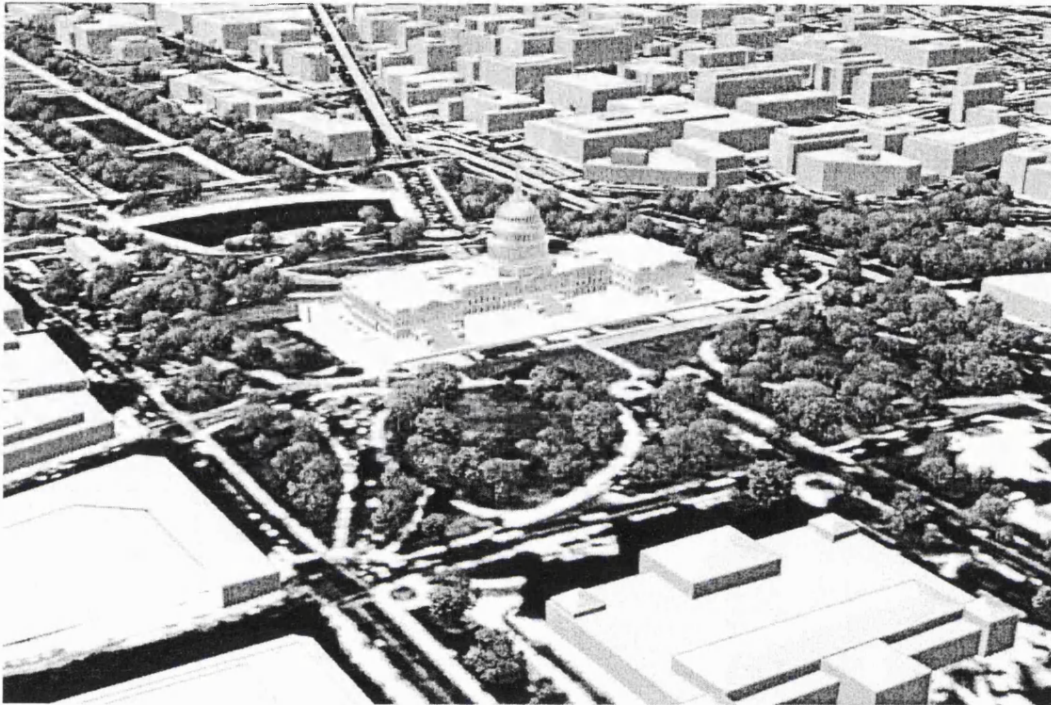


Figure 2: Richard Brown: Visualization of Stennis Space Center
using World Construction Set, 2001
(<http://www.3dnature.com/>)

