Chapter Seven

New Souls, New Bodies - Subjectivation, Objectiles and the Threshold of Perception

Those who hear the machines that are ticking away within themselves, who open up and make the connection to their streams of desire, and who dream of a new human being at a time when the emergent class is busy exploiting the old one - these are the condemned, the damned. (Theweleit, 1987:265)

Modulating the Subject

It has been argued so far that, for Deleuze and Guattari, the realm of the machinic exceeds that of the signifier. Subsequently, the text is considered only as *one participant* in interactions between bodies. Bodies are not *reduced* to their textuality. Furthermore, this implies that art is not a matter of signification so much as *expression*. To approach art as simple signification - as pure textuality - is, for Deleuze and Guattari, to curtail its expression, to subject it to potentially despotic *interpretations*. This does not mean, however, that either art or bodies escape analysis. Rather it means that both art and bodies must be analysed at the level of the broader machinic. In the machinic it is art and desire, rather than art and the signifier, that are related. The signifier comes after. Indeed, Guattari at times equates art and desire and suggests that they are one step ahead of "our old social machines".

Desire machines, aesthetic creation machines, are constantly revising our cosmic frontiers. As such, they have a place of eminence in the orderings of subjectivation, which are themselves called upon to relay our old social machines that are unable to follow the efflorescence of machinic revolutions that are causing our time to burst apart at every point. (MH:26-27)

It is in this complex series of interactions between machinic revolution and social machines that the basis of ethical possibilities for new technologies will be sought in this chapter and the next. Are there "machinic revolutions" at hand? Of course, there is nothing inherently revolutionary or new about technology per se. As Philip Hayward has pointed out -

In no real sense can there be said to have been any model 'organic' past where the expressive impulse or productive craft was untrammeled by various enabling and prescriptive uses of tools or technologies. (1991:5)

What is needed then, rather than an analysis based upon 'techno-evolutionism', is a consideration of machinic (epistemological and pragmatic) breaks, and, only subsequently, of what technologies these machinic breaks produce.

On one level, our contemporary pragmatics seem to revolve around the radical intensification of a choice between 'subjectification' and 'subjectivation'. Both of these involve one's implication in contemporary social machines, though with different ethical consequences. The first, subjectification, implies a thoroughly stratified or captured position. One's subjectivity is aligned with the Major - one's flows contained within its antiproductive maneuvering. The second, subjectivation, implies subjective operations which, although operating within social machines, use the processes of these social machines to form lines of escape from them.

¹ As will be seen, this latter term is drawn out of Deleuze's work on Foucault.

Deleuze and Guattari give a schematisation of these pragmatics of *subjective* machinery which invokes three 'ages' - 'ages' with pragmatic elements that, despite their labels, can co-exist in any given social situation. I shall give too brief a summary. In 'ancient' regimes Deleuze and Guattari see the human being as already enslaved by despotic machines. In these "imperial archaic" States there is an overcoding of "already coded flows" (*ATP*:459) with the face of despotism. This despotic machine is totalitarian and, to put it simply, human bodies, as with the labourers on the pyramids, are treated as technologies in themselves. A second 'age' (although *not* an age of radically new technologies which remain fairly constant until the emergence of the motorised machine which forms the basis of the nation-State), is that of the autonomous State or city, such as Athens. In this age the despotism is *dispersed* throughout the State, for example, in a citizenship/slavery machine. The machines of this age proceed by subjectification and subjection.

The human being is no longer a component of the machine but a worker, a user. He or she is subject to the machine and no longer enslaved by the machine. (ATP:457)

If not a subjected slave, the operational subjectivity one is now allowed is only one territorialised *upon the State*. It is this State machine that often captures the work of Heidegger, or, to take a broader example, runs colonialism, with its divisions into slaves and citizens, subjected empire and subject nation-State, third (or fourth) and first worlds, even illiterate/literate (computer illiterate/'networked'?).

The third 'age' is that of the *modern* nation-States which "take decoding even further and are models of realization for an axiomatic or a general conjugation of flows" (ibid.). In these states the ancient machinic enslavement to the despot (for example, the despot's interface) and social State subjection and subjectification are *combined towards a new efficiency*, as are the technologies of both (ibid.)². With the development of motorised machines, the "modern State

² It can be seen that there is not necessarily any notion of progress through these 'ages', or hierarchy in their co-existence.

and capitalism brought the triumph of the (technical) machine" (*ATP*:457). This "triumph" is not, however, simply of the technical, but of the (technical) *machine*, in other words, of a new machine that lies behind a new notion of the technical. These newer technical machines involve a combination of machinic enslavement, where subjectivity is of little immediate importance (for example, in being a labourer building the pyramids) with "an increasingly powerful social subjection" (ibid.). This forms a new machinic complexity, only part of which involves the new technologies of these nation-States (such as radio or the tank). Many forms of structural analysis, seen *as* operating machines, are themselves part of this powerful social subjection/enslavement machine. They are a kind of epistemological and political grammar - a series of order-words to fall into particular positions within the processes of production: capitalist/proletarian, "subjects of the enunciation that form the private subjectivity of capital"/ "subjects of the statement, subjected to the technical machines in which constant capital is effectuated" (ibid.), teacher/student, and so on.

For Deleuze and Guattari this third machinic 'age' of the nation-State (and the second technological age of motorised technology) is now shifting to a fourth (with a concurrent third age of technology). This shift has been occurring since after the Second World War.

If motorised machines constituted the second age of the technical machine, cybernetic and informational machines form a third age that reconstructs a generalized regime of subjection: recurrent and reversible "humans-machines systems" replace the old nonrecurrent and nonreversible relations of subjection between the two elements; the relation between the human and machine is based on internal, mutual communication, and no longer on usage or action. (458)

There is little doubt that the term "machine" here slips between 'machine' and 'technology', but the implications are clearly that new technologies effectuate new, *more efficient* machines of

subjection-enslavement, in for example, data processing and the despot's *inter*face. Deleuze and Guattari note that -

A small amount of subjectification took us away from machinic enslavement, but a large amount brings us back to it. (ibid.)

'We' are not *necessarily* brought back to the singularity of the despot here however, as with the ancient regimes of machinic enslavement. Rather 'we' are dispersed throughout the contemporary complexity of Capital, its diverse decodings of flows and the machinic heterogenesis which results.

For me, the singularity of this machinic revolution is this. It is very clearly *perceived* by those participating in this transformation that humans no longer have any real upper hand over either technologies or machines, if they ever did. More especially, even the *illusion* of the upper hand has now become untenable. This is Heidegger's 'saving power' of technology speaking with a dreadful voice.

This occurs in at least three registers. Firstly, although in the terms discussed here it is clear that machines have always had prime importance, what this 'age' brings about is this new awareness of the machine at both the broadest and most specific levels. The third age of the technological machine reflects the emergence of a fourth age of the social machine. This develops a collective assemblage of enunciation finally dedicated the machine itself in all its forms of content and expression³. It is no surprise, then, to find theories of the machine such as Deleuze and Guattari's, Virilio's or Haraway's arising in such an age. Such discourses are as symptomatic as they are acute. Where these theories differ from other forms of enunciation that are also openly machinic, such as economic rationalism, is that all of the former can be seen to be

³ In forms as diverse as economic 'rationalism' or Guattari's 'machinic heterogenesis'...

attempting to give expression to lines of flight, *from* within the new machines and *to* their outside. The latter involve only pure subjectification to despotic/corporate economic control.

Secondly, this new machinic episteme is deeply disruptive, in a new version of the Copernican revolution, of previous 'humanity' based systems predicated *against* an acceptance of the machinic. The crises in 'subjectivity', Humanism, 'philosophy', the Enlightenment project, and so on are therefore due in part to the new technologies and the new machines that have produced these technologies as much as anything else. These crises are certainly not due, at least not primarily, to any pronouncements coming from within the academy. These crises are not, for example, the result of institutionalised or academic attacks on the 'subject', 'enlightenment', and so on⁴. They are the consequence of events within the machinic - of "machinic revolutions" that arise far beyond philosophical speculations.

Thirdly, this machinic awareness is channeled through the actualisations of new technologies such as VR and the internet, or, for that matter, automatic bank tellers. Subsequently, despite the 'crises' in the academy as regards the status of the 'subject', etc, which we can in some ways see to be lagging behind the 'main event', newer information technologies in fact already shift extremely efficiently between subjection/subjectification and enslavement. They do this by externalising as information what was, and will quickly appear to be again, the 'internally' constructed subject (tied now, for example, to electronically controlled credit). We will return to the new forms of control which new technologies often develop shortly. In the meantime it is enough to note that one general ethical choice as regards the use of technologies, new or otherwise, is in using them in processes of subjectification or of subjectivation.

In subjectification, one's controlled forms of subjectivity (and machinic enslavement) are assigned by regimes of truth, various technical machines (e.g. the word processor) and so on.

⁴ Thus the political perversity of a theory such as Habermas' Communicative Action. Habermas' 'solutions' to the problems are only intensifications of the problems themselves.

One is a subject in, or subject to, either the State or Capitalism. This is so even if one's subjectification is theorised as one of lack or existential angst. Subjectification occurs either through the State apparatus of capture or through Capitalism's expression of more dangerous explosions of limits and deterritorialisations, always with the aim of producing more surplus value (e.g. the computerisation of the money markets, the European Community as an interesting transition between State and pure Capital).

Subjectivation, on the other hand, is a term with which Deleuze refutes those who claim that Foucault 'rediscovered' some essential subject at the end of his life. According to Deleuze, Foucault discovered, not the subject, but subjectivation as a line of flight within the system. It is a kind of acknowledgment of subjectification and willful use and dismissal of it in order to exist at cross purposes to it, and to the State or Capitalist machines that produce it⁵. As such it is a freeing of desiring-machines, akin to artistic creation, in itself a kind of will to power, a creation of a useful assemblage in an acceptance of the contingent. It is a different form of expression of the exteriorisation and materialisation of what was an 'interior' esoteric subject.

I think that subjectivation has little to do with a subject. It operates as an electric or magnetic field, an individuation operating by intensities (low as much as high), within individual fields not within persons or identities. It is this that Foucault, on other occasions, called passion. Foucault's idea of subjectivation is no less original than those of power or knowledge: the three constitute a manner of living...(PP:127-128 - my translation)

Subjectivation here seems to have a lot in common with what Guattari calls 'machinic heterogenesis', and with the intensities outside of personality or identity constructed by artists, particularly those working in performance. As the Cagean aphorism goes, "permission granted,

⁵ As such, it is similar to the 'counter-actualisations' discussed in chapter three.

but not to do anything you want". That is, anything can be done if one's actions are not predicated upon the aggrandisement of one's ego as a response to subjectification. Subjectivation, machinic heterogenesis, the constitution of fields of intensities, lines of flight, or just plain artistic creation - all involve an awareness of, *use* of, and development away from, the way in which technologies are used to reinforce social subjection/subjectification with machinic enslavement.

In this is it necessary to differentiate the self/I double act on the one hand and the *individual* on the other. In notions such as subjectivation, Deleuze and Guattari valorise the affective power of the latter. Deleuze writes that the individual has little to do with a self or 'I', or even with a *multiple* self, which seems merely a self which collects different possibilities from the present, with little will to counter-actualise the event. The individual, on the other hand -

...is not a Self...for it expresses Ideas in the form of internal multiplicities, made up of differential relations and distinctive points or pre-individual singularities. Nor is it an I...it forms a multiplicity of actualisation, as though it were a condensation of distinctive points or an open collection of intensities...it is therefore insufficient to multiply selves or to 'attenuate' the I in order to discover the true status of individuation...(DR:257-258)

Deleuze remarks that Nietzsche's great philosophical discovery was that -

...no doubt the I and the Self must be replaced by an undifferenciated abyss, but this is neither an impersonal nor an abstract Universal beyond individuation. On the contrary, it is the I and the self which are abstract universals...Beyond the self and the I we find not the impersonal but the individual and its factors, individuation and its fields, individuality and its pre-individual singularities... (258)

The self and the I are more abstract because they cancel the immanent differences that form the consistency of the individual in favour of a more *general* common or good sense (257). They do not deal with specific and active *shifts* in sense as the individual does. With the current rapid multiplications and shifts in the flow of sense it is arguable that good sense and common sense become absolutely untenable. An acceptance of individualisation is the beginning of any response to contemporary machinic problematics.

This does not mean, of course, that artists should eschew the use of technologies, or participation in social machines. This would, of course, be impossible even if it was desirable, which it is not. It is precisely in the age of immense possibilities of communication and information, that "you can't tell in advance which stratum is going to communicate with which other, or in what direction" (*ATP*:69). In other words, when extreme forms of the capitalist machine are effectuated in new information and communications technologies, there is perhaps a greater possibility for artistic creation - the creation of 'real virtuals'. There has perhaps never been more possibility for artistic creation alongside such extreme possibilities of subjection, enslavement and social control⁶.

A good example is TV. For Deleuze and Guattari TV is an example of an "aggregate" or "microassemblage" (following Foucault) which "includes both subjection and enslavement taken to extremes, as two simultaneous parts that reinforce and nourish each other" (458). It is a form of subjection because it is consumed in a flow of subjectification and the "subject of the statement (by TV) more or less mistakes itself for a subject of enunciation". The TV-eye coupling forms a desiring-machine not dissimilar to those such as the nipple-mouth machine of the baby. As machinic enslavement the TV forms part of an assemblage that constructs possible viewer participations as "intrinsic component pieces, 'input' and 'output'" for "in machinic

⁶ I do not mean to invoke the reinstatement of the grand narrative of the artist here, or the maintenance of so-called 'high culture'. Rather it is a question of finding points of creation in everything.

enslavement there is nothing but transformations and exchanges of information" (ibid.). For Deleuze and Guattari, such contemporary assemblages of information technology combine enslavement and subjection as two co-existent poles of the same process. Yet much escapes from within enslavement and subjection. There is, for example, some video art, or the increasing cheapness of videosampling and television production so that everyone can 'make' their own TV. There are community television stations in central Australia⁷, the video clip (some of which at least show a degree of escape from the State), programs critical of the State such as *The Simpsons*. These all show that the technology itself, as a medium, can be somewhat dislocated from its regular functioning in the broader social machines⁸.

All this is, of course, in many ways unsurprising. As discussed in chapter two, the possibilities of creation exceed the State, as Capitalism exceeds the State, for though the State is sovereignty, it is only sovereignty "over what it is capable of internalizing, of appropriating locally" (ATP:360). There are several forms of "nomos", including the Capitalist machine, that operate very differently to the State because they can traverse an outside to the State. Indeed there is a strong set of relations between the outside, nomos, war machine, and any technology that will allow movement through this nomos, be that a horse or a communications network. New technologies have therefore increased the ability of certain other machines to operate outside the confines of the State machines. They have also, in giving forms of expression of consciousness which are less State bound, increased the degree to which thought can exist outside the State increasing the potential of non-sovereign thought.

See Wark, 1993:75 for a brief description of one related project, that of Eric Michaels and Francis Jupurrurla.

⁸ It is worth noting that Sydney artist Brad Miller has created a specifically Deleuze-Guattarian interactive CD-ROM piece, *Digital Rhizome*, which has been exhibited both at the Fourth International Symposium on Electronic Art in Helsinki and at the Beaubourg in Paris. This consists of excerpts of texts accompanied by sounds and image which can be accessed like many other CD-ROMs.

It is worth remembering, however, that for Deleuze and Guattari, outside means both "huge worldwide machines" such as multinationals, religions such as Islam or Christianity and "also the local mechanisms of bands, margins, minorities" (ibid.). There is no doubt that their preference lies with the local and one would be foolish to deny it. Yet the two different 'outsides' are implicated within one another.

That there is involvement between the local and the global is shown, for example, in the links in creative production between individual works or performances and their dissemination and marketing. For example, phenomena such as rap (or reggae or other popular music movements) clearly operate as both local others or outsides and huge worldwide machines, involved in acts of piracy against the State and in making money for large multinational corporations. Rap is a good example of how, with new technologies and performance (in this case sound sampling, cheap recording techniques, the distributable compact disk) it is necessary to carefully position each event in its own machinic contexts. There is a very different context for rap, for example, in considering either the State apparatus (to which Rap is often explicitly a Public Enemy) or the Capitalist machine (with which it has a far more ambiguous relationship). Indeed, this context varies tremendously depending upon which State apparatus you are talking about (the Australian or the USA's, for example). Tony Mitchell has commented, for example, on rap performer Ice T's exhortation of middle class white boys in Sydney, Australia, not to take crack, much to the audience's glee (1989:289). Crack is, of course, a drug that is yet to make any serious inroads into the Australian market, and such exhortations in this context seem more a matter of marketing and subjection than of molecular revolution.

More positively, some of art's less State-bound uses of technologies also need to be seen in this global/local context. In particular the dynamism of performance work needs to be considered in its nomadic context. There are many examples of this. There are Cage's interpenetration of

different musics, all meeting through their outsides, or much of popular music as heterogeneic performance. There is Beuys' social sculpture as a nomos; his I like America and America likes Me, for which the air travel and the ambulance were as constitutive components as the coyote. There are Abramovic and Ulay's silent, still performances of Night Sea Crossing in different venues throughout the world, sometimes combining the presence of a Tibetan Llama and an Aboriginal elder. There is Stelarc's crossing of the strict boundaries of State competition with new technologies in his combination of components from around the world, Germany and Japan in particular. There is also Horn's mixing of the 'inside' and 'outside of bodies and phantasms, or the way in which this occurs in dance music and world music's increasing syncretism. All these can be seen as nomadic, rhizomatic, war machines, sometimes captured by the State, but nearly always recreating an outside to the State. Of course, their relationship to Capitalism is more complex, but not without many lines of escape. As I have previously noted, there is always, according to Deleuze and Guattari, a level of the "undecidable" as regards capture or escape, which is "the germ and locus par excellence of revolutionary decisions" (ATP:473). Deleuze and Guattari give the examples of the "revolutionary connections" (ibid.) of the pirate radio station, urban community networks, or alternatives to psychiatry. Later Deleuze refers to computer viruses as the latest example of this "germ" of the undecidable (PP:237).

The *problematic* of each society, along with its attempted axiomatic (that from which lines of escape are necessary) are made clear. Each social form actualises its own 'new' technologies. Societies ruled by a sovereign have "simple or dynamic machines" (ibid.). Foucault's disciplinary society requires "energetic machines". On the emerging contemporary scene there are -

...cybernetics and computers for the societies of control. But the machines explain nothing. It is necessary to analyse the collective agencies of which the machines only form one part...(ibid. - my translation)

The simple "machines"/technologies are those such as levers, pulleys, and so on. The energetic machines would include those such as cars and steam engines. The control machines are those such as robotics, computer information control. Although the terms have slipped again here, with Deleuze talking about "machines" and "collective agencies" instead of technologies and machines (showing a divergence between the later essays of Deleuze's and Guattari's, in which machines became more prominent), the point remains that there is always a problematic formed in the area between social formations and their lines of escape. To reiterate, the particular dynamic that Deleuze, following Foucault, sees as coming after the 'disciplinary' society is that of control (of enclosure and instantaneous communications) - and control's technologies are the computer and cybernetics. I shall shortly discuss the problematic that emerges out of this society of control. In the meantime, I shall merely comment that there is a double vigilance necessary in the practices of art or in discussions of these practices. In the first place it is necessary not to dismiss artistic practices because of the technologies they use. In the second place, however, there is a necessary vigilance needed about how artistic practices with various technologies align either with social axiomatics (particularly now of control - and how many university arts departments need now to ask about how they fit in with social axiomatics of control?) or with lines of flight.

