



Durham E-Theses

Speed and becoming in the urban public sphere

O'Hara, Charles

How to cite:

O'Hara, Charles (2004) *Speed and becoming in the urban public sphere*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/3100/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

SPEED AND BECOMING IN THE URBAN PUBLIC SPHERE

CHARLES O'HARA

**A copyright of this thesis rests
with the author. No quotation
from it should be published
without his prior written consent
and information derived from it
should be acknowledged.**

Submitted for a Doctor of Philosophy at the University of Durham

Department of Geography

2004



28 FEB 2005

SPEED AND BECOMING IN THE URBAN PUBLIC SPHERE

ABSTRACT

Concerns about speed and politics focus on the loss of the self-present political subject, whose critical will can direct and legitimate political discourse. The hope of sustaining such a subject is understood to be threatened by the erosion of the ideal-normative grounds that are said to support critical subjectivity (e.g. the city, the community, public space). While the concerns about the character and control of public space are certainly to be taken seriously, it is not clear why we should attach these concerns to a loss of a critical political subjectivity and an erosion of public debate. The argument here begins by acknowledging that speed is an ambivalent quality in politics, both creating a potential to open debate to new identities, and posing the risk that oppositional politics will stall in hard oppositions, or in a failure to recognize that which is truly novel in an event. Both of these risks require that recognized identities begin to 'leak', and become open to a world whose potential exceeds the recognized permutations of the possible. This thesis explores how a public, and its implied subjectivities, are maintained 'at speed', within the multiple timespaces of the contemporary city. Instead of an objective speed that comes from without, and overwhelms the subject, time is conceptualized as duration; an immanent view of time in which speed is characterized as repeated disruptions. A public can form around these repeated disruptions. The public is understood to be an assemblage, in Deleuze and Guattari's use of the term, which is sustained by the circulation of texts. A public actualizes wherever, and whenever, there is a successful conjunction of text and context. These conjunctions are not determined, but are only determinable in the event of their actualization. However, it is possible to create a diagram of the assemblage which highlights the potential that exists for the formation of a public, as well as the potential to go beyond recognized subjectivities and open the assemblage to a process of becoming. This thesis creates such a diagram for the smog-event in Toronto, Canada, and engages in an 'experimental critique'. An experimental critique seeks to explore how the event has been placed into circulation in the public sphere, and to encourage experimentation with the limits of recognized identities and possibilities that are sustained in the public assemblage.

© The copyright of this thesis rests with the author. No quotation from it should be published without their prior written consent and information derived from it should be acknowledged.

ACKNOWLEDGEMENTS

I would like to thank my supervisors, Ash Amin and Mike Crang, for their support and enthusiasm as I branched out and experimented with new ideas. When I felt lost in the woods their insights and encouragement kept me going. I would also like to acknowledge the role that the academic community in the department of geography; during my time here there has been a robust and challenging set of ideas in circulation and a truly welcoming community in which to test their limits. In particular I would like to thank Paul Harrison, Kurt Iveson and Adam Holden. My fellow postgrads were also a great help and great encouragement, both as friends and colleagues. Thanks are also due to all those in Toronto who responded to my call for participants, and who were willing to share their insights about smog. Finally, I would like to thank my family, and especially my wife Erika, for all their support and for pulling me away from the books when it was clear that it was time to take a break.

TABLE OF CONTENTS

Abstract.....	i
Acknowledgements.....	ii
Table of Contents.....	iii-iv
List of Figures.....	v-vi
INTRODUCTION.....	1
CHAPTER ONE: Speed and a Politics of Becoming.....	18
The narrative of speed, first pass: threshold speed and the absence of the political subject.....	20
The narrative of speed, second pass: the loss of ideal conditions for dialectical synthesis and the impasse of ‘hard’ opposition	25
A politics that is (un)comfortable at speed: a politics of becoming.....	33
Mediation and indeterminacy in the formation of publics.....	35
Publics as assemblages.....	40
Experimenting with assemblage.....	42
Conclusion.....	46
CHAPTER TWO: The Public Assemblage.....	49
Assembling time: the actual and the virtual.....	51
Time as the coordination overlapping technological networks.....	52
Time as duration - the actual and the virtual.....	55
The public assemblage and the time of the public	60
Capitalist axiomatic and a critical public sphere.....	71
Conclusion	80

CHAPTER THREE: Examples and Experimental Critique	83
Repeating the event: using concepts to create examples.....	85
Concepts	86
Examples.....	90
Witnessing, presentation, description.....	94
Conclusion	101
CHAPTER FOUR: Assembling the Smog Event	103
Smog-event: Toronto, 5:30 PM, rush hour commute.....	103
Smog-event: Smog Summit, June 2, 2002: “The time to act is now”.....	106
Smog-event: London 1952.....	115
Smog-event: Tracking the invisible –molecular escape and the problem of ‘no safe level.....	118
Capture? – Ozone, PM _{2.5}	119
Capture? – Air Quality Index and ‘legitimately safe’ air.....	127
Smog-Event: The incorporeal transformation of the public assemblage.....	132
Conclusion	138
CHAPTER FIVE: Repetition and Becoming: exploring the potential of the smog-event	141
Field note.....	143
The need for an ‘efficient subject’.....	146
The Smoggy Milieu.....	149
The Efficient-subject.....	161
The Play of Judgment.....	171
Becoming-Smog.....	181
Conclusion.....	187
CHAPTER SIX: Experimenting with Circulation	190
The affect and percept of gridlock – the end of the road.....	193
The car and bicycle in Toronto’s gridlock.....	216
Bicycle by Rainer Ganahl.....	223
Conclusion.....	237
CONCLUSION	241
BIBLIOGRAPHY	253

LIST OF FIGURES

		PAGE
Figure 1.0	Billboard accusations, Bathurst St. Toronto Canada. Summer 2002.....	2
Figure 4.1	Smog Horizon on Highway 401.....	103
Figure 4.2	Smog Cloud on Suburban Arterial.....	103
Figure 4.3	Drive Clean Logo.....	135
Figure 5.1	you just know.....	151
Figure 5.2	let me see what it looks like out there.....	152
Figure 5.3	building momentum.....	154
Figure 5.4	smog-event at a conjunction of forces: wind, hot pavement, tired limits.....	155
Figure 5.5	I get to the corner...a burning feeling of bad air.....	156
Figure 5.6	the heavier air, which is often smoggy air, kind of falls down.....	156
Figure 5.7	you can really <i>see</i> the smog.....	162
Figure 5.8	Brown is everywhere.....	163
Figure 5.9	territory of risk and morality.....	166
Figure 5.10	just one guy in a car like almost everyone else.....	167
Figure 5.11	people really don't give a shit.....	173
Figure 5.12	I can't see that we're going to make it any better.....	180
Figure 6.1	Road Series Toronto.....	198-209
Figure 6.2	Images from Martha Rosler's <i>Rights of Passage</i> (1997) (from top to bottom): <i>Routes 1 & 9, New Jersey 1995</i> <i>Donuts, New Jersey Turnpike, 1995</i> <i>Greenpoint, under Brooklyn Queens Expressway, 1994..</i>	212

Figure 6.3	Submit and Dominate (car advertisement, Toronto).....	214
Figure 6.4	Detail of <i>use a bicycle. mail art project with self made stamps</i> by Rainer Ganahl. 2004.....	225
Figure 6.5	<i>Forbes.com, Reuters World News Highlights 1900 GMT, 1/9/04 and Newsday.com, bicycle bomb, 1/6/04</i> by Rainer Ganahl, 2004.....	227
Figure 6.6	Detail from <i>Newsday.com, bicycle bomb, 1/6/04</i> , by Rainer Ganahl, 2004.....	227
Figure 6.7	Detail from <i>Forbes.com, Reuters World News Highlights 1900 GMT, 1/9/04</i> by Rainer Ganahl, 2004.....	228
Figure 6.8	Still shots from <i>bicycling</i> by Rainer Ganahl, 2004.....	232

INTRODUCTION

Imagine for a moment the following scenario:

It's 30 degrees Celsius and the humidity makes it feel like 37; yet another heat wave in what has been one of the hottest summers on record in Toronto. Looking to the horizon the office towers in the city centre are shrouded in a smoggy haze, the landmark CN tower a dull grey in the morning sun. There has been a record number of air quality alerts issued this summer and another one has been issued today. Is the air getting worse? Are my children's health at risk? Is this climate change?

These kinds of observations and questions might pass through a commuter's mind as they sit in traffic, but they are not likely to occupy more than a few seconds of their time before they are pushed aside by more mundane and pressing concerns. To some activist and academics concerned with the fate of the political in contemporary society, this kind of 'inattention' is a serious problem that reflects how mobility and speed are eroding the conditions for political reflection and action. Critically theory has traditionally sought to overcome this erosion by trying to recreate the conditions that will support a self-present political subject, one who can engage critically in the world around them. The absence of such a subject in practice, however, has created an uneasy oscillation between a lament for lost citizen-subject, and a condemnation of the apathetic masses. Adopting the latter strategy, some anonymous culture-jammers were not going to let 'the public' off the hook with a shrug of incredulity – in the summer of 2002, on one of Toronto's busier downtown commuter arteries, they commandeered two large billboards and painted in large scrawling letters the accusation APATHY LETHARGY (Figure one, next page).

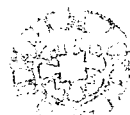




Figure 1: Billboard accusations, Bathurst St. Toronto, Canada. Summer 2002 (author's photo).

The gloves were off -- the accusation that so often lies hidden behind concerns about the political was made public, labelling the commuters stuck in traffic on this smoggy day, passing a verdict on this whole messed-up world that 'chooses' to look the other way when the sky is falling. I don't mean to slip towards hyperbole here, but I want to preserve the affect of these billboards, the indignant mixture of anger and impotence they express, because I think it points towards weaknesses in how we critique 'actually existing democracy' (Fraser 1994). I want to argue against these sentiments, or better, I want to think through the ambiguity they provoke -- who is being targeted in these billboards, who is apathetic, and what should they do?

We could argue that the accusation is simply over-strident hyperbole by pointing to the political economic constraints that restrict individual choice and action, or the corporate control that distorts democratic process etc. But this only displaces the righteous indignation 'upwards', rather than addressing it. In particular, it still targets a subject (albeit an institutional or corporate subject) who has failed to uphold the normative ideals of social responsibility. What is compelling about the billboard accusation is that it provides no clear indication of who is being addressed. In the middle of mobile and temporary passage it simply accuses everybody. This is not to suggest it points to some form of Original Sin shared by all, which lamely dissipates the sentiments expressed on

the billboard. Instead, I want to argue that the ambiguity points to the fact that a world characterized by speed and mobility is also a world characterized by a loss of control. However, critical discourse is ill-equipped to deal with this loss of control so long as it premises critical intervention on first regaining control in order to develop a critical distance from the event. Therefore, from a critical perspective ‘things always happen too early, understanding always comes too late’, and so critical thought always seems to be ‘too slow’ (Bielik-Robson 2000 p.72).

In what follows I explore how we can critically engage in public discourse without premising critically intervention on first regaining control. It is argued that with the loss of a self-present critical subject, there is a need to develop an affirmative, or experimental, critique that diffuses the oppositional dynamics of political struggle by making visible, and experimenting with, the limits of recognized political identities. In doing so an affirmative and experimental critique aims to make visible the conditions, and potential, for critically intervention (or better, experimentation) in a public sphere that has little time to pause for reflection, and which is continually in a process of becoming.

At speed normative judgment becomes problematic, it is not always easy to provide clear answers to the question of who is to blame, nor what should be done. In response to such a predicament, it is perhaps understandable that some would express the sentiment that ‘we’ need to ‘slow down’. Thus Wolin writes:

Starkly put, political time is out of synch with the temporalities, rhythms, and pace of governing economy and culture. Political time, especially in societies with pretensions to democracy, requires an element of leisure, not in the sense of a leisure class...but in the sense, say, of a leisurely pace. This is owing to the needs of political action to be preceded by deliberation and deliberation, as its ‘deliberate’ part suggests, takes time because, typically, it occurs in a setting of competing or conflicting but legitimate considerations.... Political time is conditioned by the presence of differences and the attempt to negotiate them. The results of negotiations, whether successful or not, preserves time...That political time has a preservative function, is not surprising. Since time immemorial

political authorities have been charged with preserving bodies, goods souls, practices, an circumscribed ways of life (Wolin 1997 prg. 1.4).

This call to slow-down reflects a view of politics in which democracy depends on the considered reflection of a self-present political subject, the democratic will is what governs and directs time, or as Wolin says 'preserves time'. In this view of politics, democratic debate progresses through opposition, recognition and inclusion – a familiar dialectic rhythm. The political body, and the political subject, are understood in the first instance to resist change, only opening their 'circumscribed ways of life' to 'good souls'.

However, the call to slow down is inadequate, both from a pragmatic and a normative standpoint. First, from a pragmatic standpoint, it is not clear how a democratic polity would 'slow down' (what would that mean?). Presumably there would have to be some form of agreement to slow down, which would take deliberation, for which we would have to slow down to do it adequately. We would be caught in double bind. In short, it is necessary that we think about how to act 'at speed', and not at some ideal speed. Second, it is not at all clear that it is desirable to slow down (Chesneaux 2000). As Conolly (2002) argues, speed is also what disrupts unjust and exclusionary social relations, and so it brings with it the opportunity for progressive change. Speed is a force that opens up the 'concentric circles' of identity to a process of becoming, which it turn makes possible the formation of new identities:

The cultural logic of recognition [e.g. Wolin c.o] purports to *recall* things that are there intrinsically but have been forgotten, occluded, repressed or oppressed, while the groan of becoming is the uncertain process by which *new* events and identities reconfigure established logic of recognition in ways that cannot be captured entirely by tight models of explanation or dialectic advance (ibid. p.159).

Once again, we see the ambiguity of speed, which calls on us to figure out how democratic societies can live with speed, somewhere between a regressive stability and destructive fluidity. Therefore, Connolly calls on individuals to nurture a 'critical responsiveness', "not merely to already existing identities but to the politics of becoming

by which new constituencies periodically surge into being from the opaque netherworld of difference, injury and energy” (ibid. p.171).

I agree with Connolly’s normative response to speed – a need to open the oppositional identities of a politics of recognition to an awareness of their own becoming, a process that moves beyond the will of the subject to control and preserve. In what follows, I want to explore what a politics of becoming would look like in practice. I take up the challenge where Connolly leaves off, for while Connolly posits the normative need for a politics of becoming, he offers little guidance on *how* such a politics might emerge, and how becoming can be harnessed to desirable ends. Becoming does not promise a better future – a better future must be created from becoming. It is not simply a matter of what political subjects ‘should’ do in response to speed, but of understanding how to open public discourse to the kind of ethical norms that Connolly identifies, to develop a critical practice and not just leave it as a theoretical norm. There is a risk that in saying we ‘should’ be open to becoming, we will turn becoming into something that can be recognized by the subject, which would simply return us to a politics of (attentive) recognition. However, becoming is precisely that which cannot be represented, it is instead a process that can only be sensed at the limits of recognized identities and which moves between recognized identities (Deleuze and Guattari 1988 p. 237-239).

Pragmatically it is not a question of representing becoming, but of engaging in politics in such a way as to re-activate the force with which we (i.e. those engaging critically in politics) were ourselves pulled into becoming, in order to legitimate experimentation with changing circumstances.

The bridge I use to cross the gap between a politics of recognition, and a politics of becoming, is a critical appraisal of the role of the public sphere in contemporary politics. The public sphere is not a realm of decision-making, but a process whereby decisions and claims gain legitimacy and are sustained in a democratic polity. A theoretically ideal public sphere would be one which provides the grounds on which claims could be made public, given ‘legitimate consideration’, and synthesized into a more just outcome (Laclau and Mouffe 1985; Habermas 1992). In relation to this idea, a faltering public

sphere legitimates unjust outcomes, and concerns with speed are often expressed as part of a critique of contemporary ideologies that forego any vision for the future and which encourage an a-social individualism (Bertman 1998; Sennett 1998; Bauman 2000; Zawadzki 2002). The dominance of such ideologies of 'presentism' and 'individualism' are understood to be not just the result of a distortion or capture of the public discourse by powerful interests, but more problematically an exhaustion of critical thought in the public sphere, an inability or unwillingness of political subjects to 'believe' counter-ideology. It is for this reason that purely normative responses about how the public should respond to speed are weak, because they simply draw attention to the fact that 'the public' doesn't appear to be present or listening. Therefore, the apparent weakness of counter-ideology is explained in terms of the erosion of the conditions that would create a critical and self-aware political subject, and so support a critical public sphere. Speed is central to these narratives of decline.

The impact of speed is characterized in two ways – in terms of an erosion or control of public space, and in terms of an experience of fragmentation, disruption and disorientation. With regard to the first, it is argued that high-speed technologies allow for the creation of a more dispersed and exclusive urban form, which allows for separation of difference, an exclusionary withdrawal of the privileged from social responsibility, and militaristic control of movement by the State (e.g. Virilio 1987; Mitchell 1995; Sennett 1998; 1998; Davis 1999; 1999). There is not just a normative concern with exclusion and control, but with how these controlled spaces provide no opportunities for encounters with difference, which it is argued invigorate the public sphere by making subjects more aware and accepting of difference. The second concern, about fragmentation of experience, argues that a constant influx and fragmentation of information leads to sense of being overwhelmed, and an inability (or unwillingness) for the average person to decide between, and commit to, competing claims (e.g. Bertman 1998; Sennett 1998; Bauman 2000; Melucci 2000; Virilio 2000; Zawadzki 2002). These concerns paint a picture of a public sphere that, for the majority of people, remains a spectator sport, over which they have little influence. However, it needs to be stressed, that these commentaries are largely speculative, and so we can also reverse their

normative assessment. With regard to the high-speed technologies and control, we need to also consider that such technologies can allow for a coordination and control that challenges State control, or as Connolly has noted, allow for the intrusion of new identities (Connolly 2000; Barry 2001; Porter 2001). Similarly, while 'fragmentation' may create a sense of being overwhelmed, it also creates a 'healthy' scepticism towards truth claims, one that Beck, Lash and Giddens for example, have argued can have progressive potential in a 'reflexive' modernity (Beck, Giddens et al. 1994). Once again, we see that speed and control need to be treated with ambivalence rather than condemnation. However, what we can say unambiguously, is that the ideal conditions hoped for in critical theorizing of the public sphere are definitely absent. Critical theory then finds itself at an impasse, because with the absence of ideal conditions to create the political subject, it must fall back on the will of an exceptional critical subject who can transcend these imperfect conditions and recognizes his or her predicament.

Whenever critical theory forgets that it is a normative exercise, it oversteps its limits and risks becoming an over-strident and moralizing critique that laments the loss of an engaged citizenry, and lambastes those with power for their greedy manipulation and control of the masses. In doing so, it forgets that the task is not to simply represent an already existing public, but to also call that public into being. Therefore, when it fails in this task it is perhaps tempting for the disillusioned critic to say that people are overwhelmed by 'speed' or 'power'. But such a lament cannot be taken seriously for too long in case it lulls us into a lamenting apathy that recreates the very conditions it seeks to critique by suggesting that there is 'a speed' after which a certain group of people become confused, while a privileged few remain able to see through confusion (for a critique of this kind of 'threshold' thinking see Derrida 1984; Prendergast 1995 p.190; and Bertman 1998 for an example). Such a lament forgets that the critic has to do some hard labour to call a public into being under non-ideal conditions, i.e. at speed. We need to then return to those non-ideal conditions and ask how a public takes shape, how identities form, within spaces that are controlled by high-speed technologies, and within everyday routines characterized by fragmentation and change.

When we pay attention to how we will call a public into being, rather than thinking about the ideal conditions that would maintain a certain kind of public, we are forced to deal seriously with the question of mediation. Although mediation is recognized as a key characteristic of the modern public sphere, it is often treated as simple transmission of information between already existing subjects (Carpignano 1993; Habermas 1994; Hartley 1997). This accounts for why mediation is often treated with ambivalence, or outright condemnation, as a distortion of communication that ideally takes place in a 'Agora-like' setting (even if mediated) (Habermas 1992; Stevenson 1998). However, this ambivalence is quickly repressed whenever distortion is understood simply as a product of ideological control of the communication networks – i.e. an exclusion from the public sphere. In doing so, we retain the agora-like notion of the public sphere, we have simply placed a TV or phone in between all participants in the debate. However, as Derrida's critique of the primacy of speech over writing (mediation) makes clear, mediation is not a distortion of communication, but the very condition of communication – even face-to-face communication (Derrida 1998). Communication is always a contextual event, it is always sent and received in a medium that takes it beyond the intentions of either sender or receiver. There is an intrinsic loss of control.

This insight into the essentially mediated character of communication has very profound implications for our understanding of how the public sphere creates legitimacy, and for our understanding of the role of the subject and speed in this process. It becomes clear that the subject does not exist prior to the reception of the message, which is to say that receiving and responding to a piece of information in a given context (a given medium), is itself a moment of subjectification. This means, as Warner (2002) argues, a public does not exist outside of its circulation. However, mediation must be understood in the broadest sense of the medium, or space, in which a person encounters a text, image or sound (Cavell 2002 p.24,66). This means that there is an inhuman element to the formation of public, a conjunction of forces that exceed any given human intention. As a result, communication, and the formation of subjectivity, is characterized by indeterminacy – all the more so in an age of mass and instantaneous communication.

The focus on the medium does not mean that content of a message is irrelevant, nor is it to dismiss the ideological restrictions on content, but it does draw out that critical thought must consider how changes in mediation changes the kind of subject that emerges, and so the role that ideology and belief will play in control. Historical studies of technology and culture have powerfully demonstrated how the subject emerges and changes in conjunction with different kinds of technology (e.g. Eisenstein 1983 on the printer press; Kittler 1986 on typewriters and computers; Crary 1992 on photography). Since the late 19th C, in the wake of scientific studies of the psychology of perception, as well as the growing popularity of technologies of perception such as photography, the stereoscope, and eventually film, there has been a cultural awareness that the subject is no longer present to themselves, i.e. that there are flows of energy and sensation that run beyond conscious perception, but which can nevertheless be harnessed to control the subject (Crary 1992; 1999). The technologies used to communicate information are never independent of what kind of knowledge is communicated (Eisenstein, 1983; Kittler, 1986). Today if we consider the life of a particular political claim, we can see that the success or failure of a claim to become legitimate is not simply undermined by the control of a particular communication medium (e.g. TV) by a particular group, but by the failure to control as well. This is a problem for all ideology, no matter what the political inclination. Ideology keeps being ‘exposed’ – a tape gets misplaced revealing an outright manipulation of facts, a ‘safe’ nuclear power plant leaks and contaminates ground water, a new scientific paradigm undermines ‘fact’ (Spinks 2000). These are familiar dynamics in a mass mediated society, and it gives rise to a healthy scepticism in all subjects.

As was noted at the outset, one of symptoms of a public sphere characterized by ‘speed’ is scepticism towards ideology, and a perceived growth in the legitimacy of ideology of presentism and individualism. Leaving aside the question of whether or not particular ideologies are gaining predominance, we can see now that the scepticism is not strictly an outcome of objective speed *per se*, but of the volatility of subjectivity in a world characterized by increasing mediation.¹ Therefore, it is useful to think in terms of two

¹ I prefer the adjective volatile, to the characterization of the subject as fluid or flexible, which still connotes a kind of self-present mastery. Similarly volatile is not as definite as absent, the latter claims too much and puts us on the road towards a nightmare of cybernetic control.

kinds of speed, or better, two different aspects of speed – the actual, or objective speed, and the virtual speed of emergence. This distinction is taken from a Deleuzian interpretation of Bergson's notion of time as duration (Ansell-Pearson 2002; Deleuze 2004 p.22-50). Time as duration is conceived as a continual flow that opens the objective bodies of the world to the chaotic, or open, multiplicity from which they emerge and are continually returning. In short, any object is but a temporary stability. A subjective identity then, is also always only a temporary stability, and it is a matter of understanding its conditions of emergence and repetition.

If we think then, in terms the objective speeds present in the public sphere – e.g. the speed of transport, or the transmission of electromagnetic signal - we can see that these speeds are dependent on a smooth functioning technical network that maintains a smooth passage, and so maintains the integrity of the identity of that which moves within it (Latour 1997). Our world is in fact formed of many such networks, and so many speeds; the successful coordination of different networks is what allows for a particular subjective experience of time (rushed, leisurely, nostalgic etc.). Rather than a subject who moves through space and in time, then, we have a subject whose time is assembled as a passage through space – we need to talk of an emerging timespace, or temporalized space (Crang 2001). If we then return to our consideration of the public sphere as mediated communication, and keep in mind our understanding of mediation in its broadest sense of the timespace in which a person moves, we can see that subjectivity, and so a public, emerges only temporarily and in repetition, at a conjunction of numerous speeds. Here it is clear that 'fast' speeds are crucial for maintaining contemporary subjectivities – e.g. the high-speed of telecommunication and transport – as well as for insulating them from 'others', but they only do so in conjunction with 'slower' speeds. Control is always the control of speeds, in the plural, never a singular dominant speed – but it is, nevertheless, often an effective control. This is where the virtual speed of emergence, or the accident, becomes important.