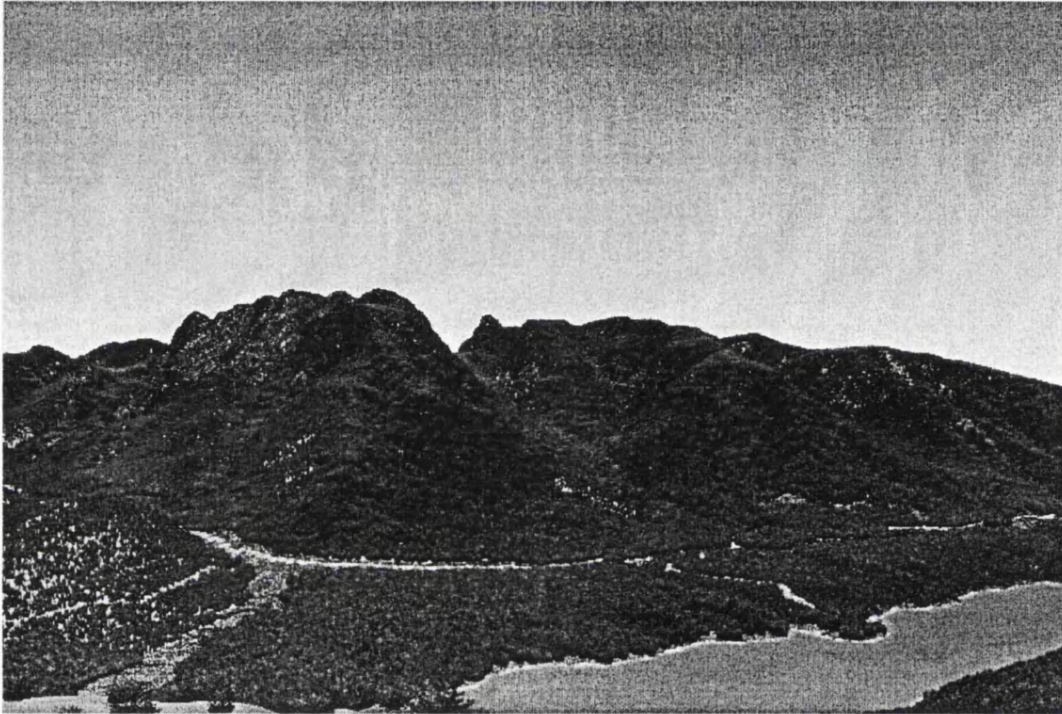


Figure 3: Ken Fairhurst, landscape created with Visual Nature Studio, 2001
(<http://www.3dnature.com/>)

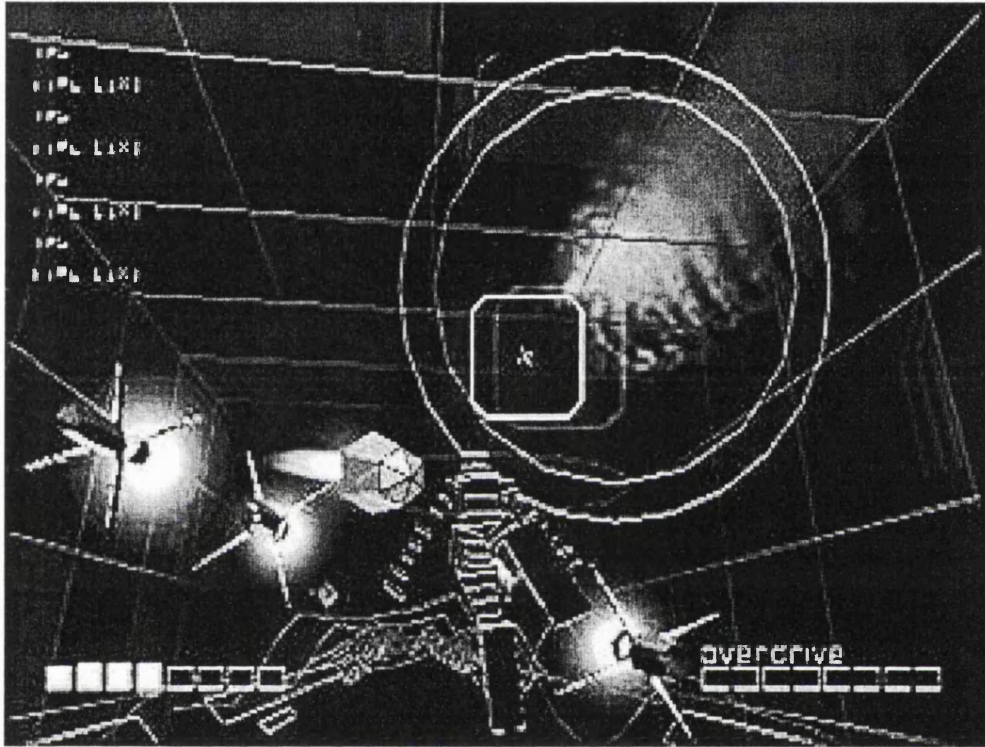


Figure 4: *Rez* screenshot
(<http://sega.gamerweb.com/previews/ps2/rez.asp>)

My studio practice takes shape around various discourses and praxes of landscape. Although – as I will go on to discuss – this work is not self-consciously ‘theoretical’, there is no question that my written and scholarly practice has played a key role in determining the directions it has taken. In broad terms, my artwork has developed around my ongoing preoccupation with the landscape view – the spatial configuration that underpins the Western landscape tradition – and with the various ways that this configuration can be challenged and questioned.

This preoccupation first arose out of my impatience with the formulaic sameness of conventional landscapes, and with the staunch facility of the camera in accommodating them. Landscapes are easy on the eye – both that of the photographer, and of the viewer – and my work is motivated, at a fundamental level, by a desire to deconstruct and ‘denaturalize’ this space, and to frustrate and foreground the operation of vision.