Modulating the Object

In virtual reality many invisible qualities and characteristics can be made visible...Virtual worlds may [also] represent abstract data (demographics, for example) which have no real-world spatial component. Navigation of this type of space depends upon the paradigm used to incorporate it, to give it dimension. Shifting gears on the

"paradigm transmission" may transform (or eliminate) those dimensions. Similarly, the transition between microcosm and macrocosm cannot be construed as distance.

(Cornwell, 1992:227 and 232 - bold my emphasis)

Deleuze's view is that there is not a technological evolution without there being a more profound mutation of Capitalism, and that the latest mutation is one that produces humanity as an undulating wave, puts it into orbit or onto a continuous beam (PP:244). Art is also put onto this beam. Rather pessimistically, Deleuze specifically mentions the ways in which "art has left closed milieux and entered the open circuits of banking" and marketing (with which, of course, art has a very long and sticky relationship). In these circuits, art "is now an instrument of social control" (245). Deleuze and Guattari's analyses are apposite to an analysis of this situation in that their notions of machines and technologies can account for the mutual involvement of different systems, not all of them systems of language based upon the priority of the signifier. Thus the previous example of the credit card whose numbers do not purely signify in a language but also operate a machine (the automatic bank teller), or what Deleuze calls in his study of Foucault, "systems of light". These different systems "are not the same form, and do not have the same formation" (1988a). In short, Deleuze and Guattari's notion of the machinic allows for an analysis of technological and artistic practices which is not purely textual. This analysis can incorporate a study of what is made visible or invisible as much as what can be expressed or not expressed, heard or not heard, produced or not produced, in technological and artistic production. What becomes crucial in such analysis is the question of the threshold at which objects can be seen, expressed, heard or produced. Seen from this point of view an object is 'modulated' by the threshold of perception (expression and production) in which it participates. I shall turn to music to begin a more detailed discussion of this threshold of perception.

It is perhaps because it is hard to territorialise on either systems of language or of light that music seems a special "system" in Deleuze and Guattari's work. Music seems all threshold. It encompasses a complete pragmatics of 'modulation'. It is a form of production which typifies a world in which technological change means that there are no longer objects, but *objectiles*. An objectile is -

...a very modern conception of the technological object: it refers...to our current state of things, where fluctuation of the norm replaces the permanence of the law; where the object assumes a place in a continuum by variation...temporal modulation...implies as much the beginnings of a continuous variation of matter as a continuous development of form...modulating is molding in a continuous and perpetually variable fashion...sounds and colours are flexible and taken in modulation. The object here is manneristic, not essentializing: it becomes an event. (FLD:19)

Music operates through rhythm - the undulation of a wave - which enables the negotiation of this world of objectiles and modulation. This rhythm is not the same as a repetition of meter but is rather a way of distributing intensities, necessarily unevenly. Such disparate modulations as those in the waves of distribution of information through cyberspace, birdsongs, the electrical modulations performed by synthesisers or by guitar pedals such as the wah-wah, and a *general distribution and dedistribution of territories* can come together in music. It is no wonder that music provides such a voice for dissent *and* for the machinations of Capitalism or the dispersion of power through a field (the record industry covering the world as a modulating territory, music as territorialiser of markets, the army or police's use of music in siege situations - "Lily Marleen"). It is also no wonder that music can provide a model for the other arts in this respect, or that Cage's music should have inspired so much other artistic activity, particularly in performance. *Music deals with the object as pure event*.

Music finds a parallel here in the ephemeral nature of performance in general. Just as music deterritorialises the fixated object and forms a modulating machine, so too do objects (and 'subjects') become objectiles in performance work, as performance deterritorialises its components in an event; in modulation and interaction. Music and performance give a "proximity' grouping between independent and heterogeneous elements" (*DL*:104). These are drawn together into an assemblage that modulates all. Deleuze (or in this case possibly Parnet⁹) often returns to the example of Kleist's marionette¹⁰ -

What defines a machine assemblage is the shift of a centre of gravity along an abstract line. As in Kleist's marionette, it is this shift which gives rise to actual lines or movements. (ibid.)

What is more, the definition of a machine as a "proximity grouping" specifically "of man-tool-animal" (ibid.) well describes the modulations of much of the performance work discussed earlier. Beuys' *Honey Pump at the Workplace* or Rebecca Horn's machine-flapped bird feathers or flows of mercury are just three examples of many aesthetic modulation machines. It is in the modulation between "man-tool-animal" - the becomings - that performance becomes an event, shifts centres (and senses) of gravity and creates machines capable of movement. This is the way in which art creates nomadic machines; the way it works as a machinics of expression rather than a signifying apparatus.

Often below the threshold of perception, art has always had this objectile nature. In the twentieth century, this nature has been brought to the surface as never before *in an event of events*. Not only does art now shift thresholds. Now it can be *perceived* to shift thresholds. And what this shifting of thresholds is particularly applied to is the threshold of perception itself. This

⁹ Each chapter in *Dialogues* was written either by Deleuze or Parnet. Except for the first two, the chapters are not attributed to one or the other.

¹⁰ See also my own, Murphie, 1987 for further discussion of Kleist's marionette.

(conscious) *operation* on the threshold of perception, producing a force of modulation, is what art is now about. This force of modulation connects supposed 'stabilities' in a manner that destabilises them, and makes them move. For example, of the literary machine Deleuze and Guattari write that -

...reading a text is never a scholarly exercise in search of what is signified, still less a highly textual exercise in search of a signifier. Rather it is a productive use of the literary machine, a montage of desiring-machines, a schizoid exercise that extracts from the text its revolutionary force. (AO:106 - my bold)

However, the force of modulation in itself is not always "revolutionary" in the positive, Guattarian molecular sense of a revolution. The "artistic machine" and the "analytic machine" or the "revolutionary machine" need to combine their modulations, so as to "function in the deadening framework of social and psychic repression", either separately or forming one desiring-machine together (137). For Deleuze and Guattari this produces ethical, nomad art which is precisely this activity to do with connecting flows. It is not necessarily to do with the signifier. It is the art of turning objects into object*iles* with revolutionary force.

In Deleuze's work on Leibniz, the arts, at least in the Baroque sense (and, to recall, Deleuze believes that we are now in a neo-Baroque), exemplify the potential for interconnection that is the world's plane of consistency and the very expression of the interaction of everything. For the "theater of the arts is the living machine of an infinite machine of which every part is a machine" (*FLD*:124), one infinite series of folds - one fold in a universe that has "lost all center as well as any figure that could be attributed to it" (ibid.). It is therefore in the arts that interactive expression is revealed fully for what it is, that the act of folding, of expression, of interaction, of making an objectile, *draws attention to itself*¹¹.

¹¹ The work of those such as artist Linda Dement, who works, among other media, with CD-ROMs, with her images of folded, fragmented and flowing, constantly modulated bodies, is a good example.

This is why Deleuze can say that Foucault's conception of the life as artwork is also an ethical affair, and that also if there are ethics, it also must be an aesthetic affair (*PP*:137-138). Following Spinoza, *Deleuze sees both aesthetics and ethics as a pursuit of interconnectivity*. Not that this means that they are exactly the same, but in both the aim (in Leibnizian terms) is *an extension of the clear zones of perception of that interconnectivity* - in what Deleuze calls at one point, accords, or harmony (*FLD*:130-131). This extension is a modulation of the threshold of perception which broadens and diversifies it. This is because, by being interactive, rather than imposing a fixed frame on a simple representation, perception extends the very range of what can be perceived. The arts are all united into the "universal theater" (123).

As I have previously noted, however, this implies that ethics is not the same as morality. Neither is ethical practice - pragmatics - the same as moral judgment. Ethics are a series of practices (which are aesthetic even if they only involve a style of living, thus the ethical and aesthetic considerations of the performer's life such as Jarry's) which promote expression and machinic interconnection. Morality (following at least Spinoza and Nietzsche) is a force of antiproduction, or what Nietzsche called "ressentiment" and bad conscience, the "internalisation of pain" (*NP*:131).

...morality presents itself as a group of constraining rules of a special type, which consist of judging actions and intentions according to transcendent values (it is good, it is bad...); ethics is an ensemble of facilitating rules which evaluate that which is said or done according to the mode of existence implied. One says this, one does that: what mode of existence does it imply? (PP:137 - my translation)

Once again, this does not, of course, mean that any mode of existence, any given aesthetic, is acceptable to Deleuze and Guattari. In a world in which *everything* is not only modulating but, moreover, 'consciously' modulating, everything has its own aesthetic, even and especially such

machines as the National Socialist. This could seem to make *every* practice ethically positive. Yet the ethical aesthetic described here needs to be qualified by its *continuing* interactive potential - the zones of clear perception it opens up - and continues to open up. It is worth noting, on the other hand, that, for Deleuze and Guattari, positive ethical practices often necessarily arise from lines of flight from within a potentially repressive system.

Where do new technologies such as VR fit into this? I shall argue that the emergence of technologies of self-conscious modulation of the threshold of perception, such as VR, surpass simple representation in favour of *operation* and that this parallels the bringing to the surface of art's objectile nature.

Smooth Voyaging?

Having given an explanation of the machine according to Deleuze and Guattari and further criticised some of Laurel and Rheingold's approach to Virtual Reality in the second chapter I can now propose an alternative view to the latter. In this, Virtual Reality's commonality with performance and art will not be taken as its mimetic qualities - its 'representation of an action', so much as its qualities of modulation; its realisation of the objectile.

'Virtual reality' will be discussed here in a way which only briefly describes its current specific technological form (that is, for example, a helmet, glove and a three-dimensional, digitally produced, navigable world). I am more interested in 'VR' as a more general emergent series of cultural phenomena - a machinic phylum. In this latter context, technological developments such as Hypertext, the Internet and the World Wide Web can be seen as the first flowerings of a "virtual age" (Stone, 1995:17). The attempt here will be neither to valorise this age, nor to condemn it. Rather it is to seek out its characteristics and the modulation of the notion of

modulation it performs. Many critics do, however, valorise or condemn it. Landow (1992), Ulmer (1989) and Rheingold (1994) all seek to valorise the participatory or democratic pluralism of the virtual media themselves whilst qualifying this with condemnation of some of the uses to which they may be put by unscrupulous or repressive powers. On the other hand, critics such as Virilio or Baudrillard are, of course, almost unendingly pessimistic.

The work of Deleuze and Guattari has provided one of the key tools of analysis in this area. As Stuart Moulthrop argues (1994:304-305), in a summary of some of these analyses as regards hypertext, virtual media offer a kind of dream of Deleuze-Guattarian "smooth voyaging" ¹² in a literalisation of the "sort of intertextual play [that] has been the preserve of poststructuralist critics like Hélène Cixous and Jacques Derrida, or postmodern novelists like Kathy Acker and Thomas Pynchon" (305) ¹³. In short, virtual media offer a kind of "textual promiscuity" as a "regular feature of cultural systems" (ibid.). Moulthrop, however, sees little inherently liberating about all this, writing that such "ostensible 'smoothness'" may be "more delusion than Deleuzean" (306). In a much more precise reading of Deleuze and Guattari than many.

The concept of the rhizome has had an enormous, if at times dubious, influence on the attempt to develop and conceptualise hypertext. Both Moulthrop and Rosenberg's (1994) essays attest to this, as does the *Rhizome* project itself in which Rosenberg was involved. As Moulthrop points out, "A Thousand Plateaus serves in this discussion as more than an example of proto-hypertext. It has also been a major influence on social theories and polemics that have had a strong bearing on the cultural integration of new media" (301). McKenzie Wark, in Virtual Geography (1994b), writes that the book was written in part as a working out of some notions of Deleuze and Guattari, specifically in a "rewriting of the Deleuzo-Guattarian negative historicism of deterritorialization in terms of my own experience" (225). A somewhat less sober (and perhaps more absurd) Deleuzean in this respect is Nick Land, who writes that "our human camouflage is coming away, skin ripping off easily, revealing the glistening electronics. Information streams in from Cyberia; the basis of true revolution, hidden from terrestrial immuno-politics in the future. At the stroke of midnight we emerge from our lairs to take all security apart, integrating tomorrow" (1992:219). This latter day techno-poet-philosopher might do well to listen to the more coherent Deleuzean appropriations of Wark and Moulthrop, amongst others. For another useful application of the concept of the rhizome to electronic media, see Saper, 1991.

¹³ Landow (1994:38-39) inadvertently gives a stunning example of how this interplay does not always work, at least in terms of ethics, appropriating the feminist writing of Hélène Cixous into the uneasy context where "her own practice also anticipates what has become an important mode in the hypertext document". The simple mistake made here is the substitution of one highly interactive world for another, that of the hypertext medium for that of the written, with little considerations of the *other* interactions that surround and engage with these worlds, such as the worlds of specifically gendered bodies. These issues will be discussed further in the final chapter.

Moulthrop warns against both "technonarcissism" (309) and the "misleading possibilities for multiple discourse" (308). Moulthrop further points out that, for Deleuze and Guattari, "the dyad of smooth/striated represents not a dialectic but a continuum - a conception that has considerable consequences for our understanding of hypertext and its possibilities for cultural change" (316)¹⁴. With this in mind, then, an evaluation will be made of VR on the basis of its *operations* first - what it *does*, rather than whether it is inherently good or bad. In this, I am not so much interested in VR as a form of representation of reality as an *expression* of it. There is no doubt that VR, as yet, provides a very poor representation of reality and may, in the foreseeable future at least, not reach the degree of high-fidelity reproduction of reality that we already associate with older media such as television. Nevertheless, the high-fidelity reproduction of the world is not necessary to an expression of it, and there can be no doubt that VR, as with everything else in the world, expresses the world in a particular fashion¹⁵.

I have already begun to signal that this expression is complicated by the fact that VR - as an expressing 'entity' - can be considered in at least three different registers to be three different things. The first, and only the first, of these registers is that which is usually discussed - VR as a particular series of technologies. By and large, these occur in the form of a computer mediated space which combines various *perceptual* mechanisms and systems with *operational* systems (flight, weapons control, movement through VR space, etc). The effect is both that one is immersed in a computer generated world, and that sometimes, through that immersion, one is

¹⁴ Moulthrop concludes that "Hypertext - and its yet more distant cousins, virtual reality and cyberspace - will not produce anarchist enclaves or pirate utopias" (316). He makes the point that "we who write theory tend to suffer from a surfeit of idealism and an antipathy to operational compromise" (315). Deleuze and Guattari, of course, were much more interested in operations than ideals.

¹⁵ Rebecca Coyle (1993:160) cites Krueger on this issue, who writes that "artificial realities are a medium of expression and experience...Increasingly, people are products of artificial experience. Vicarious experience through theater, novels, movies, and television represents a significant fraction of our lives. The addition of a radically new form of physically involving interactive experience is a major cultural event which may shape our consciousness as much as what has come before". I would argue that this new medium is produced within a relation to changing consciousness. This will be discussed shortly.

able to operate more effectively in the world to which such technologies are linked. Such technologies include the now ubiquitous helmet-and-glove, Myron Krueger's 'Artificial Reality', in which the whole space is made interactive and the body itself is not so claustrophically encumbered with technical apparatus, or, more generally, such technologies as flight simulators, computerised flight control systems or video guided missiles. All of these *express* a certain relation to the real, even if that representation is fuzzy or 'inaccurate'. In fact, often the fuzzines or inaccuracy is part of its expression of reality. The clearest example is the missile guidance system or cockpit which simplifies representational detail deliberately in order to express itself more effectively (and, at times, more maliciously) within the world. In these cases less representational accuracy makes for more ballistic accuracy. Having discussed these technical aspects broadly, in what follows I will not cover the technical details any more than I need to. (These are discussed much more fully in Rheingold, 1991; Coyle, 1993; and Pryor and Scott, 1993.)

The second of the registers in which VR can be considered is a broadening of the first. This involves a consideration of the way in which, through a series of new media technologies, the line between the 'virtual' and the 'real' is generally blurred within communication systems (although, of course, it could be argued that the telephone has already accomplished this blurring). This occurs not just within the first register of what we could consider to be recognisably VR technology, which itself involves at the least a form of communication between body and machine, but in the broader arena of what Rebecca Coyle (1993:162) has labeled "meta-media", which would here include VR technology, the Internet or cyberspace as a whole. These new meta-media, considered in themselves, are still only new *technical* systems, and neither the first nor the second register of Virtual Reality, in themselves, explain exactly why such technical systems or even larger arenas facilitated by these broader meta-media have arisen as they have

and when they have¹⁶. As has been noted with Heidegger from the beginning of this thesis, there is nothing technological about technology. More specifically, as Coyle notes -

As a meta-media, virtual reality is likely to be so all-encompassing that its 'reality' will need to be grasped philosophically rather than identified as a discrete area of communications practice. The ethical component of this philosophy may well be crucial to the future of human society. (ibid.)

This philosophical and ethical grasping is complicated by the way in which 'reality' and the virtual are so obviously blurred in VR. Coyle also quotes Brenda Laurel, who in 1991¹⁷ said that, despite "the word 'virtual" being -

...okay because in fact we're creating environments or realities that don't necessarily have concrete physical components to them...the use of the word 'reality' in the singular belies a certain cultural bias that most of us are not very comfortable with. (in Coyle, 1993:162-163)

In the following section I shall attempt to give the beginnings of a philosophy from a Deleuze-Guattarian perspective which describes how it is that the virtual is expressed in contemporary technological and cultural developments, and how this expression relates interactively to a reality which is certainly not singular. I shall argue that 'virtual' and 'reality' are not, as Laurel is cited by Coyle (162) as suggesting, "oxymoronic" terms, but rather interactive ¹⁸. Furthermore, I shall argue that related areas such as metaphysics and physics are also - like the virtual and the actual - highly, mutually implicated. In this I shall write of a third register in which Virtual Reality can be

¹⁶ For a more specific discussion of the precise social situation of cyberspace see Hayward, 1993.