A complex temporalized space becomes prone to accidents. Unlike objective speed, which can be measured, predicted, and often controlled, the accident has a 'virtual speed of

emergence' that is 'infinite' and exceeds all objective speeds with its unexpected disruption (Virilio 2003). However, an accident is not merely technical, nor is it necessarily a negative occurrence – we can have accidents of knowledge (a crisis of faith, or a flash of insight, intrusions of memory). What defines an accident is a disruption of already recognized, and more or less entrenched, subjectivities and the networks that support them. The accident is important because it presents us with a problem and forces us to think (Massumi 2002b; Virilio 2003). What the accident signals is that a new set of connections has emerged from the chaotic, or open, multiplicity from which recognized identities have been formed and stabilized in actual assemblages. This disruption is crucial for a critical politics, because it can be used to draw attention to the fact that all recognized, or actual, identities are reductions of a much more complex, and virtual, reality of which they are only one expression. This does not mean only that the new connection needs to be recognized, which would return us to a politics of recognition and opposition, but that we need to open subjectivity to a process of becoming by which what is, is always becoming-other. A better term, then, for the accident is the event (Deleuze and Guattari 1994 p.111-113; Stengers 2000 p.66-67). The event is a conjunction of virtual forces that is expressed in a particular state of affairs, but is never exhausted, or wholly represented by this state of affairs. Therefore, any given occurrence of the event signals a much larger potential that cannot be represented – because it does not exist as a thing in the real world – but which is nevertheless actually present and opens all recognized identities to further becoming. The event does not reveal a problem for which there is a solution, but instead makes us aware of a problematic situation for which there is not one adequate solution, but which will instead require continual experimentation.

We are now better able to articulate the challenge that faces a politics of becoming. It is a question of exploring and engaging in the process by which claims are assembled from the event and put into circulation. Chapter two deals with the conceptualization of this in detail, but in brief we can consider the public sphere in terms of what Deleuze and Guattari (1988; Deleuze 1999) call an 'assemblage' that is animated by an 'abstract machine', or 'diagram', that translates the event into a text that can be circulated and

used in different contexts. The public sphere as 'abstract machine' produces publics – not just discourse, but subjectivities and spaces brought together in an assemblage that sustains a claim, and so makes it legitimate. However, the machine is abstract because it exists in the virtual, and because the connections it draws are not pre-determined, but are themselves an event. This means that any expression of the public, and its subjectivities, are continually prone to disruption. Therefore, for critical thought that seeks to work at speed, in the midst of this ongoing assemblage, it is a question of how the continued disruption of the event can be used to encourage experimentation with existing identities and so draw individuals beyond themselves and into an engagement with their own becoming. Becoming signals the continued disruption and reactivation of the event beyond any recognized identities, which creates a potential to move beyond what we are, and calls on us to become with the event, to respond to it in an ethical manner.

However, it needs to be stressed that this is not a simple matter of recognition on the part of the subject. Becoming is an involuntary process that takes the subject beyond themselves despite what their intentions might be – as critics, as embodied humans, we do not recognize becoming, but sense its excessive presence above and beyond any recognized identity (Deleuze and Guattari 1988 chap.10). Therefore, it is never just a matter of representing or communicating facts or truth, but of re-activating the event. The critic is a witness to the event, and his or her task is to craft a text that will re-activate the event in different contexts (Massumi 2002a; Dewsbury 2003). However, because becoming and the event are nonrepresentable (by definition they are that which is always changing), there must be an engagement with an aesthetic dimension – a transmission of affects and percepts (sensation) -- that allows one to propagate the event. As Deleuze and Guattari argue: "Politics operates by macrodecisions and binary choices, binarized interests; but the realm of the decidable remains very slim. Political decision making necessarily descends into a world of micro-determinations, attractions and desires, which it must sound out or evaluate in a different fashion." (Deleuze and Guattari 1988 p.221). This different evaluation is always an experimental evaluation, for we can never be certain that we will succeed in transmitting the event, in re-activating the

sense of the event, and in doing so make visible the problem the event poses to recognized identities, and the desirability of experimenting with one's subjectivity.

There is no use lamenting these conditions, they are what we are given to work with in the contemporary public sphere. Instead, it is necessary to engage in what I call an affirmative, or experimental, critique. Rather than following a dialectic critique that seeks to synthesize opposition, an experimental critique would follow what Williams (2003 p.19) calls a Deleuzian four-fold dialectic. When one encounters an opposition between existing identities, the first move is to critique these identities as partial representations of a non-representational reality. This critique of representation is also a critique of the control that it legitimates. However, and second, one does not oppose these identities with new ones, but explores how these identities emerge within the networks and flows that are always both actual and virtual. Third, one shows how these conditions are never static, but instead set up a 'search for completeness' - i.e. a process of becoming within repetition. Finally, having made identities problematic in our own analysis and thought, it is necessary to experiment with how to re-activate this event, and so provoke others to explore the limits of existing identities in relation to the problem posed by the event. An experimental critique aims to propagate the problem posed by the event, not contain it, and so it encourages and validates a vital experimentation with, and belief in, the world as given (Deleuze 1995 p.176).

In the second half of the thesis, I will engage in an experimental critique in relation to smog-events and the politics of air quality in Toronto. Smog is of interest in a discussion of speed, politics and becoming for two key reasons. First, speed is necessary for the control of smog, whether this be through attempts to displace pollution in space and time, or whether it is to monitor and control the sources of pollution in an attempt to maintain safe air quality. Therefore, speed is central to assembling an identity for smog as air quality, and for assembling (ir)responsible identities in relation to mitigating air pollution. However, and second, smog is never completely captured by this process of assembling, but remains disruptive within everyday routines. Therefore, smog is of interest because it provides an example of how subjectivities are not only formed in

repetition in an assemblage, but also how disruption opens the assemblage to becoming. Smog is an example of a political issue that intrudes into the routines of everyday life, routines that are supported and disciplined by the multiple speeds and temporalities of the contemporary city. The thesis is not an attempt to resolve the best course of action for improving air quality in Toronto, but is instead an example of an attempt to intervene (however humbly) in an oppositional political field 'at speed'.

The use of smog as an example also reflects my own interest in environmental politics, but it does not represent an engagement in the debates in critical ecology that focus on the social construction of nature, or the public perception of ecological issues (e.g. Demeritt, 2001, 2002; Castree, 2003; Bulkeley, 2000, 2003). Critical ecology represents a different project than the one being presented here, because this literature is focused on how ecological claims are constructed and recognized, whereas I am interested in how these claims create a potential that moves beyond recognized positions. In chapter four I examine the assemblage of a measure of air quality, but my purpose is not to critique construction of the knowledge claim, but to explore how this creates a potential for the actualization of a public. Similarly, in chapter five I engage with how a subject can respond to claims about air quality, but I do not claim to be representing a public, but presenting the potential that is created by the circulation of air quality claims, and which goes beyond recognized positions. The point of contact between critical ecology and what I am doing is in its normative claims that ecological politics should remain open to the uncertainty and eventfulness of the nature-culture interface. I begin with this ethical premise, and explore how the smog-event, as a daily and ongoing disruption within the urban routines, creates a problem that challenges us to think about our ability to contain and isolate ourselves, and the consequences of our actions; in doing so it offers an opportunity to open public discourse to a process of becoming that searches for a way of living that does justice to an event that signals the limits of control.

Chapter four looks at the machinic production of the smog public(s) through the construction of an air quality index, and the system of control and monitoring it necessitates. Here we will see that speed is both essential for the capture of the smog-

event, and that smog continues to escape and be disruptive. The eventfulness of the smog-event is transferred through science into the public sphere where it is manifest as an inability to legitimately finalize a 'safe' air quality threshold. This raises questions about what kind of control is legitimate, because control of smog also necessitates control of the urban population. As a result, the formation of a public around a particular claim about how to provide 'safe' air remains an eventful and indeterminate process.

In chapter five, building on interviews conducted in Toronto, I explore the indeterminacy of forming a public in more detail. I look at how the disruption of the smog-event enters into everyday routine, and the moral quandary it presents to the subject as they try to 'be efficient' with their energy use in order to 'do their part' to reduce smog. As a first pass, I present the subject as a 'body-without-organs' (BwO), open to its 'milieu', and argue that the subject here encounters smog first as an intensity or force. The subject as BwO is conceived as creating a 'plane of consistency' that is disrupted by the added intensity of smog, and which then creates a potential for change, or for a reactive turn away from the smog-event. The concept of a BwO presents a subject that is opened to the smog-event, but how a person responds to this disruption is also dependent on how they negotiate the discipline required to 'be efficient'. As a second pass, I explore how the intensities and forces that define the body-without-organs become expressive as a territory, in which a subject can be recognized as (ir)responsible. This territory is not fixed, but is continually being re-defined as a subject negotiates what is 'reasonable' in a particular context. I argue that in both these aspects we can see how smog creates a problem for maintaining a stable subjectivity, which in turn allows us to see that the subject is always exceeded by a process of becoming.

This excess can then be used to problematize the dynamics of control in modern societies. However, making control problematic requires that moments of disruption are used to animate and give force to critiques of control in the public sphere. Therefore, in chapter six I look at how one might do this in the case of encouraging a public open to experimenting with transportation reform (one of the key reforms in a smog politics). In order to do this, the opposition between already recognized road users must be diffused

and opened to becoming. I therefore engage with the opposition between cyclists and drivers on the streets of Toronto. I argue that in the everyday conflict between cyclists and car drivers negotiating the congested streets, the identities of both are opened to becoming-other as the question of freedom in mobility becomes problematized. I engage with photographs take by participants in Toronto, as well as the art of Martha Rosler and Rainer Ganahl, in order to discuss and evaluate ways that this becoming can be productively mobilized in the public sphere to destabilize existing identities and encourage experimentation with different forms of mobility.

The politics of becoming will prove frustrating for some readers, especially if they are searching for a resolution or adjudication of political claims. The theoretical path followed here does not offer any solutions, but instead magnifies and propagates the disruptive event and the difficulty of capturing and containing that event in any particular political claim. This is not, however, a lament for a lost subject, nor a celebration of the potential of a more volatile subject. It is instead a sober, but hopeful, engagement with the conditions under which politics – and so critical theory -- must take place today. It is still possible to have a critical engagement with a world characterized by flux, change and volatile subjectivities, but it must also be accompanied by a sober recognition of the continual labour, and risks, attendant in assembling and sustaining a truth claim that can remain ethically responsive to changing events. The world is always excessive to representational capture, and so part of the role of a critical theory must be to embrace this excess and encourage us to open ourselves, our theory and our politics, to becoming. In this way we start to develop a critical theory that is able to think at speed.

The thesis is structured as three purely theoretical chapters, followed by three chapters that provide examples of how the event is captured and how we can think about how to re-activate the event through an experimental critique. Chapter one explores in more detail the argument concerning the limits of an oppositional politics, or politics of recognition, in a world characterized by speed and change. Crucial here are the arguments about the importance of mediation in the public sphere, and how this creates the conditions for experimentation with recognized identities within circulation and

repetition. The loss of self-presence needs to be affirmed as the conditions for transformation, and the stakes of political practice. The next two chapters move away from this theoretical normative critique and describe in more detail the mechanics of an experimental critique as it will be applied in this thesis. Chapter two develops the conceptualization of the public sphere as an abstract machine, or diagram, that assembles publics by sustaining a conjunction between discursive and material assemblages. Here the key argument concerns drawing attention to the multiple networks that sustain a public, and the importance of the accident in drawing critical thought towards thinking the event, and how it could be re-assembled. Chapter three addresses how an affirmative critique must engage a 'non-representational' approach to its field of enquiry, since becoming – by its very definition – is beyond representation (always in process of becoming). This is important, because I am not providing a narrative of how people in Toronto are responding (or should respond) to smog-events, but am using my interventions with the smog-event as examples of how to use theoretical concepts to re-activate the event and encourage a process of becoming; this is an intervention in the public sphere (however limited). The chapters that deal with the smog-event in Toronto then echo the purely theoretical arguments of the first half of the thesis. Chapter four shows how the creation of air quality indices is central to the machinic production of subjectivity and control. Chapter five uses interview material to explore the process of becoming that is set in process during the repeated encounters between bodies, smog-events, and the moral claim to be efficient. Chapter six explores how we can experiment with becoming in order to try to channel it towards progressive ends. The goal is to provide an example of how we can think within the event, and so at speed; I stress the indeterminacy of this process, and so hopefully encourage readers to experiment with their own becoming in different contexts.

CHAPTER ONE

SPEED AND A POLITICS OF BECOMING

...Fitzgerald says that there is another type of cracking...Instead of great breaks these are micro-cracks, as in a dish; they are much more subtle and supple and occur when things are going well on the other side...But what exactly happened? In truth nothing assignable or perceptible: molecular changes, redistributions of desire such that when something occurs, the self that waited it is already dead, or the one that would await it has not yet arrived...The crack up “happens almost without your knowing it but is realized suddenly indeed”...This molecular line, more supple but no less disquieting, in fact, much more disquieting, is not simply internal or personal: it also brings everything into play, but on a different scale and in different forms, with segmentations of a different nature....A micropolitics.

Deleuze and Guattari (1988 p.199)

The theme of speed and politics is never raised when everything is moving along as it should, it is raised in times of perceived crisis and confusion – Deleuze and Guattari have captured its essence well in the question ‘what happened?’ It is in the rush to figure out what has happened, and to propose what we should do, that the question of speed creeps in. Speed is what prevents us from acting as we should or from being able to diagnose what happened. It is all going too fast. Therefore, unsurprisingly, there is a sense of urgency to discussions about speed, a sense that we should not only ‘mount the barricades’, but also that we better do it in a hurry before it’s too late and all is lost. Countering this stance – or perhaps conjured up in the minds of those who would have us believe they have the solutions -- are those who have given up on trying to figure out what happened, and have retreated from public engagement. Neither stance, it must be noted, addresses the question of ‘what happened?’ – one has rushed to answer with pre-given concepts and solutions that may not apply to the new event, the other has given up trying to understand. If we are to think about speed, then, we have to get beyond this clamouring duality. As Bennington says:

...what is urgent is to hold up against urgency so as to think it, to be patient enough with the emergency to do its urgency justice by not just

running with it: the thinking of urgency will, then, also be a thinking of the resistance to urgency. (Bennington 1998)

Resisting urgency, however, does not mean 'slowing down'. It is necessary to act at speed, but to not get carried away by speed and so recreate the very conditions one hopes to critique. In this chapter, then, I want to review how we can think critically at speed by moving critical thought away from a political analysis that is focussed solely on the moment of opposition and decision-making, towards one that pays attention to the processes by which oppositional identities 'crack-up' and create an opportunity to experiment with what happened, i.e. respond to the event.

This chapter will move in three broad passes; it begins by reviewing some of the contemporary literature that has once again raised the issue of speed as a problem for democratic politics. Speed as a problem for politics is, of course, not a new theme in modern thought; the problem of speed is conceived of as a problem of the political subject's ability to represent a world of flux and change, and so engage critically in democratic debate. However, if this has been a recurring theme throughout modern thought, why should we believe that today we have reached a 'new speed' after which it will become impossible for a critical subject to emerge? The focus on the unity of the subject, along with the threshold thinking of a 'new' speed, creates an undue urgency that recreates the very conditions it seeks to criticize. It is necessary, then, to consider how the subject emerges at speed within political struggles. In the second pass, I argue that twentieth century critical theory has accepted modernity's (or better, modernities') temporal complexity, and the loss of self-presence it entails. It can be read as an exploration into how the subject then emerges within social and material opposition between (always partial) subjectivities, leading to a dialectical recovery of presence and reason. However, in the absence of the ideal conditions under which such a synthesis could take place, politics risks being dominated by powerful interests – a domination that today is seen to rely on the spaces and times of segregation, surveillance and control made possible by high-speed technologies. Critical thinking is haunted by the fact that in practice there is no necessary reason for partial subjectivities to give way in opposition to synthesis rather than seeking domination, and critical theory can only

counter this with normative statements that risk leading us back to a premising political intervention on the will of a self-present political subject. Therefore, in the third pass, I argue that critical thought is faced with the task of conceiving how the subject changes 'behind' the recognized conditions that lead to oppositions. Here we are searching for how to open the subject to the eventfulness that characterizes a world of multiple speeds. This requires that we think again about the mediation of the public sphere; thinking about mediation makes us foreground the processes that in-form subjectivity in an assemblage of the material, social and psychic, and it provides grounds for intervention in its formation and change. Intervening in this process of de-subjectification is what I call an affirmative and experimental critique – it does not seek to re-ground the subject, but engage with encouraging change 'at speed'.

The narrative of speed, first pass: threshold speed and the absence of the political subject.

Raising the question of speed and politics today may strike the reader as a particularly timely question, seeing as we live in the so-called digital age of 'instantaneous' communication (Gleick 2000; 2002). However, concerns with the impact of speed on politics have a long history in modern critical thought, and we need to ask what it is today that makes us think again about speed, and makes us think that our new speeds are something to be concerned about. The key symptom that raises the alarm bells in the literature reviewed here, is that politics and critical thought seem powerless to stop the rise of ideologies that legitimate neo-liberal globalization; either ideologies that express a kind of resigned legitimation that we live in the 'best of all possible worlds', or which express an outright celebration of the individual over the social (Bertman 1998; Sennett 1998; Bauman 2000; 2000; Virilio 2000; Zawadzki 2002). Zawadzki usefully summarizes these as concerns with ideologies of 'presentism' and 'individualism'. With regard to the first, it is argued that we live in a 'landscape of events' (Virilio), amongst a flood of facts and norms, and individuals have stopped trying to make sense of the world and believe in a coherent vision of the future (Virilio 2000; Zawadzki 2002). This is accompanied by an awareness of the horrors of past history, which triggers a 'politics of debt' that does not aim to articulate a vision for the future, but simply to compensate

those who have been (and will be) harmed (Zawadzki, 2002 p.19). This is a melancholic politics that Virilio captures in the image of Benjamin's *angelus novus* who is dragged backwards into the future, unable to see what will come, eyes fixed on a past characterized in terms of carnage and destruction (cf Lash 1998).

In such a situation, where ideology abandons the future, political discourse becomes impatient and urgent, it wants everything and it wants it now. This is also a politics of individualism, again for reasons that are claimed to be related to speed. In an increasingly hurried everyday existence, people fail to reflect on the more persistent pain and suffering of others, stuck as they are in the 'solitude of speed' everyone else appears to be 'on another planet' (Zawadzki 2002 p.23; Bauman, 2000; Sennett, 1998).

However, as Zawadzki points out, this is not to say that people simply don't 'have time', but relating back to the concern with presentism, it is a concern that time has been drained of any social or progressive vision. Hence, leisure time is 'time to kill' or 'time to spend', and to say that one has 'no time' is in this ideological frame, to say that 'you do not interest me' or that without a belief in the future one is literally 'out of time'.¹ Therefore, Bauman (2000) characterizes the politics of 'fluid modernity' as a 'peg politics', a politics characterized by a lack of coherent vision, and in which people have increasingly adopted the mentality of the tenant in a caravan park – i.e. concerned only

¹ This ideological reading of time-scarcity is important, because we do not want to imply that if people simply had 'more time' they would engage in more critical political reflection (holding all other variables stable – e.g. education, religious devotion etc.). And even if we suspect that this might be an outcome of work-time reform, it is worth noting that the evidence as to whether or not people actually have 'less time' is mixed. Some portions of the labour market are indeed working more hours, in particular professionals and those who are working two or more part-time jobs. However, the evidence of a time-squeeze is ambiguous - while some are working more, on average there is a convergence in the work-time/leisure time split in western industrial countries towards an increase in leisure (with the exception of the US and UK) (Gershuny, 2001). Within this trend, however, there is a gendered component as it would seem women are still assuming the bulk of domestic tasks, which would add to their time burden (Hareven, 1991, Nowotny, 1994, Kay, 1998, Davies, 2001). In addition, there is some evidence that in a dispersed city commuting is taking up more time (Pooley and Turnbull, 1999, Jarvis et. al. 2001). Nevertheless, some studies have shown that those who are working longer hours are still making time for social activities and leisure, for example by paying for housekeeping services (Roberts, 2002). In short, the evidence on work-time and time-stress is mixed. However, the more fundamental critique is to ask why would 'more time' or 'more security' change people's attitudes towards dominant ideologies. Certainly politics has taken place in more time-scarce and unstable times. It is this assumption of a correlation between a specific experience of time and space and a commitment to an ideology that needs to be clarified before one engages in empirical critique looking at time use and politics.

with preserving the services that affect them personally, and should these decline, they will simply move on (if they can).

In summary, then, the question of speed and politics today, is posed as a question of the fragmentation of temporal experience and the proliferation of times – not of one universal acceleration, but of a universal qualitative shift in the experience of time. Politically, the question of speed is posed here as a problem for ideology (not of ideology), it raises the question of whether it is possible today to oppose dominant ideologies with a counter-ideology that articulates a coherent vision of the future, and without such a coherent vision it fears that democracy will have been set adrift, unable to counter the will of the most powerful groups in society. However, we have to slow down so as not to get carried away by this narrative of speed. In particular, we need to question the importance placed on the will and self-presence of the individual subject as an explanation for the legitimacy of particular ideologies. In addition we need to question the idea that we have somehow reached a ‘new speed’ after which it would no longer be possible to create a critical public – why should we think the task of forming a critical public is more difficult today?

A more sober assessment of the impact of speed and mobility would remind us that such a wilful political imaginary has been in crisis for some time. We can find similar concerns at least as far back as the work of J.J. Rousseau; in his novel, *The New Eloise*, we find the young hero St. Preux, overwhelmed by the constant flux he encounters upon entering the city:

I’m beginning to feel the drunkenness that this agitated, tumultuous life plunges you into. With such a multitude of objects passing before my eyes, I’m getting dizzy. Of all the things that strike me, there is not one that holds my heart, yet all of them together disturb my feelings, so that I forget what I am and who I belong to.
(quoted in Berman 1982 p.18)

And as Prendergast (1995 p.12-13) has noted, the question of identity and belonging are raised as a political question:

The existential problem of 'belonging' in and to the city described by Saint-Preux was also a political problem, a politics of belonging. Much of the argument of *Du contrat social* turns on the claim that in the modern city (unlike smaller ancient city-state) there is no social and material base for the reinvention of the ideals of the polis. The difficulty of being a citizen in the modern world is essentially that there are no cities...in which to exercise the virtues of citizenship. The problem of 'representing' the city as a coherent and intelligible space thus becomes associated with the problem of representation in the city.

In St. Preux's dilemma we see encapsulated the belief that being able to tell a coherent narrative about oneself and one's community is an important precursor to political engagement – one must belong before one engages politically (Matteson 1998; Passy and Giugni 2000; Putnam, 2000). However, by premising politics on a self-present identity (a coherent self), and then lamenting its absence, this kind of narrative only serves to contribute to the situation it hopes to intervene in (Prendergast 1995 p.190). In particular, it fails to address the problem of an identity that must be created within fragmentation and speed.

Even in critics who accept a model of the subject as formed in relational, material and dialogical encounters, there is tendency when talking about speed to revert to the idea of subjects who are able to will themselves *back* to a self-present attention – as if they still subscribed to a simplified idea of alienation in which modernity imposes a kind of illusion on top of a more authentic self. Berman writes that "...the great modernists of the nineteenth century all attack this environment [of constant flux] passionately, and strive to tear it down or explode it from within; yet all find themselves remarkably at home in it, alive to its possibilities, affirmative even of their radical negations, playful and ironic even in their moments of gravest seriousness and depth" (ibid. p.19). Today, as well we can here echoes of the belief in the need for this critical will when Harvey writes "we have to learn how to cope with an overwhelming sense of compression of our spatial and temporal worlds" (Harvey 1989 p.241), or when Melucci (2000) calls for a 'playing self' that is able to respond ethically to the world in flux. However, by theorizing about the reasons why a critical subject is absent, without any engagement

with how we might re-create such a subjectivity at speed, critical theory culminates in a kind of critical anxiety, and sense of powerless urgency, about the ability of the subject to 'recognize' the predicament that they are in.