I go about this in a number of ways. On the level of the image, the deconstruction of the view can take the form of a simple refusal of its spatial logic. I often shoot with the camera aimed directly at the sky or the ground, and for several years, I photographed nothing but rock surfaces. In such cases, the identity of the image itself becomes an issue, and many of my works have played upon the innate ambiguity of the materials I photograph, and on the viewer’s tendency to misread what they see (close-ups which appear to be aerial photographs, rock which looks like water or human skin, etc.). For some years now I have worked almost exclusively with contact prints, in formats ranging from 8x10 inches to 35mm. Contact prints – especially 35mm format – have some visual inconsistencies that I find particularly appealing. Though they possess incredible resolution and colour saturation, their small size makes them very difficult to see. This combination of visual seduction and frustration – disrupting the conventional function of the image, rendering it simultaneously captivating and disquieting to the eye – is a key element in my work. Not surprisingly, most of this work is difficult to photograph well.

All of my work is composed of multiple images (sometimes thousands) – a tactic which further compromises the identity and integrity of individual images, and which necessarily involves the deconstruction of the view in one way or another. At times, this has meant breaking the view apart into its constituent elements (earth, sky, horizon line, etc.), reassembling it in through the use of a

grid, opening it out in panoramic form, or presenting it three-dimensionally, as assemblage or sculpture.

Alongside the frustration of vision, the use of multiple images compels the viewer to move away from the single viewing position that is called for by traditional landscape images. This involvement of the body in the experience of the work is another ongoing motivation behind my studio practice. This is directly related to my fascination with gardens and anamorphic pictures, and the way that they encourage the spectator to 'perform' differently, to pull apart and attenuate the conventional activity of picture viewing. Much of my work is in the form of relief sculpture, and images which appear two-dimensional when viewed from across a room take on an entirely different character as the viewer approaches more closely. Other pieces, which take the form of sculpture in the round, invite haptic and temporal consideration. Most of my works are seductively tactile and visitors often respond by touching them (or even, in one case, by taking parts of the piece home with them). Whatever the case, all of my works actively dispense with the unique point of view and attempt to bring the viewer to an awareness – implicit or explicit – of the hapticity of vision and the affective character of looking.

On a more personal level, my studio practice is concerned with the notion of *process* and with my own corporeal involvement in the making and meaning of objects. The significance of such involvement is immediately clear in art forms such as dance. Whether it is the rigorous discipline of ballet, or the more spontaneous bodily movement of the clubber, dancing presupposes a responsive body – but not necessarily one that is *attended to* as such. My interest in objects, and in their making, lies here, in the performance of the inattentive body and in the existence of the work itself as a 'powerful particular' – a real agent with causal powers.

Let me try and explain what I mean by this. Making objects, for me, is more a practical and instinctual operation than it is an actively reflective one. Apart from the concerns noted above, I seldom have a sense of wanting to make a work 'about' a particular issue or to express a particular meaning or idea. Up until very recently, most of my work has been incredibly labour-intensive, and individual pieces can take months to complete. My initial conception of these pieces is seldom worked out in detail; sometimes I have a clear vision of how I would like the final work to appear, at other times I begin with nothing more than a box of contact prints and a vague sense of wanting to do something with them. Whatever the initial idea, I have not yet managed to make an object that has turned out exactly as I first envisioned it, and this solicitation of contingency is a vital part of my practice. I work from one stage to the next rather than making and following a detailed plan. Decisions which appear important in retrospect are often made very quickly, and on the basis of

little more than logistics or convenience. The final shape of each work is determined by a heterogeneous array of spatial, aesthetic, and logistical pressures. Obviously, some works are more successful than others, but as far as I am aware, the merit of particular objects is in no way proportional to the amount of directed thought that goes into them.

My understanding of process is, therefore, not as something that I am in control of, but something that I am the *subject of*, or *subject to*. Process comprises the reflective and the intuitive, the intellectual and the corporeal; it consists of actions, decisions, and gestures that arise in response to the demands of an object in various stages of emergence. In this sense, the process of making an artwork is – for me – profoundly affective. It could be described as a kind of performance, though it is neither choreographed in advance, nor one in which I play the role of the director. If it is a performance, it is an attenuated and improvised one, a series of acts and gestures that evolve in space and time. The best way I can think of to describe this is as a sense of feeling the work make itself through me; a sense of being ‘led’ through a process of emergence, rather than actively controlling it. It is worth mentioning that I often experience the same sensation whilst writing, though obviously not to the same degree. Nevertheless, my written work is similar to my studio work in my understanding of it as one path through a field of possible meanings, rather than a narrative highway leading directly to a predetermined destination.