¹⁷ At a talk given at The University of Technology, Sydney, on October 9, 1991,

¹⁸ Or, as Cornwell (1992:232) puts it, "The abstract idea of virtual reality can be frightening because it reminds us that *all* reality is illusory". According to Cornwell, this leads to an anxiety, a "fear of nothingness" (ibid.) which "sometimes leads people to try to impose safe limits on what virtual reality can or cannot be. These rules make little sense, however, when placed in the context of the potentially N-dimensional nature of virtual reality" (ibid.).

discussed, one that encompasses the first and the second and, in fact, gives them their potential. This is, of course, the machinic register as it has been described in the previous chapter. I shall argue that VR technologies arise, and will continue to arise, in any number of previously unthought actualisations. This is because there has been a profound series of shifts within the machinic, both virtual and actual, as regards the virtual itself. To sum this up, because of these shifts in the machinic, modulation is no longer a filter for a stable world but is applied to modulation itself, so that everything is taken up within this modulation of modulation. The threshold of perception, previously the unseen frame for a perceived 'stable' world, now frames itself, draws attention to itself as unstable and therefore as something that can be *operated* through like any other machine. Finally, the virtual flowers, not in its 'unreality' or transcendence, but in its immanent reality, also making it something through which we can operate.

Virtual Reality and the Threshold of Perception

I might as well take the period that follows the mechanical age and call it the virtual age...virtual because the accustomed grounding of social interaction in the physical facticity of human bodies is changing. (Alluquère Rosar le Stone, 1995:17)

Virtual reality expresses what might be called *the shock of the real immanence of the metaphysical*. We thought that the metaphysical lay 'beyond' us. Now we find it sticking to anything and everything and pushing us around. VR brings to an end the regimes of separation which would, through the operation of certain representations, deny the *interactive* reality of the virtual and actual in favour of a simple facticity of *stable* bodies and *fixed* states of affairs. Yet we are only at the beginning of the end of this regime. No doubt VR still awaits its own Bazin or

Kracauer who, as with their theorisation of film, would attempt to describe not the 'bizarre' or 'unreal' nature of VR but the way in which the real is *expressed* within it in a distinct fashion¹⁹. Here I will use Deleuze's discussion of the virtual in *The Fold* to begin to discuss what it is that is expressed in VR.

I shall not extensively discuss VR as a form of representation. There can be no doubt that VR can be used to tell stories, to extend subjectivities, or to imitate an action, but none of these are operations exclusive to VR. Moreover, theoretically at least, like abstract painting or much modern music, VR could just present "noise" without stories, or diagrams without beginnings, middles and ends. In addition, there is certainly something suspicious about Capital's potential ability to use VR to extend human subjectification through the imitation of an action into areas such as home banking and shopping²⁰. It comes as no surprise, for example, that William Gibson's version of cyberspace is ruled largely by banks and renegade cowboys. The treatment of technology on the basis of the imitation of an action has already been critiqued in the first chapter. Nevertheless, it should be reiterated here that even mimesis is never just representation according to Deleuze. It is always first and foremost a form of production. This productive aspect is also clearly described in Michael Taussig's book, Mimesis and Alterity (1993). For Taussig mimesis always involves contact. It produces changes in relations, and is therefore a tool or weapon, used to gain control. Espen Aarseth points out, with regard to the context of the hypertext, that the main goal of designers such as Brenda Laurel, rather than transparent access, is -

¹⁹ This is not to imply that VR only, as Bazin can be seen to imply as regards film, contains a form of real*ism*. Once again I am interested in what is expressed in the virtual(actual)/reality interaction, not in what is represented.

²⁰ In another context, Rheingold (1994:10) writes "I've been colonized; my sense of family at the most fundamental level has been virtualized". Rheingold's books *Virtual Reality* (1991) and *Virtual Community* (1994) give perhaps the best coverage of the actual technological and social developments in this field. The second, *Virtual Community* is considerably less 'starry-eyed' than the first and one can only admire Rheingold's commitment to a true virtual community, as exemplified in his net defence of the independence of the Internet.

...to be able to control what they call the plot. The user-character will be allowed some leeway, but by use of Playwright, an expert system with knowledge of dramatic structure...the situations and actions would be carefully orchestrated to fit its model of appropriate drama. (1994:75)

This is, in essence, as is Greek tragedy, not as far from a 'shoot-em-up and win' video game as one might like to think. It is certainly along way from those systems that Aarseth suggests "can be classified as indeterminate cybertexts" (ibid.). Mimesis always involves some sort of control. When imposed by the system itself it always involves stratification and subjectification within that system as a form of control. As Aarseth writes of Laurel and similar theorists, "it is hard not to see the potential for conflict between the user and this *deus in machina*" (ibid.).

How can we then conceive of VR outside of mimesis? If it does not, despite the hype about representation, merely represent the real, or *even* represent it effectively²¹, what does it do? What does it create? What does it indicate? Does VR express a shift away from an interest in representation to *operation*, as I have suggested? If this is so, what are the consequences for any notion of 'real*ism*', if the real and the virtual are in co-extension, or when a fundamental assumption of new machines is that the virtual operates on the real, as in VR? To what 'unreal' would such a realism be opposed?

VR creates a totality which (potentially) both overwhelms present perceptive thresholds and creates, rather than represents, a 'total *enough* world' within the world(s) at large. VR has obviously real affects on those worlds with which it interacts. It presents humanity for the first time with the possibility of the modulations of the virtual, previously operating below the general threshold of perception, *being seen* to overtake and disrupt our more 'solid' notions of our social

As Sally Pryor notes, "current state-of-the-art VR worlds are not convincing enough to be seriously confused with the 'real thing'. More importantly, the representation of 'reality' in VR is actually a highly specific view of the world, a view which unthinkingly assumes a Western tradition and ideology" (Pryor and Scott, 1993:168).

existence. In this, it instills a crisis in our normal, if false, dichotomy between reality and representation.

How then, can we approach VR? Firstly, it is necessary to take a machinic approach, as VR, as always, is a machine and the product of a machine *before* it is a technology²². As such it possesses a concept that traverses its plan(e). In this, it is important to remember that the -

...concept is not a simple logical being, but a metaphysical being; it is not a generality or a universality, but an individual; it is not defined by an attribute, but by predicates-as-events. (FLD:42)

The "predicate-as-event" of VR is the modulation of modulation. VR also possesses a machinic phylum²³ or technological lineage, which I would define as those machines which interact across different thresholds of perception so as to, firstly, draw attention to them, and, secondly, allow participation with, or operation through, them. For example, in VR, territorial thresholds can be modulated by both the telecommunications system globally (one can operate at great distances distance itself, large or small, is modulated), and the computer-body network locally (one can have access to the minute perceptions both of one's own body and of the computer in a manageable fashion). Information thresholds are crossed by the computer chip. Body/machine thresholds are crossed by augmented perceptual apparatuses, such as stereoscopic vision or even

²² Most of the technology for VR pre-existed it. VR as a technology is a specific multiplicity drawn together from previous technologies (such as stereoscopic vision, stereo sound, digital image processing, etc) so it is actually quite hard to pinpoint what is actually 'new' about the technology per se..

Deleuze and Guattari write of a "machinic phylum, or technological lineage, wherever we find a constellation of singularities, prolongable by certain operations, which converge, and make the operations converge, upon one or several assignable traits of expression" (ATP:406). The example they give is of the "iron sword, descended from the dagger" and the "steel saber, descended from the knife" (ibid.). The important point here is that each "phylum has its own singularities and operations, its own qualities and traits, which determine the relation of desire to the technical element (the affects the saber 'has' are not the same as the sword)" (ibid.). Manuel De Landa (1991) differentiates two aspects of machinic phyla. There is firstly that of "self-organization" which "include all processes in which a group of previously disconnected elements suddenly reaches a critical point at which they begin to 'cooperate' to form a higher level entity" (6-7). An example he gives is that of termites cooperating "to build a nest" (7). Secondly, there are "the particular assemblages in which the power of the processes may be integrated" (20).

just the now common computer interface. Representation/'reality' thresholds are crossed by the affect and the percept operating in one joined represented/real space. In all these, VR provides a massive amplification of potentiality and variation in the realm of the modulation of modulation itself. The threshold of perception is itself subject to a massive broadening of its own limits. In short, we are now brought to the knowledge of the *power* of modulation.

Extracting the World from the World

Of course, it is the amplification, control and the self-reflexivity of the virtual in VR that is at issue here, not the question of its originality. The technologies involved here in some ways merely actualise, in a new formal series, an older virtual machine, which could be called the world. For Deleuze, following Leibniz, the world is virtual, has always been, and this virtuality includes the whole world (FLD:51). The world is an infinite series (of folds or differentials) that permutates within extrinsic limits. For Deleuze, "the word 'virtual'....designates the unilateral character of inclusion" (52). This leads to the Leibnizian concept of an individual monad, each of which contains the whole world. This can be easily understood in reference to VR, where the technology itself is based upon an entire scientific understanding of extrinsic differentials of perception. VR is a matter of extracting the optimal degree of clear perception which effectuates the actual knowledge of a potential entire world (contained in cyberspace, the matrix, internet a simple disk or CD-ROM). The world of VR is virtual, then, in the sense that 'virtually', all the world is already there. Yet the individual in cyberspace has a perception which resonates with some of that world clearly, and other parts of that world less clearly. Some images in Gibson's novels of the 'matrix' give an adequate expression of this simultaneously clear and fuzzy perception of cyberspace. Gibson himself, as cited by Scott Bukatman, suggests that this may be

because he acknowledges that cyberspace is as much about unconscious formations as conscious. Bukatman quotes Gibson and writes that -

The books 'may pretend, at times, and often rather badly, to be about computers, but really they're about technology in some broader sense.' At the heart of Neuromancer lies the continuity of machines and history. 'I suspect that they're actually about Industrial Culture; about what we do with machines, what machines do with us, and how wholly unconscious this process has been, is, and will be (Bukatman, 1993:644)²⁴.

This is questioning what humanity, consciously or unconsciously, is crucially able to *extract* from the machinic world by operating through a perception of it. Deleuze writes in this regard that "Inclusion is virtual, Leibniz specifies, because it has to be extracted, and because the predicate is included in the subject only 'under a certain power'" (*FLD*:52). The degree of perception, provided by the threshold between the clear and the 'fuzzy', is the *power* under which the virtual world can be extracted. On a simple level, the perceptive extraction of the world is a matter of practices, of ethics, and being about affording perception, is also about art predicated upon the creation of percepts and affects. This predication is not "an attribution" but an "execution', an act, a movement, a change, and not the state" (53). In other words it is an event.

Perception itself is not representation, nor is it even the more complex mimesis of an action. It is much closer to what we have come to separate from the classical theatre as performance art (with 'real' time, pain, pleasure, etc) in its eventuality, as action, as event. For Deleuze, this event is the basis of conception. *Conceptions* of the world are also *perceptions* of it and concurrently forms of *production* which execute the extraction of clear *relations* within it.

²⁴ Gibson is quoted here from the "Author's Afterword" to the electronic edition of his cyberspace novels (Voyager, New York, 1992).

Relations themselves are types of events... Events in their turn are types of relations; they are relations to existence and to time. Included in the notion of subject is forever an event marked by a verb, or a relation marked by a preposition. (52)

There are also relations within relations and events within events, and the conceptualisation of this brings about the virtual age. For example, the world itself is a broad event/relation and all actions, perceptions within it are also events/relations within that borader event/relation.

...the world itself is an event and, as an incorporeal (= virtual) predicate, the world must be included in every subject as a basis from which each one extracts the manners that correspond to its point of view... (53)

Again it is VR that makes this perfectly clear, as a world of relations in which individuals may literally contain the whole world virtually (on disk or even in the simplest of interactive software, such as netscape, for example) but must relate to it in different ways to extract any smaller event. This is not only a question of being able to tell stories well²⁵, although it might be. It is also a question of which connections can be made, of the possibility *of* relation, of the possibility of allowing new events to occur and to interconnect with each other.

Once again, then, the aspect of VR that seems to characterise it as different from some other experiences is not the technology but its attitude to perception, not as a solid or stable representation but as a relation to an event. VR designers accept, with Deleuze, that -

...nothing authorises to conclude in favor of the presence of a body that might be ours, or the existence of the body that would have happened to affect it. There exists only what is perceived...while the phenomenon is what is perceived. (94)

²⁵ Which stories for a start? - those narratives of increased performativity that Lyotard (1984) points to as informing so much of our culture, and which certainly seem to have invaded computer mythology and sales.

It is the acceptance of the pre-eminence of this perception that characterises the way in which VR opens up the world of the virtual to us. In short, by accepting the virtual as part of the real, the virtual can be *generally* perceived and one can participate in relations/events.

There are two aspects to this perception as conceptualised in *The Fold*. The first aspect is the above mentioned, that perception is affect. Materially, when one considers sound vibrating the ear canal, light on the retina, signals in the central nervous system, this is something which seems obvious. But there is more to it than this. Affect is not uni-directional. It is an exchange of deterritorialised quanta. Perception for Deleuze's Leibniz was not something that "resembles an object" for a subject but something that "evokes a vibration gathered by a receptive organ" (95). A simple way of putting this is that pleasure and pain have an existence themselves as objectiles which interact with other objectiles. For Deleuze's Leibniz this interaction is a vibration and makes for a kind of harmony or disharmony. Thus a "pain resembles the movement of something pointed that would dig into my flesh in concentric circles" (ibid.). Pain is not, in other words, something that resembles a specific object, such as a pin. Neither is it as simple a matter as a representation to an apprehending subject. Perception, as an objectile, has its own existence. In short "resemblance is equated with what resembles, not with what is resembled" (96). Perception as interactive process, as with the percept and affect of art, contains more complexity than a simple relation between an object and subject. In short, with VR, as with all interaction, it is a question of a series of interactions between that registers, with each affect being regarded as its own processual micro-ecosystem. To put this another way, a becoming resembles only itself.

The second aspect of perception is that it has two levels, unconscious and conscious. Unconscious perception consists of minute perceptions, "being-for the world" (94). In Spinozan terms this is *affect* on a miniature and immediate level. With every glance our eyes 'capture' millions of percepts. Conscious perception, like VR design, is based upon "differential relations"

(ibid.). Conscious perception, rather than perceiving every moment of an affect, every moment of folding, perceives the 'differential' which describes and produces the fold or affect. Our eyes survey thousands of details; we see a 'person'. This 'person' is the product of a 'differential' that operates through the miniature details.

The Virtual is Difference

'Differential' here is both a mathematical and philosophical term. It refers in mathematics to differential calculus. Here, if 'x' represents a position on a horizontal axis and 'y' on a vertical axis, the figure 'dy/dx' can give the gradient of a curve predicated upon any change of position within these axes, no matter how large or small. The figure 'dy/dx' is thus also a way of describing infinitesimal differences mathematically²⁶. This is not, however, quite the case for Deleuze, who writes that it "is a mistake to tie the value of the symbol dx to the existence of infinitesimals..." because this refuses it "any ontological...value" (DR:170). For Deleuze, as the philosophical mark of a differential, -

The symbol dx appears as simultaneously undetermined, determinable and determination...In short, dx is the Idea - the Platonic, 'eibnizian or Kantian Idea, the 'problem' and its being. (171)

Here is the kernel of the theory of what Deleuze calls different/ciation. It explains how difference works through two series (dy and dx), and how it is undetermined but determining. As Deleuze writes, this is because "each term exists absolutely only in its relation to the other" (172). The

²⁶ In this a "system of difference must be constituted on the basis of two or more series, each series being defined by the differences between the terms which compose it" (DR:117). These differences between the two series are, in mathematics, the 'dy' and 'dx' as discussed, where 'd' stands for the difference which moves through possible positions of 'x' and 'y'. To give a simple example relevant to the fold the differenciator is the force that runs through a particular curved fold (in a curtain, in a body). This is not necessarily, of course, a regular folding.

differential is an expression of the in-between. Ideas are differentials, as is everything virtual (or dynamic). This is why thought always involves an *encounter* with an outside and, although difference is self-genetic, why thought's 'objects', its determinations (or actualisations), are not in themselves genetic. Rather -

...the reciprocal synthesis of differential relations as the source of the production of real objects - this is the substance of Ideas. (173 - bold, my emphasis).

"Ideas" in this early work will later be termed "concepts" in What is Philosophy?.

Deleuze also builds a theory of power into this notion of differential relations in that "variable magnitudes are taken to be functions of one another" (174). For Deleuze, "the differential is pure power, just as the differential relation is a pure element of potentiality" (175). What Deleuze values in the differential is not that it describes infinitesimal changes that cannot be measured in any other way. Rather it is that it enables an escape from a primary consideration of relations *only through objects considered in their identity*, or through their negation if an identity cannot be found. The symbol dx is therefore opposed to the "not-A" (170) of philosophy ²⁷.

Philosophically, then, the differential gives us the beginning of an understanding of the in-itself of difference. This is carried further with the "differenciator" in *Difference and Repetition*, Deleuze remarks that -

...difference must be articulation and connection in itself; it must relate different to different without any mediation whatsoever by the identical, the similar, the analogous or the opposed. There must be a differenciation of difference, and in-itself which is like a differenciator...by virtue of which the different is gathered all at once rather than represented on condition of a prior resemblance, identity, analogy or opposition. (117)

²⁷ Where identity is based upon assumptions such as 'A equals A', 'A does not equal B', etc.

The 'differenciator' is a way of describing the internal dynamics of that process of folding itself. It is an expansion of the notion of the differential which provides a way of understanding the *coherence* of heterogeneous systems and the way in which this allows them to produce or express.

This state of affairs is adequately expressed by certain physical concepts: coupling between heterogeneous systems, from which is derived an internal resonance within the system, and from which is derived a forced movement the amplitude of which exceeds that of the basic series themselves. (ibid.)

This is, of course, also a way of theorising the coherence of interactive systems, especially as they produce, not the same old story, but difference. In a subsequent attempt to give a more complete expression of the problematic of difference, Deleuze invents the term 'different/ciator'. The different/ciator exceeds the mathematical use of dy/dx to express some of the specific coordinates of this problem at certain moments, of a specific expression of the moment of a gradient of a fold, for example. Deleuze uses the term 'different/ciator' to provide a broader means of understanding the virtual and the actual within a framework of difference as both productive and produced.

We call the determination of the virtual content of an !dea differentiation; we call the actualisation of that virtuality into species and distinguished parts differenciation. It is always in relation to a differentiated problem or to the differentiated conditions of a problem that a differenciation of a species is carried out, as though it corresponded to the cases of solution of the problem.(207)

The virtual is, then, the realm in which the totality of differential relations coexistence. The latter are produced by particular problems set up by heterogeneous series²⁸. The actual is the

²⁸ To recapitulate, for Deleuze, the virtual -

realm in which these are actualised through differenciation into particular differences. The differencial comes into existence in the virtual. It operates in both the actual (through differenciation - the production of specific states of affairs) and the virtual (through interaction with other differencials, other heterogeneous series). What we have come, in the present, to call 'Virtual Reality', then, can be seen, at different moments, to present us with both the virtual and the actual in the way they have been described here. It is the specific differentials that remain crucial, however, in both the virtual and the actual, as it is the differentials that both produce and operate in the threshold between different virtuals on the one hand, and the virtual and the actualisation of its specific cases²⁹ on the other. The operation of the differentials forms the two parts of difference, namely that of differenciation and differenciation. Deleuze suggests that "in order to designate the integrity or the integrality of the object we require the complex notion of differenc/ciation" (209). This means that "every object is double without it being the case that the two halves resemble one another, one being a virtual image and the other an actual image" (ibid.).