The urgency created by the lost subject is intensified by the idea that 'we' have reached a new (universal) speed. As Derrida, argues, the question of speed is often posed in the following way:

Are we having, today, another, a different experience of speed? Is our relation to time and to motion qualitatively different? Or must we speak prudently of an extraordinary – although qualitatively homogeneous – acceleration of the same experience? (Derrida 1984 p.20)

In posing the question this way, we are asked to choose between saying that everything is the same, or that we have passed a threshold into a 'new' speed, a new overwhelming experience of time. However, Derrida continues by noting that this dichotomy is far too simplistic:

And what temporality do we have in mind when we put the question that way? Can we take the question seriously without re-elaborating all the problematics of time and motion, from Aristotle to Heidegger by way of Augustine, Kant, Husserl, Einstein, Bergson, and so on? So my first formulation of the question of speed was too simplistic. It opposed quantity and quality as if a quantitative transformation – the crossing of certain thresholds of acceleration within the general machinery of a culture, with all its techniques for handling, recording, and storing information – could not induce qualitative mutations, as if every invention were not the invention of a process of acceleration or, at the very least, a new experience of speed. Or as if the concept of speed, linked to some quantification of objective velocity, remained within a homogeneous relation to every experience of time – for the human subject or for a mode of temporalization that the human subject – as such – would have himself covered up. (ibid. p.20)

In other words, in the threshold idea of a 'new speed' we have the idea that the subject exists as it always has, but it now must manage to do everything 'faster' (a quantitative transformation that does not induce qualitative mutations), or that a change in objective speed results in a universal qualitative change. But, of course, the relation between

objective speed and the qualitative, or phenomenal, experience of time is not so simple, nor is it all at universal (we will return to discuss temporal complexity in more detail in chapter two). By drawing attention to the ‘machinery of a culture’ Derrida draws attention to the materiality of speed and the fact that we live in a world of multiple speeds and so experiences of time (Latour 1997). However, this complexity of time must be suppressed in the narrative of speed outlined above, because the notion of a universal experience of time supports the notion that there is a universal and essential human subject – a human as such in the enlightenment tradition – who is overwhelmed and lost at a ‘new’ speed.

Therefore, the narrative of speed outlined here moves too quickly on two grounds. First, in positing a wilful and self-present subject as the motor force for a critical politics, and second by suggesting that today we would have reached a ‘new speed’ that somehow makes critical self-presence impossible to achieve for most. Because of these shortcomings, the critique of speed remains very much on a normative plane, lamenting the presence of ideologies it does not agree with, but offering little in terms of constructive advice of how one might intervene, or why speed should be a hindrance in the struggle to question these ideologies. It creates urgency.

The narrative of speed, second pass: the loss of ideal conditions for dialectical synthesis and the impasse of ‘hard’ opposition

If we read past the initial urgency in these concerns about speed, we can read these narratives more sympathetically as pointing towards the need for a critical theory that thinks about the conditions that are needed to sustain a progressive opposition to dominant ideologies. Picking up on this thread we can come at concerns about speed from a more productive angle through critical theorization of how speed impacts the public sphere as the realm where ideology is legitimated. The concept of the public sphere provides a bridge to cross between, on the one hand, a normative concern of the dominance of a particular ideology, and on the other hand, the need to engage with the processes and material conditions for making critique visible and legitimate within different experiences of time. Habermas’ seminal work *The Structural Transformation*

of the Public Sphere (1992) moves democratic politics beyond the idea of direct participation in decision-making (Calhoun, 1994). Through the public sphere, politics moves into the everyday sphere, where 'the public' negotiates what is reasonable and legitimate. This is crucial for the discussion of speed, because it provides a link between the experience of temporal multiplication and fragmentation in everyday life, and the concerns raised above about the political legitimacy of ideology. By unpacking the process through which legitimacy is sustained, we can move the discussion of speed away from a lament for lost subject, and towards a consideration how ideologies, and the subjectivities they express, emerge and change at speed.

The key dynamic of the public sphere is that of making and sustaining a public identity (Habermas 1992). The public sphere gives expression to identities that emerge within material conditions of everyday life and, ideally, results in the recognition of their claims. Politics can then be understood as a process of 'naming' and calling a public into being (Bourdieu 1984). Critique of the public sphere is almost always of its ideological exclusions, and focuses on the process through which recognized norms of publicity and privacy can be continually challenged and redefined through the inclusion of new identities (e.g. Young 1990; Mouffe 1993; Calhoun 1994; Fraser 1994; Coole 2000). Habermas conceptualizes this process of contestation as an institutional (here in its broadest sense to include, for example, print media) and dialogical setting, which would follow a strict code of 'discourse ethics' to ensure all voices were heard (Kearney 1986).² It is understood that this ideal discursive realm is an ideal to be worked towards. With more pragmatic and immediate concerns in mind radical democratic thought moves the oppositional dynamic of the public sphere out of institutional settings and recognizes "an aspect of civic engagement in persistent struggles to maintain workable identities... We can think instead of civic engagement as more pervasive and differentiated with respect to locale; it arises in connection with many aspects of

² Flyvbjerg (1998b) summarizes the requirements of the ideal speech situation as follows: 1) No party affected by what is being discussed should be excluded from the discourse (the requirement of generality); 2) all participants should have equal possibility to present and criticize validity claims in the process of discourse (autonomy); 3) participants must be willing and able to empathize with each other's validity claims (ideal role taking); 4) existing power differences between participants must be neutralized such that those differences have no effect on the creation of consensus (power neutrality); and 5) participants must openly explain their goals and intentions and in this connection desist from strategic action (transparency).

everyday life..." (Shapiro 1997 p.38; see also Rasmussen and Brown 2002). While Habermas' dialogism requires a discourse ethics, radical democracy requires an ethic of 'agonistic pluralism' whereby recognized subjectivities must be open to revisiting the terms of the hegemonic consensus in the face of claims from new identities (Laclau and Mouffe, 1985; Mouffe 1993; Gilbert 2002).

Having given this brief overview of the normative role given to the public sphere in critical theory, we need to consider how the multiplications of speeds is understood to disrupt, or delegitimize, the process of identity formation and legitimation. The dominant narrative that I want to review in this regard is of the loss of centrality, or the dispersion of the city into what Castells has characterized as a 'space of flows' (Castells 1989 p.341; see also Bauman 2000). As we saw above, the spaces of the city are important for the public sphere, because it is in the encounters in such spaces that identities form and are recognized. Public space also provides an opportunity to encounter and learn from difference, or less ideally, to be forced to accommodate difference (e.g. Sennett 1970; 1977; 1994; Mitchell 1995; Light and Smith 1998; Copjec and Sorkin 1999; 1999; Sorkin 1999; Bickford 2000). However, high-speed communication, transportation and surveillance technologies have been critiqued for allowing a more segregated urban form to develop; the high-speed city is negatively characterized by gated-communities, gentrification, suburbanization and the militarization and surveillance of city space -- all of which has been associated with the marginalization or even criminalization of difference and poverty. (Zukin 1995; Merrifield and Swyngedouw 1997; Davis 1999). However, we must bear in mind that the spaces of the city have always been policed, and the idea of the inclusive city square of renaissance Europe, or the Agora of the Greek city are more ideal representation than reflections of an inclusive reality (Virilio 1987; Martinotti 1999; Isin 2002). Therefore, the question asked today is whether high-speed technologies make this control more difficult to challenge and subvert.

Certainly critics such as Paul Virilio believe that the contemporary urban forms and temporalities are eroding the conditions for democratic politics:

Ubiquity, instantaneity, the populating of time supplants the populating of space...the end of the unity of place of the old political theatre of the city, and its imminent replacement by the *unity of time*, a chronopolitics of intensivity and interactivity, 'technicity' succeeding the continuity [*la longue durée*] of the City...the current metropolitan reorganization tends toward the definitive disarmament of the conjunctive system of civil society, the unity of neighbourhoods, the family unit, the very possibility of opposition whatsoever to oppression...the totalitarian unity advances masked by the progress of technologies – *civil and military technologies which have little to do with democracy*. (Virilio, 1998 #207 p.58, 61, 63 all italics and parentheses in original)

For Virilio the modern city does not work by containment, but by controlling movement so that there will always be a smooth uninterrupted passage that keeps the subject disciplined. With less hyperbole, Augé (1995) makes a similar critique of the more mundane 'non-spaces' of the modern city, such as airports or freeways, in which he argues we have no symbolic codes to provides us with bearings for interaction, exploration and appropriation, but only commands that tell where, when and how to move and consume (Exit, Luggage Pickup, Keep Right, Mind the Gap, Just do It, Buy Gas Here, Historic Monument next Exit etc.). On the one hand, then, the concern with speed here is with a purely logistical control of anticipation and interception, but on the other hand, control also works by modifying what is recognized as possible. Virilio argues that the subject loses stable references in a space of intensivity, and there fore has no grounds by which to compare alternatives and make critical choices (Virilio, 1997; Virilio, 2000).

However, in characteristic fashion, Virilio's adopts a conscious strategy of presenting the worst-case scenario as a way of alerting us to the potential risks (Armitage 1999; Zurbrugg 2001). What's missing, then, is any sense that the high-speeds also allow for unprecedented connection and coordination – and indeed comparison -- that cannot be wholly controlled by the state or any other actor (Thrift, 1996a; Connolly 2002). Activists and counter-publics are showing that it is possible to create spaces of encounter within the dispersed and mobile city and so maintain an identity in the public sphere (Doron 2000; Barry 2001; Porter 2001). Here it is not just a matter of using

communication technologies to make a media event, but of taking advantage of the multiple temporal rhythms in the fragmented city to find 'slow spaces' that allow for encounter (Bell and Leong 1998; Leong, 1998). In this context, we need to think about what potentials exist for creating public spaces starting from our present situation, rather than premising the vibrancy of the public sphere on a largely non-existent ideal (Betsky 1998; Lerup 2000; Teyssot 2000).

In this framework what is retained is the ideal that space should allow for an overlap between public and private, such that the two terms lose their fixed categorisation and can be transformed. Teyssot argues that we need to think of thresholds and passages whereby what is internal (private) folds into the external (public) and vice versa (Kilian 1998; Crang 2000). This much more fluid and mobile norm for public space moves us away from thinking of defined spaces towards emergent spaces of encounter. Lars Lerup (2000) evokes such a folded space in the daily commute:

Driving the freeway you may see a lone observer. Just as you begin the descent into the canyon [where the road drops below grade] the observer looks right at you, then down at you, until he disappears above you. Invariably they are alone, often leaning on the balustrade, not moving. Or they walk back and forth, agitated, gesturing, and since their mouths seem to open and close – their heads are turning fast, back and forth, up and down – they may be screaming, or haranguing you. You cannot hear. They are the overpass people. Where they come from, who they are, no one seems to know....For us, the drivers of the superhighway, they are the others. Those who have time to spare. Those who don't have to (bikes are often held or parked next to the observer). Those who don't. Those who refuse. Not the leisure class, not the vagrants, maybe the mad, but mostly those who fall in between, those who refuse to be counted. We need them to remind us that all is not speed and progress (pp. 62-63).

In this example we see not only a folding of private (the car, the commute) and public, but also that the encounter is fleeting and its politics are ambiguous – there is no clear message imparted. However, in its repetition this kind of encounter can serve as the grounds for creating political claims, and as the spur that starts individuals asking questions and seeking answers. Such encounters act as a 'shock to thought' that works

as much (if not more) on an affective register, as they do on a cognitive level (Deutsche, 1996, 1999; Massumi 2002a; 2002b). There is clearly a great degree of uncertainty associated with such encounters; the circulation of a message is always prone to disruption or diversion. However, this is just to stress again the result of speed is ambivalent, it creates very time sensitive spaces, or what Crang has called temporalized space (Crang 2001). I will return to discuss the nature of the encounters in these fleeting spaces in more detail below and in subsequent chapters. However, what I want to stress here is that in the contemporary city, public identities are not confined to any one place, identities emerge and are sustained *in repetition* at the intersection of the different rhythms in the city (Lefebvre 1996 p. 228).

The ambivalent fluidity in urban space has implications for the normative model of the public sphere set out above. In particular, it becomes apparent that the meeting of identities in opposition need not lead to a synthesis, but can also lead to an unbridled attempt at domination, materialized in spatial control and exclusion. What speed exposes then, are the limits of a normative conception and critique of the public sphere as dialectical synthesis based on agonistic encounters (Deleuze 1986 p.147; Sloterdijk 1987 p.367; Robbins, 1993; Flyvbjerg, 1998a). Theoretically opposition is suppose to lead to a 'higher' synthesis (or even hegemonic synthesis), and when this doesn't happen critical theory works to expose the partiality of dominant interests, and so expose them to an ethical and normative critique seeking expanded recognition and inclusion. This is not, of course, an ineffective strategy and often works to force the dominant party to accommodate the demands that have been made public. However, in adopting a strategy that 'blames' the dominant identity, political action can also prompt a reaction that attempts to avoid or contain the disruptive element. These are familiar dynamics in a democratic politics, but it shows the essentially reactive and conservative nature of politics based in a dialectics of recognition and opposition – this is not to dismiss the need at times for reaction, or that it is sometimes desirable to preserve what is, but it does reveal important limits of this approach to politics for a critique concerned with coming to terms with speed and temporal complexity.

The reactive dynamics of the dialectic shows why it is ill suited for a political analysis concerned with speed. First, we can see that dialectics creates a politics that this is never ‘at the right speed’ – from the point of view of the dominant identity, change is always ‘too slow’ (unreasonable resistance), while from the point of view of a dominated, or marginalized group, change is always ‘too fast’ (insufficient consultation, imposition).³ This creates urgency that is compounded by the fact that the dialectical synthesis re-introduces the wilful subject into political analysis. While the subject is formed in opposition and discourse, it is still the will of the subject once formed that drives politics and that becomes the target for critique (Lekhi and Fiser 2001; Sloterdijk, 1987). In dialectical critique the critique of power is always a critique of those whose will power expresses. As a result, when it comes to the analysis of speed, a dialectical critique risks returning to the undue urgency diagnosed above that laments the fact that subject does not ‘recognize’ justice, truth etc. – the ‘wrong speed’ is willed by the dominant half of the dialectic. The problem of speed gets missed here, because it becomes once again a problem of the subject, framed as a problem of who controls speed, while not providing us with any analysis of how we might work within speed without waiting for the recognition of those who have power.

A second, and related, reason dialectical critique is insufficient for a political analysis concerned with speed is because it is based on ‘recognition’, and so is not well equipped to deal with novelty. A politics of recognition is always about the redistribution of existing resources and values:

When we make power an object of representation [i.e. something we recognize c.o] we necessarily make it dependent upon the factor according to which a thing is represented or not, recognised or not. Now, only values which are already current, only accepted values, give criteria of recognition in this way. The will to power, understood as the will to get oneself recognised, is necessarily the will to have the values current in a given society attributed to oneself (power, money, honours reputation)... What seems symptomatic in this philosophy of the will is

³ We can imagine different combinations of this dualism that produce the same point: e.g. dominant groups can ‘stall’ making change ‘too slow’ – the point is it is that the dialectic is a thoroughly reactive view of politics.

conformism, absolute misrecognition of the will to power as creation of new values (Deleuze 1986 p.81-82).

A dialectical and oppositional concept of political struggle is ill suited to answer the question ‘what happened?’ – the question which at the outset we suggested was the essence of the problem of speed. What if something truly novel has happened, what if it is not just a question of redistributing existing resources, but of a creating a new values (e.g. as some suggest with ecological politics)? If we ask what those values would be, the answer is that we don’t know. They are precisely indiscernible at this point in time, we sense a need for them, but cannot ‘recognize’ them in a concrete articulation of what we should do. This is precisely the kind of question raised by a world characterized by speed and recurring accidents (Virilio 2003). As Virilio says:

Our generation has to return to questions. Why? Because the preceding generation had all the solutions – the economic solution through capitalism and the consumer society; the political solution through Marxism or capitalism; the military solution through dissuasion. All the solutions were there. Now we’ve seen the results and are experiencing the drama of these solutions, so I believe our generation must again find the questions, and that’s not easy (quoted in Dercon 2001)

In such a situation it is imperative that public debate and political legitimacy ground itself not just on what is possible and recognized, but that it is also open to the ‘impossible’, those questions that we can see today, but whose answers are for ‘a people to come’ (Deleuze 1995 p.176; Rajchman 1999). Because of the limits of the dialectical political analysis, an oppositional politics risks falling into nihilism (i.e. literally willing nothing but the same) in a world of proliferating speeds and identities – either through a wilful and destructive domination that seeks to cynically manipulate, or a resigned or overly-strident moralism that seeks to always blame others, or through frustration at a politics that is unable to broach ‘big’ questions about a radically indeterminate future.

A politics that is (un)comfortable at speed: a politics of becoming

In the above discussion we have been using speed, in the singular, as a short hand for what is in fact a proliferation of speeds, experiences of space and time and so identities. Speed is a short hand for a complexification of the world that starts to exceed representation (Thrift 1994; Connolly 2002). This is troubling for a politics based on recognition, it is troubling for thought based on representation. The risk of a politics 'at speed' is that it falls into an overly strident reaction to this loss of orientation and control, a reaction which we have shown can lead politics towards nihilism. In order to avoid this, we need to get past a politics that is based purely on recognition of existing identities, in order to supplement it (not replace it) with a politics that experiments with identity (Deleuze and Guattari 1988; Massumi 1992; Hardt 1993; 1998; Patton 2000; Rajchman 2001; Connolly 2002).⁴ If, for example, the problem is that politics has stalled in an overly strident, or 'hard', opposition that is leading towards violent domination, then it is necessary that recognized identities start to 'leak' and become-other, and so diffuse the tension. If, on the other hand, we have reached a point when it seems that recognized solutions are not sufficient to the novelty of an event, it is also important that recognized identities start to come undone, so that we can experiment with new ways of being. In both cases what is needed is a politics of becoming, one that encourages experimentation as a way of moving beyond what is and engaging in thinking about what could be.

Critical theory, as we have seen, has been premised on the will of the subject, and so has been focussed on the conditions through which the subject is recognized and sustained. As Lekhi and Fisher argue (2001 p.72):

What politics has tended to dwell upon, at least in its modernist versions...is a collective or individual subject whose organic unity it seeks either to maintain or restore. Together with a neurotic belief in

⁴ As will be clear by the references here, such an experimental politics builds on the work of Deleuze and Guattari. This connection will become much more clear as the chapter progresses and in following chapters.

‘responsibility’, the politics has typically also been premised on the possibility of a transcendent intervention into social reality.

However, in a politics of becoming the goal is to move away from premising change on the subject, and its responsibility to recognize truth and justice (Schrift, 2000). Instead, we want to engage with the limits where a subject recreates itself or starts to ‘crack-up’. This means attending to the contexts that mark the limit of existing subjectivity, where conventionally recognized categories (e.g. age, class, gender, ethnicity etc.) start becoming problematic for the subject, and where a search for a new way of being becomes potentially desirable (e.g. it is no longer enough to be recognized). Such problematic moments are not properly political in the conventional sense – they do not fall into the binary for or against. As Deleuze and Guattari argue: “Politics operates by macrodecisions and binary choices, binarized interests; but the realm of the decidable remains very slim. Political decision making necessarily descends into a world of micro-determinations, attractions and desires, which it must sound out or evaluate in a different fashion.” (Deleuze and Guattari 1988 p.221). A politics of becoming, or what Deleuze and Guattari call a micropolitics, is interested in those forces that pull a subject beyond their recognized identities before they are able to articulate any ‘good reason’ to change, and before they know exactly where it is they are headed. This is a politics that is comfortable with a subject who is overwhelmed, it affirms the fact that the subject is ‘out of control’ as the very condition of possibility for political practice and change.

With these goals in mind, we need to return to the analysis of the public sphere as that realm in which subjectivities emerge and become recognized. In the above discussion it was suggested that subjectivities emerge within opposition, and the analysis was explicitly focussed on the public sphere as the process by which different identities meet in opposition and are reconciled. However, this moment of political confrontation represents a very slim aspect of the public sphere – what Habermas calls the ‘properly political’ public sphere (Habermas 1992). Habermas also identifies another dimension – the literary public sphere circulated in newspapers, books and essays; this is characterized as a set of spaces and practices in which individuals discuss what it is to be a ‘human as such’, and reflect on the relationship between their inner feelings and

passions, and their public identity, or ‘audience oriented subjectivity’ (ibid. p.43-57). In paying attention to this dimension of the public sphere, we are reminded again that there are aspects of political engagement in the way one negotiates the everyday disciplines of presenting oneself as a respectable citizen (Burchell 1995), and we can start to better understand how it is that subjectivity emerges in the public sphere through the circulation of texts – this is a becoming of identity that happens behind, below, beyond, or in parallel, to the hard oppositions of the politics of recognition. This is an analysis that is immanent to the circulation within the public sphere and to the formation of subjectivity. This will require we pay attention to the fact that public sphere is always a mediated encounter.

Mediation and indeterminacy in the formation of publics

The mediation of the public sphere is crucial to an analysis of becoming, because it disrupts a nostalgic longing for a public sphere stylized as authentic face-to-face communication between self-present subjects. What it shows is that any intervention in the public sphere is always highly indeterminate and beyond the wilful control of any individual or group subject. Public discourse in the earliest public spheres circulated through newspapers, letters and conversations in coffee-houses (Habermas 1992; Warner 2002), while today electronic media have multiplied the paths of circulation (Stevenson 1998). Warner (2002) reminds us that public sphere exists by virtue of the circulation of texts – or more strongly, a public exists only as a circulation of texts, and only by virtue of being addressed (see also Eisenstein 1983). The mediation of the public sphere cannot be overcome; indeed it is the very condition of its existence. Mediation is what allows public discourse to travel, to move beyond the here and now, and find applications in other times and places. Warner notes that:

... [the] interactive relation postulated in public discourse... goes far beyond the scale of conversation or discussion, to encompass a multigeneric lifeworld organized not just by a relational axis of utterance and response, but by potentially infinite axes of citation and characterization (ibid. p.91).

...this is often missed from view because the activity and duration of publics are commonly stylized as conversation or decision-making” (ibid. p.97).

As a result, a text is never simply sent and received between individuals occupying the same space, but is disseminated amongst strangers, and received within a mediated context in which it may have effects unanticipated by its author. Here attention is drawn to the fact the public sphere is not an actual agora-like space in which individuals of a community meet and exchange information or debate. Instead, in the public sphere texts circulate in the absence of the sender, and move through many different spaces, where they are used to justify different kinds of actions. It is for this reason that Warner insists that one can be a member of a public by giving a text the ‘merest of attention’. A critical understanding of communication in the public sphere, then, cannot avoid an engagement with what Derrida calls the iterability of all communication (Caputo 1997; Derrida 1998; Glendinning 1998; Bergen 2001).

Derrida argues that theories of language and communication are inadequate because they posit a break between writing (absence) and speech (presence). Speech, it is said comes before writing and is argued to be more ‘authentic’ than mediated forms of communication (Derrida, 1998). But if this is the case then what is the difference between speech and writing and how can we understand the first act of speech (i.e. its origin)? It is the standard postulate of linguistics that writing distinguishes itself from speech by its ability to travel over long distances and long delays and still be understood. Therefore, it posits the absence of the sender. But, Derrida notes, it also posits the absence of the receiver, and his or her intentions. As a result, the characteristic of writing is that it can be understood in the *absence* of either the writer or receiver and hence is open to reinterpretation. Derrida calls this characteristic of language *iterability*, by which he refers to the possibility that the same act (of writing) could be repeated in a completely different context and still be understood as writing, as communication (Glendinning, 1998). Therefore, writing has no meaning in and of itself (as writing) independent of context. As a result it is the act of repetition (both past, and possible future) that makes writing writing, i.e. makes it communication. Derrida then notes that

speech also shares these features with writing, as does *any* form of communication. Communication is that which can be recognized as an act of writing, or inscription, independent of sender and receiver. We cannot privilege writing over speech, then, as a carrier of meaning. This is because speech, if it is to have any meaning, must be expressible, and if it is expressible then we can say it follows rules, as does writing. The question then is the nature of these rules, which Derrida sets out to show are no more fixed in writing as in speech (ibid. p.114). You can never find the original moment when natural speech was fixed in writing because we cannot conceive of speech without rules. Writing is no less, nor more, contextual than speech or other forms of interpretation. Hence, we do not bring a fixed rule and meaning to a situation, instead we have recognition of an act of communication that has taken place in the past and can take place in the future and which therefore gives it meaning in this context. What is crucial is to recognize absence as a modification of presence (or, vice versa) (ibid. p.116).