Whatever the medium I am working in, there is a vast difference between the process of conceiving an idea, that of making an object, and of reflecting on its meaning. Beyond the broad set of concerns noted above, much of what I acknowledge here as crucial to my practice has emerged only retrospectively. It is this chiasm between the idea and the object – and the shift in meaning that accompanies this transformation – that also motivates my fascination with gardens: the development of a vision into plans and detailed drawings, and the evolution from this stage into a large scale work in three dimensional space. Here, the ‘object’ is envisioned before it is made, and seen again, as something else, after it is made.

Recently I began working with video. This was a self-conscious choice, inspired in part by a desire to move away from the time-consuming and labour-intensive work discussed above. It was also provoked by my own perplexity with much of the video work that I was seeing, and a wish to better understand a medium in which time and narrative are fundamental, rather than secondary concerns. Initially, my aim was to find some way to make video work that was as tactile and involving as my earlier work with images. In retrospect, this was somewhat naïve – a decision arrived at without sufficient understanding of the medium, and without a clear sense of my own process. For this reason, my transition to video has been a slow and reflective one, in which my

theoretical work has taken on a different and more prominent role. Certainly my understanding of 'landscape' has changed profoundly over the past four years – writing a dissertation tends to have that effect – and though I would still describe my process as affect-driven, I am also more attentive to the way that my theoretical practice furnishes the various figures and metaphors that captivate my imagination. I still consider my subject matter to be 'landscape', broadly speaking. Apart from an awareness of working within the boundaries of the latter discourse, however, I cannot yet provide a detailed description of exactly what I'm doing, or what my 'process' is as such. All I can offer at this point is an account of some of the things that fascinate me about this medium.

I have not completely abandoned the concerns that motivated my work with photographic objects. The frustration of vision persists as an ongoing theme in my work, though I am approaching this theme in different ways. Where my photographic work exhibited a fascination with intricacy, variety, and hyperabundance, my video imagery shows an affinity for the banal and the repetitious. There is something strangely hypnotic about video images, and I have become interested in exploiting this aspect to its fullest, working the tension between total absorption and utter boredom. I still tend to use the video camera in much the same way that I use a still camera, and find myself filming events in which almost nothing happens – a cloud travelling slowly across the sky, steam emerging from the side of a building, a leaf moving slightly in the grass. I have been working almost exclusively with short (under 30 second) video loops, exploring the hypnotic effect of watching the same very limited action occur again and again.

In terms of process, one of the things I find most engaging about video is the comparatively small amount of work involved, and the speed with which more or less 'finished' works can be produced. Rather than taking months to complete a piece, I can now see results in a single afternoon. This has brought about a considerable change in my understanding of process – an understanding which takes shape, at this point, around the question of how little one need do in order to produce a meaningful result. In this respect I have been inspired by the work of Martin Creed, and the way in which his apparently insignificant actions – rolling a sheet of paper into a ball, for instance – take on unexpected resonance.

Somewhat to my surprise, I have found the process of producing video images – both shooting and editing – radically different from working with a still camera. There is a profound sense of isolation to the video image; a sense, even when watching an action in realtime through the viewfinder, of irrevocable distance from the world that one is recording. I suspect that this has less to do with the artifact itself than it does with the technology by which the image is produced. Whatever the case, this feeling of isolation is multiplied in the editing process to the point where the image leaves off

being a document and takes on a strangely abstract identity. The sound that accompanies the images only increases this feeling of strangeness. Perhaps because I am still using the video camera as I would a still camera, and not paying much attention to sound whilst shooting, the sound that goes along with the image is always a surprise – a sort of unplanned addition, and one that bears little relation to what appears on the screen. Though my original intent was to record soundtracks to accompany the images, I have been finding it more interesting to work with these weirdly detached sound bites. Despite all of these contingencies, I nonetheless have a much greater feeling of being in control when working with video – a sense in which the path I follow with the work is not so much dependent on the demands of an object in space. This is a strange feeling, and one with which I am not entirely comfortable – but one which has also given me a bit more room to breathe.

What has been most interesting, to this point, is not the work I have produced – at the moment, there is very little of this work that I feel ready to show – but the way that changing media has brought about a reconsideration of the relation between my studio practice and my written work. The decision to engage in a different kind of process has ‘opened up’ the relation between these two aspects of my practice, enabling me to see more clearly the various points at which they intersect. My written work and my studio practice come into being in different ways, but both are, fundamentally, different kinds of spatial praxes: means of exploring, ways of finding the boundaries of one’s world.

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