The virtual, as a necessary part of the object, is therefore absolutely real, but this is in the sense of a reality which is constantly different/ciated and produced as different/ciated.

..is opposed not to the real, but to the actual...is fully real in so far as it is virtual...'Real without being actual, ideal without being abstract'; and symbolic without being fictional. Indeed the virtual must be defined as strictly a part of the real object - as though the object had one part of itself in the virtual into which it plunged as though into an objective dimension...far from being undetermined the virtual is completely determined. When it is claimed that works of art are immersed in a virtuality, what is being invoked is not some confused determination but the completely determined structure formed by its genetic differential elements, its 'virtual' or 'embryonic' elements. (DR:209).

Here we again see evidence of a slippage of terms (Deleuze himself is here correcting his own previous opposition of the virtual and the real) in the discussion of the abstract which will later come to mean something quite similar to the virtual. The point remains clear, however. The virtual is not a confused realm, but a precise genetic realm.

²⁹ Deleuze writes that

^{...}the genesis takes place in time not between one actual term, however small, and another actual term, but between the virtual and its actualisation - in other words, it goes from the structure to its incarnation, from the conditions of a problem to the cases of solution, from the differential elements and their ideal connections to actual terms and diverse real relations which constitute at each moment the actuality of time.(DR:183).

For an understanding of perception, different/ciation is crucial. It allows for a notion of perception based upon difference and change rather than upon identity and stasis. For example, as discussed, the differential creates a kind of threshold between molecular, unconscious perceptions and Molar, conscious perceptions. These two levels of perception, unconscious and conscious, though thoroughly interdependent, are quite different operations which form two heterogeneous series. Yet once again, as with the abstract machine and the concrete assemblage, there are no absolutes. What might provide a heterogeneous series of minute perceptions for a cell of the body might provide a differential for a molecule in that cell. What provides a moment of perception for a muscle might be the result of a differential of many cells' heterogeneous, minute perceptions.

The implication of this is as follows. That which we normally see as perception, perhaps of the 'same' or the 'identical' is in fact a differential operation at the threshold between these two forms of perception, which extracts a "clear zone of perception from minute, obscure perceptions" (FLD:96). It is this very understanding of perception which forms the basis of VR-namely that one does not have to reproduce an exact representation of reality in order to make reality work, one just needs to provide the broader differential relations between heterogeneous series. Beyond this, however, what Deleuze, through Leibniz, is suggesting here is that all perception is based upon this extraction of a clear zone of perception from fuzzy perceptions by a virtual differential. This whole operation itself is now able to be clearly perceived. We now know that we all already live in the virtual as well as the actual. As previously noted, in some ways all VR does is give us the shock of realising how close the metaphysical is to us. It shows us that the metaphysical inheres within the relations of our bodies. At the deep levels of both virtual and actual, this shock indicates that we are increasingly aware of relations of difference, of the way in

which everything seems interconnected and interactive, and at the same time endlessly individuated because everything is a multiplicity.

The Differential Relation does not exclude Individuation

Individuation - as a process - is the specific actualisation of the different/ciations of the virtual. As Ideas are *active* - creative as well as created - they are formed between series in differentials as "problematic or perplexed multiplicities" (*DR*:244). Actualisations are the multiple 'solutions' to these problematics, produced within the "intensities" of "implicated multiplicities" (ibid.). In other words, they are produced in the way that bodies interact to form new bodies. These bodies are intensifications of relations. In this, "Intensity is the determinant in the process of actualisation. It is intensity which dramatises" (243).

The seat of this process is given another account in Deleuze discussion of Leibniz's monads, although Deleuze (as shall be discussed shortly), at the end of *The Fold*, expresses a desire to turn Leibniz's "monadology" into a "nomadology" (137). For Deleuze's Leibniz, the construction of perception within itself (resemblance with what resembles) explains in part the ability of the monad to be both self-enclosed and to contain the entire world. The monad is like a house with two levels. The upper, the level of the 'soul', is completely enclosed, and perceives only its own projections on its own interior folds. The lower, more closely identified with bodies, has windows, and in a sense opens out onto the world. There is of course, in Deleuze's account, intermingling of body and soul, and of the two levels. This reflects the way in which minute perceptions (of the body) and macro perceptions (of the soul) are dependent upon each other for definition. For Deleuze, in Leibniz' texts -

...the expressed (the continuum of differential relations or the unconscious virtual Idea) should be in itself distinct and obscure: for example, all the drops of water in the sea like so many genetic elements with the differential relations, the variations in these relations and the distinctive points they comprise. In addition, it seems that the expressor should be by nature clear and confused: for example, our perception of the noise of the sea, which confusedly includes the whole and clearly expresses only certain relations or certain points by virtue of our bodies and a threshold of consiousness which they determine. (DR:253)

There is, therefore, once again a threshold of perception between "distinct and obscure" (micro perception - the unconscious) and "clear and confused" (macro perception - the conscious). For Leibniz' monad this is realised in a severing of an inside and an outside, which, as with Baroque architecture -

...can be defined by this severing of the façade from the inside, of the interior from the exterior, and the autonomy of the interior from the independence of the exterior, but in such conditions that each of the two terms thrusts the other forward. (FLD:28)

Again VR literalises this for us in some of its forms of content and expression. There is a body and technologies, computers, levers, hands on triggers at the 'lower' level. There is a 'closed room' connected to it at an upper level, be that inside a VR helmet with computer generated projections on its walls and sounds vibrating in its earphones, or the 'blacked out' cockpit of some of the more recent fighter planes.

What defines a monad in terms of perception is the clear zone of perception this whole machine gives it. Though the whole world is present within and available to the monad most of it

is not clearly perceived. The remainder is noise³⁰. The minute perceptions are there but not dominated by a differential into consciousness.

Each monad not only defines itself through, but draws its power from, its ability to actualise (in the soul) and realise (in the body) its own clear expression of the world. Another way this is put is that it finds accord or harmony, in the form of a differential, between different vibrations. A monad *expresses* this accord on a virtual *and* an actual level. Or alternatively, by applying a differential, the monad literally folds the world, and in a sense creates both soul and body as a particular fold of that world. Thus the degree to which the monad can realise and actualise itself through its ability to fold through the differential *is* its power. *The folding is the event that creates a form of power*. The body is the fold's realization and the soul its actualisation³¹. However, as with the abstract machine and its effectuating machines, neither the soul nor the body should be considered to be the same as the event (*FLD*:105).

Following on from this, pain can be considered to be a lack of harmony (the refusal of the differential or the grating of heterogeneous series without a different/ciator) and the challenge is to bring harmony out of pain (the creation of acknowledgment of a satisfactory differential, such as, for example, a new concept). Harmony "explains the correspondence between each soul and the material universe" (106).

The more harmony there is the larger (literally) is the zone of clear expression, as harmony is another way of expressing a differential or fold. The ethical task is once again to increase harmony, to increase the clear zone of expression, the expressive power. This is so even in

³⁰ This is, in fact, the aim of, for example, the blacked-out cockpit, that is, to extract the necessary clear perceptions from a very high level of 'noise'. The more general problem in the modern world, one solved by VR, is not one only of perceiving the world accurately but of being able *not* to perceive the world's many perceptual bombardments, of defining an effective upper level to the 'monad'.

Once again, the terms slide a little in Deleuze's work. He writes that "...there exists an actual that remains possible, and that is not forcibly real. The actual does not constitute the real; it must itself be realised, and the problem of the world's realisation is added to that of its actualisation...The world is a virtuality that is actualised in monads or souls, but also a possibility that must be realized in matter or in bodies..." (FLD:104).

bringing discord into harmony, in producing a harmony of apparent discords. Territorialisation on a Major such as the State or Capital, on the other hand, will reduce the clear zone of expression, the expressive power of what can be extracted from the virtual in all the power of its differentials. It can be seen that these ideas relate strongly to Deleuze and Guattari's other ideas about the machinic being interconnective and interactive, about the productive which increases connection and the antiproductive which limits the clear zone of expression or perception which may be extracted from the general noise. More especially, what becomes "universal harmony" in *The Fold* relates very strongly to Spinoza's spiritual automaton, which can affect and be affected by more and more of the world because of the harmony between ideality and material objects³².

An Aristotelean dramatic model will not necessarily give this ethical impetus. This is at least true of the model of *The Poetics*, with its neat beginnings, middles and ends, especially as interpreted by some theorists such as Laurel this century, who see the 'imitation of an action' as something that neatly separates representation and life, mimesis and production, the copy and the copied. This representative, dramatic model, as used by those such as Laurel, both underlies, and at the same time cannot come to grips with, a general cultural crisis about the status of representation as brought about by such technologies as VR.

What is proposed here is that performance models - a bringing of harmony without sacrificing the difference inherent to disharmony - provide a much better method of understanding VR's machinic consistency and its potential productions. They enable us to counter-actualise the events and productions of VR.

³² To recall, by "spiritual automaton" Spinoza means the manner in which "a true idea...shows how and why anything is or is made, and that its objective effects proceed in harmony with the formality of its object." The soul, in other words, "acts according to certain laws and resembles a spiritual automaton" (Spinoza, 1910:255). This accord between true ideas or the soul and the body and its affects is the basis of the process whereby an increased understanding results from increased interaction.

John Cage, for example, attempted to expand harmony infinitely in his music, by making all 'noise' music simply by shifting the thresholds by which music was perceived. He often told the story of being told by Schoenberg that he had no feeling for harmony, and that he would reach a point in his creative life where he would come up against a wall that he would not be able to break through (Cage, 1990b). He decided, since he had dedicated his life to music, that he would keep hitting his head against that wall. Eventually, he found himself thrown back away from that wall and considering the space that lay all around it (that is, around conventional, or even at the time non-conventional, harmony). Towards the end of his life³³ I heard him say that he finally felt that he was finding harmony - something he has not expected since the discussion with Schoenberg. This was during a discussion accompanying the performances (in London) of his Europeras 3 and 4, in which 'harmony' consisted of two pianists playing operatic overtures, 12 old 78rpm record players with operas playing and several singers singing arias of their choice simultaneously, in combinations determined by chance operations. Cage's understanding of harmony here is a new concept of harmony - not the same as previous concepts, a new conglomeration of composites, the allowance of a different/ciator of great magnitude. His conceptions of silence³⁴, of interpenetration and unimpededness and so on, enabled him to develop a new process of different/ciation. Going around that wall effectively tore the wall down for him. His new conception of harmony (the concept of silence) broadened his (and our) zone of clear expression immeasurably. And when it is said that he created new concepts, this is meant in precisely the manner described by Deleuze and Guattari by which concepts are created, quoting Leibniz as saying "I believed I was entering the harbour, but I am thrown out on the high seas" (OO:27 - my translation). A new concept throws one to the high seas and also enables walls to

³³ Whilst speaking in London in 1990.

³⁴ For Cage, 'silence' was only silent when we chose not to hear it. For Cage, there was no part of the (often repressed, as in the spaces between the chosen musical notes of a composer's score) silence which could not become music if it was brought into a zone of clear expression.

be torn down because it can expand the extension of the zone of clear expression so much. According to Deleuze and Guattari this makes Cage a philosopher as well as an artist because whilst an artist creates percepts and affects (154), only philosophers can create a concept. To recapitulate, a concept here defines itself by -

...the inseparability of a finite number of heterogeneous components traversed by a point in absolute flight, at infinite speed... (26 - my translation)

The concept then, like Cage's music, combines a number of components into a kind of philosophical machine which is actual (it is a point) but works at infinite speed like the differential in *The Fold*.

Once again we conclude that *an ethics of interaction is in interaction itself*, in pursuing interaction beyond its present limits, and sustaining new potentialities of interaction, building new machines, whether they are artistic or philosophical. This is a constant movement of expansion of interactive possibilities. Yet it is not a colonial expansion. It does not constantly search for new territory to submit to a despotic 'interpretation'. Rather it seeks more interactive involvement in the immanent - in the difference at hand. Whether or not VR imitates actions is somewhat inconsequential compared to the ways in which it too involves interaction, expands it, or limits it, what machines it connects with or disrupts. It may be, for example, that the telephone system, if it is more interactive, will always be more exciting than a 3-D narrative when it comes to how we define 'virtual reality'.

How do we Express Expression?

Once again, we see that VR, even in the early forms by which we began to become conscious of it, such as elements of Leibniz's philosophy, indicates a *shift in our threshold of perception as*

regards the threshold of perception itself. It is the sweep of new machines (machines of control perhaps but also machines leading to different, perhaps broader harmonies - the two are related), of new organisations, new differentials. VR is not there to tell new stories, or even to enhance communications³⁵. It is an effectuation of a change in the nature of the perception of the threshold of perception. Understanding VR technology is secondary to understanding its machinic indices as regards perception, and perhaps Rheingold is right to compare it to primitive performances in the Lascaux Caves.

Perhaps the reason that VR foregrounds the perception of the threshold of perception is that it expresses the obvious way in which the body and 'soul' need each other *in order to express the world*. In terms of perception there are no differential or macro perceptions without microperceptions. There is no perception inside a helmet or cockpit without the vibrations of the physical world, the hand touching the inside of the glove, or even the synapses and computer connecting in Gibson's novel. VR is not an escape from the body, any more than (probably less than) television. VR is merely reconfiguring the relations between micro and macroperceptions, bringing to light the possibility that these relations are subject to change, and that different social machines, different conceptual apparatus may make it possible to have different bodies, different souls, or different zones of clear expression without always having to submit them to a Major reterritorialisation.

There are at least two possible ways for these relations between macro and micro perceptions to be reconfigured which are of relevance to VR. The first is one in which the body is

³⁵ More communications will not exist without increased thresholds of perception, differential mechanisms that will filter a harmony from them - a filter that is called the "vinculum" in *The Fold* (110-111).

³⁶ By 'soul', here I mean the incorporeal component of our individuation. Put more crudely, it is that, which through both its coherence *and* its incoherence or ability to shift with consistency, enables us to have an *idea* of ourselves. Put differently, if our bodies are a series of actualisations, our souls are real as a series of virtualisations. I do not of course, refer here to any inner residing spirit relating to a transcending beyond. In more Foucauldian terms, of course, this soul is socially and materially formed within political processes, like anything else.

deterritorialized - for example its movement's significance is removed from its position in a small space and shifted to a virtual space of any 'size', which is largely perceived through the head (the eyes and the ears) and is therefore a kind of reterritorialisation of the body on to the face (ATP:181). This often consists of an enhanced way of seeing, of determining significations. The second way in which the micro and macroperceptions can be reconfigured is in conceiving of virtual worlds not as enhanced representations in this way but as "smooth spaces". In this model, rather than the face, it is the haptic³⁷, the use of the whole body which becomes the more important, and more nomadic, means of negotiating the space.

...smooth space is directional rather than dimensional or metric. Smooth space is filled by events or haecceities, far more than by formed and perceived things. It is a space of affects, more than one of properties. It is haptic rather than optical perception. Whereas in the striated forms organize a matter, in the smooth materials signal forces and serve as symptoms for them. It is intensive rather than extensive space...Perception in it is based on symptoms and evaluations rather than measures and properties. That is why smooth space is occupied by intensities, wind and noise, forces, and sonorous and tactile qualities, as in the desert, steppe, or ice. The creaking of ice and the song of the sands. Striated space, on the contrary, is canopied by the sky as measure and by the measurable visual qualities deriving from it. (479)

Of course, both the haptic and the optical are combined at the moment in VR, but it may be that the domination of one over the other is a matter of how the politics of VR are configured within general politics of representation or nomadism. It is a choice between the measuring sky and the "song of the sands". This is, of course, a choice that must constantly be made and re-

³⁷ This relates both to the sense of touch and to the body's interior sense of its own movement.

made. However, to qualify this, it is not always a matter of the literal haptic³⁸ or the optical³⁹, as the former can sometimes serve to striate space, whilst the optical can also reinstate the smooth, "liberating light and modulating colour, restoring a kind of aerial haptic space" (ibid.). It is a question of deciding whether smooth or striated space is presupposed in the use of the haptic or the optical; of whether the lines followed are "abstract" or nomadic lines (that Deleuze and Guattari equate with art) that pass "between points, figures and contours: it is positively motivated by the smooth space it draws". Or, on the other hand, is the space of VR going to be subject to "concrete lines", which are motivated by "a feeling of anxiety that calls forth striation" (496-497).

Even the fact that VR as a technology enables an 'image-ining' of a constructed world in a quite remarkable way is secondary to these considerations of the smooth and the striated in the formations of virtual space. In all this there is, perhaps, a choice and interaction between nomadism and anxiety. For, as Deleuze writes when discussing Spinoza, imagination diminishes its own object over time - that is, what seems at first the magical assertion of the "presence of its object" (EPS:295) soon enters into a kind of "vacillation", and thus the "process of imagining an object thus contains within it the principle of its own dissipation over time" (ibid.). In short, any magic to VR's representational illusions will soon disappear. Then the considerations of how it functions, what it does, will commence in earnest.

³⁸ And what Deleuze and Guattari also call "close vision" (*ATP*:496). Close vision is a way of determining the eye as more of a participant in the haptic than the representational. For example, in close vision, as when one sits too close the screen in a cinema, 'perspective' is lost.

³⁹ Also "distant vision".

The Virtual, Aesthetics and Subjectivation

This consideration of VR leads to a more general question regarding interaction. Is the body generally repressed within the new machinic by a new 'subjectifying soul' as much as it has been within previous machinic 'ages'?

More positively, it is a matter of how much 'new souls' of subjectivation can be developed in order to express the percepts of a 'new body'. This soul, as the incorporeal expression of individuation, arises from interactions between bodies in the first place, which in turn are produced by the events which inhere within them. As such, the body and the soul are, of course, interdependent. Nevertheless, the body *appears* in the world of the 'soul' as an other - as the intrusion of the multitude of heterogeneous microperceptions in the harmony of macroperceptions.

With the union of the soul and the body, the other who now springs forth amid my effects - in order to throw them topsy turvy - is the animal, and first of all the little animals inseparable from the fluid parts of my body, insofar as they become foreign to me as they had formerly been..."our body is a type of world full of an infinity of creatures that are also worthy of life." The animals that I meet outdoors are nothing but an enlargement of the latter. (FLD:109)

Paradoxically to enable the expression of a 'new soul' in new technologies to begin it may be necessary to 'become-animal', and to understand now how what Deleuze and Guattari refer to in *A Thousand Plateaus* as "becoming-animal" relates to other becomings-minor and becomings-molecular. All are attempting to broaden the extension of the clear zone of perception, the resonance with the world, and of *a world that starts with the microperceptions of the body*. One can see why Beuys' animals are so important to him, why talking to a dead hare

about art, considering the hare, the bee, and so on as perceptive, and resonating with them, can relate to his idea of 'social sculpture' as a broader interconnection of actions, a happening which must always involve a becoming-animal on the level of the percept. It is precisely away from transcendent 'truths' and unifying subjectivities to such becomings-animal that one must move in order to then become-molecular. One must become more and more specific in order to know the world - or rather to resonate with it. One can understand here the specificity of Cage's work, and why following nature "in her manner of operations" (Cage, 1990b) means introducing elements of chance which molecularise the whole aesthetic process, throw it open to the full specificity of the entire world; at that moment.