The essentially mediated character of all communication is important for our understanding of the public sphere, because it questions the extent to which we can conceive of individuals as self-present subjects, a point that diffuses the tendency in critical theory to reify the subject once they have been formed. In order to see this more clearly, Glendinning asks us to consider the case of someone who sends a message to him or herself and then immediately reads it; even if only the slightest of moments has passed it is possible that the message could be read anew and given a different, previously unanticipated, meaning when read by the *same* person. If we read the message in a completely novel way, a way that 'surprises us', then it is an example of how language works in the absence of a defined sender and receiver, which happens in this case to be the same person. The possibility of being able to 'surprise' ourselves indicates that we are not always present even to ourselves. Of course, this does not preclude that the message can be read the same way, only that no identity is fixed and hence we always bear the *responsibility* to interpret.⁵ Glendinning argues that this

⁵ On the responsibility to interpret messages in the public sphere Hirschkop (1999) notes that Bakhtin considers the public sphere as a context in which we have responsibility, by which he means we are able

shows how our being with others is not conducted through language, but that we must consider that kind of being with others that language is – or, more broadly, the kind of being that mediation is. In order to think through the impact of our ‘language-being’ on the subjectivities formed in the public sphere, it is necessary to reflect on the implications of how something is mediated. This provides a more concrete understanding of the nature of the indeterminacy that is at the heart of communication, and so how a focus on mediation can help us see how the subject becomes receptive to critical intervention and experimentation.

Often the question of how something is mediated focuses on the ideological restrictions of the content of a message, as well as a question of the access to the means of circulation. However, it is not possible to do away with the indeterminacy of circulation simply by adjusting content, or ensuring access to the means of communication (Carpignano 1993; Hartley 1997). This is what Warner calls the ‘non-ideological’ limits of the public sphere, because the ‘style’ of a text will influence who reads it, and what it can do. Warner argues that:

What [ideological] critiques tend to miss, however, is that the tension inherent in the [textual] form goes well beyond any strategy of domination. The projection of a public is a new, creative, and distinctly modern mode of power...One consequence of this tension in the laws of public discourse is a problem of style. In addressing indefinite strangers, public discourse puts a premium on accessibility. But there is no infinitely accessible language, and to imagine that there should be is to miss other, equally important needs of publics: to concretize the world in which discourse circulates, to offer its members direct and active membership through language, to place strangers on a shared footing (ibid. p.77).

Style, as a ‘creative and distinctly modern’ mode of power goes ‘beyond any strategy of domination’ because it does not work by ‘forcing’ people to respond, but by calling on them. This highlights that when we say the public sphere is discursive and textual, it is not ‘just’ textual. As already noted, texts always exist in potentially infinite relation of

to respond and feel compelled to respond. This is a useful way to conceive of responsibility, because it does moralize the term – it is not a matter of what you should do, but what you can do.

citation and characterization, and this takes shape in relation to the world in which they circulate and seek to influence. Texts 'call on' people by legitimizing the practices that 'concretize the world', and do so through a language that offers 'direct and active membership' with strangers. In this way a text *attempts* to "call a public into being", but the success of that attempt is always limited by a rhetorical power of language, and the iterability of context, in a way that is not captured by an ideological critique of power (Goankar and Povinelli, 2003).

However, the impact of how something is mediated goes far beyond a concern with style, which still suggests that the circulation of the public sphere depends centrally on a human subject who 'appreciates' style. Studies in the history of technology and culture show that the public is far more distracted and volatile than even the notion of style suggests. For example, Kittler's (1986) analysis of 'discourse networks' (i.e. communication and transcription networks through which discourse is formed and relayed) charts the changes in the concept of subjectivity between the end of the 18th and the beginning of the 19th C. In the discourse network of 1800 it was still possible to think about an organic individual *qua* human because of the technology of writing was then a privileged medium for moving between the sights and sounds of lived experience and being able to recreate those in other settings. Words literally shimmered with feeling, calling into the imagination a world of senses. Humans, through writing, were at the centre of interpretation. By the end of the 19th C, however, the number of recording technologies had multiplied to include film, the gramophone and the typewriter, and the human was no longer a privileged source of knowledge. As a result, in the discourse network of 1900, it was no longer possible to hold to a concept of a self-present subject because it was possible to record and measure a gap between recollection of an event and its 'perfect' representation in technology (cf. Crary 1999; Weidman 2003). There is no memory and no knowledge without technology. Psychotherapy works on this model -- first you just talk, and this is inscribed by the analyst, then it is organized and sent back to you to be re-embedded in your sense of self. In short, Kittler argues, our subjectivity mutates through the constant modulation of our experience by technologies of recording and transmitting. Warner's idea of style would need to be

stretched then, to include all those affects and percepts that capture our attention, or the organization of space that funnels our attention towards certain objects and goals.

Crary draws out the implications of this kind of analysis for our understanding of political subjectivities:

Much recent critical theory, derived from a now pointless critique of presence, has been unable to fathom that whether or not one has direct perceptual access to self-presence is intrinsically irrelevant with modern disciplinary and spectacular culture. What is important to institutional power, since the late nineteenth century, is simply that perception function in a way that insures a subject is productive, manageable, and predictable, and is able to be socially integrated and adaptive. The realization that attention had limits beyond and below which productivity and social cohesion were threatened created a volatile indistinction between newly designated 'pathologies' of attention and creative, intensive, states of deep absorption and daydreaming (ibid. p.4)

In other words, in a highly mediated society, it matters less what the (self-present) subject *believes*, and more what they will actually *do* in the situation (Lash, 2002). The biggest threat to this kind of discipline is not active resistance, which can be identified and either isolated or integrated, but an indiscernible 'daydreaming' that might lead to withdrawal, or an accident, or to new ideas, all of which would then disrupt the legitimacy of control (ibid. p.78). The mediated context of communication shows that subject is both prone to capture, and constantly escaping from capture – in short, it creates a very volatile subjectivity.

Publics as assemblages

We are now better able to articulate what exactly a public entails when we say that a public only exists in circulation, and only by virtue of being addressed. This is not only, and perhaps not even primarily, a form of conscious address but rather a kind of continual modulation that relies at times on overt meaning (content), but at others on direct bodily stimuli or subconscious suggestion. Where is the subject in all this? Felix Guattari argues that the subject exists only in habit or routine – what he calls the refrain:

When I watch television I exist at the intersection 1) of a perceptual fascination provoked by the screen's luminous animation which borders on the hypnotic 2) of a captive relation with the narrative content of the program associated with the lateral awareness of surrounding events – water boiling on the stove, a child's cry, the telephone...3) of a world of fantasms occupying my daydreams. My feeling of personal identity is thus pulled in different directions. How can I maintain a relative sense of the unicity, despite the diversity of components of subjectivation that pass through me? It's a question of the refrain that fixes me in front of the screen (Guattari 1995 pp.16-17).

The subject only ever exists within a constellation of flows of energy, information, psychic flows, all which is actualized in a particular material organization of space and technology. Here the idea of mediation is understood in its broadest sense of the term medium as an enveloping space (Cavell 2002). The concept of the subject that is developed here is highly 'impersonal'. It does not depend on any essential interiority, or phenomenological perception, it only depends on a body being in the 'right' place at the 'right' time and acting in the 'right' way. Rather than a subject, Deleuze and Guattari would suggest it is better to use the impersonal form of 'a person', or indefinite articles such as he or they. 'A person' who is considered to be part of 'a public' whenever they utter an ideological statement in a context where it is given legitimacy, and so allows the subject to recreate his or her being. A public is this conjunction of the will and psychic drives of a person, the material forces of a particular context, the social constraints operative in the context etc. The number of terms we include in the assemblage varies by context – we include as many as it takes to describe 'what happened'. Following Deleuze and Guattari, we will call this constellation an 'assemblage':

Blanchot is correct in saying the ONE and HE – one is dying, he is unhappy – in no way take the place of the subject, but instead do away with the subject in favour of an assemblage of the haecceity type that carries or brings out the event insofar as it is unformed and incapable of being effectuated by persons ("something happens to them that they can only get a grip on by letting go of the ability to say I"). The HE does not represent the subject but rather makes a diagram of an assemblage. (Deleuze and Guattari 1988 p.265).

We will return to discuss the idea of a subject produced within a diagram and assemblage in the next chapter. However, for now this concept of 'a public' can be used to animate our understanding of the public sphere as a circulation of texts. Here we see that the indeterminacy that is associated with the Derridian understanding of communication can be understood as the indeterminacy that surrounds the successful conjunction of a collective subjective assemblage – will the text enter an assemblage that, in the event, will form a productive, manageable and predictable subjectivity? This goes beyond the will of the subject and places us in the realm where 'something happens' that we have to 'get a grip on'. The formation of a public, and its implied subjectivities, is thus an event, it is singular and exists only in repetition.

Experimenting with assemblage

To bring us back to our concern with speed and temporal complexity, and the being and becoming of subjectivity, one must acknowledge that in practice subjective assemblages are often successfully repeated, imparting a degree of stability, even stolidity, to the subject. And this is not at all unrelated to the speed of different technologies that are used to 'capture' our attention. A spectacular modernity works by creating spaces that require attention, and so make attention a problem for control. However, at the same time, it is clear there is not a subject who can rise above the multiple speeds and definitively control attention (no internal subject of will, or external subject of control). The ephemeral and speedy nature of modern control means that there are always situations where speed runs out of control. Instead, of thinking about a subject who fits in the binary of in or out of control (dominated, dominating), it is better to see the subject as 'alive' or 'vital' within a play of forces (Ansell-Pearson 1997 p.143). Rather than a subject, Deleuze refers to a body:

What is a body? We do not define it by saying that it is a field of forces, a nutrient medium fought over by a plurality of forces. For in fact there is no 'medium', no field of forces or battle. There is no quantity of reality, all reality is already a quantity of force...Every relationship of forces constitutes a body – whether it is chemical, biological, social or political (Deleuze 1986 p.40).

Forces here must be understood to be a very heterogeneous set; we can talk of the force of desire, the force of gravity, the force perception – in short of any biophysical, psychic, social or material force. The approach to force, then, is qualitative – they are not comparable in purely objective terms. In this model, power is immanent and relational to the field of forces and not something that is imposed from without, willed by the transcendent subject (Hardt 1993; Allen 1999; Patton 2000). This is a Nietzschean concept of power in which the ‘will to power’ is dispersed throughout a network or assemblage. Nietzsche argues that a will to power is ‘beyond good and evil’ (“being is by itself will to power” (quoted in Deleuze 1986 p.49)). As a result, it must constantly be evaluated in terms of what it allows a body to do – what can s/he see and do today? Normatively a negative, or reactive, will to power is defined as one that seeks to only conserve itself and contain new forces, while an active will to power is a system that is open to new forces and can grow and transform with them. No matter how stable a particular assemblage may appear this is always a dynamic system because it is open to the continual introduction of new forces and new relations. New connection in part of the assemblage triggers a global rearticulation of the relations between forces and so can change the ‘will to power’ of a particular assemblage – these are moments of ‘transmutation’, and it has the potential to change what a body can do.

These moments of transmutation are important for distinguishing this approach to power from a dialectical and hierarchical model of power. For Nietzsche dialectic thought ends when two or more qualitatively unequal forces create a negative will to power that finds its culmination in a will to nothing, or nihilism. At this point, he argues that there must be a reversal, as distinct from a synthesis and unity. “Instead of the labour of opposition or the suffering of the negative we have the warlike play of difference...The no [of reactive opposition c.o] stripped of its power, transformed into the opposite quality, turned affirmative and creative: such is transmutation” (ibid. p.191). Transmutation requires a new relation of forces, perhaps because a new force has come along, or because of a previously unnoticed affinity between existing forces. At this point a new active force is created, and the struggle of active and reactive forces starts over again.

Rather than a synthesis, there is a swerve or schiz, which starts a new trajectory and inaugurates a new will to power. It is this moment of escape and creation that defines the idea of the 'eternal return', and this is why Deleuze is able to argue that 'only affirmation returns'. The world does not proceed toward unity, it proceeds towards difference – 'the world is neither true nor real, but living' (ibid. p.184). Power is only unifying to the extent that it is manifest as a negative will to power, to the extent that it tries to contain these new trajectories. However, because the will to power is never universal but is only as extensive as its assemblage, there is a point when affirmation returns with the creation of new forces, at some point life will intrude and take a new trajectory. It is in this sense that we can say power is everywhere and comes from nowhere. To say that power is creative, is to acknowledge that power exceeds its representation, and to ignore this is to reduce analysis to the level of 'blaming' those 'with' power for a state of affairs that is not ultimately only, or even primarily, the result of human will. An oppositional stance may be morally (and even intellectually) strong, but it can be pragmatically weak if it tries to directly oppose its singular will to the will to power from which it emerges. Therefore, it is necessary to assess the will to power, the assemblage, in which one is situated, and try to affirm its conditions as the conditions of possibility for politics – they are always constrained, but the point is to search for potentials to be otherwise that exist within constraint. *"To affirm is not to take responsibility for, to take on the burden of what is, but to release, to set free what lives. To affirm is to unburden: not to load life with the weight of higher values, but to create new values which are those of life, which make life light and active"* (ibid. p.185 emphasis in original).

In a world of speed and temporal complexity, there are many disruptions that may herald new relations of force, and which in turn require a transmutation of the will to power. Therefore, it is important 'at speed' to be open to the irruption of the new. A politics of becoming requires an affirmative and experimental critique (henceforth just experimental), one that moves beyond who is 'responsible' for a particular state of affairs and how it can be solved, and experiments with how to open a recognized state of affairs to the continual becoming of the assemblage from which it emerges. If speed

brings something new to politics, then it is only a renewed sense of the importance of a certain modesty in political claim making and in the legitimation of power in the face of a world that is always becoming. Nietzsche states: “We are in the phase of the modesty of consciousness” and Deleuze expands on this by saying that “To remind consciousness of its necessary modesty is to take it for what it is: a symptom; nothing but a symptom of a deeper transformation and of the activities of entirely non-spiritual forces” (ibid. p.39). However, this call for modesty is not a normative claim (or not only), but rather an ontological statement about our limits as humans. It is therefore also a statement about the necessity to take up the challenge of engaging the ‘deeper transformation’ of which consciousness is but a symptom.

Ideology as symptom, counter-ideology as symptom -- a whole field of symptoms of a deeper transformation of forces – it is these forces that an experimental critique seeks to uncover and articulate. It is by making these forces visible that one then has the raw material with which to evaluate the articulation of an ideology in a particular context. However, in identifying forces, we must be careful not to conflate forces with the bodies that express the conjunction of forces. It is not enough to say that a particular proposition is blocked by the ‘force’ of a particular group or individual; to say they ‘have’ force would be to return the analysis of the assemblage to a critique of power as representation and its politics of recognition. We are broaching here a very complex problem that will only be fully dealt with in the coming chapters; this is a problem that only becomes visible at the limits of a normative critical narrative of recognition, as we prepare to move to an actual application. The problem is that forces that are always moving are non-representational: “A ‘force’ is the set of invisible, untouchable, self-renewing conditions according to which certain effects can habitually be expected to appear...An event, a passage...” (Massumi 2002a p.160). Therefore, in an experimental critique we start with recognized identities – subjects, ideologies – and work to represent the assemblage of which they are but an expression; but what we want to then evoke and make visible is the force that moves ‘between’ the recognized identities and animates the assemblage.

An experimental critique requires that we present the assemblage in such a way that its constitutive incompleteness is apparent, i.e. to make it clear that it is a contextual, and reductive of a much more complex reality. In this way the aim is to make apparent that an identity is never just what it is recognized to be, but that it is also always in a process of becoming. This requires us to present critique as a way of experimenting with what is recognized, as an example of thinking about how it could be re-assembled. But all this is still only suggestive, and it will be necessary to give some more substance in the following two chapters. We have come here to the limit of a normative critique of speed. We have made apparent the problem speed poses – the problem of the ‘hard’ opposition, and the problematic question ‘what happened?’, both of which lead to the need to go beyond recognized identities. It will be the purpose of the next two chapters to give this critique some substance by articulating a view of the public sphere as a diagram of forces, which will make available to us a new set of terms for thinking and presenting becoming. In the final three chapters I will then go on to apply these ideas and concepts to the becoming of air quality politics in Toronto, Canada.

CONCLUSION

I no longer know if I'm looking with my naked eye at a starry sky or at a drop of water through a microscope. Since the origin of the species, the horse moves, supple and mathematical. Machines are already catching up, moving ahead. Locomotives rear and steamships whinny on the water. Never will a typewriter commit an etymological spelling error, but the man of intellect stammers, chews his words, and breaks his teeth on antique consonants. When I think all my senses burst into flame and I'd like to violate all beings, and when I give rein to my destructive instincts I find the triangle of a metaphysical solution. Inexhaustible coal mines! Cosmogonies find a new life in trademarks. Extravagant signboards over the multicoloured city, with the ribbon of trams climbing the avenue, screaming monkeys hanging on to each other's tails, and the incendiary orchids of architectures collapsing on top of them and killing them. In the air, the virgin cry of trolleys! The material world is as well trained as an Indian Chief's stallion. It obeys the faintest signal...

Excerpt from Blaise Cendrars *Profound Today*
Cannes, 13 February, 1917

The above excerpt from the poet and writer Blaise Cendrars (1998) resonates as much today as it did when it was written in 1917, evoking the sense of confusion and the apparent weakness of human will and thought to do justice to modern complexity; it reminds us once again that concerns about speed are not new in the cultural and critical commentary of modernity. Therefore, if we are to broach the subject of the impact of speed on political discourse again today, we need to be sceptical and critical of the suggestion that we have somehow today reached a 'new speed'. When critical thought suggests that the complexity that characterizes a world of multiple speeds results in a singular experience of 'speed' that overwhelms the 'average' person, it simply recreates the initial image of confusion it sought to critique. It is important for critical thought to hold up against the urgency that universal statements tend to create in order to think the urgency. But this does not mean trying to slow down the world in order to have time to think, which implicitly validates the erroneous idea of a universal acceleration. Instead, it requires that we think about how speed and temporal complexity shed light on the limits of how we think about politics and political change.

This is what I have tried to do in this chapter; starting with the initial sense that speed 'erodes' the conditions for a critical politics, I have used the concept of the public sphere to work through how ideology is legitimated or critiqued, and how speed impacts this process. It was argued that 'at speed' the oppositions that characterize a dialectical model of politics risk becoming entrenched, or hard, opposition, or risk being unable to address the novelty that might be emerging in a world characterized by temporal complexity and a loss of control. Therefore, I argued that we need to supplement a dialectical model of political analysis and critique, with an experimental critique and a politics of becoming. The latter tries to look at the limits of recognized identities and oppositions to better understand the contexts that support them within a world of multiple speeds.

Here we saw that the identity and ideology are created within an assemblage of material, social and psychic flows, and a public can be understood to always be in a dynamic state of becoming. Therefore, if we want to understand how to get beyond the impasse of

identity and recognition of an oppositional politics, it is necessary for critical thought to make this assemblage visible, and so make visible the potential to experiment with how new identities, new assemblages, might be created. The overall trajectory of the argument presented here is to move critical thought away from a normative critique focussing on ideal conditions which would recreate and support a self-present critical subject, towards understanding how critique can take place ‘at speed’, within the multiple temporalities and complex assemblages of an always imperfect world, one whose complexity exceeds critical representation.

Understanding a public, and the subjectivities it implies, as an assemblage that emerges from this complexity highlights the indeterminacy, and risk, in any attempt to call a public into being. However, this indeterminacy is not a cause for lament, but the very condition of political action and change, for good or for ill. Pragmatically, rather than normatively, it is possible to treat ideologies and subjectivities as ‘symptoms’ that encourage us to seek the conditions that support them and to experiment with how else they might be assembled. Therefore, in the next chapter two chapters, I will move away from the theoretical normative narrative to look more closely at the dynamics of a public as an assemblage, and how an experimental critical thought might present this assemblage in a way that encourages experimentation.

CHAPTER TWO

THE PUBLIC ASSEMBLAGE

The first chapter developed a normative critique of speed, which argued that within a society characterized by speed and temporal complexity political discourse risks deteriorating into hard oppositions, or an inability to appreciate truly novel circumstances that go beyond recognized identities. Therefore, it was argued it is necessary to engage in an experimental critique that supports a politics of becoming and encourages experimentation with recognized identities. In this chapter, the goal is to move away from this normative critique, and develop a positive expression of how the public works 'at speed' by building on the concept of the public as assemblage. In order to do so, it will be necessary to set aside a wholly negative concept of speed in which it is understood as a universal force that comes from without and 'erodes' pre-existing identities. Therefore, I will explore Deleuze's Bergsonian conception of time as different/ciation; time itself is always a process of assembling, and so is never separate from the assemblage within which one is moving and thinking – time is always timespace. A public, then, has its own speed formed at the intersection of many speeds, and it is at the intersection of these speeds that subjectivities form as an expression of the public assemblage. Therefore, if we consider the public as an assemblage, it is one that is always in the process of assembling, it is prone to the disruption of a new connection that opens it to a process of becoming. However, it is this same openness that means that a public assemblage is always prone to capture and closure by a conservative will to power. Therefore, this provides us with the grounds on which a critical public sphere must work immanently within existing assemblages in order to draw attention to the limits of recognized solutions and identities.

The chapter will proceed in three passes. In the first, I will develop a Deleuzian conception of time and speed, focussing in particular on the materiality of time as a process of connection, and on the distinction between the actual and the virtual. Here

we will see that time itself is a process of assembling. The key image of time is as a movement that fills the interval between a particular conjunction within the 'virtual' multiplicity (the event) and its actualization in a particular state of affairs. Within habitual repetition, the interval becomes invisible, and time is considered a smooth projection of the present into the possible future, but if the event continues to be disruptive, there is an opportunity to re-think the habitual and experiment with how else we might 'go-on'. The important speed, in relation to the public sphere, then, is this 'virtual speed of emergence' of the event (what we can think of as a 'swerve' or 'shiz') and whether or not it can be used to pose new questions.

The second pass, then, builds on this conception of time as an assemblage/assembling, but in relation to the assemblage of the public (assembling the 'time of a public'). I will move through the process of synthesizing the event into a public through three repetitions of the event. The first is the connective synthesis of the event itself, which disrupts an existing state of affairs. The second is a disjunctive synthesis that 'makes sense' of this disruption such that it can be circulated in knowledge statements. The third is a conjunctive synthesis that brings together objects that would not otherwise have connected, but which can now be placed in relation in the wake of the connective and disjunctive syntheses. This conjunctive synthesis is of the public draws together what is sayable with a particular context of 'visibilities' – whenever and wherever this is successfully done, a public forms, along with the subjectivities that are its expression.

However, the assemblage only exists in repetition (in time), and so if the event remains disruptive, there exists an opportunity to open the assemblage to the virtual and becoming. However, this becoming can in turn be captured and returned to an assemblage that is a version of the same (there is a continual process of capture and escape). This, then, brings us to the third and final pass. If the assemblage is opened to becoming, then contemporary capitalist State works immanently within the processes of disruption to capture the event in order to profit from a conservative re-articulation that preserves capitalist relations. This capture must be continually and critically evaluated, which is the role of a critical public sphere. Because we cannot at present do without

some form of control, critique is not aimed at 'solving' the problem of control, but encouraging experimentation within the assemblage. The process of experimental critique seeks to trace the capture of the event in the assemblage, and its continuing disruptions, in order to consider how we can keep visible in public discourse the problematic questions the event raises, and the potential it suggests for alternative realities.

Assembling time: the actual and the virtual

If we want to consider how speed impacts the formation of publics, where publics are understood to be an assemblage, it is crucial to understand that time itself is an assemblage. We do not have a public assemblage that is in time, but an assembling of a public that takes time, or better, makes time – the time of the public. In the first chapter it was argued that whenever we use the term speed, we are actually referring to a problem of multiple speeds and temporal complexity. In the subsequent discussion speed was shown to have an ambivalent register - it was associated with the attempt to control, and the unexpected loss of control. In this section, I will argue that this ambivalent oscillation is intrinsic to a concept of time as assemblage. I will begin by reviewing how the control of time depends upon the control of space. We can think of the assembling of timespace networks, and their overlapping and layering into a complex series of timespaces. However, this leaves us with the idea that there can be a controlling subject at the heart of the unfolding of the time-assemblage; yet the subject is formed within the act of assembling of timespace, and so is never strictly speaking in control. In order to see this, we need to look more closely at the process of spacing and timing, and what happens in this process (Thrift, 2001a). Following Deleuze, we can argue that the actual assembled timespace is only on dimension of time – its actualized dimension – but what goes unseen is a virtual dimension. Time then, is a continual interchange from the virtual to the actual and back again, that takes place through movement. This means that the duration of time is punctuated by a series of events, but that the eventfulness of time is concealed in habit and repetition. This is why 'at speed', in a world of multiple temporalities, the accident is so important – it offers the

opportunity to make visible the eventfulness of time, and the presence of the virtual that is excessive to any actualization in a particular assemblage. The interval between a virtual event, and its actualization in a particular state of affairs is closed by habitual movement. The challenge that speed poses to thought, then, is to be able to think the event, and not let it disappear into repetition.

Time as the coordination overlapping technological networks

We can start by picking-up a particularly strong narrative line of modernity as a story of increasing speed and mobility, resulting from advances in transportation and communication technologies (Kern 1983; Schivelbusch 1986; Virilio 1987; Harvey 1989; Cronon 1991; Thrift 1994; 1997; Millar, 1998; Crary 1999; Gleick 2000; Kuipers, 2000; Mackenzie 2002; Virilio 2003). The idea that technology can ‘accelerate’ time is a seemingly uncontroversial claim, but what these studies show is a much more complex relation between time and technology that results in a proliferation of speeds. The idea that technology could accelerate time is dependent on the image of clock-time where time is linear, cumulative, infinite and reversible (Adam 1995). However, clock-time exists only where there is a network of coordinated clocks, and it reflects the working of the clock as a closed system separate from its environment (Stengers 2000 417 p.177; Mackenzie 2002 chap. 3). Wherever such a system is opened to its environment is runs awry and is disrupted by events. Therefore, we can see that “time is not itself a primary phenomena. Time passes or not depending on the alignment of other entities” (Latour 1997 p. 176). The role of technical mediators in the passage of time draws to our attention that there is no time, and so no speed, separate from a particular organization of space.

This is the kind of time and space – the kind of speed -- that can be mapped using a time-geography diagram, in which case the ‘object’ is a person, who must coordinate a multitude of networks in order to get through the day (Hagerstrand 1984; Ellegard 1999; Lenntorp 1999; Vilhelmson 1999). However, this is not a purely technical organization, but must also include the coordination and organization of social relations and natural

rhythms (Pred 1981; Hagerstrand 1982; Thrift 1983; Pred 1990; Crang 2001). There is always a process of implementation and adaptation to local circumstances, and so a given technology never results in a uniform and universal experience of time across different contexts; in each case it is a question of evaluating how a particular technology influences the experience of time (Glennie and Thrift 1996; Stein 2001). The successful intersection of different networks produces a 'space-time trajectory' and the idea of a 'trajectory' implies that in assembling the trajectory people also place themselves in a historical time based on projected, or hoped for, course of events, and recall of the past (Hagerstrand 1982; Crang 2001). At this point we are able to extend time-geography to not just an objective mapping of time-networks, but a more phenomenological reading of time. But this is still a map of space and time that is resolutely founded on a linear idea of 'clock-time', as reflected both in its technical bias and graphic representation, but also in as much as the past and future are imagined only as extensions, or an unfolding, of actions taken in the present (Gren, 2001). This is then an image of a person in time that, for all the talk of connection, is curiously detached from the space they assemble, creating an objective image of a body in control of space, or 'dragged around', rather than one actively interacting with space (Crang 2001; Gren 2001). I will return to this lack of eventfulness below.

As a first pass, then, we have an image of time as a heterogeneous network that needs to be assembled, and then coordinated with other networks within an overarching clock-time network. There is not a singular shift to 'clock-time', or a time dominated by technology, but a series of overlapping networks and a proliferation of timespaces (Glennie and Thrift 1996). High-speed technologies do not necessarily lead to 'more speed.' For example, electric street lighting and railways in European cities opened up the city to a night-life, a space-time with that gave a whole new temporality and variety to daily rhythms (Schlör, 1998). Similarly, increasing the speed, reliability and cost of mass transportation has allowed for the creation of tourist spaces where one could 'get away' or 'drop out' (time made possible, it should be added, by the changing pace of production that allowed workers to take holidays) (Shaw 2001). Nevertheless, this proliferation does create a sense of acceleration to the extent that one recognizes that

there is a growing gap between what one is doing and what one could be doing, literally a multiplication of experiences and inputs and the desire and need to choose and coordinate amongst them. As Tekeli (1999 p.229) argues: "The accelerating pace of contemporary society is determined by the continuous increase in the gap between experience of the past and the expectations of the future." It was at the end of the 19th C, at the same time that technical networks (including standard time) were becoming more dense and pervasive, that cultural commentary started to register a disjunction between 'personal' and 'public' experiences of time (Kern, 1983). David Harvey (1989) has suggested that this multiplication of experiences is experienced as a sense of 'compression' of space and time, but it is more accurate to view this change as a progressive complexification, or layering, which means that as the world appears to shrink (in as much as what was distant can now be close at hand) it is also appears to expand as new space-times are created, and because what was previously invisible is now part of our world (Kirsch 1995; Bridge 1997; Dodgshon 1999; May and Thrift, 2001). Speed leads to temporal complexity, not uniformity. It is at this point that we can start to get the sense that the world is moving 'too quickly' because we are aware that much of the action 'escapes' our conscious attention.

Even if we have traced here a concept of time as a complex, multi-layered assemblage, the suggestion that there is a point after which it 'escapes' our conscious attention shows that we have still kept an assembling subject at its core. Therefore, we can think of subjects who control timespace, subjects who are controlled, and subjects that loose control. Again, this is not without merits, and suggests a whole politics of time (Nowotny 1994; Davies 2001). But premising the passage of time on the subject does not serve the purpose of developing a concept of time and speed that contributes to an experimental critique and a politics of becoming at speed. The idea that something 'escapes' control suggests that our description of time is still not complete. We need to conceptualize how this escape takes place, and for this we will need to adopt a more philosophical standpoint.

Time as duration - the actual and the virtual

In the above discussion we have thought about time as a passage between distinct points, or objects in a network. However, by stressing the assembling of such networks, I have tried to draw attention to the fact that in thinking about time we are dealing with motion and change, even if only by repetition of near identical cycles. However, if this change is not to be just the assembling of pre-existing objects, it requires that movement be a creative conjunction, which in turn implies a dimension that is not yet actualized but which provides the context for the ‘movement of the mind that orders the world’ (Crocker 2001 p.48). However, if this ‘transcendental’ idea is not to become dogmatic (i.e. implying a pre-existing truth to be recognized), it must be shown to be in a process of becoming. This is what Deleuze, building on the work of Bergson, sets out to accomplish by thinking of time as duration composed of the movement between the actual and the virtual (May 1996; Patton 1997; Crocker 1998, 2001; Patton 2000; May 2001; Ansell-Pearson 2002; Deleuze 2004 p.22-51).

Bergson, in his articulation of the concept of duration, argued that “to conceive of things as taking place in terms of succession of positionings (‘before’, ‘after’, etc.) is to presuppose the faculty of space” (Ansell-Pearson 2002 p.30) – i.e. it treats time as if it were the same as space. However, he argues our experience of time is one of continuous flow, in which we cannot identify the beginning and ending of a particular event because it always moving and progressing. “We can conceive of succession without distinction, and think of it as a mutual penetration, an interconnexion and organization of elements, each one of which represents the whole, and cannot be distinguished or isolated from it except by abstract thought”. (Bergson quoted in Ansell-Pearson, 2002 p.21). It follows, that movement is distinct from the space covered. As Deleuze argues:

Space covered is past, movement is present, the act of covering. The space covered is divisible, indeed infinitely divisible, whilst movement is indivisible, or cannot be divided without changing qualitatively each time it is divided. This already presupposes a more complex idea: that spaces covered all belong to a single, identical, homogeneous space while movements are heterogeneous, irreducible among themselves. (Deleuze quoted in Crang 2001 p.202).

Rather than thinking about objects first in terms of their incorporation in networks, we can think of objects as being in motion, and each motion is in itself a singular becoming. This movement is what Bergson called duration, and he argues it is the essence of time and for Deleuze the key to the becoming of all assemblages.

However, the world of constant motion jars against our awareness of solidity in a world of, at times all too stubborn, material objects and social relations. This is where we must attend to the distinction between the actual and the virtual and the repetition of time as habit. If time is movement, it is a movement that weaves together the actual dimension with a virtual dimension. One way to understand the virtual, is to think of every duration as composed of two kinds of multiplicity – a closed and open multiplicity. A closed, or numerical, multiplicity is akin to the space-time networks we have been describing above, it can be measured quantitatively. In mathematics we would think of it in terms of numerical set. However, an open, or virtual, multiplicity is not formed of discrete elements, but is a whole in which a change to part leads to a qualitative change of the whole, and so it is continually changing not just in degree, but in kind. It is the open multiplicity that Bergson associates with the virtual, but the two kinds of multiplicity are never separate, and only together form duration. Every object differs from itself, it is at once part of a closed multiplicity (e.g. it is a ‘car’ or an ‘atom’) in which it has a distinct identity, and it is part of the open multiplicity:

Movement has two aspects: by changing qualitatively duration divides up in objects and the objects are ‘united in duration’ by losing their contours. “We can therefore say that movement relates the objects of a closed system to open duration, and duration to the objects of a system which it forces to open up. Movements relate the objects between which it is established to the changing whole which it expresses and vice versa” (Ansell Pearson, 2002 p.40 quote is from Deleuze).

Thus Deleuze conceives of a world that is characterized by movement and a constant (if not always apparent) mutation. The world of movement is thus characterized by difference in as much as movement is a continual process of *differenciation*, where

actual objects appear, and *differentiation*, which characterizes the continual variation of the virtual multiplicity:

Whereas differentiation determines the virtual content of the Idea as problem, differentiation expresses the actualisation of this virtual and the constitution of solutions....Differentiation is like the second part of difference, and in order to designate the integrity or the integrality of the object, we require the complex notion of differentiation (Deleuze, quoted in Patton 2000 p.38)

In this last quote we see that Deleuze conceives of the virtual as throwing up ‘problems’ that need to be thought, and which are actualized in particular states of affairs. However, there is nothing ideal about the virtual, it is a real arrangement that ‘forces’ us to think – the actual and the virtual are but two aspects of the same reality. The virtual as a relation of unseen - but not unsensed – forces, causes us to think; there is nothing transcendental about the virtual in as much as it is always related to an actual arrangement and is immanent to it (May 2001).

The importance of this concept of time for our understanding of speed and the assembling of a ‘time of the public’ are twofold. First, it shows that any actualization is part of a much more fluid, nonrepresentational, reality that is a source of potential change.¹ Therefore, it is important to understand how a particular state of affairs is maintained as *repetition* within this virtual multiplicity. Second, it shows that ‘control’ of time depends on the emptying of the interval between a virtual *differentiation* and its actualization in a particular state of affairs, such that repetition becomes repetition of the same. However, strictly speaking, repetition is never repetition of the same; to say that nothing has changed is to ignore the novelty of each repeated conjunction, and it also fails to acknowledge changes that are too small to be recognized. All actual objects are in the process differing and changing (“Returning is the being of that which becomes” as Nietzsche says (Deleuze 1986 p.48)). The concept of time as repetition destabilizes the idea of identity, and so of a self-present subject at the heart of time. Instead, the subject

¹ Ansell-Pearson (2002 p.21) writes that duration “is nonrepresentational, as soon as we think it we necessarily spatialize it”. We will return to how to approach this nonrepresentable quality of the virtual in the next chapter.

is formed within this repetition, as part of the actualized assemblage – more precisely within the movement in the interval between the virtual and the actual.

The interval – the form of determinability – produces difference. As a result, indeterminate being is determinable only in time. I am “determines the existence of a ‘self’ [moi] that changes in time and presents a certain degree of consciousness at every moment”. It is a difference that differentiates. It is a difference that distributes itself through out the self, and is only on this basis that the self thinks and produces any movement between I and ego, or concept and object (Crocker 2001 p.60-61 quote is from Deleuze).

This means that subject is always in a process of stabilizing and repeating itself through practice, which in turn means that, even for this briefest moment between the virtual and its actualization, there is a possibility to think again about how to go on, how to do and be differently: “for a brief moment we enter into that schizophrenia in principle which characterizes the highest power of thought, and opens being directly on to difference, despite all the mediations, all the reconciliations, of the concept” (Deleuze quoted in Crocker 2001 p.61)

In relation to this Deleuzian concept of the time of assemblage, the important impact of speed is the part it plays in emptying, or bracketing, the interval. The imaginary of speed as an acceleration of a universal abstract time relies precisely on this evacuation of the interval, and a replacement with an image of time in which the passage between points does nothing, and so the future is simply a projection of the present into the future, a rearrangement rather than transformation (Crocker 1998). In this sense we can see that the subjective experience here may be anything but ‘speedy’ – it may be frustratingly slow, or it may be the most mundane and plodding of routines, both of which are made possible by a conjunction of flows, some of which may in fact be very fast (e.g. telecommunication). The important aspect of speed, from the point of view of opening the assemblage and its subjective expressions to becoming, is the ability to enter into the interval. This is why the crucial speed, in the first instance, is not any objective velocity, but the speed of the ‘swerve’ of ‘schiz’ that makes us think again – what Virilio calls the ‘virtual speed of emergence’ (Virilio 2003). Only secondarily does objective

speed get broached, as part of the articulation of the problem made visible by the accident. This is why the accident or disruption is so important at speed. The disruption does not necessarily change anything, a person copes with all kinds of disruptions within a daily routine. But with repetition, there is the potential to be pulled into a modification of routine, a modification of movement that opens the self to thought and becoming.

What the accident makes visible, if only for the briefest of moments, is that something has changed within the virtual multiplicity, or better, that something is always changing. This change is what Deleuze and Guattari call the event, "...the part that eludes its own actualization in everything that happens. The event is not the state of affairs. It is actualized in a state of affairs but it has a shadowy and secret part that is continually subtracted from or added to its actualization" (Deleuze and Guattari 1994 p.156).

Whenever we try to represent the event, we always say too much or too little, the event runs between all recognized identities, it is becoming. This means that the event poses a problem that is only partially, and temporarily, 'solved' in a particular state of affairs. Therefore, the event is something that creates a new potential in the world, and a measure of the potential of the event is the number of different ways it can be actualized:

The event is not identified with the significations that those who follow will create for it, and it does not designate a priori those for whom it will make a difference. It has neither a privileged representative nor legitimate scope. The scope of the event is part of its effects, of a problem posed in the future it creates. Its measure is the object of multiple interpretations, but it can also be measured by the very multiplicity of these interpretations: all those who, in one way or another, refer to it or invent a way of using it to construct their own position, become part of the event's effects (Stengers 2000 pp.66-67).

It follows, then, that thought moves backwards, so to speak, counter the actualization from the virtual to the actual; thought moves from the set of possible state of affairs (what has been actualized) towards sensing the potential of the event and to articulating the problem that it poses. It is this problem that we want to keep visible in the public sphere in order to encourage a politics of becoming, because it has no definite solution, and so keeps all public assemblages open to the potential of being otherwise.

We now have a concept of time that does not require a controlling subject, and which is never completely in control – it oscillates on the edge between control and chaos. Even in the most repetitive manifestation, we find here a strategy of looking for the disruptions that can diffuse entrenched repetitions and open them to becoming. It is also in being aware of the continued disruption of the event that we can evaluate how well different solutions ‘do justice’ to the event by allowing us to respond to the event, rather than trying to repress it within a repetition of the same. In this regard, speed is not intrinsically a problem, but always requires evaluation rather than a blanket condemnation of ‘speed’:

Slow and rapid are not quantitative degrees of movement but rather two types of qualified movement...In this sense, the role of the qualitative opposition gravity-celerity, heavy-light, slow-rapid is not that of a quantifiable scientific determination but of a condition that is coextensive to science and that regulates both the separation and the mixing of the two models [of a scientific quantitative model and a qualitative model c.o.], their possible interpenetration, the domination of one by the other, their alternative (Deleuze and Guattari, 1988 p.371 emphasis in original).

In any particular ‘solution’ (possible actualization), it is not objective speed *per se* that is good or bad, but it is good or bad only in relation to how it makes possible, or restricts, the connections that allow for creative responses to the event. In this regard slow and fast are not only objective measures of speed, but qualitative evaluations of compatibility. We will return to this evaluative critical dimension in the last section of the chapter.

The public assemblage and the time of the public

We are now able to apply this concept of assembling time to the public sphere as assemblage, where time will be seen as immanent to the process by which a public forms. Again, a public is not in time, instead the process of assembling is the ‘time of a public’. Therefore, we will want to attend to where and how the swerve, or schiz, of the virtual event can open the assemblage to becoming. However, if the public is an assemblage, we need to conceptualize what it is that it is assembling, and how we can

conceive of this process without reverting to the will of a subject who calls the public into being, and which at the same time gives us critical purchase for intervening in the process of public formation. The approach that I will adopt follows Deleuze and Guattari's concept of the diagram and abstract machine as that which actualizes the event in a particular assemblage. The idea is to follow the progression of time in its repetition as it moves from event to assemblage, stressing the indeterminacy and eventfulness of this process. This is conceived, following Deleuze and Guattari as a series of machinic syntheses, which I will characterize, following Massumi, as the connective, disjunctive and conjunctive syntheses of the event (Deleuze and Guattari, 1984; Massumi 1992; Holland 1999; De Landa 2000).² It is this last synthesis that is central to the discussion here as that which actualizes a public, but I mention the others because there is no linear progression – the three syntheses exist concurrently and come together in a 'consistent' whole. Focusing on the conjunctive synthesis, then, it is argued that we can understand the public in terms of the conjunction of a statements and visibilities. The public assemblage forms a territory, in which it is possible to 'see' that a particular state of affairs is legitimate – we thus have a machinic production of legitimacy and subjectivity. However, there is always something excessive to this arrangement, and the question we need to ask is how this excess is made visible and how it opens the territory to becoming.

The first synthesis and assemblage that I want to attend to, is that which forms by chance, due to an 'accidental' meeting of two or more objects, but which is also as a reflection of an affinity and compatibility that is intrinsic to the matter in question (e.g. different sized grains of sand and pebbles filtering in a stream form in layers based on a chance encounter and physical affinity) (Massumi 1992). The connective synthesis is an actualization of the virtual, an event, and it results in new identifiable entities in the world, which behave with a predictable regularity. We can say that this synthesis creates a 'coded milieu'. However, the new connections have not yet been identified, but are simply the connection between matter that have come together through a chance

² These terms are developed by Deleuze and Guattari (1984) in *Anti-Oedipus*, but my treatment of them here owes more to Massumi's use of these terms; Massumi uses them more broadly than to critique psychoanalysis and state control.

encounter, or which have 'found' an affinity for connection after being brought together by an unrelated functional requirement. However, even if 'unidentified', the new entity can form connections with what already exists within the coded milieu, it can disrupt and start to 'demand' to be noticed. This first synthesis leads to what Deleuze and Guattari (1988) call a 'machinic assemblage', in as much as when viewed abstractly the world here appears as a kind machine, joining compatible segments that come into contact with each other.

This then leads to a need to understand how this new entity can be incorporated into the existing state of affairs. This is where a second synthesis takes place, that of knowledge formation that gives an identity to the new object. This second synthesis is called a disjunctive synthesis, and it is by no means a simple matter, but is again an event in itself. The work in the social studies of scientific knowledge (SSK) captures the eventfulness of the formation of scientific knowledge (Latour 1993; Latour 1999a; Demeritt 2001; Hinchliffe 2001; Braun 2002; 2002; Whatmore 2002). SSK highlights that the laboratory is not a place where nature is 'revealed', but a material context through which the scientist and the object of study both come in to being through the smooth functioning of the experimental apparatus – it is an event (Latour 1999a chap. 4 and 5). If all the objects hold together, and the experiment produces the hoped for result, the scientist infers that the hypothesis was correct, and that there is a new kind of object 'out there' in nature, or that s/he has discovered new characteristics of an already existing object. At this point the scientist is able to name the object and it comes into being; this is what Deleuze and Guattari (1988) call an 'incorporeal transformation' – nothing has changed materially, but the naming of it allows it to be treated in new ways.³ This, of course, will only be sustained so long as the new identity can be repeated or used in different contexts (e.g. other laboratories, industry – see below on how the identity is used) (Latour 1986). A similar process of assemblage is present in all knowledge formation, but the important outcome for our purposes here is that it

³ Massumi (1992) uses marriage as an example of an incorporeal transformation effectuated by the statement 'I do'. Deleuze and Guattari (1988) make reference to a Judge's verdict as an example of an incorporeal transformation. The point I take from these is that the what results is a stable identity. It is not just a passing statement which repeats a familiar scene (e.g. saying 'Good Morning' to your co-workers)

produces an *identity* for the new object that entered the world in the connective synthesis. It is now possible to describe in a series of statements what the object is and how it will behave, how it can safely combined with other objects, and where and when it might cause disruption (this is not confined to inhuman objects, but all identities). As an identity, the object enters the world of knowledge, a world of already existing statements where the new identity rearranges what is considered possible, and true. The word disjunction captures the fact the object has been disjoined from its context of emergence, and through its incorporation in knowledge it is now expected to connect only in certain kinds of predictable ways – either this or that, or that and those etc. (e.g. tropical flowers will not grow outdoors in Canada) (Massumi 1992).⁴ It provides us with a series of possible options for what is reasonable, given a particular goal and set of conditions. This is a process of ‘overcoding’ that doubles the coding of milieu in which the object might be found. This act of identity formation is what Deleuze and Guattari (1988) call a collective assemblage of enunciation (in this case it is the laboratory).

In summary, the connective and disjunctive syntheses produce both a context where a problem becomes visible in a particular state of affairs, and as a series of statements (knowledge) that identify the object and how it is possible to respond to the problem it raises. Both of these syntheses exhibit what Deleuze and Guattari call a ‘double articulation’ (1988), in that in bringing together a particular conjunction of objects it produces a new potential in the world, something more emerges that ‘doubles’ and goes beyond the mere addition of what was there before – it is an event because it is productive of difference. In this way, we can say that synthesis propagates the event if in its ‘new’ form the event continues to have disruptive effect – e.g. it requires us to change how we do things, and it remains problematic (Massumi 2002a).

We are now able to address the conjunctive synthesis that forms the public assemblage. This repeats the connective and disjunctive synthesis, but on a different ‘plane’, because

⁴ Deleuze and Guattari (1984) distinguish between an ‘inclusive’ and ‘exclusive’ disjunction. The latter tends to limit what the new knowledge object can connect with, while the former tends to open the object to the possibility of new connections. As with all of Deleuze and Guattari’s terms, this is an evaluative criteria of the ‘more or less’ kind, rather than a strict binary of types.

what is brought together is a series of pre-existing identities (human and non-human), whose conjunction will 'legitimate' the different identities – there will be a second incorporeal transformation. If an event remains problematic, it will be necessary to decide how to respond to the event, i.e. necessary to choose among the possible options articulated in the disjunctive synthesis. This is where the conjunctive synthesis comes in, for it brings together a disparate set of elements that might not otherwise have been combined (Massumi 1992). Deleuze and Guattari use the example of the feudal assemblage to capture this most general and heterogeneous of syntheses:

Taking the feudal assemblage as an example, we would have to consider the interminglings of bodies defining feudalism: the body of the earth and the social body; the body of the overlord, vassal and serf; the body of the knight and the horse and their new relation to the stirrup; the weapons and tools assuring a symbiosis of bodies – a whole machinic assemblage. We would have to consider statements, expressions, the juridical regime of heraldry, all of the incorporeal transformations, in particular, oaths, and their variables (the oath of obedience, but also the oath of love, etc.): the collective assemblage of enunciation. (Deleuze and Guattari 1988 p.89).

This final assemblage, then, brings together both the bodies of the machinic assemblage and the identities of the collective assemblage of enunciation. A public is this kind of assemblage, for it legitimates a particular claim (a particular truth), by binding it with a particular arrangement of things – it actualizes the sayable and the visible (Deleuze, 1999). In the example of the feudal system we have a very large and stable assemblage, one repeated across space and time for a long historical period. But the concept of a public as an assemblage works on a smaller scale. The concept of a public here has no fixed form (a place) or content (set of people), but is produced wherever and whenever it actualized (Rafael, 2003). It is always an event that brings together a diversity of statements within a particular context. The example that both Massumi and Deleuze and Guattari use is of a court judgement, which both legitimates the power of the judges and the law, but also transforms the prisoner into a legitimate convict. After the 'incorporeal transformation' of this conjunction, the prisoner leaves as a guilty convict, and the judge, lawyers and spectators leave as responsible members of society. Within this

context we can conceive of one person as being part of several, perhaps contradictory publics, as they move through space and time and are taken up within the assemblage.