One can also begin to understand the function of pain in performance, not as masochism (someone such as Stelarc rightly denies any such psychoanalytic or mystical purpose to his suspensions from hooks) or sensationalism but a way of clearly expressing and "resolving dissonance" (FLD:131). Once again this involves a broadening of the zone of clear perception, of the threshold of which pain is the signal and therefore entirely legitimate material for artistic practice when this is directed towards an extension of expression. State art simply refuses to cross or even approach its limit and instead demands the negative masochism of identity in confirmations of limits about which it pretends not to know, of clear separations between things such as representation and life, the copied and the copy. The classical theatre, for example, demands naturalism, but never the shifting real.

The artistic use of pain to *cross* limits in the work of artists such as Abramovic and Ulay is specifically differentiated from this kind of contractual Majoritarian masochism⁴⁰ because in masochism, according to Deleuze's account (*CC*), the point seems to be to *reaffirm limits*, in fact, to contract them out to a 'third party' in order to have them reaffirmed. As opposed to this,

⁴⁰ I am indebted to my colleague Nick Mansfield for an understanding of masochism and culture, about which his book should soon be published. This is not to say that he would be in agreement with these points.

an artistic use of pain is that which seeks to break the rules of the game. While it is important for masochism to *maintain* the fantasy against reality and against the danger of the return of the father, the artist, on the other hand, uses pain to contact reality and to dismantle the father. When pain is understood this way, both in performance, and in the crossing of the barrier of conceptual pain brought on by some new technologies, it can point the way to new contacts with the world, and to the dismantling of oppressive social contracts.

The resolution of dissonance is tantamount to displacing pain, to searching for the major⁴¹ accord with which it is consonant. (FLD:131)

Harmony here, as opposed to the unities and identities which State art and masochism assume, is a harmony between differences. The harmonic different/ciator in nomad art practices describes the relations between series, the process of each remaining intact. It can provide a harmony between dissonances without always resolving them. Pleasure and pain are intrinsically related in testing this harmony's limits. In short, "harmony has many formulas" (132). According to the formula of The Fold, and in the promise of VR, such notions as the action, or even simple stories are like melodies which come after, not before, the creation of a harmonic plane of consistency. In other words, stories, like melodies, only have their uses later, when they interact with other harmonic elements. The Fold suggests, in fact, that at this point there can be a "harmony between harmony and melody" (135). This in turn suggests a possible place for the mimesis of an action within broader considerations of interactions.

At its limit the material universe accedes to a unity in horizontal and collective extension, where melodies of development themselves enter into relations of counterpoint, each spilling over its frame and becoming the motif of another such that all of Nature becomes an immense melody and flow of bodies. And this collective unity

⁴¹ Once again a slippage of terms. The "major accord" here is one which can tolerate dissonance as harmony. Again the work of Cage is exemplary.

in extension does not contradict the other unity, the subjective, conceptual, spiritual, harmonic, and distributive unity. (ibid.)

Melody (or story, or action) is a realisation in extension of the intelligible (interactive harmony) to the sensible (vibrating bodies and matter). At this point it makes sense to talk about an action, or even mimesis, not as explaining or copying, but as resonating, and expressing.

Harmony and melody, interaction and action are confounded in technologies such as VR or work such as Cage's. The perceptual threshold is so thrown by the dynamic of the diagram's effectuation that it is hard to tell the difference between vertical harmonies and horizontal melodies. This is the point at which Deleuze says that our world differs from that of Leibniz, and new tonalities are required (such as Cage's, Glenn Branca's, or for that matter punk music or bands such as Sonic Youth's, to give just musical examples) which accept dissonance.

In this, our playing with the perception of the virtual is moving us all from "monadology" to "nomadology".

...it could be said that the monad, astraddle over several worlds, is kept half open as if by a pair of pliers.

To the degree that the world is now made up of divergent series (the chaosmos),...the monad is now unable to contain the entire world as if in a closed circle that can be modified by projection. It now opens on a trajectory or a spiral in expansion that moves further and further away from the center ... overtake monadology with a "nomadology". We are discovering new ways of folding, akin to new envelopments, but we all remain Leibnizian because what always matters is folding, unfolding, refolding. (137)

To sum up, by following Deleuze and Guattari's accounts of the virtual, the machine and technology, we can begin to assume that the "Virtual Age" has only just begun. Until we begin

to participate in its machining of the modulation of modulation itself more freely, and with less anxiety, we will not be able to convert our monadological lack of an outlook into a nomadological participation in the outside. Finally we are in a position to invoke a Deleuze-Guattarian theory of interaction in both the use of technology and performance. This will be done in the next chapter.

Chapter Eight

"n - 1" Interactions, "n - 1" Ethics

You invent self-destructions that have nothing to do with the death drive. Dismantling the organism has never meant killing yourself, but rather opening the body to connections that presuppose an entire assemblage, circuits, conjunctions, levels and thresholds, passages and distributions of intensity, and territories and deterritorializations measured with the craft of a surveyor. (ATP:160)

Most important obligations and passions in the world are unchosen; 'choice' has always been a desperately inadequate political metaphor for resisting domination and for inhabiting a livable world. Interpellation is not about choice; it is about insertion. It is past time to put our reading practices into action. (Haraway, 1992a:42-43)

Balancing Deconstruction and Construction

An ethics of interaction necessarily involves a pragmatic balancing act. One must dismantle those connections which are antiproductive and enter into productive connectivity. At the same time, however, there must be enough of the organism, significance and subjectification to keep operating within the social assemblages that depend on them. For Deleuze and Guattari the outside to the social machines must be produced and maintained from materials drawn from

these very same machines. In this there is an extent to which one temporarily needs the organism, in part as a protection against the *extremity* of the forces of interaction. This whole double process is the same in reverse in the establishment of a minimal existential territory in the face of Capitalism's accelerating power of deterritorialisation.

The necessity of both sides in this whole process is one derived not from an ideal ethics but from pragmatic ethics in what is now an unavoidably, and increasingly, interconnected world. This is not just a matter of networked technologies. It is also, as discussed in the previous chapter, a matter of the way in which the world is awakening from an unconscious State to the interaction by which it has always been underwritten. This underlying interactive principle of the world may be summed up, in Deleuze's words, as "Everything is always the same thing, there is only one and the same Basis, and: Everything is distinguished by degree, everything differs by manner" (*FLD*:58). Everything is different *and* one, not because everything is the Same or derived from a controlling 'God' but because everything can eventually be connected to everything else, transformed by everything else; the wind, the rock, the sea - even the most paranoid and the most nomadic social assemblages. *As such interactivity in itself is not an ethical choice that can be made. It is the very basis for subsequent ethical choices.* It is an unavoidable condition of existence and of the expression of existence.

If everything expresses itself though interconnection, the first implication of this is that "becoming is always double" (ATP:305). Any interaction affects both (or all) sides of the interaction. For example, it is impossible to 'merely' imitate something, without changing it, without interacting with it. This is why all interactions involve production rather than mere

¹ A brilliant example of this is given in the film *Babe* (1995) in which a pig wishes to become a sheepdog. It's 'becoming-sheepdog' however, involves not an imitation of sheepdog's or even a physical impersonation of them. Rather the pig changes what it is to act as a sheepdog (and institutes a much more benevolent system of getting the sheep to do what they are supposed to do in the process). This also changes the lives of the sheepdogs in the film. Neither pig nor sheepdog are in the same position they were in at the beginning. They have not of course, merely swapped positions either.

representation (when the latter is considered as an active depiction of a passive object or scene). The second implication of interconnection is that all interactions, such as, for example, between the wind and the rock and the sea, always paradoxically involve a form of disconnection, a process of unfolding according to a new differential. There is always some form of deterritorialization in interaction, of the dismantling of previous assemblages and the setting free (at least temporarily) of nomadic elements such as the vibrations of music, grains of dust from the cliff face, vapor from the sea. Human beings themselves are only *one* of these potentially nomadic elements, which is why "the question in music", and interaction generally, particularly as it involves the arts, "is that of a power of deterritorialization permeating nature, animals, the elements, and deserts as much as human beings" (309). In this the war machine - the nomadic - is ubiquitous. All "collective bodies" have "fringes or minorities that reconstitute equivalents of the war machine" (366).

If, then, human beings are *only one set of elements* within a shifting series of interactions, as the current ecological crisis so dramatically demonstrates, an ethics of interaction will be highly contingent. Even the 'nomadic' itself can possess a shifting ethical value when considered from the point of view of the enormity of possible interactions with which it is involved. This is another reason why an ethics of interaction is not identical with *any* interaction per se. For example, using the US liberal language of democracy, Rheingold points out that there is nothing inherently ethical about interactive technologies. Writing about new communications networks, Rheingold warns that people who idealise the inherent interactive potential of these networks "without specifying the hard work that must be done in real life to harvest the fruits of that democratizing power,...run the danger of becoming unwitting agents of commodification" (1994:286). More generally, as I have previously noted, Deleuze and Guattari write that -

...smooth space and the form of exteriority do not have an irresistible revolutionary calling but change meaning drastically depending on the interactions they are part of and the concrete conditions of their exercise or establishment. (ATP:387)

In fact, as Moulthrop points out, it is the 'interface' between the smooth and striated, the plan(e) of interaction between them, that often provides the plane of a possible "site of resistance" (1994:300)². One must always begin in the middle, and not, as one may have thought, immediately position oneself in the smoothest, or the most nomadic of spaces.

Enhancing Interaction

It would be a mistake, then, to identify ethical interaction too readily with Deleuze-Guattarian concepts such as the nomad, the rhizome, and particularly the war machine. There is always a parallel dynamic of lines of flight and capture that must be considered. To put this simply, both double becomings and deterritorialisations must attain their own sustained plan(e) of consistency, escaping from the planes of organisation of Capital and the State, to be of the most use³. The

The dream of a new culture is a fantasy of immanent change, or as Gilles Deleuze and Félix Guattari put it 'smooth voyaging': 'Voyaging smoothly is a becoming, and a difficult, uncertain becoming at that. It is not a question of returning to preastronomical navigation, nor to ancient nomads. The confrontation between the smooth and the striated, the passages, alternations, and superpositions, are under way today, running in the most varied directions' [Deleuze and Guattari, 1987:482]. It is precisely this 'confrontation between the smooth and the striated,' between two fundamentally different cultural registers, on which I want to focus in order to explore the interface between information technology and culture. This interface is in many ways a site of resistance, for the smooth and the striated can at times manifest an almost dialectical opposition; but it is also a place where polemics predicated on this apparent dialectic necessity break down. In examining the nature of this failure we may come to a better understanding of interactive media and how they are implicated in our neocultural dreams. (Moulthrop, 1994:300)

² Moulthrop writes that -

³ Guattari schematises this in *Molecular Revolution*, writing that interactions "represent the reverse of redundancies" (151). A redundancy, a term taken largely from linguistics, and like surplus value in economics, is something 'left over' that can be used; for example, it is something that remains deterritorialised after the formation of a molar assemblage. An example Guattari gives of a "diagrammatic" redundancy is that of the "blueprint" (154). It can be seen that interaction and redundancy are both processes which could occur to the same deterritorialised and reterritorialised quanta. Interaction is a matter of connection between the fluxes of redundancy. Guattari provides a four-fold formula whereby the nature of

creation of this plan(e) sustains the potential of ethical events. These enable the production of difference. However, once again this difference must subsequently be evaluated in terms of the new relations and possibility of relation it produces.

It is because of the complications within Deleuze and Guattari's understanding of difference that it is not, as it is in some other philosophies such as Derrida's, or as it has been championed in institutions for years now, a simple ethical value in itself. Part of the radical nature of Deleuze and Guattari's understanding of differences, and of the interactions between them, is the way in which they also form parts of many assemblages which seem reactionary. For example, deterritorialization lies at the heart of the Capitalist machine, and various lines of flight can easily lead to fascism, madness or death, none of which, unsurprisingly, is thought to be a very useful ethical formation from a Deleuze-Guattarian point of view. They are very careful to analyse such processes. Indeed, such analyses of the relation between desire and forms of expression such as fascism, lines of flight and forms of deterritorialisation-reterritorialisation such as Capitalism are. as Foucault points out in the introduction to Anti-Oedipus, a major part of their project. They are also, to take another example, deeply suspicious of drug use as a practice in itself, whilst in favour of the kind of discoveries that can be made there. It would be preferable, ethically, for them, to "succeed in getting drunk, but on pure water,...in getting high, but by abstention" (ATP:286) in order to make these discoveries. This is because by doing so one always begins in the middle, not making the mistake that drug users make, even when quitting, of starting "over

the interaction between interaction and redundancies can be determined according to whether interactions and redundancies are moving at negative speeds (that is, an action is relatively reterritorialising or reterritorialised) or positive speeds (that is, their actions are relatively deterritorialising or deterritorialised). If the speeds of both interaction and redundancy are negative this gives a "cold' stratification (for example, palaeolithic society)" (ibid.). In "palaeolithic society" there is little sustained interaction outside of basic survival. Interaction at negative speed and redundancy at positive speed produce "lines of abolition or lines of return", as in the dynamics of "fascism". The interaction of positive speeds of interaction and negative speeds of redundancy "produces lines of escape" (as in capitalism). The ethical highlight is when both speeds are positive. Here the machines really open out to the creation of a new plan(e) and there is an overwhelming of "the opposition between redundancy and interaction" (ibid.).

again from ground zero" (ibid.). It is in the middle that one finds interaction, not in negation. The nomadic problem and task is that of the *relay*, not of building a new model from scratch (377).

This can be better understood if other ethical values are added to difference. Perhaps the primary of these for Deleuze is the constancy of expression through interaction, which forms the basis of his interest in Leibniz and Spinoza, in whose philosophies, according to Deleuze, expression "organizes their theories of God, of creatures and of knowledge". He sees their "Anticartesianism", for example, as being "grounded in the idea of expression" (EPS:17). It is not then, just a question of difference, but of differences that can constantly and dynamically express their own generation. "Expression appears as the unity of the multiple, as the complication of the multiple, and as the explication of the One" (176 - my italics). Production is this dynamic, changing expression of difference. This is why Deleuze and Guattari can consider homogeneous space, such as that produced by a drug, not - in the end as it may appear to be in the beginning - to be smooth but to be striated (ATP:370). It is captured and antiproductive. It does not express its intensities. So also Capitalism is especially antiproductive despite its use of deterritorialization and the war machine, because it forms assemblages (such as machinic enslavement or subjectifications) which highly regulate the possibilities of expression and alternative productions. Simply put, differences are restricted to an expression of the Capitalist machine in all its glory rather than any other potentiality. It is therefore necessary to break with the full body of Capital, but the danger is that such breaks finally form a "merely specific reterritoriality, a specific body on the full body of capital" (AO:375), such as the ex-communist States. At the same time, Capitalism "is constantly escaping on all sides" (ibid.), and it may be an enormous task to create a plan(e) of any real consistency in the face of these lines of escape.

The ethics of differences and expression are complicated in the present time by this constantly shifting relation to the Capitalist machine, as it sets free potentialities, often only to reterritorialise

them. The response to this situation is perhaps a question of maintaining the continuing expression and production of difference *within*, as much as outside of, Capital - a pragmatic balancing act - not just the setting up of new forms from scratch which are soon emptied by, or reterritorialised, on Capital. It should be obvious by now that, in this respect as in others, Deleuze and Guattari are far from being idealists. They are, rather, practical 'mechanics'.

For Deleuze and Guattari, there is never any situation where a being has power except as interacting in a machine (*EPS*:91). The relation between power and interaction itself, however, provides a basis for ethical re-evaluation. In Spinozan terms the degree to which interaction can be tolerated, *above striation*, is the 'power to be affected'. This forms the basis for Spinoza's *Ethics* (1952). To sum up Deleuze's version of the Spinozan theory of interactive ethics, there are "four phases" by which our participation in interactivity is enhanced. Firstly, there is the phase of "passive joy", in which we are trapped within an inadequate idea but through an *expression* of this are led to the second phase. This is "the formation...of a common notion" or an idea that is adequate to the reality of our expressed interaction. Thirdly, there is the phase of "active joy", which is the joy of acting in accordance with an adequate idea. Fourthly, this active joy folds in with the passive joy, by which the inadequacy of the passivity is transformed into "desires belonging to reason". In all this, the key is *the expression of interaction*, through which we move from passive (which are, of course, still passive, even if very strong) to active affections.

Spinoza's project is thus realized not by suppressing all passions, but by the aid of joyful passions restricting passions to the smallest part of ourselves, so that our capacity to be affected is exercised by a maximum of active affections. (EPS:285)

This is a schema by which interaction is increased at every move, and passion's only refinement is in according with the pragmatics of interaction, from common notions to active affections.

These affections⁴, however, are not the results of causes and effects (106) relayed between discrete entities, but expressions of interaction, of double becomings. More than this, as I have noted, affect is "not a personal feeling, nor is it a characteristic; it is the effectuation of a power of the pack that throws the self into upheaval and makes it reel" (*ATP*:240). Active affections come from a participation in multiplicity.

The consequences of this primary and pragmatic value accorded to what one could call a constantly expressed interactivity are many. For example, once again it is no longer a question of the analysis of formed matters so much as what lies between them. "The interval takes all" (478). In short, the in-between becomes the zone of ethics. One does not ethically accumulate striations behind the borders of what one considers to be one's own private State. This would be moralism. One, in fact, subtracts one's '1' - the unity under which one attempts to dominate one's State - in favour of a molecularisation and distribution of what was discrete. "What one addresses is less a matter submitted to laws than a materiality possessing a nomos". Put simply, it is a question of "surrendering to the wood" (408), always to anconer form of becoming.

Yet, as I have noted, there is also a notion of individuation in this in-between state. This is a notion of individuation as *event or intensity*, not as formed matter or subject. For Deleuze in particular, the power of the concept lies in the condensing of singularities, of events. This could be seen as a Deleuzean perception of the very nature of interaction - *the condensation of the event and its prolongation*. Singularities are brought about by particular condensations in interaction and, in turn, singularities prolong interaction. These in turn produce individuals. As

⁴ These "affections" are more like the affects described in chapter three than subjective affections.

Deleuze writes of Leibniz - "in a sense the individual is the actualization of preindividual singularities" (*FLD*:64). This is what individuation is. It can be understood, then, that interaction is event based, and must be understood not *only* in terms of *deferred* difference (Derrida, 1973) but in terms of specific occurrences, or of events.