In chapter one, it was suggested, following Warner (2002) that a public can be understood as a circulation of texts, and that a public has no existence outside of this circulation. We can now see that this circulation does not consist of a text that moves through pre-existing contexts, but a 'reading' (viewing, listening, uttering) of a text that actualizes a particular context and so 'calls a public into being'. Different kinds of texts are used in particular contexts, and so characterize the duration of a public. "The temporality of circulation is not continuous or indefinite; it is punctual. There are distinct moments and rhythms, from which distance in time can be measured. Papers and magazines are dated, and when they first appear they are news. Reviews appear with a sense of timeliness. At a further remove there are regular publishing seasons...". A public then may consist of the reading of a magazine article on subway, or a television program recalled during a dinner party, or a more sustained engagement such as book dealing with a particular issue, or a professional or personal rehearsal of a particular set of ideas and practices. In each case the reading of a text is part of assembling a public that calls into being a world, both immediately in a context, but also imaginatively in terms of a past and future and trajectory of the possible: "Circulation organizes time. Public discourse is contemporary and oriented towards the future" (Warner 2002 all quotes pp.94-96). This image of a multi-temporal circulation of texts is a very useful one, because we can imagine a public assemblage as emerging at the intersection of multiple circulations and in a given context.

Where I would diverge from Warner's account is in the primacy it places on the text, rather than the context of its reading. For in doing so, he ignores a whole other set of punctual rhythms that may influence the reading of the text; for example the manner in which past experience can be recalled by a particular encounter in space, thus folding the past into the present, or even triggering a different image of the future than the one evoked in the text (Crang and Travlou 2001). Here we have series of overlapping durations in which a person is more or less engaged, but which can interpenetrate and

influence one another in a particular context. Hence, Warner claims that: “The more punctual and abbreviated the circulation, the closer a public stands to politics. At longer rhythms or more continuous flows, action becomes harder to imagine.” Yet this does not mean that durations with ‘longer rhythms or more continuous flows’ are not influential, they may be recalled at the same time as a more contemporary text is read, thus folding different temporalities into each other and forming the time of the event -- it is not that the longer rhythm has less impact, it just “becomes harder to imagine”, it is more unruly. Warner’s concept of a world of circulating texts, all moving at different ‘speeds’ and rhythms, is akin to the imaginary of multiple timespace networks we reviewed above, which if multiplied quickly reach a complexity that is better grasped by collapsing them into one singular emerging duration, in which the past and present and possible future co-exist in a singular unfolding of time (Ansell-Pearson 2002).⁵ As a result, a recognized public only exists in repetition and a set of practices. A person does not just ‘believe’ the content of a particular text; they use the content to assemble a particular context and to go on. If it stops being useful, it stops being legitimate.

The upshot of all this complexity, however, is the binding together of an utterance and a context, a statement and space, in a way that creates a recognized identity. The concept of the assemblage builds on what Foucault would call a *dispositif* of space and knowledge that expresses power (e.g. the modern penal system) (Deleuze 1999; Patton 2000). However, at this point we need to ask how these different actualized assemblages are created – by whose will, who wields this ‘power’? The answer is nobody’s will determines even if some have more force, they are an expression of what Nietzsche calls a will to power, and what Deleuze and Guattari call an abstract machine (1988 p.141-148). The abstract machine is virtual in the sense used above, and it connects words and things, expression and content, immanently within a particular conjunction. An abstract machine has no substance (it is not actualized), and it works not by connecting recognized forms and substances, but by connecting only matter and function ‘diagrammatically’ – an abstract machine is “a diagram independent of the

⁵ In this regard, Deleuze’s concept of the ‘pure past’ is useful, where time is conceived of as a cone in which the unfolding present moment forms the apex, with the whole of the past present, but not necessarily recalled at any one time (see Ansell-Pearson, 2002 pp. 180, 194).

forms and substances, expressions and contents, it will distribute” (ibid. p.141). It is only once matter and functions have been joined by virtue of their diagrammatic affinity that they become actualized in an assemblage, where it is possible to distinguish them in terms of form and substance, content and expression. Hence, if we think of the double articulation mentioned above, the abstract machine is what works to create the first articulation, or connection, leading from there to a recognizable assemblage in the second articulation. The abstract machine works immanently on unformed matter, but it “is neither an infrastructure that is determining in the last instance nor a transcendental Idea that is determining in the supreme instance. Rather it plays a piloting role” (ibid. p.142). In terms of our discussion of time above, the assemblage reflects the actualized portion of duration, while the abstract machine is the virtual multiplicity which is always in the process of drawing new connections. This means that an assemblage is radically indeterminate, but not indeterminable – it is determined within the event, and as an expression of the event. The assemblage actualizes into content (machinic assemblage) and expression (collective assemblage of enunciation), and in so doing it creates the conditions for further diagrammatic relations to be joined by the abstract machine.

A diagram actualizes as an assemblage, and assemblages can be categorized by their degree of consistency. On the one hand there are loosely held together, and form a ‘plane of consistency’, while on the other they are tightly bound and well formed and can be characterized as strata (Deleuze and Guattari 1988 p.337). Between these two poles, an assemblage is characterized as multiplicity of elements that form a territory; on the one hand there are highly territorialized elements, which bind the assemblage to the strata, while on the other there are ‘deterritorialized’ elements, that can make connections beyond the strata and open the assemblage, and set the whole territory into a process of becoming and change. In order to understand how this happens in the case of a public assemblage, we need to recall that the subject is itself formed within the assemblage, at the intersection of the visible and sayable, or content and expression. As a body (a person) moves through timespace, he or she is actualized in the assemblage as a subject, and so we enter here the interval between the virtual and the actual discussed above. Therefore, even though it may be just for the briefest of moments, the subject

can sense that the assemblage is a reduction of the full complexity of the event in which they are immersed (Thrift 2000b); this sense of excess (which will return to in greater detail in chapters 5 and 6) can prod the subject into thinking of other ways to go on, other possibilities. The subject is not in control, but in thinking the event they can act as a 'cutting edge of deterritorialization' (Deleuze and Guattari 1988).

As an example, we can consider the case of the disciplinary assemblage as a way of understanding how the assemblage starts to 'crack-up' in its repetition. Deleuze (1999 esp. chap. 3) argues that in the assemblage expression (e.g. words) and content (e.g. persons, things) both have form and substances that are independent of each other, and that must be brought together by the diagram, or abstract machine. Thus, if we think of disciplinary assemblage, it has a form of expression, which is the penal law, and a form of content, which is the prison. Both the form of content and the form of expression have a substance. The substance of criminal law is the delinquent, so long as it is the object of discourse; the substance of the prison is the body of the prisoner. It is the abstract machine, or diagram, of disciplinary power that conjugates these two forms – expression and content -- and holds them together such that their two substances appear to be one and the same body – i.e. the delinquent is the prisoner. Expression and content do not reflect signifier and signified, they must be brought together and are exterior, or autonomous, in relation to each other. If the prisoner is not seen as a delinquent, then it becomes harder to treat him or her as a prisoner (Deleuze 1999 p. 47). The disciplinary diagram, then, is an example of Deleuze and Guattari call a strata, in this case an example of social or anthropomorphic strata (there can also be physicochemical and organic strata). A strata allows for a particular solidification and repetition in the organization of space and time, it solidifies the relationship between form of content and form of expression in the identification of a hybrid word-thing substance (delinquent/prisoner).⁶

⁶ On different strata we might have a musical sound-thing, or a yellow colour-plant. The idea is that an object has both an expressive component, which gets its meaning in relation to other expressions (yellow flowers attract a certain kind of bird who are not attracted to blue flowers), and content component which emerges from certain 'internal' requirements (the plant can survive long periods of drought and high winds). There is no necessary relation between a yellow flower and a sturdy plant, but they are brought together by an abstract machine in a particular plant – life is creative.

The world, then, can be conceived as being formed of multiple strata, each one its own assemblage. But if we now shift scales and perspectives, different strata can be conceptualized as being brought together in a 'larger' assemblage, or territory (Deleuze and Guattari 1988 p.503). So we can have the strata formed from the disciplinary diagram of the penal system, brought into conjunction with the strata of the disciplinary diagram of schools or factory work. While the strata are 'coded' and 'overcoded' milieus (i.e. there is a defined relationship between content and expression), in the relationship with other assemblages the content and expression may not be so rigidly territorialized, and so it allows for the 'destratification' or 'deterritorialization' of the substances held by the strata. What allows something to become deterritorialised is not the contradiction (or gap) between form and content (e.g. not a contradiction between the prisoner and the 'inner' or 'real' person who is 'good'), but an excess that is not captured by either form of expression (penal law) or form of content (prisoner) and which allows substances to make connections with other strata. For example, consider an elderly man jailed for euthanasia for helping his spouse kill herself. He is a delinquent, because he stuck a needle filled with poison in her arm. He is a prisoner, because we see him there on TV, in an orange prison jump suit, surrounded by guards. But there are other forms of expression that might fit as well – discourses about what it is to be a loving husband, wise elder etc. And we can 'see' other things⁷ – he stumbles when he walks, has a voice filled with sonorous authority. In this light it is possible that the body that was legitimately labelled as delinquent/prisoner can deterritorialize and 'move' to connect with a different discursive assemblage, one that makes it seem unjust to send him to jail, even if the reason for doing so cannot be articulated in law. In such a case, the vector of deterritorialization could be the image/story of the convicted person, probably broadcast through the mass media. What is crucial to note here, is that this deterritorialization was not willed by the subject, but was something that 'occurred' to the subject because of a relation that is excessive to the assemblage. Therefore, deterritorialization is open to empirical analysis and so to thought. In fact, Deleuze

⁷ Deleuze stresses that seeing in this case is not restricted to vision: "Visibilities are not defined by sight but are complexes of actions and passions, actions and reactions, multisensorial complexes, which emerge into the light of day" (1999 p.59)

argues that deterritorializations are precisely the source of thinking, we must be “forced to think” by events in the world. We would then enter into a process of trying to think why this man should not be labelled a delinquent, which would open a whole series of questions about murder, suicide, dignity in death, which might in the end bring us the problem of how we define today a ‘natural’ lifespan, or perhaps whether or not ‘punishment’ is the right response to this event.

These excessive elements form what Deleuze and Guattari (1988) call a ‘line-of-flight’, because they open the assemblage, and its subjectivities, to a process that might lead towards a new assemblage, and a new stratification. De-territorializations are always relative in as much as they are then re-territorialized. An absolute de-territorialization is not impossible, but it would be suicidal. The line-of-flight, or deterritorialization, is also an expression of the abstract machine, this time acting not to create an assemblage, but as the cutting edge of deterritorialization, making connections between elements brought together in assemblage. In this we can see that the assemblage remains open to the virtual. We can also so see how ‘at speed’ the subject can still be critically engaged with the becoming of society, but not in a wilful or transcendental fashion. Instead, like in the example above, it may be the shaking of an old man’s hand on the television (a form of content or visibility), or the jarring use of a word (e.g. the word ‘retard’ in medical discourse – a form of expression, or statement), that causes the subject to think again, and so try to articulate the problem that can be seen, but as yet has no solution (and perhaps never will). Within the assemblage, then, the abstract machine works at ‘infinite speed’ to create virtual connections that are sensed and seen, rather than firmly identified or articulated. They become problematic relations around which the subject stumbles with each repetition, and it opens them to a process of becoming.

The role of an experimental critique is to be attentive, or sensitive, to such moments and to present them again in public discourse, to try to re-activate the sense of excess that was apparent in the event. The experimental critique works immanently, within the assemblage, and tries to magnify and propagate problematic relations. This means that the experimental critique must go beyond recognized identities, and make visible the

process of assembling that allows them to exist in repetition. In this way the aim is to open up stratified identities and relations in the hopes of encouraging experimentation with how different elements could be recombined in new relations of content and expression. In the following chapter I will explore how one can approach this task, given that we are talking about making visible excessive potentials that are usually only sensed within the assemblage, rather than firmly recognized and repeated. However, in concluding this chapter, I want to reflect on the role of the subject in this process of destratification, and why an experimental critique pays such close attention to the subject as a node of change.

The Capitalist Axiomatic and a Critical Public Sphere

So far we have talked about ‘a public’ in the singular, yet the contemporary public sphere is characterized by multiple publics and counterpublics. In chapter one we saw that at speed there is a risk that these identities resolve into hard oppositions and that they fail to address the novelty of the event. In terms of the Deleuzian language of the public as assemblage, we would say that the risk is that an assemblage becomes rigidly territorialized, and so restricts opportunities for experimentation with the event, or fails to open itself to becoming through interaction with different assemblages. Therefore, the critical stance of a politics of becoming is to look beyond individual identities, and try to re-activate the event (the problem) of which individual assemblages express are but one possible solution. Normatively, an experimental critique takes no sides, it moves between all identified solutions. However, it does take a stance ‘against’ all those forces that would try to limit the differentiation of the event. It is in this sense that we can say that an experimental critique is ‘opposed’ to State control, or control by market forces. However, it would be better to say that an experimental critique problematizes any attempt at closure and control, even as it recognizes the inevitability of such moves. Rather than opposing control, it seeks to escape, or avoid, control. Therefore, if we are to develop a critical stance for an experimental critique, it will always be one that evaluates (rather than rejects or opposes) control, not with an eye to a final solution, but with an eye toward evaluating better or worse, more or less

interesting, and so revealing that all solutions are reductions to the event. It is in this sense, then, that we have to understand Deleuze and Guattari's 'opposition' to what they call the capitalist axiomatic, a process that relies on high-speed technologies of control and which we will review in this final section as a way of articulating the strategic role of the subject in an experimental critique 'at speed'.

In the discussion of the assemblage above, we used the example of the disciplinary assemblage of the prison, but Deleuze argues we are moving away from a disciplinary society towards a society of control, one that no longer relies on set places of discipline, but which controls the body directly and interactively through spaces that can be recombined in an almost infinite variation that anticipates desire and disruption:

[In a disciplinary society the] various placements and sites of confinement through which individuals pass are independent variables: we're suppose to start all over again each time, and although all these sites have a common language, its analogical. The various forms of control, on the other hand, are inseparable variations, forming a system of varying geometry whose language is digital (though not necessarily binary). Confinements are molds, different moldings, while controls are modulation, like a self-transmuting molding continually changing from one moment to the next, or like a sieve whose mesh varies from one point to another...school is being replaced by continuing education and exams by continuous assessment...In disciplinary societies you were always starting all over again (as you went from school to barracks, from barracks to factory), while in control societies you never finish anything... (Deleuze 1995 p.178-179)

In a control society, the assemblages are continually being modulated by high-speed technologies that allow for monitoring and controlled interactivity, which means that the subject is 'never finished', he or she has to always be prepared for the next set of changes (to career, to skills, to changing fashions etc.). As we noted in chapter one, this kind of control offers both opportunities for unprecedented freedom, but also unprecedented repressive control. Much depends on how the assemblages are actualized, and this regard Deleuze and Guattari distinguish between the working of the

diagrammatic abstract machine, that multiplies possibilities, and what they call the *axiomatic*:

...we are not using the word axiomatic as a simple metaphor, we must review what distinguishes an axiomatic from all manners of codes, overcodings, and recodings: the axiomatic deals directly with purely functional elements and relations whose nature is not specified, and which are immediately realized in highly varied domains simultaneously; codes, on the other hand, are relative to those domains and express specific relations between qualified elements that cannot be subsumed to a higher formal unity (overcoding) except by transcendence and in an indirect fashion. The *immanent axiomatic* finds in the domains it moves through so many models, termed *models of realization* [p.454 italics in the original].

The axiomatic logic is similar to the working of the abstract machine in as much as it cuts across codes and overcodes, across recognized form and substance, content and expression, and deals directly with functional elements and unformed matter. However, unlike the abstract machine, the axiomatic seeks to preserve a certain kind of assemblage, it works within the virtual to preserve *versions* of the same, which are termed here 'models of realization'. Therefore, "diagrammaticism should not be confused with the operation of an axiomatic type. Far from drawing creative lines of flight and conjugating traits of positive deterritorialization, axiomatics blocks all lines, subordinates them to a punctual system, and halts the geometric and algebraic writing systems that had begun to run off in all directions" (Deleuze and Guattari 1988 p.143).

Deleuze and Guattari argue that the capitalist state is an example of very powerful axiomatic machine, but it is important to realize that this is not to say that capitalism is *in control*; to say capitalism works through axiomatic control is distinct from being in control. Capitalism is a symptom of capture rather than the motor of development; while certain segments of capital and the state limit change through dispersed and mobile control, they are continually 'out of control' from the point of view of social, technical, and material mutation (Massumi 1992 p.130). The fluidity and speed with which capitalism 'anticipates' (creates) needs, is based on its ability to maintain a

particular assemblage in which new connection can be quickly reterritorialized. For all its fluidity and flexibility, then, capitalism is inherently conservative; if it increasingly requires and provokes change, it does so in the name of a constant repetition of different versions of the same. Capitalism, or better the dominant segment of capital and its influence on state power, maintains its dominance by restricting access or debate about the technical networks through which people could begin to experiment with the organization of society, and thrives on multiplying the number of possible forms of expression that can be combined with the existing infrastructure – what Deleuze aptly calls an infinite finitude. States regulate access to infrastructure, and regulate its content (your behaviour, how much pollution can come out of a factory or car, what gets shown on TV or in magazines etc.), but states do not create the initial innovation that leads to new technology and infrastructure, nor does capitalism. “It is not a state that presupposes a mode of production; quite the opposite, it is the state that makes reproduction a ‘mode’....Like seeds in a sack: It all begins with chance intermixing.” (Deleuze and Guattari 1988 p.429). As a result, capitalism profits after the fact, and the state regulates after the fact, and both rely on high-speed technologies to monitor and contain such disruptions (Andrejevic, 2003).⁸ Innovation – becoming – is always singular and excessive to its capture, which is why Deleuze and Guattari think of the state and capitalism not as a cause, but as an ‘apparatus of capture’, a ‘machinic process’ that immediately senses and reproduces its own limits without ever passing a threshold that would necessitate a different kind of state organization and a different kind of economics.⁹

⁸ It is important to recognize the quasi-autonomy of the military in this regard. In practice the highest speeds are developed by, and reserved for, the military. In this regard state control is ‘faster’ than capital. However, to the extent that the military is subordinate to the state, and the state in turn subordinate to the capital axiomatic, then speed is subordinate to the market. In short, the fastest speeds – those controlled by the military – are in the service of a certain segment of capital. On the appropriation of the ‘war machine’ by the state (see Deleuze and Guattari (1988) esp. chapter 12. See also Virilio (1987 p.9) concerning the parallel mutations in both military technology and bourgeois trading class).

⁹ Deleuze and Guattari (1988 p.438) talk about the logic of the penultimate, or limit, in which one knows what constitutes the ‘next-to-last’ after which one would have to change the nature of what one is doing. This, they point out, is the ‘economics of everyday life’ and is characteristic of what the alcoholic calls the ‘last glass’ after which he or she will be able to start over again (after a pause, a rest...).

However, at this point we have to admit that it can never be a matter of simply opposing axiomatic capture; there are times for instance when one could imagine it would be desirable to block some lines of flight. But more fundamentally, we cannot do without some form of control – or at least it does not seem possible today to see what this kind of anarchism would look like, or how it could take shape in a progressive form. That is why the critique of control is always immanent and experimental, it is always trying to sense out the limits of control, and questioning how they could be exceeded or redefined. In this sense it is a critique with no solution, and its goal is not to call another public into being (to create another identity from the assemblage), but to create what Deleuze and Guattari calls a ‘minor’ discourse, by which he means a claim that highlights the limits of existing recognized possibilities:

We have seen several times that minorities are not necessarily defined by the smallness of their numbers but rather by becoming or line of fluctuation, in other words, by the gap that separates them from this or that axiom constituting a redundant majority (‘Ulysses, or today’s average, urban European’; or as Yann Moulier says, ‘the national Worker, qualified, male and over thirty-five’)... What defines a minority, then, is not the number but the relations internal to the number. A minority can be numerous, or even infinite, so can a majority. What distinguishes them is that in the case of a majority the relation internal to the number constitutes a set that may be finite or infinite, but always denumerable, whereas the minority is defined as a non-denumerable set... What characterizes the non-denumerable is neither the set nor its elements; rather it is the connection, that ‘and’ produced between elements, between sets, and which belongs to neither, which eludes them and constitutes a line of flight... minorities constitute ‘fuzzy’ nondenumerable, nonaxiomizable sets, in short, ‘masses,’ multiplicities of escape and flux. (Deleuze and Guattari 1988 p.469-470)

In other words, the minority is that element within a recognized assemblage that pulls us beyond recognized identities because it is not recognized as part of any identity. Every assemblage has a minor element, an element that is more deterritorialized and so which is problematic. It follows, then, that a minor politics, or politics of becoming, is always asking questions for which there is at yet ‘no people’ – i.e. no assemblage in which it would be possible to recognize a new identity:

A minority is always somewhere a 'people to come' – our minorities are those 'future' people we might yet become. But we are thus 'peoples' in a very different sense from what modern political thought has called '*the people*'. A minority is rather *a* people, an indefinite people, a people not completely defined or determined... It can't be found in the public-private distinctions built on the concept of political representation. In this way 'a people' or 'a people to come' serves to expose what Foucault came to think of as a basic difficulty or limitation of modern political thought – the distinction between state and society, the attempt to base the first on the proper arrangement of the second. It raises another kind of question: the relation of the 'undoing' of civil society or its determinations, and what is yet possible to think and see politically... questions posed to politics which are not yet of politics [Rajchman, p.51-52]

A politics of becoming, then, seeks to keep open the question of control and identification, and in so doing it questions the infrastructure of control. But to what end does it question? To no end, only to provoke becoming and experimentation. Because this kind of question is at present by necessity a minor politics, it questions only in the name of 'a people to come' and in the hopes of keeping politics open beyond the limits of the possible. The impossible question of control (i.e. the one with no answer) is how to create a State that is not premised on the '*proper* arrangement of society', but perhaps to look instead for a State that is the expression of the immanent organization of life.

In such a situation, critique of capitalism is always internal, or immanent, to the assemblages that exist, it is always an evaluation of the capture by capital and state. Therefore, critique it is always a 'self'-critique – i.e. critique of the assemblage of space and subjectivity as opposed to critique of ideology (belief) and the subject. The relationship between the subject and its necessary mediation in an assemblage gives importance to subjectivity as a site of politics, but this has little to do with identity politics; the critique of self is a politics for a creative production – a desire for a genuine interactivity at the interface rather than one limited solely in the name of profit or state control (Massumi 1992; Stone 1995; Mesner 1996; Beller 1998; Clough 2000; Crang 2000; Kittler 2001; Thrift and French 2002). New technologies create new opportunity for unprecedented connections, new ways of organizing, but not all connections are equally possible within existing social stratification. Clearly it can never be a question

of doing without social stratification, but it is always a question of a *responsive* stratification (rather than the moral overtones of a *responsible* stratification).

Within an immanent critique of control, a subject is most radical or disruptive when invisible to any assemblage of control and capture (they are ‘nonaxiomizable’). This is not to say a radical subject is necessarily ‘good’ – e.g. the criminal is invisible. However, it is to say that normatively, and pragmatically, we are aiming for the freedom to experiment with existing infrastructure and regulation -- the hacker as figure of resistance, people who live ‘off the grid’ (Golloway, Brucker-Cohen et al. 2004). In short, people who try to (re)make assemblages – which of course does not mean simply hacking, it can mean using older technologies within new technological assemblages, it can mean experimenting with modes of expression such as poetry or music, so that the whole is more interactive. A positive evaluation of the invisible subject requires a recognition that the axiomatic capitalist State – and by extension liberal politics – has relatively little problem dealing with difference (i.e. it can adapt to difference; whether it will is a matter of struggle) so long as the difference is only an ‘identity’ difference (i.e. one simply of recognition rather than organization). Political struggle conventionally remains on the level of recognition, but is most radical when it shifts to the terrain of organization. The right to organize takes on a different connotation, and resists the state’s attempts to give resistance an identity that will reterritorialize it within a form of existing relations.

If the critique of organization and production was before in the name of a class (the workers) and a teleological or transcendental end (the revolution, ‘justice’), it is possible to argue that it should now be in the name of the invisible individual – the singular, the nobody, the whatever body – and that it has no end, only a becoming that requires constant ethical vigilance.¹⁰

¹⁰ This is distinct from moral and guilt ridden vigilance. Nietzsche talks about a need to valorize ‘irresponsibility’ so that we can be open to responding to the event without the reactive guilt or shame that prevents an ethical response (Deleuze, 1986 p.141)

The novelty of the coming politics is that it will no longer be a struggle for conquest or control of the State, but a struggle between the State and non-State (humanity), an insurmountable disjunction between whatever singularity and the State organization. This has nothing to do with the simple affirmation of the social in opposition to the State that has often found expression in the protest movements of recent years. Whatever singularities cannot form a society because they do not possess any identity to vindicate nor any bond of belonging for which to seek recognition. In the final instance the state can recognize any claim for identity... What the State cannot tolerate in any way, however, is that the singularities form a community without affirming an identity, that humans co-belong without any representable conditions of belonging (even in the form of a simple presupposition) (Agamben 2003 p.85-86).

In writing this, Agamben is quick to note the risk of such a politics, in that those without identity have historically been those most ruthlessly crushed by the state because unable to call upon its mechanism of recognition and protection. This is why he writes of an 'insurmountable disjunction' between the (invisible) whatever body and State organization – at present we cannot articulate clearly a form of social organization that no longer relies on the centralizing control of the State, and so politics no longer simply 'opposes' the state with the aim transcending its contradictions. Instead, the political project proposed is a politics of multiplicity (Patton's term), one no longer based on identity or belonging, but on the attempt to multiply the number of collective, yet singular, becomings that a body can be accommodated within society.¹¹ At present this open-ended becoming of society is an impossible task, but one that provides a trajectory for politics 'without end'. This can be a "very disconcerting and dangerous idea: politics seems to revel in the idea of progress, development and movement... What prevents [a politics without ends] from blurring into fascism or conservatism?" (Grosz 1999 p.17). The answer is that there is no guarantee, only a constant need for a vital experimentation.

The role of the critical public sphere is to transmit the continuing disruption of the event and to encourage experimentation. But just as we cannot say that capitalism controls, as

¹¹ This singular collective becoming challenges the notion that politics is about what happens to recognized collectivities and group identities. Deleuze writes suggestively: "I...sense that we're rapidly approaching an era of half-voluntary and half-enforced secrecy, the dawn of a desire that is, among other things, political" (Deleuze, 1995 p.9)

if capitalism were a subject doing the controlling, we cannot say that the public sphere transmits, as if there were some form of wilful transmission from the reflective, enlightened and ethical elite to the masses. Capital controls – this is a diagram of what is happening not a statement of will. Likewise the public sphere transmits is a diagram of a rather unruly and indeterminable assemblage. If capital controls through identification, the critical public sphere transmits through a ‘sensed’ potential of that which exceeds identification – it ‘perceives’ (makes visible) problematic situations. This is what Deleuze calls the power of the ‘false’:

We might begin with the terms *real* and *unreal*, defining them the way Bergson does: reality as connection according to laws, the ongoing linkage of actualities, and unreality as what appears suddenly and discontinuously to consciousness, a virtuality in the process of becoming actualized. Then there’s another pair of terms, *true* and *false*. The real and the unreal are always distinct, but the distinction isn’t always discernible: you get falsity when the distinction between real and unreal becomes indiscernible. But then, where there’s falsity, truth itself becomes undecidable. Falsity isn’t a mistake or confusion, but a power that makes truth undecidable (Deleuze 1995 p.66).

If the critique of ideology harbours a hope for an ‘authentic’ relation of the subject to the real, the experimental and problematic critique affirms that no particular arrangement of identities does justice to the complexity of a reality in the process of becoming. Rather than make a claim for a particular state of affairs, the power of the false is better understood as a background against which different claims can be evaluated for the way in which they do justice to the event. Therefore, even if not explicitly embodied in particular state of affairs or identity, the power of the false shadows all positive claims – not as a lack, but as productive excess with which to experiment. In other words, what is transmitted is that which is indiscernible, and hence the importance placed on aesthetics and affect in chapter six below. However, like all claims within the public sphere, the claims of an experimental critique exists only by virtue of their circulation; and like all claims, their legitimacy exists only in as much as they can be articulated at the same time as they are made to resonate with a particular state of affairs. In short, an experimental critique is just that – an experiment.

Programmatically, an experimental critique will unfold by tracing the event through its capture within a public assemblage, paying attention to the subjectivities and oppositions that it makes possible, and to the disruptive contexts in which an excessive element is made visible that can be used to open the subject and the assemblage to experimentation with change, i.e. to becoming. In following chapter I will engage in more detail the style of this kind of critique, and then following will be three chapters that present the formation and becoming a public assemblage in relation to air quality politics in Toronto, Canada. Chapter four will look at the diagrammatic assemblage of the public through the capture of the smog-event in a measure of air quality. Chapter five will then look at how individuals negotiate air quality claims in different contexts. The goal here will be to show how smog makes visible and problematic the question of control, and so open the subject to becoming. Finally, chapter six will look at how we might experiment with keeping the problematic question of control visible in public circulation, by engaging contexts where excess to control is made visible and the re-activation of such contexts.

CONCLUSION

This chapter has provided the backbone of an experimental critique through the development of the concept of a public as an assemblage of expression and content, words and things, in a particular context. In this we have seen that a public exists only in repetition, and its claims are considered legitimate only so long as they remain useful in concretizing the world - i.e. allowing a person to go on and to make connections with others. Understanding a public as an assemblage means that we do not think of the public as having a definite form (place) and content (type of people), but instead as an emergent phenomena that must be repeated in order to be maintained. Therefore, a public is prone to disruption, and is indeed perhaps characterized by a constant disruption that forces us to re-affirm the public, and so re-create our 'belonging'. It is these disruptions that provide an opportunity for intervention into the public, and it is the goal of an experimental critique to use such disruptions to raise questions about how the

public has been assembled, and the reductions and limits it places on recognized identities.

In the first part of the chapter it was argued that if we are to think critically of intervention of a public 'at speed' it is necessary to work with a concept of time that is immanent to the formation of the public. Therefore, we began by reviewing the materiality of time as assembling of space, and so stressed that there is not time separate from an organization of space. This provided us with an image of a world of multiple temporalities and growing temporal complexity. However, the limit of this approach for an immanent critique of speed, is that it leaves the subject 'outside' of time, and so quickly overwhelmed by the complexity. Therefore, we moved to explore a concept of time as duration, which sees the subject as forming within the unfolding of time. In duration time is movement, and in particular the movement between a virtual multiplicity and its actualization in a particular state of affairs. This means that any object in the world is but a temporary stabilization of a more fundamental fluidity and change. Therefore, recognized stabilities exist only in repetition, and this repetition is one that is punctuated by events and disruptions that open time to the potential of new trajectories and new becomings. This draws attention to the importance of routine and habit for getting 'a grip' on time, and in particular the importance of the accident, or disruption, as a way of being able to think 'at speed'. We need to think within repetition, and try to open repetition up to the event of which it is but a partial and temporary closure.

The second pass then applied this concept of time to the idea of a public as an assemblage. Here a public exists in time, or better creates time in its assembling. Therefore, what is important is to pay attention to the disruptions that become apparent in repetition. The assemblage is first of all a heterogeneous multiplicity, but through the movement of a virtual 'abstract machine', it brings together utterances and contexts, expression and content, within a stable repetition. An assemblage, then, forms with greater or lesser 'consistency', or durability, and so forms into territories whose elements are more or less 'territorialized'. When many assemblages come into contact,

it is possible for elements within the assemblage to de-territorialize and cause a disruption. This is once again the expression of a virtual 'abstract machine', but this time acting as a 'cutting edge of deterritorialization'. It is at this point that it becomes possible, even desirable, to think about the potential of assembling the event in novel ways. The deterritorialized element introduces a play into the system. An experimental critique must pay attention to the context in which such disruptions become visible, as well as trying to articulate the problems that they raise for all attempts to capture the event in a particular assemblage. The disruption renders control problematic.

In the final section, then, we explored how disruptions are re-territorialized by an axiomatic that seeks to contain the disruptions set-free by the 'abstract machine'. A critical public sphere that seeks to encourage a politics of becoming, must always work immanently to re-open the reterritorializations effectuated by the axiomatic. However, at this point we need to acknowledge that it is not clear how we might organize a society that does not effectuate some element of axiomatic control, and so centralizing power. It is not enough to 'oppose' the State and capitalism, because it is not clear how one would get beyond the axiomatic control it has set in place, but also it is not clear what beyond would mean. At present it is impossible to imagine a society that is intrinsically responsive to its immanent becoming. Hence, the goal of an experimental critique is not to find a solution, or to call another identity and public into being, but to encourage experimentation with the limits that are currently placed on recognized identities, and to make visible the problematic question of control. This explains the focus that is placed on the individual and subjectivity in an experimental critique – it is not a form of identity politics, or individualism, but is instead an attempt to multiply the number of collective, yet singular, becomings that can be tolerated within society, and so experiment with the limits of existing social organization in the name of 'a people to come'.

CHAPTER THREE

EXAMPLES AND EXPERIMENTAL CRITIQUE

There are...two ways of reading a book: you either see it as a box with something inside and start looking for what it signifies...Or, there's the other way: you see the book as a little non-signifying machine, and the only question is "Does it work, and how does it work?" How does it work for you?...This second way of reading is intensive: something comes through or it doesn't...This intensive way of reading, [places the book] in contact with what's outside the book, as a flow meeting other flows, one machine among others, as a series of experiments for each reader in the midst of events that have nothing to do with books, as tearing the book into pieces, getting it to interact with other things, absolutely anything...

(Deleuze 1995 p.8)

Conventionally political analysis seeks to represent, and perhaps adjudicate, a situation of political conflict. However, an experimental critique falls between the recognized positions of political opposition. It does not ask what should we do, it asks instead: 'given what we are told we have to do, how is it that all positions seem to say 'not enough' or 'too much' and so appear 'false' – in doing so, it makes us aware that no position has a privileged relation to truth, and so there is a need for a vital engagement to support what we believe, but also for a need for a continued experimentation with what we are becoming. In other words, as its name suggests, it is an experiment itself, an experiment in thinking that it is hoped will reinvigorate thought in political debate. Therefore, if a research text plays a role 'in' the public assemblage, it does not act as a manual detailing positions and what should be done. It acts as an example of how we can think again, or Deleuze says above "as a series of experiments for each reader in the midst of events that have nothing to do with books." The strength of this approach is in

the invitation to use it and think with it, the affirmation of a common problem with multiple solutions.

In this chapter I will discuss how I will use the concept of the public as assemblage in relation to the public sphere of air quality in Toronto. The aim is not to represent different positions that individuals and groups can take in relation to smog, and adjudicate between different responses to smog, but to present the circulation of claims about air quality in such a way as to transmit a sense of the potential that inheres in the repeated disruption of the smog-event. A key challenge for writing an experimental critique is incorporating that which is strictly non-representable into a textual presentation – trying to present recognized identities in such a way that shows they are not fixed but becoming, i.e. in motion. As was noted in the discussion of time and duration in chapter two, a system that is constantly in motion is not one that is amenable to strict representation – any representation will always be a partial picture of an ongoing process. Becoming is sensed rather than recognized. The risk of dealing with such a fluid system in a social science framework is that analysis might be dismissed as ‘mere opinion’ and so ‘false’. In order to head off this misunderstanding, it will be necessary in the first half of this chapter to explain Deleuze’s ‘transcendental empiricism’ (sometimes called radical empiricism) and how it informs the presentation and reading of concepts and examples.

In the second half of the chapter, I will then engage more directly with how I have presented the disruption and circulation of the smog-event in the final three chapters. In geography there has been a growing interest in the ‘non-representational’, and ‘methodologically’ this has led to three guidelines for a non-representational approach – witnessing, presentation and detailed description. I will use these as a framework for linking my work to the theory in the first half of the chapter, and to introduce how my work in Toronto is presented in the following chapters. If, as has been argued in the previous chapters, a world of temporal complexity and speed is one that ‘escapes’ a self-present subject, then it follows that one cannot produce a definitive representation of such a world without implying the researcher is somehow able to adopt a self-present

position outside the unfolding of events. This is possible only if one wants to freeze the becoming of a system and represent what is. Seeing as the task here is to try to encourage thinking beyond recognized identities, to describe a world that is in motion and to re-activate the potential of the event, it follows that it is necessary to create a text that does not represent the world, but which tries to intervene in the unfolding of events at speed.

Repeating the event: using concepts to create examples

In geography the focus on that which is excessive to strict representation is addressed in a growing body of literature labelled 'non-representational theory', a label attached to a broad set of theorists who try to think beyond a subject-centred mode of representation (Thrift 1999, 2000a, 2003; Dewsbury 2000, 2002; Dewsbury et. al., 2003). However, as those supportive of exploring this new approach have argued, it is not a question of being 'against' representation, but of opposing the "belief that [a representational system] offers complete understanding – and that only it offers any sensible understanding at all..." (Dewsbury, 2003 p.1911). This is not to suggest that representational modes of analysis deny the partiality of any given representation; however, the critique of representation wants to subvert the resistant, judgmental and oppositional dynamic that is set up whenever analysis is always subjected to the criteria of true or false, right or wrong, which leaves no space for what is becoming or excessive within these binaries – i.e. that which cannot be strictly recognized. The challenge is to open our concepts and thinking to their limits, and so encourage a process of experimentation, of always asking ourselves to look and think again and differently. In the previous chapter I have developed the concept of a public as an assemblage, and have argued that the assemblage is composed of both virtual and actual elements, but that the former are non-representational. If there is a portion of the assemblage that is non-representational, then it is necessary to explain how we can research and write in such a way as to make 'make visible' that which is not strictly present without falling into mysticism. This will require an engagement with what Deleuze calls 'transcendental empiricism' and in particular its use of concepts and examples.

Transcendental empiricism is a phrase used to describe an immanent image of thought, one in which thought can never stand 'above' what it represents. It is 'transcendental' because some of the relations that define an object are virtual (they come from a realm that is known only in thought and sensation), but it is empirical because for Deleuze there is nothing ideal about the virtual (see chapter two). Empiricism, for Deleuze, is a philosophy in which everything exists only in relation; an object is not defined by its essence, but by the externality of its relations (Deleuze and Guattari, 1994 p.47-48; Lawlor, 1998; Patton, 2001). Therefore, a thought is not ideal, it has an empirical reality that connects it with actual material objects. Within a transcendental empiricism an idea, a concept (e.g. of the subject, of the public), and a text, are not judged in terms of whether they accurately represents an extant reality – whether it is true, false, or mere opinion – but in terms of how well it is able to engage with that which it comes into contact. By the simple fact of being uttered, the idea has an existence in the world, and whether it is true or false is secondary to what it will do. In other words the question is not is this 'true', but is it useful and to whom? Therefore, in order to respond to the charge of that presentation is 'mere opinion' (or false, or fabricated) it is necessary to better understand how Deleuze understands the formation and use of concepts, because it allows us to be more rigorous in our evaluation of how to engage in and with non-representational work.

Concepts

To embrace an immanent point of view, we must do away with the idea that somehow representation is 'just' a weak echo of the world. In order to do so, we need to understand what concepts do in the world. If one is not careful in reading non-representational arguments it is possible to miss this point and think that what is being said is that theory and representation are somehow 'inauthentic' and suspect, and that there is something 'behind' theory that needs to be brought into the light of day by 'presentation'. On the contrary, the task is to affirm theory's limits, and so redefine its place *in* the world, and free it from the burden of 'truth'.

For example, Dewsbury recognizes that a non-representational theory needs to move beyond the subject-object dichotomy, and so writes that we need “to get back to a moment of prediscursive experience; to recommence everything, all the categories by which we understand things, the world, the subject – objective divisions; to recommence everything to pause at ‘mystery’, as familiar as it is unexplained, of a light which, illuminating the rest, remains at its source in obscurity (Dewsbury, 2003 p.1910). Yet strictly speaking, if we follow the logic of Deleuze’s transcendental empiricism there is no source that is in obscurity, there is nothing to get back to; after Deleuze there is little mystery although there is joy and re-enchantment, a bracing affirmation of the world’s unpredictability and constant differentiation. As Rajchman (2001 p.125) notes: “[Deleuze] was never drawn to attempts to turn the voids or silences in modern work into a mystical metaphysics of the Unsayable or the Invisible.” Therefore, when Dewsbury et. al. (2002) claim that “The world is more excessive than we can theorize” (p. 437), it would perhaps be more accurate in the case of Deleuze’s thinking to say he has theorized a world that is excessive. He does not shy away from using his concepts to dispel the mystery of mystery that too often shelters dogmatic thinking – in Deleuze’s philosophy sensation exist and is amenable to thought, the moment of prediscursive experience is not beyond our ability to think and engage it.

Deleuze is the pre-eminent critic of philosophy as representation, but he does so with the aim of freeing thought from judgments that limit what it can do. Philosophy cannot represent the world because the world is in constant motion, but it can conceive of this world in concepts, and so it can *participate* in the world. Deleuze’s philosophy is totalizing; it explains *everything* through a constant multiplication of concepts (no mysterious background), but the concepts are created in such a way that they remain open to the world they hope to engage, they are tools for thinking about the particularities of the world without prescribing in advance what those particularities will be or should mean. Therefore, if we are to ask how to situate ourselves as researchers and readers in the plane of immanence, the answer has to do with our use and understanding of philosophical concepts. It is the way that we use concepts that

distinguishes a representational and transcendental critique from presentational and transcendental empiricism.

In an immanent frame, thought is understood as a movement from chaos to expression (an idea) triggered by an encounter between the body and the world. We are forced to think. The act of thinking is a repetition of the event, but it is not a repetition of the same, because clearly the first time it was an event in the actual world, the second an event in thought. Deleuze and Guattari create a typology of ways of thinking by dividing thought between the arts, the sciences and philosophy (Deleuze and Guattari 1994 p.117 onwards; Massumi 2002a p.208-256). In the arts thinking takes the form of the direct connection between forms of expression (e.g. colour, sound) to create an image/sound/text that re-activates sensation of the virtual in the world (see chapter six below). Good art moves us. In science, the forces of the virtual are captured in a machine that measures them against a standard; science creates propositions about how the world really is, it creates a model. Science's concepts are representational, its image of thought is transcendental. Good science is useful, it gives control (see chapter four below). Finally, moved by art and intrigued by science, philosophy creates concepts that break open limits of our representations so that they can reconnect to the virtual from which they emerged. The concept is not representational, it instead gives conceptual shape to a problem (i.e. to an event) that becomes visible at the limits of science, and which is expressed as sensation in art.

These three modes of thought are all interrelated: for example, given what science tells us about relativity, microscopic relations, flows of matter and energy, given what art expresses about the embodies experience in a world of flux, what today is an adequate concept of the subject? Deleuze and Guattari answer with concepts such as the 'body-without-organs' and the 'refrain' (see chapter five below). The question is not what 'is' a subject, but how do you think about the subject in a way that affirms what we sense (art) and know (science), and which then reconnects a person to the virtual and opens the subject to becoming other. These are not relations of comprehension or extension (i.e. that refer to, or represent the world), but "pure simple variations ordered according to

their neighborhood...The concept of a bird is found not in its genus or species, but in the composition of its postures, colors, and songs..." (Deleuze and Guattari 1994 p.20).

Therefore, the philosophical concept is incorporeal, it has no spatiotemporal coordinates only ordinate intensities – it is not the bird itself, it does not even refer to the bird, but it can help in thinking what the bird might be able to do, or what we may be able to do like a bird; the concept-bird is something we can use in our own life.

But where does this leave social science? In the past social sciences have been just that – sciences. Even a 'soft' science is still a science – "Containing expression in properties belonging to general classes of beings is science's activity" (Massumi 2002a p.253).

The social sciences, in both quantitative and qualitative work, have tended to take expression (images, personal reflections, quotes from interviews) and describe a class or type of person, like science the move is from expression to reproducibility. However, does this mean that to get beyond this we are suppose to be become artists or philosophers? Dewsbury (2003) has suggested that Deleuze's discussion of philosophy "explains a practice that can equally operate for theoretical work in other fields" (p.1916) and that "the researcher's task" is that "of inventing concepts" (p.1912).

Perhaps, but that sets a daunting task (which is not in itself a reason not to try), and more importantly, do we not in the process become philosophers and not geographers and social researchers? I do not raise this question as an expression of disciplinary parochialism, but in the name of keeping some rigour and consistency in the understanding of what thought is doing. Deleuze and Guattari (1994) have already characterized their work as a 'geophilosophy', and so perhaps some geographers do embrace the task of constructing concepts, but for all its merit as a tool for thinking about space and materiality, philosophy is still, in the words of Massumi (2002a) "gloriously useless" (p.243). Philosophy is a speculative exercise that can feedback into 'useful' activity, but in and of itself it only serves to inject questions, problems, make visible potentials, all of which ideally triggers wonder. Social sciences can provide the link between philosophy's 'wonder' and its 'feedback' into actual contexts.

Social research serves a 'relay' function between creative thought and more mundane practices and contexts; as a result it has always been political as it negotiates the insertion of new ideas and concepts into a complex reality that exceeds representation (Latour 2003). With a transcendental philosophy that judges and pronounces on truth, social sciences took on the role of police and the rebel, creating knowledge about the population and its resistance, narratives about the struggle over truth (Serres 1995 p.68). However, with transcendental empiricism, with a philosophy that seeks to make visible that which exists at the edge of truth, the edge of the recognizable, the social sciences need to take on the task of creating examples that can be useful for, and encourage, experimentation.

Examples

Following Massumi (2002a), I would argue that the role of theoretically informed social sciences, let's call it an experimental social science, should use philosophical concepts to think through and make visible the potential for change in particular contexts. Massumi describes the work of art, science and philosophy in terms of series of process lines between the event and actualization – hence art connects expression to expression to create sensations, science moves from expression to reproducibility, and philosophy moves from reproducibility to connect back to the relationality of the virtual. He suggest that cultural and social critique could encompass a more general and ample movement:

...beginning before the scientific limit of recognizability and continuing past its limit of reproducibility. This is a broad sweep running from philosophy to art, through the middle region that is shared, in passing, with science. If a process line succeeded in following this path, there would be nothing prohibiting it from then turning around and taking the same path in reverse, going from expressed quality to relationality... Imagine the power of contrivance, the fabulatory skill, needed to pull that off...A process line of this kind would be most fraught – and filled with a unique potential. It might even be in a position to draw political effectiveness from its movement, perhaps serving in some way as an arbiter in the mutual interferences, battles, and negotiations between philosophy, science and art. It would distinguish itself from both art and

philosophy by taking their political middle as its eventual terminus (ibid. p.252-253).

Massumi imagines the cultural studies researcher as an inter-disciplinary academic who practices a particular kind of politics, one aimed at finding a way of combining the insights of the different process lines of thought into a politically useful way of expressing the problematic situations that underlie social conflict. Would this mean creating new concepts? I don't think so, instead it would involve creating a 'translation machine' that would be sensitive to differences in modes of thought and being, and productive of a mode of presentation that encourages connection across difference.

What is potentially unique about cultural studies is its institutional calling to substitute *affect for interest*, more or less vague affective tendency for sharp class self-defence. This is...not something they would want everyone to do. There are acute contextual differences in many people's lives that make general defences of particular interest or rights a vital necessity. The removal [of sharp class defence] is self-referential: pertaining only to the activity of cultural studies...Consider that the expanded empirical field is full of mutually modulating, battling, negotiating, process lines liberally encouraged to develop and sharply express self-interest across their collectively remaindered, ongoing transformations. The anomaly of an *affectively engaged yet largely disinterested* process line could conceivably be a powerful presence if it were capable of conveying its (masochistic?) removal of self-interest (ibid. p.255).

Massumi argues that this tending of openness and connection would necessarily be tending of "symbiosis as such" a tending "of coming-together, a *caring for* belonging as such" (p.255). Such an approach would not be without risk and difficulties, which is why he suggests it may be masochistic – the researcher becomes vulnerable, indeed even invites, the punishment that comes with being misinterpreted as being 'for' one side or the other, or condoning certain kinds of knowledge and actions as acceptable, when one is in fact only trying to express the conditions of existence that make their presence understandable and approachable (not necessarily admirable or even justifiable). He suggests that this approach would be an ethical engagement (in order to stress that it is not abstract and prescriptive, but contextual and demonstrative).

Massumi claims he does not know exactly what such an approach would like for cultural studies. Fortunately, however, he has provided ample examples in his own work of the kind of ethical engagement will look like in social research in areas that may not strictly be termed 'cultural studies' (e.g. architecture, film criticism, media studies, political economy) (Massumi 1992; 1998; 2002a). Massumi's approach is to 'use' philosophical concepts to engage in evaluating the potential that exists in the social field, in the continued reproduction of its assemblages and strata. He uses the philosophical concept to propagate the disruptive element of an event in textual form. Again, this an ethical engagement, but:

Ethics is not about applying a critical judgment to expressions product. It is about evaluating where its processual self-conversions lead. The basic question is: does process continue across its capture? Is the crossing of the gaps, the transformative feed-forward between strata, drift enough to keep it creative?...[or] Does the success of the system's self-reproduction create such a logjam that it backs up the flow of expression spreading stagnation along its entire course preventing still-striking autonomies of expression from making perceptual waves?...The next question is, can the logjam break? (Massumi 2002a p.xxvi)

Therefore, in using philosophical concepts, one is evaluating whether the event that gave rise to a given state of affairs has ceased to have force, and is simply reproducing the status quo, or whether the existing state of affairs still has the potential to re-activate the lightning flash of the event and open itself to transformation.