It can also be seen that an individual is not the same as a stable subject, and has a completely different relation to time. Neither is desire initially about a subject⁵, but rather about an individual. The individual is instantaneous, contingent, imbued with the event and constantly changing; the subject defers time. In terms of theatre and performance, as previously discussed, one could differentiate between the 'real', individual time of the performance art event and the deferred, subjective time of the drama. Performance, as opposed to the deferrals of the classical theatre, must individuate in order to express.

For Deleuze and Guattari this is what the theatre of cruelty is - "not a promised and pre-existing land" but a "world created in the process of its tendency". This "new land" is -

...not at all a hope, but a simple "finding", a "finished design", where the person who escapes causes other escapes, and marks out the land while deterritorializing himself.

(AO:322)

What the artist regulates in all this is the threshold of deterritorialization (ATP:432), the spatiotemporal 'in-between'. It is this threshold that forms the events, determines their specificity, just as the control of threshold forms the specificity of any interaction; of the artist, the war machine, or Capitalism.

Individuation, then, moves towards movement, not towards static representation or stable form. It is not that representation does not exist, or that we cannot conceive of individuals in the more common manner as stable entities, but rather that, as Deleuze says of Spinoza -

⁵ "Desire is not in the subject, but the machine in desire" (AO:285).

...the representative content is but an appearance, determined by a deeper expressive content; the form of psychological consciousness is superficial in relation to true logical form; the spiritual automaton, manifested in the concatenation of ideas, is the unity of logical form and expressive content. (EPS:153)

The individual is, then, like the spiritual automaton, an expression of a particular interaction as event. The individual thus expresses a multiplicity as it is engaged by pre-existing singularities. In individuation, "Being expresses in a single meaning all that differs" (*ATP*:254). Each individual is seen as "an infinite multiplicity, and the whole of Nature is a multiplicity of perfectly individuated multiplicities" (ibid.). The dynamism of these multiplicities also explains why it is the interaction of their ratios of speeds that determines what a body is, and, in turn, what the particular dynamic of that body is. A body, as any assemblage, is always interactive first, because it is dynamic and multiple. Bodies participate in a "fixed plane of life upon which everything stirs, slows down or accelerates" (255).

It is this process that art both revels in and reveals, in short, experiments with - "art as 'experimentation'" (AO:371). It is a process that is not one of lack but of rearrangement through interaction, that "never fails to reach fulfillment as it proceeds" (ibid.). This is also true of a more ethical kind of scientific practice (ibid.). As such, it can be seen why art as experiment, though it may not be avant-garde, still easily aligns itself with what appears to be new, especially with new technologies that still possess a high degree of deterritorialisation. For the new technologies can also be effectuations of new intensities and the in-betweens of multiplicities. Deleuze and Guattari quote Klee here on the "intermundia that are perhaps visible only to children, madmen, and primitives" (AO:243).

The ethical tasks of art and, indeed, any work with these new technologies is to assist a realisation of these "intermundia" and the possible becomings of *more*; to create lines of escape

that assist the creation of more lines of escape. Beuys' social sculpture, Abramovic and Ulay's Night Sea Crossing or Cage's 4'33" are perfect examples. These are all events, with accompanying concepts, percepts and affects, which allow a whole 'flock' of lines of flight, both for the performers and for the audience.

The basic level of this creation is to -

...distinguish assemblage haecceities (a body considered only as longitude and latitude) and interassemblage haecceities, which also mark the potentialities of becoming within each assemblage...But the two are strictly inseparable. Climate, wind, season, hour are not of another nature than the things, animals, or people that populate them, follow them, sleep and awaken within them. (ATP:262-263)

When these things are understood, the move to the intermundia is less a romantic leap into the abyss - which for Deleuze and Guattari would be too much of a transcendental move, an expression of death - than a simple understanding of the ways things are, of letting them happen, of participating in interactive events. In Cage's words "Nichi nichi kore ko nichi...each day is a beautiful day" (Revill 1992:304).

Artistic creation changes according to its own performed and expressed interactions as it does not attempt to maintain a form strictly separate from those interactions. For Deleuze and Guattari "singing or composing, painting, writing have no other aim: to unleash these becomings" (ATP:272). This leads to a good axiom for an ethics of interaction in art - "look only at the movements" (282).

Choice between pre-given options has nothing to do with these movements. Here we can take the mundane example of what is often considered to be interactive art. I mean those pieces where the art consumer may 'choose' between different options, which these days are often computer driven. For example, there may be a choice between images in a wandering through previously formed and easily digested images on a CD-ROM, or between different endings of the story as in supposedly interactive movies, or the chance to remix songs on an 'interactive' CD. All this is interesting, but how much movement of becoming is allowed in these pieces? Often there is not much⁶. The problem is, of course, that in many of these works there is an entire pre-set assemblage which is unmovable, no matter how many choices are available within it. For Spinoza, according to Deleuze, this was the trouble with 'passive affections', where one's desire renders one passive. This desire is determined by something *else* (a system) that one deems oneself to lack (and to which one has no access).

...our force of suffering asserts nothing, because it expresses nothing at all: it "involves" only our impotence, that is to say, the limitation of our power of action. (EPS:224)

No wonder many still find reading a novel more interactive than the latest computer driven artwork. The lack of real becoming is fed by the presence of choice as an element of subjectification. It may be that some interactive artworks create preferable choices for subjectification (for example Jill Scott's interactive Machine Dreams which gives viewers choices within four streams of history of interaction between women and technology) but this is not necessarily always the same as becoming, except when the choices involve a becoming-minor (which in Scott's work the 'becoming-woman' obviously does). Deleuze and Guattari point out

⁶ As Allucquère Rosanne Stone notes, the media industry has a fairly low-level notion of interaction, about which she cites Michael Naimark's pejorative "poke-and-see technology" definition (Stone, 1995:10). Recent media industry examples just reinforce "the feeling that interaction in a commercial frame is still a medium like television, in which the most advanced product of the technological genius of an entire species conveys Geraldo Rivera to millions of homes in breathtaking color" (ibid.). She contrasts this to an early MIT Lab definition provided by Andy Lippman, "who described interaction as mutual and simultaneous activity on the part of both participants, usually working towards some goal - but he added, not necessarily" (ibid.). See also Monica Sarkis' "Interactivity as Interpassivity" (Sarkis, 1993).

⁷ Rheingold comments that "Electronic democracy is far from inevitable" (1994:275). This kind of 'choice' could, in fact, be seen as part of the weapons system of the computer. Rheingold's warning that "a computer is, was and will be a weapon" (290) should be well heeded.

The marketplace is, of course, also predicated upon 'choice'. Rheingold is easy to cite here also, as he notes that the "most insidious attack on our rights to a reasonable degree of privacy might not come from a political dictatorship but from the marketplace" (292).

that the very basis of many information theory driven technologies that have stormed artistic practice in the last twenty years are -

...a homogeneous set of ready-made signifying messages that are already functioning as elements in biunivocal relationships, or the elements of which are biunivocally organized between messages. Second, the picking of a combination depends on a certain number of subjective binary choices that increase proportionally to the number of elements. But the problem is that all of this biunivocalization and binarization (which is not just the result of an increase in calculating skills, as some say) assumes the deployment of a wall or screen, the installation of a central computing hole without which no message would be discernible and no choice could be implemented. The black hole/white wall system must already have gridded all of space and outlined its arborescences or dichotomies for those of signifier and subjectification even to be conceivable. (ATP:179)

PC or Mac? Both use the same black hole/white wall system. Are there not alternative forms of expression we could develop for personal computing? In a society moving towards a society of control through the control of information and through a widening variety of choices available to the subjectified self, there is nothing radical or even necessarily interesting in the interactive offering of more and more such choices in a binary environment.

To create lines of flight, then, is not necessarily to push them towards a choice or a particular direction, as this would cut down on the interactive potential involved. Lines of flight are lines *between*. In addition, to participate in an interaction is "to be a part of something" (*EPS*:183), not just to be involved whilst remaining distinct from, and outside of, a 'system'. Conversely, to direct from outside is to avoid the becoming-other, the 'sorcery' of becoming-minor that always involves one in lines of flight, for this -

...is how we sorcerers operate. Not following a logical order, but following alogical consistencies or compatibilities. The reason is simple. It is because no one, not even God, can say in advance whether two borderlines will string together or form a fiber, whether a given multiplicity will or will not cross over into another given multiplicity, or even if given heterogeneous elements will enter symbiosis, will form a consistent, or cofunctioning, multiplicity susceptible to transformation. (ATP:250)

Yet, there are criteria which must be applied during the course of events. These boil down to whether a given multiplicity can sustain its production of diversity through time and thus conserve all its dimensions (ATP:251)⁸. By conserving its dimensions the multiplicity is given a plan(e) on which to base its continued becoming and the escape of others. Not only must it conserve its multiplicity on the plan(e) of consistency, it must be able to maintain the dynamism of the eternal return of that difference in multiplicity. For Deleuze and Guattari, this is what makes for a kind of refrain of "free action...which by its essence unleashes the power of repetition as a machinic force that multiplies its effect and pursues an infinite movement" (498).

It is this refrain or what is sometimes translated as the 'ritornello', that enables interaction to continue to interconnect to the limits of any specific infinities, to create and maintain a plan(e) of consistency for free action. This is a plan(e) for the free action of other persons (particularly those persons who *are* 'other'), animals, objectiles, and intensities. It provides an entire *ecology* of interaction.

For 'human beings', as a machinic series of events themselves, there are three ethical - read pragmatic - limits within which they can work in order to keep the refrains going, to adapt to their modulations, maintain a dynamism of eternal returns, and arouse active passions. All three determine a traversing of the plane which in turns cuts through many other planes, of what in

⁸ I would suggest simply that a piece such as Cage's 4'33" can. Interactive television based on predetermined choices cannot. This is not to say that interactive television does not have interesting potential in this area.

older times we called the inside and the outside of the human being. All three are the grounds through which new human and natural ecologies may be conserved. These are "subjectivation, the event, or the brain" (*PP*:239). For Deleuze they more or less amount to an inflection of the same thing because all three are plan(e)s of interaction. To reach the potential of any of the three it is necessary to work in the potential stirring up of "little" events outside of the Capitalist machines. One must preserve broader ecologies⁹, rather than exploit created surpluses. In this, strangely enough, we must believe in the world.

Belief in the world is what we lack most. We have totally lost the world; we have been dispossessed of it. To believe in the world - it's also to arouse even the smallest of events that escape control, or that create new space-times, even of reduced surface or volumes, It is this that we call pietas (piety). The capacity to resist, or, on the contrary, submission to control, is judged at every attempt. One must have both creation and people. (ibid. - my translation)

Ultimately, and ironically Deleuze and Guattari's theories of the machinic and of interaction, provide a way of enacting small and delicate *ecologies* with which to sustain a creative connection with people and the world we may be in the process of losing.

⁹ Rheingold points to the way in which broader ecologies exceed the human or even the 'biological', in the form of the fact that soon "entire ecosystems of net-spawned information-seeking robots will be circulating through the Net. These entities are formally more akin to robots (*automata* is the precise jargon) than to living creatures, but increasingly, automata are being designed to incorporate biological behaviours. The 'worms' that can attack networks, and the 'viruses' that pester computer users, are the malevolent side of this trend. Knowbots and Rosebud are the benevolent side. In the environment of a heterogeneous, free-form Net, you are going to find both kinds." (1994:107)

Ethics is not Explication but the Expression of Differentials

The hard law of explication is that what is explicated is explicated once and for all. The ethics of intensive qualities has only two principles: affirm even the lowest, do not explicate oneself (too much). (DR:244)

As I have discussed it, the ability to interact outside predetermined bounds along with the scope of *sustained* interaction available to a particular form of action largely determines, for Deleuze and Guattari, its ethical value. In order to sustain interaction one must constantly subtract the '1' that would overdetermine the coding of the interaction and render it antiproductive. One must affirm "the lowest". One must also avoid exhausting the potential for further interaction and, "not explicate oneself (too much)". This is reiterated in different forms throughout their work.

The assumption here, drawn from the theories of Deleuze and Guattari, has been that the differentials *between* formed elements involved in interactivity are the primary basis for the secondary perception of objects and subjects. In fact, it is only through perception grounded in the differential rather than object (or subject) that the illusion of object and subject can arise¹⁰ in a shifting world. The question then becomes: what would a general ethics of interactivity consist of in the light of the differential notions?

Concretely, if you define bodies and thoughts as capacities for affecting and being affected, many things change. You will define an animal, or a human being, not by its form, its organs, and its functions, and not as a subject either; you will define it by the affects of which it is capable.(SPP:124)

¹⁰ Deleuze cites Maïmon who writes that "the mode of the differential makes up the particular object, and the relations of differentials the relations among different objects" (*FLD*:89).

Broadly speaking, an ethics in this Spinozan-Deleuzean sense is a question of which interaction opens up the most potential for the creation of further differential perception and generation.

It is no longer a matter of utilizations of captures, but of sociabilities and communities. How do individuals enter into composition with one another in order to form a higher individual, ad infinitum? How can a being take another being into its world, but while preserving or respecting the other's own relations and world? (126)

In short, an ethics here involves differentials which give the "...capacity for discerning in a single act the relationship of the greatest possible number of thoughts" (127). More broadly, this implies that interactive systems should allow not just for the propagation of one particular differential but for the differentials between differentials.

We have seen that in Deleuze's work on Spinoza interaction is primary. For Deleuze, it is affect which determines such primary ideas as common notions in Spinoza. It is affect and interaction which determine whether relations are composing or decomposing (terms which are only somewhat related to *Capitalism and Schizophrenia*'s terms 'territorialising' and 'deterritorializing'. Ethics here is a matter of practices which expand the degree of interactivity or the ability to compose relations. In Spinoza's *Ethics*, interaction can produce joy and love (through composition) which in turn enhances the potential for further interactions (differentials of differentials). On the other hand interaction can also act via what Deleuze and Guattari came to label 'paranoiac' machines, which close down possibilities of interaction. As opposed to productive desiring-machines or nomadic war-machines, these paranoiac machines produce in Spinoza's terms sadness/hatred and decomposition (the example of the poisoning of the apple in the Garden of Eden is an example of a decomposing interaction) because they cut down on the possibilities of interactivity and the number of interactive connections and formations. Constant

¹¹ Although these terms do not have the same ethical positions.

participation in the love and knowledge of God (Spinoza, 1952:456-457;V:11-20). Spinozan productive composition makes one a spiritual automaton destined for a greater degree of knowledge through productive connection rather than relatively unproductive illusion. One can see many connections between Spinoza's conception of God, and Deleuze and Guattari's planes of immanence or rhizomes.

Deleuze, following Spinoza, actually defines expressed interaction as both a condition for being (or perhaps rather becoming) and for knowledge - for Deleuze interaction *is* both being and knowledge. This is what he means when he says all desire is productive - that conceptions of desire based upon lack are false. According to Deleuze and Guattari, desire is expressed through interaction, through production and connection, and particularly through productive connections. All else is illusion, imagination and so on - ideas inadequate to the real interactive nature of existence. Such illusions, for Spinoza via Deleuze, can only lead to the first kind of knowledge which is described as follows.

This first kind expresses the natural conditions of our existence insofar as we do not have adequate ideas. It is constituted by the linking together of inadequate ideas and of the affects-passions that result from them. (SPP:82)

This knowledge can usefully lead only to an understanding of one's illusions as illusions. Freud and Lacan's work on the interpretation of dreams might have been a good example of this kind of knowledge - until it imposed another illusion onto the interaction in psychoanalysis - the illusion of lack in desire. Once this mistake is realised the 'spiritual automaton' - or nomad - is free to move on to some kind of awareness of broader interactions through his/her connection with them on a plan(e) of immanence.

The plan(e) of immanence upon which the nomad maps new compositions today is at every moment more and more stratified by both State and Capital. As Cage has sadly said "we may have ruined the silence" (Cage, 1990b). Yet this plan(e) is also more and more deterritorialised in the State and Capital's increasing turmoil. It is in the face of this stratification by, and turmoil within, the State and Capital, that we can understand the necessity of the activity of the "war machine", which we have seen is a *body* in Spinozan terms¹², or a specific arrangement of desiring-machines in a Deleuze-Guattarian sense. As Kowsar describes it, this "war machine" has a complex usage in Deleuze's work.

On one level, any abstract ideational category outside of the codified edicts of logos and nomos (or reason and law) that is "other", different and clearly exterior, displaying a subversive intent, can qualify as a war-machine: on another level, any organic or mechanical force that can mow down barriers, frontiers, fortresses, and enclaves, may also function as a war-machine. (Kowsar, 1986:26¹³)

The war machine can be seen as something which undoes the restrictions on interaction and affect imposed by the Majoritarian State or Capital. It does this not only by dismantling the State and Capital but by deterritorialising its quanta from their capture in assemblages of antiproduction. These quanta are then free to interact in a world exterior to those arrangements or assemblages but, in a sense, interior to a dynamic process of machinic heterogenesis. In contrast to this, the familiarisation and internalisation of discipline through an Oedipal psychoanalysis, and one might add, representational-theatricality, is in essence a construction of

¹² By this is meant any arrangement of individual elements, in proportion, to form a "body' capable of being active - the more complex the body, the more active possibilities there are.

¹³ In this article Kowsar gives a detailed description of Deleuze's writings on the theatre in "Un Manifeste de Moins" (MM), translated by Alan Orenstein in *The Deleuze Reader* (Boundas, 1993:204-222), as "One Manifesto Less". In this piece Deleuze discussed the work of Italian director Carmelo Bene and suggests that Bene's work functions by subtracting the 'Major' from the pieces he produces. For example, the machinery of the State, the Lords and Bishops, etc are subtracted from Bene's production of *Richard III*. Deleuze suggests that this provides a beneficial method for all theatre production.

an interiority stratification or territory *from outside* of that stratified, which is a restrictive channeling of affect and a denial of the exteriority through which affect operates. It is at this point that we can return once again to Deleuze's use of Spinoza, for a clearer understanding of alternative views of interiority and exteriority.

The Power to be Affected and Performance

In Hardt we find another reason why Deleuze's use of Spinoza can lead us to an ethics of interactivity.

...the power to exist of a mode always corresponds to a power to be affected, and this power to be affected "is always filled, either by affections produced by external things (called passive affections), or by affections explained by the mode's own essence (called active affections)" (Expressionism in Philosophy: Spinoza 93, modified¹⁴).

...When we pose the question of cause in this context, we find a real distinction: Our power to be affected is constituted by active affections (internally caused) and passive affections (externally caused). Immediately, this distinction suggests the outline of an ethical, an ultimately, practical, project: How can we favor active affections so that our power to be affected will be filled to a greater extent with active rather than passive affections? (Hardt 1993:72-73)

This adds a further dimension to our ethical analysis of interaction. Such an ethics is not just a question of a radical critique of social assemblages and their often hidden dominance of interactive events. What would be the point of this critique if there was no creative, genetic practice (in the full Nietzschean or Spinozan sense) to follow it? Here we see that the project

¹⁴ By Hardt.

which both accompanies and follows critique is the attempt to favour the active affections - those which are 'internally' caused. Internal here of course means immanently internal to a certain nomadic system which by nature encloses, in a process of machinic heterogenesis, external chance encounters with bodies and events. This is opposed to externally imposed and rigid systems which then create a notion of a fixed but elusive 'interior'.

When applied to work in the visual arts, installation, performance or music this discrimination between active and passive affections as expression of the power to be affected (which equals the power to exist) is very useful. For example it throws much light on Cage's use of chance operations to express 'nature in her manner of operation'. Cage's expression here can be seen to be an ultimate affirmation of the Nietzschean or Spinozan universe as seen through the writings of Deleuze. Cage's use of chance operations, among other methods, as a way of sidestepping the ego, can be seen as a movement against the passive affections that the ego is the seat for. The ego here is seen as something imposed from the outside through a series of transcendent implants or foldings into the subject. Cage is suspect of the way in which this egotistical subjectivity is actually an obstacle to expression (active affections) in its fullest sense. On the other hand, interactive expression in the full sense here, through chance operations, is nothing other than an expression of interaction itself - of the connection between Cage as a body and intelligence. chance, 'nature in her manner of operations' and subsequently certain sounds that are produced as this expression. Likewise the audience has the potential to be freed from its need to interpret what the artist is communicating¹⁵, and thus from passive affections, and is free to interact in an expressive way with the sounds as events. There is, in other words, in work such as Cage's, the opening of a space for an event. That event is interaction in a positive and active sense. The

¹⁵ That is, the audience is freed from the question 'what did Cage mean?' - this also makes sense of his resistance to the egos of the American abstract expressionists (see Jones, 1993)

activity of interactivity here can be seen to be an acceptance, not of one self or the other, but of the *connection* which is the immanent expression of one's interactive reality at that moment.

Deleuze constantly draws attention to the fact that it is the acceptance of the reality of contingent interaction that forms the ground (of groundlessness) of affirmative expression. When discussing Nietzsche, Deleuze focuses on Nietzsche's discussion of the acceptance of the return of thrown dice as being the final affirmation of being through an understanding of chance¹⁶ (of, perhaps, nature in her manner of operation). This is Nietzsche's eternal return -

The dice that are thrown once are the affirmation of chance, the combination that they form on falling is the affirmation of necessity. Necessity is affirmed of chance in exactly the same way that being is affirmed of becoming and unity is affirmed of multiplicity. (NP:26)

There are therefore two aspects to an active expression of interactivity. Action (the throwing of the dice- the affirmation of chance) and acceptance of necessity (the affirmation of connection). Thus one does not recoil from the connections one's actions produce - this recoil for Nietzsche leads to ressentiment, guilt, shame and everything he attacks. For Deleuze it explains some aspects of the paranoid machine - a machine that in *Anti-Oedipus* blocks flows and is entirely unaffirming.

This notion of affects activated in the acceptance of chance and necessity also explains much other interaction in the arts. For example, as Eno's work (1976) suggests, much of what is music

Martin Rosenberg, in his essay on various avant-garde tropes and hypertext notes the importance of an affirmation of chance in the development of applications for new technologies, writing that he wishes "to hammer home this point of the role that contingency plays in transgression, defined here as this exploration of the desire for liberation and for evolution (broadly construed)" (1994:288). In a response to Deleuze and Guattari's work, Rosenberg notes that this affirmation of chance in "tactics of subversion" (291) is that which allows one to "remain indifferent to geometry" (ibid.), which would return relations to pre-fixed spatio-temporal coordinates. In this, "the fork in the road, the bifurcation in the history of a system, represents the moment when Nietzsche's eternal return acts upon a system, when Bergsonian duration acts upon memory, its always-already contingency destroying the sense of past and future enabled by the geometric regulation of time and space" (ibid.). Rosenberg gives an interesting critique of his own hypertext *Rhizome* project (291ff), especially of the way in which nomos quickly returns to logos.

in popular and experimental music forms relies on chance; on 'nature in her manner of operations' (and here there is no difference between nature and artifice). It does not rely on the kinds of hierarchical forms in music (such as the standard arrangements of the orchestra) which seem to regulate the fold of the interaction in such a way as to maintain the ascendancy of passive affections over active affections, in the players as much as in the sounds they produce. These hierarchical forms, of course, keep the transcendence of the composer, conductor etc intact and this transcendence in turn promotes certain functions of the State apparatus as they pertain to the development and reception of music. (This model is similar for all the arts.) What is encouraged in these hierarchical and State art forms, in terms of an ethics of interaction, are the passive affections. That is why, in opposing this, Cage can say that our ears are now in perfect condition - they are ready for active affections, for immanent affirmation internal to the situation of the event. Of course, this is not to oppose any music per se. It merely questions the interactive apparatus through which it is perceived - that is, the state of its production and reception. What often appears to be an inability of various forms of music outside of the classical repertoire to match up to the complexity of classical music (or of musicologists to keep up with what is happening in rock or thrash and so on) actually has more to do with keeping certain social apparatus functioning smoothly in their paranoid state of blocking precisely those kinds of flows that Eno describes in his essay "Generating and Organising Variety in the Arts" (1976).

These flows are not, however, *only* a matter of chance. Through the affirmation of chance *new* assemblages come into existence which constitute the basis for a processual ontology.

The common notion is the assemblage of two composable relationships to create a new, more powerful relationship, a new more powerful body - this assemblage, however, is not merely a chance composition but an ontological constitution, because the process envelops the cause within the new body itself. (Hardt 1993:99)

Now we are in a position to frame an ethics of interaction, as regards both becoming as a process of interaction and of interaction as a process of becoming. An ethical practice of interaction is one that situates itself in the interaction or chance encounters *between* bodies. These encounters between bodies are where composition or decomposition take place, whether they are encounters between the corporeal, incorporeal, technology or machines. Thus we have an ethical framework in which to regard interaction from the collisions of body and event in performance art such as the work of Abramovic or Beuys to the modulations undergone in Virtual Reality systems, music or performance in general. The question is always one of compositional or decompositional relations in regard to chance encounters between bodies. And is there not a sense in which every encounter between bodies is a chance encounter?

...the thinker himself makes his individual differences from all manner of things: it is in this sense that he is laden with stones and diamonds, plants 'and even animals'...(DR:254)

IV Conclusion

Chapter Nine - Conclusion

Becoming Interactive - Interactive Becomings

Nothing is less marginal than the problem of the marginal. (MR:262)

...the entire world may be read, as though through a crystal ball, in the moving depth of individuating differences or differences in intensity. (DR:247)

From Critical Judgment to Dramatic Aesthetic

To write of 'chance encounters between bodies', as at the conclusion of the previous chapter, is neither to champion imprecision nor to abandon politics. The case is quite the opposite. Firstly, one's analyses and ethics need to be quite specific to these bodily encounters as *precise* instances of a shifting complexity - of double becomings of bodies, invoking a real but "moving depth of individuating differences or differences in intensity". Secondly, it is only in such a study of double becoming and complexity that we can 'read the entire world' and subsequently that an active politics of the marginal can be situated. This is because, as I have argued throughout this thesis, we cannot avoid becoming interactive. We already are and always have been. Interactivity has not suddenly burst upon our world with the advent of recent technologies. Rather such technologies have arisen as a part of a more general shift in our relations with the world - as a

¹ Thus, as noted previously, Cage's aphorism - 'Permission granted, but not to do anything you want' - practices based upon an acceptance of chance and the precise relations between bodies of all sorts require a great discipline in analysis and practices associated with them.

shift in which we realise how deeply implicated within interactions with that world our technologies, aesthetic practices, and even the very thoughts we think, really are. The issues this raises for a theory of interactivity based upon becoming are discussed in this chapter, leading to conclusions about the uses of Deleuze and Guattari's work for an ethics of interaction. Deleuze and Guattari's work is not, as I have argued so much theorisation of interaction seems to be, a simple techno-evolutionary valorisation of any interaction. Neither does their work, however, shy away from interaction and becoming. For them interaction and becoming form both the ground of groundlessness and, only subsequently, in their attaining consistency away from their reterritorialisation on stratified States, a value. In addition, their work is useful in that it is not only a critique but specifically creates new operational concepts with which to move forward. As such it avoids unnecessary attempts to reterritorialise the present on past States, whether these are political or academic orthodoxies. Paradoxically this enables them to employ what has been useful in the past: to reinflect psychoanalysis towards schizoanalysis and pragmatics, or, to take another example, to reinflect marxist political analyses away from their predominant State forms of expression. Such reinflections enable Deleuze and Guattari to both analyse what is presently happening in terms of its instability as well as its condition as a fixed State of affairs. It also provides for an ethics that can encompass future actions.

In all this Deleuze and Guattari differ considerably from many other theorists of technology, ethics and aesthetics. To sum this up once more, Deleuze and Guattari favour becoming and interaction, multiplicity, complexity and heterogeneity, as opposed to the illusory assumption of any fixed 'State of things'. This commitment to process and the constancy of change is perhaps the only *central* consistency in Deleuze and Guattari's work. In this respect, Deleuze and Guattari are uncompromising and thorough. Most systems of knowledge, however, are still based, even in this post-postmodern age, on statements with a certain Truth value. Of course,

these 'Truth' statements are paradoxically produced more and more against the background of such statements' increasingly precarious position in the real (virtual and actual) world. Put simply, many critics find the fluidity of Deleuze and Guattari's thought difficult to deal with. As shall be argued, even Deleuze and Guattari themselves find it difficult at times to create concepts which do not compromise becomings. Yet for this exact reason, they themselves see their work as subject to interaction and change, not as the constitution of immutable laws² through judgment.

Here I would again argue that the major difficulty in approaching Deleuze and Guattari's work lies in the dual (though not dichotomous) nature of the notions of becoming and multiplicity. As I have noted, these concepts provide both the necessary ground (of groundlessness) for philosophical and social analyses on the one hand, and the basis for a Nietzschean 'revaluation of values' on the other. Although these two are intricately related, they are not the same. Many critics conflate them and argue that Deleuze and Guattari seem to be advocating 'anarchy', some kind of revolutionary desire in which 'anything goes', an alignment with absolutely anything postmodern, and so forth³. This in turn leads many critics to confuse aspects of Deleuze and Guattari's work with the work of others on the one hand⁴, and to set up strange dichotomies on the other. Thus for some classical Marxist critics, such as Alex Callinicos (1982, 1989), being Nietzscheans, and being at times critical of the failures of classical Marxist State forms, Deleuze and Guattari are precluded from having any useful relation to Marxism at all. It is, however, precisely Callinicos' kind of State formulation of knowledge and political practice that Deleuze and Guattari are arguing against, not necessarily against all forms of Marxism per se. They oppose the development and maintenance of such plan(e)s of dichotomous organisation as that

² See *ATP*:xv and xx. On these pages, Massumi, the translator, and Deleuze and Guattari undermine any attempt to turn their book into an immutable 'system'. Philosophical concepts become tools which are to be used or discarded according to the occasion and the dictates of specific circumstance.

³ See Norris, 1992:199 and 1993:231; Kellner and Best, 1991:104-108.

⁴ See Frank, 1983:175.

of Callinicos, with their conceptual stabilities and States, to the creation of plan(e)s of consistency.

As I have just noted, however, this does not mean that difference, becoming and heterogeneous multiplicity are simple values in Deleuze and Guattari's work. They are, as they were for Heraclites, the inescapable conditions not just of existence, but of thought itself. In short, there is no pure thought; there is no *permanently* right thought - even if there are State forms of thought, art and political practice that seek, like King Canute, to push against the tides of constant change. Political and ethical pain for Deleuze and Guattari comes not from the failure of the imposition of a 'correct' State - whether that be a nation-State, a subjective State or a State of mind/knowledge. It comes from the attempted imposition of any overbearing States in the first place.

To put this in other terms, for Deleuze and Guattari, the world is a world of shifting forces of production *first*. 'State' judgments, such as those that Heidegger sometimes seems to return to, as discussed in the first chapter, come *after* in forms of antiproduction. In addition, just as representation is firstly a form of production, so, for them, any judgment is firstly an act of force that brings States into being. Indeed, the two, representation and judgment, are complicit in the production of State antiproduction. Yet neither representation nor judgment have any real relation to the permanent Truth they often presuppose. Rather, representation, in so far as it *denies* its own production of the real, can be seen to *produce*, not Truth, but judgment as one of its inaugurating acts of force. This judgment simultaneously veils this act of force. Conversely, judgment is involved in the production of antiproductive representations of its own transcendent authority.

From Greek tragedy to modern philosophy, a doctrine of judgment elaborates and develops itself. That which is tragic is less action than judgment. Greek tragedy installed first of all a tribunal. (CEC:158 - my translation)

Deleuze poses a Spinozan alternative to the establishment of such tribunals writing that -

We do not have to judge the existence of others, but to see if they fit/agree (convenit) with us or not, that is to say, if they bring us some forces, or if they return us to the miseries of war, to the poverty of the dream, to the rigours of organisation. As Spinoza said, it is a problem of love and hate, not of judgment... (CEC:169 - my translation)

This perhaps begins to explain the shifting status of some of Deleuze and Guattari's critical terms⁵, which are not meant to provide permanent 'judgments' but to allow some 'fit' and 'agreement' with the contingencies in the company of which they are found, perhaps to "bring us some forces". Many of their statements and terms need not to be taken in their value as possible expressions of truth. They rather engage both with each other and with the world at large in a multiplicity of contingent expressions. Simply put, Deleuze and Guattari, even more perhaps than some other 'poststructuralist' theorists⁶, have tried to develop a critical discourse which is

⁵ A simple example is the term 'concept'. In *Difference and Repetition* the 'concept' is opposed to that of the Idea. The idea here is an event, the carrier of difference, whilst the concept belongs to State philosophy it is an attempt to return everything to the pre-representable. In *What is Philosophy?* the 'concept' seems now to take the place that the Idea previously occupied - that of the event, as has been discussed in chapter three. The shifting nature of the term 'machine' has also been discussed. Yet behind these shifts in terms there are often consistencies. For example, the earlier Idea and the later concept do seem to occupy a very similar position as regards the virtual and the event. Of course, sometimes their terms and frameworks have simply changed. Most notably this occurs around Deleuze's acceptance of Lacanian thought in the late 1960s (in *The Logic of Sense* in particular) and the rejection of Lacan in the early 1970s (as marked by the emergence of *Anti-Oedipus*).

⁶ Of course, as with nearly all so-called 'poststructuralist' theorists, and more than with most, it is difficult to simply label Deleuze and Guattari's work as 'post-structuralist'. Although there is an unavoidable relation to structuralism, and its breakdown, in their work, there is not *only* a relation to structuralism. Deleuze, for example, is not only post-structuralist - his philosophical project is much broader.

In addition, its explicit political nature makes Deleuze and Guattari's work hard to simply align with everything either post-structuralist or deconstructive. As Leitch remarks, "Schizoanalysis exceeds contemporary deconstruction. More than textual practice, it is a militant and dedicated political praxis" (1983:220). Leitch himself becomes nervous about this, claiming that Deleuze and Guattari fail to deal with the textuality of their own texts "and lead us to believe in the accuracy and truthfulness of their representations" (249). This is something which does not take into account their understanding either of the events of language, or the contingent nature of philosophical statements.

capable of taking into account something intellectually akin to the aesthetics of Cage's chance operations, Joseph Beuys' social sculpture, or Joyce Hinterding's 'electricity we didn't make'. As Paul Patton notes, their philosophy -

...is an explicit retreat from the pretension to universality, that is from a claim to provide for even the possibility of a universalisable moral doctrine and a corresponding recognition of the autonomy and internality of systems of evaluation...Deleuzian discourse is a properly post-modern ethics by virtue of its acceptance and affirmation of this fundamental relativity. (Patton, 1986:33)

Nevertheless, as Patton has also written, "postmodern theory itself is...a series of conflicting forces and diverging tendencies" (1988a:89). Deleuze and Guattari in fact explicitly reject many aspects of postmodern culture, even if one can see them as proposing a postmodern ethics. If, for example, Guattari (*TE*:31-32) attacks the lack of political practice's ability to adapt to the modern world, this is not a statement of postmodern resignation but rather one which proposes that political praxis renew itself in considering the micropolitics of interaction and specificity⁷.

In this, it must be made clear that Deleuze and Guattari are attacking an ethically passive position, one that relates only to the representations that it *receives* from a judging authority, in favour of an interactive, involved position. Deleuze, for example, criticises, in philosophy and aesthetics, any Kantian recuperation of the subject which amounts to "a supreme effort to save the world of representations" (DR:87). In the Kantian model the subject is a passive subject, one to whom the world comes as a series of representations which must be (successfully and

Guattari writes that -

Structuralism, and then post-modernism, have accustomed us to a vision of the world which evacuates the pertinence of human interventions incarnated in concrete politics and micropolitics. The relative explanations for this deterioration of social praxis through the death of ideology and the return to universal values appears to me to give little satisfaction. In reality, it principally incriminates the inadaptability of social and psychological praxis and also a blindness to the fallacious character of the partition of a certain number of domains of the real. It is not right to separate the action of the psyche, the socius and the environment. (TE:32 - my translation)

unsuccessfully) reconciled with that subjectivity. "Kant defines the passive self in terms of simple receptivity" (*DR*:98). It is odd, then, that a critic such as Christopher Norris (1993:221-3) uses Kant to refute a (supposedly postmodern) Deleuze-Guattarian theory of forces which he sees as complicit in the demise of political will. In fact, it is precisely a theory of forces such as Deleuze and Guattari's that is able to explain what Deleuze calls "the formation of local selves or egos" (98) in a *subsequent* receptivity. Formed by *and* as forces, these can interact with that received and head back towards their more natural activity. Without such a theory of forces there could arguably be no political will at all - in fact, nothing active at all (ibid.).

In moving outside the assumption of a passive subject, Deleuze and Guattari subject the subject to its own indeterminacy, and to interactive becomings alongside other entities, without 'saving' it through such notions as 'common sense'. In this, Kant's transcendental aesthetic can perhaps be contrasted with Nietzsche's aesthetic of the actor, of dramatisation, which has already been discussed in several chapters. Paul Patton refines this dramatic aesthetic in an article on postmodern subjectivity. He asks, "how does modernity give rise to an experience of the self as actor, and why should this pose a problem?" (1991:32). For Patton, the problem is really that such acting, even of multiple roles or 'selves', is only really choosing among presently available roles. It takes place in the realm of the pre-determined possible rather than in the generative virtual. "Genuine actors" (38) do not just play with as much of the *possible* as they can. Quite the opposite. For a dramatic aesthetic to produce the new requires an ethical commitment to the contingent world which includes the virtual, that which is not presently possible, but potential.

I have argued previously that it is in the work of the performance artist, and those similarly aligned with the contingency and immanence of such work, that an ethics of production can be determined. This is precisely not to be determined in the return to the *primacy* of the subject (Hegelian, liberal-humanist or otherwise), to reason, to the known political forms, and so on, that

many of Deleuze and Guattari's critics seem to call for⁸. Yet, neither will it be determined in a complete *abandonment* of these things. Guattari has commented that -

Performance art delivers the instant to the vertigo of the emergence of the Universes that are simultaneously strange and familiar...a forward flight into machinations and deterritorialised machinic paths capable of engendering mutant subjectivities. (CHS:90) The question is not one of the abandonment of such forces as those forming subjectivity, but the becoming of them into mutant subjectivities capable of entering into machinic heterogenesis. This seems all the more necessary in a world in which Capital, as a Major force, requires us to find more and more lines of escape from it, as it attempts to speed up its own reterritorialisation of these lines almost as fast as they are created. Indeed, some anti-Deleuzean critics'9 beloved historical reality seems to be in the process of proving that Capital more and more exceeds the analyses of classical Marxism in its totalising form¹⁰. How do we then analyse it in order to create more lines of escape from it? If, as Eugene Holland writes "Capital, as an abstract, quantitative calculus, provides no universal codes capable of organizing and comprehending and organizing the whole of social life" (1988:407), how do we respond? In Holland's analysis, following Deleuze and Guattari, the freeing up of social codes is not just a flight away from ethical responsibility and the supposed 'free subject'. It is precisely a movement against the imposed forms of State and Capital which determine those codes and supposed 'free subject' in the first place¹¹.

⁸ See Frank, 1983:173.

⁹ See, for example, Callinicos 1982,1989; Norris 1992,1993; Kellner and Best, 1991; Bürger, 1984; Frank, 1983. ¹⁰ As Lyotard (1984:13) writes, "Everywhere, the Critique of political economy (the subtitle of Marx's *Capital*) and its correlate, the critique of alienated society, are used in one way or another as aids in programming the system". This, of course, was written before the collapse of communist States in Eastern Europe. ¹¹ David Harvey notes that

Deleuze and Guattari...hypothesize a relationship between schizophrenia and capitalism that prevails 'at the deepest level of one and the same economy...A number of consequences follow from the domination of this motif in postmodernist thought. We can no longer conceive of the individual as alienated in the classical Marxist sense, because to be alienated presupposes a coherent rather than a fragmented sense of self from which to be alienated. It is only in terms of such a centred sense of personal identity that

In all this, Deleuze and Guattari's relation to Marxism as a whole is more complex than some critics would allow for. Deleuze has said that -

I believe that Félix Guattari and I, we have both remained Marxists, though perhaps in two different manners. We could never give credence to a political philosophy which would not be centred on an analysis of capitalism and its developments. (PP:232 - my translation)

At the same time, Deleuze himself, in a critique of the 'nouveaux philosophes' in France¹², attacks any attempt within various forms of marxism to reinstate the philosophical/political subject as authority. He goes so far as to write that the return to "an author or an empty, very vain, subject, and to stereotypical concepts, represents a force of fascist reaction" (*AP*:187 - my translation). He writes that such philosophers proceed falsely right from the start, rejecting as they do contingency and multiplicity, and instead reinstating "THE law, THE power, THE master, THE world, THE rebellion" (ibid.). This for him is a giving in to the law of journalistic norms of the world of the television (190).

Deleuze and Guattari's commitment both to a 'post-Marxist' politics and to an ethics of multiplicity and becoming can, however, leave them in a difficult position. It is easy, for example, by removing a single statement from the general context of their work, to judge the work as deficient in the provision of a total theory with which to combat Capitalism. Gayatri Spivak, for one, does this in "Can the subaltern speak?" (1988) ¹³. Yet, by choosing one moment in Foucault and Deleuze's work (*IP*) in order to *judge all* their work, it could be argued that Spivak has

individuals can pursue projects over time, or think cogently about the production of a future significantly better than time present and time past. (1989:53)

¹² These are a group of philosophers, who, in the 1970s, developed a return to both Freud and Marx into a marketing exercise, in the process of which they have attempted to turn themselves into left-wing intellectual TV stars, and turn philosophy into a marketable commodity. The best known of these, and most vociferous critic of Deleuze, is Bernard Henri-Lévy.

¹³ She later uses their work without criticism, and even in this article, having criticised Foucault along with Deleuze, proceeds to use Foucault's analytical methods extensively, as she herself admits.

missed the specificity of both their analyses and their political practice. Similarly, her negative comparison of Deleuze and Foucault with Derrida, in the same article, seems to valorise a totalising position of judgment for the intellectual that Foucault and Deleuze are careful to avoid. Derrida's work is useful in that it questioned the position of the intellectual. But the intellectual's position is reconstituted to some extent through this questioning because Derrida's own position involves a judgement.

The same questioning of the intellectual's position is addressed in Foucault and Deleuze and Guattari's work, but it does not close the question in a judgement - even less so in a pseudonegation of position such as Derrida's. Foucault, Deleuze and Guattari examine more than the failure of their position (Patton, 1984-85:79)¹⁴. They examine and lay open the "theoretical consistency which renders possible the analyses themselves" (ibid.). This does leave them open to criticism, but that seems exactly the point. Whilst Derrida's system is closed, in that it assumes to have had the last word, Foucault's and Deleuze and Guattari's systems are open to interactive becomings, to getting things wrong. This is the importance of the failure of the becoming, of the creation of new plan(e)s. Another way of putting this is in the manner of Massumi, who writes that "Becoming is supremely pragmatic, or it fails" (1992:100). In other words, becoming is not a matter of intention, of the gathering of a will. It is rather subject to that which it is met by and changed by along the way. It is "directional" (95). Deleuze and Guattari write that "the failure of the plan(e) is part of the plan(e) itself' (ATP:259). This makes becoming "an infinite undertaking" (ibid.). In this sense a political, philosophical or ethical 'becoming-other' should not be a takeover or colonisation of the other at all, but a becoming-different of that double becoming itself with the other. It is only then that lines of escape are formed. Here we must be

¹⁴ Patton is only referring to Foucault here.

careful to locate the initial arena of transformation as the virtual, in a fostering of a virtual ecology which preserves the consistency of double becomings and lines of escape.

The "nonvoluntary transmutation" (ATP:269) here - the failure of that becoming to preserve its State - is not that of the 'other' such as the subaltern, or of any other. It is that of the becoming itself. Becoming itself must fail in order to maintain its consistency as becoming. Deleuze and Guattari's becomings, their whole work, will be misunderstood until this is grasped. And because it is nonvoluntary, becoming is very precisely not organized along the lines of a system of quarantined 'pure' thought, especially that of the 'Great Thinker'. Rather becoming is made consistent within a process whereby thought itself enters into a meeting of outsides in which the thinker is caught up. It is not just a matter of not wanting to speak for the other or of the other; it is a matter of necessarily being unable to, of deliberately constructing intellectual processes which deny that position or ability.

Who are we when we are not the Same?

History does nothing but translate a succession of co-existant becomings. (ATP:537¹⁵)

It would be foolish to suggest that Deleuze and Guattari avoid all 'centrisms' in their work, or that they do not at times exoticise, romanticise or essentialise in some of their examples¹⁶. However, I do not think that this allows us, as so many critics seem to believe it does, to either dismiss their work, or to fall away from its many implications back into theories based upon the primacy of representation or notions of ideology. We are only just

¹⁵ Cited in Patton, 1984:68.

¹⁶ See Miller, 1993 and Lattas, 1991, not to mention the whole controversy surrounding the becoming-woman that I have discussed in chapter four.

learning to speak difference let alone 'act' consciously on it. Our languages of identity, similitude, taxonomy and opposition are overwhelming, especially in the academy. Perhaps it is time to move forward from simple academic critique and to experiment with the possibilities of new languages - and take into account Christopher Miller's useful statement of the problem, in the middle of an article that is otherwise highly critical of Deleuze and Guattari, that we "must heighten rather than diminish our capacity to understand divisions of world space, even as those divisions shift, dissolve, and reform" (1993:33)¹⁷. As I have argued, Deleuze and Guattari's ideas present many possible ways to begin to do this. In many ways their failures are points of departure. To suggest however, as Miller does, in an exemplary piece of theoretical misrepresentation of Deleuze and Guattari's attempt to deal with contingency and interaction, that "faced with a forest" Deleuze and Guattari are suggesting that we should simply "declare that we don't believe in trees" (ibid.) is facile. Deleuze and Guattari do, of course, see the trees (which Guattari at least was not only keen to see but to preserve), the borders, the representations, the States, the hamperings of flows, the lines of flight that collapse into fascisms, black holes, death, and a madness that they definitely do not valorise. On the other hand, what is problematic about many of the critiques of Deleuze and Guattari is that they not only 'see' State forms of representation, but they constantly seek to believe in them, to reimpose a belief in them and to police that belief, even as "divisions shift, dissolve and reform" (ibid.). Therein lies the difference. In addition, articles such as Miller's, and others like it, provide no way out of the supposed "postidentitarian predicament" (6) that Miller identifies - neither do such critics really write who this is a predicament for Deleuze and Guattari, along with other thinkers such as Irigaray, Foucault, Patton, Grosz and others, are arguing for the constant creation of new

¹⁷ Miller writes this in what is, nevertheless, an article hostile to Deleuze and Guattari's attempts to do so.

concepts as a way out of this predicament, not a return to the policing of outworn concepts. From another angle, these are concepts that take the *predicament* out of postidentitarianism in order to 'see the trees'. That is what nomadology is - the response of a shifting thought to a shifting world - a world in process. That is why a notion of becoming is necessary *first of all* as the ground of groundlessness for interaction, and only *then* as value.

To reiterate, a theory of becoming arises from a theory of the operation of forces. This is far from idealist, utopian or essentialist. It is no more so than a theory of forces in physics. A theory of forces implies that any force can be opposed with another force; anything can be critiqued but victory by force is not the triumph of Truth it is often mistaken for. From the point of view of Truth with a capital 'T'18, such a critique is a matter of a contradiction which, like the tragic hero with whom I began this thesis, must be judged. From the point of view of a theory of forces, however, what matters is what happens through such critiques, what is produced, of what fits or agrees with us. To recall from the beginning of this chapter, it is a matter of what "brings us some forces, or if they return us to the miseries of war, to the poverty of the dream, to the rigours of organisation" (CEC:169). It is a question of where, when and how, rather than right and wrong, at least in the first place. Without a theory of force, right and wrong are attributed through judgment alone, solely on the basis of the preservation of various forms of State thought. What is actually produced is too easily ignored. One cannot have a theory of multiplicity, of the complexity of interactive becomings - especially if we are involved in the most radically complex and shifting of worlds - if we turn first and foremost to the judgments of interiorised subjects or political and academic disciplines. What needs to be conceptualised before judging any concept, is the interactive nature of thought itself, the way in which what we think is not just a matter

¹⁸ This is as true of the valorised position of the intellectual unveiling the schemes of ideology to the ignorant masses, or even the academic defending an intellectual discipline against incursion and 'dilution'.

of aligning ourselves with True ideas or the 'real' world, but of seeing that thought is always nomadic first, always an exterior series of operations, always itself becoming. Thought is a series of interactive social and environmental processes that reaches far beyond the interdisciplinary to the world at large, its becomings constantly leading to new (or old) ways of actualising the world. We may *never* be able to think the true, but how can we *avoid* thinking the real?

Patton writes that Foucault "relies upon" a model of lines of flight which allow for the formation of new virtuals in the future social field without necessarily defining what these virtuals will actually do. Patton suggest that for Foucault, "social criticism" is a -

process of analysing and working upon the limits of the present, a matter of asking which among those things presented to us as universal, necessary and therefore unchangeable is in fact purely singular, contingent and therefore open to change. The recent history of relations between men and women seems to exemplify just this kind of criticism, and in some areas, this kind of change in the social order. (1988a:94)

If there was ever to be a becoming (not woman) of such 'universal' positions as the Man for woman and men, it would be an undoing that must proceed - for men - silently, totally without fanfare. Each time this undoing is spoken in the language of the Man it can only become re-active in the domination of relations of exchange - in a circulation of signs in which it cannot help but be positioned. As for the becoming of minorities such as women, at the very least, Deleuze and Guattari's theories acknowledge the political necessity - both Molar and molecular - of the valorisation of their presence. At the same time, Deleuze and Guattari may be two of the few contemporary philosophers who provide a description of

what it is that men can do in the context of gender relations - thus their work, whilst perhaps not free of problems, also needs to be taken more seriously than it has been, perhaps not by women but by men. One must always remember that although Deleuze comments that there is the "shame of being a man", he also asks "Is there a better reason to write?" (CEC:11).

In all this it can finally be acknowledged that interaction is not about an exchange of subject-positions. Nor is it about an aggrandisement of power-knowledge. Perhaps 'becoming-imperceptible', Deleuze's stated aim in his work and life, is much more important for everyone than notions such as 'becoming-woman'. To quote Jardine it "is an intensively different kind of difference that Deleuze wants to bring to the surface of life, a difference distinguished from itself without distinguishing itself" (135).

Perhaps many of these problems find their processual solutions in some hints given in Deleuze's early work. As discussed in chapter eight, in Difference and Repetition, Deleuze suggests that there must be some ethical resistance to too much explication. One should not attempt to completely become other, for example. In this a totally 'successful' becoming would, in fact, be a failure. The reverse side of the coin is that only failed becomings succeed. It is only in the failures of becoming-woman, for example, that one may approach what is now seen as the necessity of unbecoming for both genders, as defined in their Major State relative to Man.

Deleuze proposes a clear ethics of approach to the other. He defines the Other - again demonstrating the necessity of expression as an ethical value - not, as with Lacan, on the basis of the 'hold' the Other has over one's subjectivity, but on the basis of the Other's own "expressive value" (DR:260). This is the extent to which the Other expresses something in itself. He gives the example of a "terrified" face, when we do not know what it is that has terrified that face (ibid.). For us, this mobilises a virtual world - not of resemblances; we do

not know what has terrified the Other - but a virtual world "implicated or enveloped in its very heterogeneity with what envelopes it" (ibid.). For Deleuze, the Other should not be explicated. This would be a process belonging to the I or the Self with its reduction of the unknown possible to the ground of common or good sense (the sense with which we refute the affects of the Other as a terrified possible world). To explicate too much 19 is also to cancel the "expressivity" of the Other (ibid.) and to dismantle its Other-ness, as it is this expressivity that defines it, and from which it "cannot be separated" (ibid.). As such, in "the psychic system of the I - Self, the Other functions as a centre of enwinding, envelopment or implication. It is the representative of the individuating factors" (261) by which difference is aroused and ungrounded. The subject cancels difference in common or good sense. The Other leads us, not towards the interiorisation of the Other, but towards the interiorisation of difference, in a sense, the interiorisation of our distance from the Other with which we interact. The purpose in interaction, then, is neither to explicate the Other, nor to take the Other over. Instead, Deleuze invokes the following ethic.

The rule invoked earlier - not to be explicated too much - meant, above all, not to explicate oneself too much with the other, not to explicate the other too much, but to maintain one's implicit values and multiply one's own world by populating it with all those expressed that do not exist apart from their expressions. (ibid.)

This implies a conservation of the Other as Other - an ecology of the continued (virtual and actual) expression of the Other. We make a mistake if we think of interaction or becoming as an accumulation of 'Other-affects' *under* a Self or I, even if this is the self or I of the cyber artist using the audience to trigger his or her romanticised Self on a CD-ROM.

¹⁹ Of course, to write this in the context of a thesis is not without its ironies.

For it is not the other which is another I, but the I which is an other, a fractured I.

There is no love which does not begin with the revelation of a possible world as such, enwound in the other which expresses it. (ibid.)

Just as VR makes the threshold of preception its material, so becoming-other is at the dawn of the contemporary problematics of (non)-Being (DR:64) and representation, of who we are when we are no longer the Same. In this context we can also consider the creative. It is here that we can reintroduce a notion of the theatre as "ultimate theatre" which "encompasses everything; while in another sense it destroys everything; and yet in another sense selects among everything" (293). The object of this theatre (and its new approach to art) is not to imitate, not to reproduce the categories of Identity, Representation and the Self. but to -

...bring into play simultaneously all these repetitions, with their differences in kind and rhythm, their respective displacements and disguises, their divergences and decentrings...For there is no other aesthetic problem than that of the insertion of art into everday life. The more our daily life appears standardised, stereotyped and subject to an accelerated reproduction of objects of consumption, the more art must be injected into it in order to extract from it that little difference which plays simultaneously between other levels of repetition. (ibid.)

It is not until we can accept this play of difference in interaction that we can understand why the problems of an increasingly technocratic society are, at times, also aesthetic problems. They are problems of creating and recreating forms of play - of maintaining processual openings. These processual openings should succumb neither to the dominant attempts to submit to the systems of representation drawn from the past in order to police the future, nor to the vortex of dissolution left in the wake of the dismantling of those

Representations by shifts in our perception of differential thresholds. This dismantling itself is not, as some critics would like to claim, performed by theorists of becoming such as Deleuze and Guattari. Such theorists are attempting instead to emphasise that there is always a pathway *between* the representational police and the vortex left by the dismantling of representation. There are always new lines of flight which it is possible to draw out of any situation. Indeed, how could we avoid doing so?

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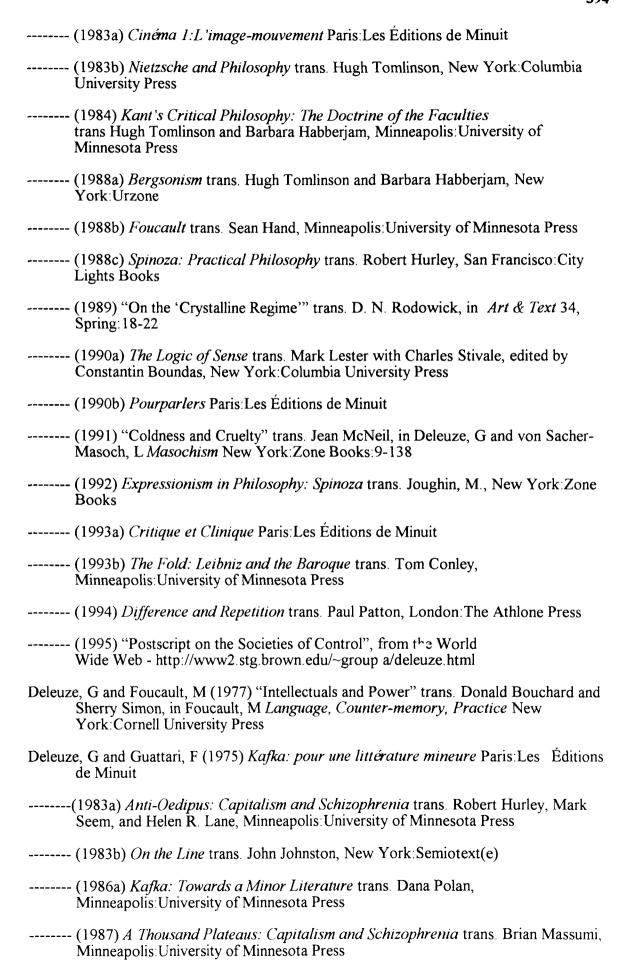
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