To use philosophical concepts to propagate the event, Massumi warns, is different than 'applying' concepts. "If you apply a concept, or a system of connections between concepts, it is the material you apply it to that undergoes change, much more markedly than do the concepts. The change is imposed upon the material by the concepts' systematicity and constitutes a becoming homologous of the material to the system. This is all very grim" (Massumi 2002a p.17). For example, if we consider Deleuze and Guattari's concept of the subject as a body-without-organs, it is important to recognize that a person encountered during research is not a body-without-organs (BwO). To apply the concept to a person is to expect that person to be a BwO or, what amounts to

the same thing, to expect them to be an organized body, a territorialized self. Even to say that they have the potential to be a BwO misses the point, for it still suggests that such a concept exists beyond its conceptual home (as an idea in text). The world is composed of bodies and of the concept of a body-without-organs, it is not composed of bodies that are (or could be) bodies-without-organs. BwO is a tool for thinking about our engagement in the world (the BwO exists only if it is useful when someone uses the concept) not for representing the world, or predicting how the world will be.

Social research can use the concept to think, not to represent the world; the task is not to apply the concept but to use contextual details to animate the abstract components of the concept and in so doing create an example that will have a wider resonance. Massumi argues that the example “is neither general (as is a system of concepts) nor particular (as is the material to which a system is applied). It is ‘singular’. It is defined by a disjunctive self-inclusion: a belonging to itself that is simultaneously an extendibility to everything else with which it might be connected...” (ibid. p.17-18). Unlike the application, which forces what is applied to conform to the concepts systematicity, the example creates a tool that allows what happened in a particular context to have a wider, yet not prescriptive or predictive, significance. There is a degree of creativity in putting together an example, but it is a different kind than the creative work of concept formation. Examples require that the researcher take empirical details and combine them in such a way that they make the concept connect to a particular context, but in doing so also make it *possible* to connect (it ‘*might* be connected’) the particular context to other (perhaps as yet undefined) contexts remote from it.

The contextual details animate the concept, and the concept gives the context a wider resonance. The details used to animate the concept are related to a particular context, but they do not necessarily related to each other – for example, to build on a case Massumi looks at in discussing how affect is important to cultural studies, it may be necessary to evoke the blue of Sinatra’s eyes, as well as a particular person’s experience with the colour blue, even if no actual person encountered by the researcher made a connection to Sinatra – it is the researcher who makes the connection having been in contact with both.

The success of such an enterprise depends on detail. “Every little one matters. At each new detail, the example runs the risk of falling apart, of its unity of self-relation becoming a jumble” (ibid. p.18). And success is not evaluated by the criteria true or false, but by whether or not the example makes a connection with the reader, i.e. makes them think. Massumi breaks new ground in his use of current events as details to animate concepts, and he is my estimation the most successful at using the approach articulated here, but he is not alone in taking up this challenge. (Kawash, 1998; Patton 2000; Thrift 2000b, 2001b; Massumi, 2002b; McCormack 2002, 2003; Pisters, 2001; Wylie 2002a, 2002b; Dewsbury 2003).¹

Witnessing, presentation and description

Having laid out these theoretical considerations for a non-representational and immanent approach to research and writing, I will now turn to engage more directly with how these ideas have informed my research and writing about the smog-event. The insight that there is something in excess of representation is not easy to translate into a concrete plan for research, a challenge which has recently been the focus of some discussion in geography (Dewsbury, Harrison et al. 2002; Latham 2003; McCormack 2003). What has come out of such discussion is a focus on the principles of witnessing, presentation and detailed description as an approach to research and writing that encourages us to see the non-representational elements of any assemblage. Witnessing refers to the work that the researcher does ‘in the field’, while presentation and detailed description reflect an interest with using conceptually driven examples to re-activate the event. The challenge,

¹ In the references give in the main text, Wylie has engaged the concept of becoming through an analysis of the Antarctic exploration, and critiqued Cartesian notions of subjectivity in a theoretically informed reading of walking. Dewsbury uses literature to animate a style of writing that goes beyond representation. Outside of geography, literature and art have been used as details to animate concepts. This is a reflection of Deleuze’s strategy of using art as a trigger for thinking, and developing concepts in conversation with art (e.g. his two books on cinema, his book on Proust and Kafka, and *Sense and Sensation* which engages the work of the painter Francis Bacon) (e.g. Massumi, 2002b; Pisters, 2001). McCormack, Massumi and Patton have shown there is work to be done bringing these concepts to bare on non-fictional examples (even if in doing-so we tend to blur and challenge any strict divide between fiction and non-fiction). Finally, Thrift has applied the insights of non-representational theory by looking for examples of how performativity, and attention to affect, has become central to entrepreneurial and corporate culture, as well how it can be used to provoke us to think about those practices which allow a subject to enter into the ‘interval of duration’ (to use the phrasing from chapter 2 above).

as discussed above, is to relate the potential of the event by describing it in sufficient detail such that the event seems immanent again.

The first guideline of a non-representational critique is the focus on '*witnessing*' as a strategy for research. Quoting Agamben, Harrison (2002) stresses that the witness is not someone who testifies in the name of truth, but "a person who has lived through something, who has experienced the event from beginning to end and can therefore bear witness to it" (p.501). This leads to a commitment to so-called 'modest theory' (Thrift, 1996b), in which the concern is with "witnessing the conditions of intelligibility of certain terms of experience", and "how the terms in which this experience are described are thus given their sense only in relation to this form of embodiment" (p.35). In other words, in witnessing the researcher does not perceive a universal dynamic, but a contextual one, the challenge is to make this context provoke thought even if it does not strictly apply to the other contexts. This, as we saw above, is the role of the example.

The narratives that are presented in the following chapters are based on my experience engaging with the politics of air quality in Toronto, Canada. Pragmatically, fieldwork was a combination of participant observation and qualitative interviews, but I was not actively engaged in observing any one particular group. In the summer of 2002 I moved to Toronto, and lived in Toronto almost continuously until the summer of 2004. It is this experience that provides the basis for my presentation of how the smog-event is taken up in the public assemblage in Toronto. In the summer of 2002 I conducted a series of interviews with people in Toronto concerned about air quality. Participants were contacted through email list serves for local environmental organizations, the City of Toronto staff email list serve and through word of mouth. Twenty people participated by keeping a one week diary of their encounters with smog, as well as a three-day time diary recording their daily routine. In addition, they were given a disposable camera, and asked to take pictures of times and places where they encountered smog or thought about air quality. At the end of the week they participated in a follow-up interview that lasted anywhere from 30 minutes to one and half hours in which we discussed their concerns with smog, their diaries and their pictures. The diaries and photographs, as

will become clear in chapters five and six, were not used to represent people's lives, but to provide texts around which a conversation about smog could take place. The interviews themselves were actualizations of the public sphere, and so an expression of the assemblage of the smog-event (this is discussed further in chapter five).

During my time in Toronto I was also able to attend the 2002 and 2003 'Smog Summits', in which the Federal, Provincial and Municipal governments report on their efforts to combat air pollution. In addition, I conducted information interviews with scientists at the Ontario Ministry of the Environment, as well as staff working at the City of Toronto's Clean Air Partnership and the 20/20 Way to Clean Air social marketing campaign, the Province of Ontario's Drive Clean Programme, the environmental NGO Pollution Probe and the Ontario Medical Association. The interviews and engagement with the institutional public sphere allowed me to better understand how the smog-event is assembled and circulated, as well as how institutions try to create a public. This material forms the foundation on which I developed the presentation in chapter four.

Finally, during my time in Toronto I was engaged in transportation activism focussing on improving cycling and public transit infrastructure, which meant that I was engaged in following the debates about transportation reform in Toronto. These experiences allowed me to understand the different positions that emerge in such debates, and gave me a sense of the degree of opposition and resistance that exists in an oppositional political field. These experiences not only informed my theoretical argument in chapter one and two, but provoked and informed the thought that went into the presentation and analysis in chapter six.

In all of these activities I was involved in different ways in the unfolding of the smog-event, and the formation of different publics in Toronto, and in doing so I developed a sense of the potential that exists at the limit of recognized claims and identities, and which is sustained through the circulation of claims about air quality. The challenge is to then make the potential of this assemblage apparent in textual form, which as we have seen above requires an engagement with the use of conceptually driven examples that

will be animated by details taken from the field. In the literature on non-representational theory, this has been expressed as a focus on presentation: “we want to work on *presenting* the world, not on *representing* it, or explaining it” (Dewsbury et. al., 2003 p.438 my italics). This distinction between representation and *presentation* reflects the fact that “non-representational theory...is characterized by a firm belief in the actuality of representation...Representations thus do not have a message; rather they are transformers, not causes or outcomes of action, but actions themselves” (ibid. p.438). To present something, then, is to be creative, to add something (however modest) to the world and see what it does.

In the chapters that follow the goal is to render visible the problem that the smog-event poses to the legitimate control of the body in an increasingly dispersed and mediated society, as well as how this problem of control animates, and is repeated, as a problem of how to maintain a particular claim about smog in public. In this political approach to smog as a public assemblage, controlling smog is about the difficulty of legitimately controlling people. I am only secondarily interested in the possible solutions to smog and the barriers to their implementation; I am primarily interested in how the smog-event makes visible these questions of control, and how these can be made visible through a conceptual re-activation of the smog-event. The point in doing so is to make visible a potential that exceeds any particular identity or positions, to re-open the oppositional dynamic to its own becoming and to encourage experimentation.

The overarching concept used in the following chapters, is that of the public sphere as an assemblage, however each of the three example chapters deals with a different aspect of this machinic production of a public and subjectivity, and so it brings in different concepts and details. Chapter four will use details from the institutional public sphere, and technical details associated with assembling a measure of air quality; these will be used with the conceptual distinction between molecular and molar bodies, in order to animate the working of the ‘smog diagram’ as it converts the virtual smog-event into a threshold measure of ‘good’ and ‘bad’ air, around which oppositional identities can form. Chapter five then uses details from participants’ diaries and interviews to animate

concepts of subjectivity, in particular the concepts of the body-without-organs and the refrain. This presentation shows how the smog-event disrupts moments of subjectification and opens the subject to becoming; the aim is to make visible the potential that exists to encourage people to experiment with their own subjective refrains, and to encourage an evaluation of the degree of control that is considered reasonable and desirable. Finally, chapter six then engages with how we can experiment with becoming in the public sphere, focussing in more detail on the importance of sensation (percepts and affects) in opening a subjective refrain to becoming. Here participants' photographs and the artwork of Martha Rosler and Rainer Ganahl are used to animate conceptual understandings of how the subject is formed in an assemblage, and how images and texts can re-activate moments of subjectification and becoming.

Taken together these three examples provide a fractured image of a public assemblage that works 'at speed', and which is continually in a process of becoming. Each chapter is an example of how conceptual thinking makes visible a problematic and indeterminate situation of control, and a need for a creative engagement in the public assemblage in order to ensure it produces progressive results. In the first pass we have an example of a diagram of an assemblage, in the second the subjective becoming that occurs within this assemblage, and finally in the third an example of how one might experiment with intervening in the process of change.

As noted in discussing Massumi's theorization of examples, the success of this endeavour is crucially related to its use of *detailed descriptions*, the final guidepost for a non-representational approach. In the chapters that follow it is particularly important to avoid returning to a subject centred narrative, and so details should be used to position the reader at the center of the unfolding of the events presented in the text. This reflects an engagement with a concept of a relational or distributed subjectivity, as articulated in the work of Actor-Network Theory (Latour 1999; Law and Hassard 1999; Michael 2000). The focus is on making visible the 'material compositions and conduct of representations' (Dewsbury et. al. p.438). It is necessary to write in a style that points to certain relations and objects present during the actualization of the public assemblage,

and how that naming in turn impacts what the presentation can do, i.e. how it might provoke the reader to think about how else the assemblage might be actualized. This takes us away from talking about subjects that pre-exist the event, towards understanding how a subject is constituted in the given.

There are no rules for what details and objects one should pay attention to in making a concept work as a tool for propagating the event. However, there is a matter of a style that avoids creating a narrative that unfolds based on the will of a subject (collective or individual). Colebrook (1999) notes that to avoid a return to subject-centred narratives Deleuze and Guattari adopt two points of style: 1) the infinitive (e.g. 'to write'), that does not admit a division between something and what it does. 2) The indirect speech act, which places the act outside the subject (e.g. 'it is said that...'). Deleuze and Guattari often adopt a style of 'free indirect discourse,' that switches between voices in the text (e.g. the personal I of the author, the impersonal presentation of a person, the indirect speech act that places a statement in circulation unattributed to a subject). In this way it is never clear whose point of view is being presented, and the reader is forced to make the connection between these different positions, and enact for themselves a moment of subjectification in which they can think about how the event might actualize differently. In doing so, the reader enters the assemblage that is being presented. These stylistic points for presenting the subjectless-subjectivity (Bains, 2002) are to be used to create a text that presents subject as an expression of an assemblage, which reflects what I observed and sensed while interacting with participants, observing, reading or participating in public events.

I take this to require a different way of treating material collected in the field. In relation to interview material, the researcher is 'free' to move beyond simply repeating or interpreting what research participants intended to say, and instead use their utterances as part of a constellation that the researcher is pulling together in order to transmit what the researcher sees as the unique potential of a given context that is being discussed by researcher and participant. This approach is apparent below in chapters five and six. A researcher still must acknowledge a context in which the utterance is used, but the

context does not necessarily relate to the participants intention. The researcher is 'free' from what Deleuze and Foucault call the 'indignity of speaking for others' (Rajchman 1999), but the participant is also free of any responsibility for the final product, or from any fear of being (mis)identified as the source of certain 'beliefs' presented by the researcher. There are no people out there who believe what the researcher is saying, or whom he or she represents; the social science researcher, like the philosopher, the scientist and the artist, is always looking for 'a public', or 'an audience.'²

The narratives constructed in the following chapters will not have research participants who explain to the reader what is going on, or whose comments – once properly interpreted -- reveal what is going on; often in qualitative research the participant is given a name and some grid markers for the reader to get their bearing so as to judge whether or not the use of the quote is 'valid' (e.g. Jamie, a white 32 year old bookseller who lives in the middle-class district of X). However, in an experimental and non-representational critique, the goal is not to represent subjects, and understand intention, but to think beyond what is recognized and intended – and for this the researcher must take full responsibility. What is given in the following chapters are examples, which include details from interview material, and material collected from time spent as part of the public assemblage of air quality in Toronto. I have thought about how to present this material in a way that connects a context to a concept, which will hopefully make the smog-event continue to have disruptive potential and encourage experimentation. This is a kind of participant-participation that moves the encounter in the field beyond what it was and is, towards what it could be. This is a thoroughly 'impersonal' presentation, because it does not 'apply' to anyone, it does not represent anyone's point of view.

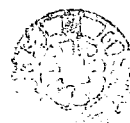
It is only subsequent to such an impersonal account that the researcher can allow herself or himself to make a statement about the potential of such an encounter, because the conditions for such an evaluation will have been laid bare, and other possibilities of

² Latour (2003) makes a similar point: "One could say that, 70 years further on, we are led finally to what John Dewey focused on: social sciences have to create the public, defined by him as what cannot be mastered by anyone but that can be represented, over and over again, by the social sciences and humanities."

going on will be immanent in the description. Thought can never simply remain unattributed, it must at some point reterritorialize on a 'belief', but it will clear that this belief is the author's, and perhaps the reader's if the text provokes thought, but it in no way claims to represent participants' belief (Colebrook, 1995). The resulting product is meant to be circulate the event in 'public', but in a wholly transformed state – participants may recognize nothing of it. Such presentations are fragile creations that will only gain in strength if they are affirmed by those who read them and re-activate the event by seeing a different potential within what is described. Rather than a fidelity to what participants intended, there is a 'fidelity to the event' (McCormack, 2003).

CONCLUSION

An experimental critique works from within the unfolding of the public assemblage. However, this poses a problem for research because by definition that which is unfolding is non-representational, it has no final form. Instead, embracing the conceptual path we have outlined in the first chapters, we need to accept that the public exists in repetition and is continually changing its actual character (if only by degrees). Therefore, experimental critique presents the assemblage in a way that makes this fluidity visible. If something is moving we can only ever present aspects of the whole, leaving it to the reader to then fill the gaps in their reading and put the whole back into motion again in a world of 'events that have nothing to do with books'. This means that the place that would usually be adopted by the subject in a conventional representational narrative is left empty, to be filled by the reader as they 're-activate' the context described while reading. Instead of presenting a synthetic narrative that explains the world, an experimental critique presents a series of examples of how we can use philosophical concepts to think about the unfolding context in which we find ourselves. The researcher, then, acts as 'witness', describing the context with an eye to the details that will hopefully trigger in the reader a sense of how they might think about their own situations, and the potentials it holds, in a similar fashion. This necessarily involves a degree of fabulation, research presents the conditions for experimentation, rather than represents the way the world is. But as we have seen, it does not follow that these



presentations are merely 'fictional'; it's only that they have a reality that is ascribed to concepts, not to a world of recognizable objects; a reality whose criteria of validity is not the binary judgment of 'true' or 'false', but the qualitative evaluation of (more or less) 'interesting' (more or less) useful.

CHAPTER FOUR

ASSEMBLING THE SMOG-EVENT

Brown fumes. Fiery Sunsets. Pollution fills the days when the weather rests. The totally still, yellow girdle or haze binds the sky and ground together. Creating a third ecology, the vapour drops invisibly through the canopy of trees to slip into the drifter's nostrils, lungs and eyes... Yet it is only above the canopy with the benefit of a foreshortening that pollution builds its body and makes its demanding presence visible. Like some immense unwanted backlash, it reminds us of the price of our total mobility... Two ecologies [ground and air C.O], two modalities (speeds) of circulation and appearance. The two strata touch, as do the two speeds, when the freeway hews its way through the green carpet to merge with the air space... the rider is brought to a realization. In fact, all brushes with the outer margins of the various ecologies of the city, whether... at the base of the hierarchy or at its very top, hovering in an air vehicle while rapidly traversing both ecologies, tend to throw the whole into focus... a sensation of traveling along the tangent of the ecological envelope.

(Lerup 2000 p.52)

SMOG-EVENT: Toronto, 5:30 PM, rush hour commute

The city of Toronto sits on the shores of Lake Ontario and benefits from a cooling wind off the lake, and on most summer days when the sun is out the sky is clear and blue – Toronto, on a global scale, is not a particularly polluted city, it doesn't usually get mentioned in the same breath as Mexico, Beijing, London or Los Angeles. But in the summer months temperatures regularly reach into the mid-30's degrees centigrade, and if the climatic conditions are 'favourable' the sky turns a hazy greyish-brown because of air pollution. Usually in the canyon streets of the city core, or in a suburban backyard shaded by trees, a person cannot see this haze. But if they move out where they can see across a vaster distance, for example, while driving on highway 401 that bisects the city, or one of the broad suburban arteries, the smoggy horizon becomes abundantly clear (Figure 4.1 dark band on horizon, and Figure 4.2 dark cloud at horizon); or perhaps a person will learn to sense when the air is thick, finding it difficult to breathe, or because

of a gritty taste in the mouth. In such moments, as Lerup suggests in the quote above, a driver, a pedestrian, may begin to glimpse their place within a much larger ecology.



Fig. 4.1: Smog Horizon Highway 401



Fig. 4.2: Smog Cloud Suburban arterial

If Lerup's intuition is correct, then in this moment of exposure to smog, the limits of existing borders are sensed, ground merges with the air, the body is infiltrated with its exterior; and in so doing air pollution brings into relation, for the passing moment, all the identities and structures a person had been using to navigate their daily routine – a person sees themselves as part of a larger whole. In that first instance – the moment of burning nostrils, or a striking brown horizon, a moment that always returns as a singular impulse, but never strictly before discourse – a person is faced with the question: 'what happened?' No sooner has that question been asked than the answer is present at hand – smog, pollution, the result of wasteful and excessive consumption of energy. And so immediately a person knows what needs to be done, knows their relation to the whole; they can shake their head in despair at the fact that there are no alternatives to using their car, or feel content that it is just a matter of time before more efficient technologies do away with smog. Smog has been identified, along with its culprits, a public has been actualized in this briefest of moments. In this chapter I want to explore how this moment between sensation and recognition is sealed in the actualization of a public, in

order to then be able in subsequent chapters to re-open the gap between impulse and recognition as the interval in which a politics of becoming can insert itself into a politics of recognition. In order to this, I want to trace the outlines of the diagram that allows smog to be treated as singular identity that can be grasped and put in its place.

Smog is of interest to the discussion of speed, politics and becoming for two reasons. First, speed is central to being able to monitor and control smog and create a public assemblage that legitimates responses to smog. Second, smog is a good example of the kind of repeated disruption that I argued was central to understanding how a public assemblage is drawn into becoming 'at speed'. Before the event, smog and a subject are both molecular in the sense used by Deleuze and Guattari; which does not mean formed of molecules, but that they are virtual. The air is polluted all the time, but it is only under the right climatic, optic, and embodied conditions that it becomes apparent to a person and/or to political discourse. Then it becomes what Deleuze and Guattari call molar. A molar entity has an identity, it has an extensive limit (a cloud over the city) and sits outside the observer. Already, then, when smog is referred to in terms of certain types of molecules and particles it is a molar entity so long as it is imagined as a cloud that sits apart and that society can definitively control. On the molecular/molar distinction Massumi notes: "It is crucial...to remember that the distinction between molecular and molar...is not of scale, but of *mode of composition: it is qualitative, not quantitative* ...When we say that a molarity is grasped as a whole, the emphasis is on the *as*. The particles are still there...a molarity remains a multiplicity – only a disciplined one" (1992 p.54 my emphasis). As a molar entity, then, smog is set apart and, potentially, manageable, but as a molecular entity it escapes discipline, disrupts the molar subject even at times when the air shows no visible signs of pollution. It is a molar entity that it is possible to have politics of air quality and make claims about cleaning the air. It is as a molecular entity that smog triggers a minor politics, or politics of becoming, that questions the limits of control. In this chapter I will explore the molecular-molar (virtual-actual) conversion in the context of Toronto, and show that speed has been, and continues to be, central to maintaining a molar entity called air

quality – initially through displacing sources of pollution outside of the city, and more recently through the intensive real-time monitoring of emissions.

However, smog remains molecular and escapes. There is actually no such thing as ‘safe’ or ‘clean’ air (or none that can be measured). Instead, there is only *cleaner* air, and the debate about how to make the air ‘clean’ is implicitly about how clean the air needs to be, and what kind of social control is legitimated by this need. Therefore, pollution remains political, and not just a technical, problem. Failure to recognize this lends undue urgency to the debate about smog – we know what to do, the time to act is now, why don’t we act!?! However, the narrative presented here is not one of an illegitimate conversion of smog to a molar entity; this move is necessary in order to make decisions and implement some form of regulation (i.e. to be able to say: ‘This action will improve air quality’). The diagram that I will sketch here outlines how the conditions are created that allow a public to be called into being. However, because the idea of clean air is a necessary fiction, claims stand or fall not simply on their technical merit in mitigating air pollution, but on their ability to maintain and legitimate a control network that maintains ‘a public’ (Barry 2001). This is necessarily an eventful and indeterminate process, each mitigation effort will need to be fought for and will be prone to disruption once created. Stabilizing a concept of air quality makes it possible to create and circulate what Deleuze and Guattari call ‘order-words’, statements which under the right conditions can be used to legitimate and identify a path to clean air by actualizing a public assemblage. However, because smog remains disruptive, it is possible to pursue a politics of becoming that seeks to keep open the problematic question of control raised by the smog-event.

SMOG EVENT: Smog Summit, June 2, 2002: “The time to act is now”

The politics of air pollution are the politics of energy efficiency, and in Toronto, as in other major cities, this focuses around two broad sectors – electricity generation/consumption for home and industry, and fuel consumption in transportation. Therefore, it is helpful to give some background in these two areas. Toronto is

Canada's largest city, and North America's fifth largest city, with a population of 2.4 million, and it is situated within a larger metropolitan area (known as the Greater Toronto Area) with a total population of 4.6 million (City of Toronto 2004a). The city and its region are largely suburban, which means it is heavily dependent on the automobile and trucks for the transporting goods and people.¹ In addition, people tend to commute on a regional scale for work (Miller 2000), yet regional transit is limited (Soberman 2001; Munro 2002).² It is important to understand that in a Canadian political context that municipalities have little power, and there is no regional authority for the GTA, which means that much of the decision-making power for smog-related issues lies not with the municipal governments, but with the Provincial government of Ontario. In 1994, and again in 1998, the Conservative Party was elected to office in Ontario (defeated in 2004) and instituted a series of reforms that severely limited the tax-base for cities (Boudreau 2000). This has left the city of Toronto with few options for unilaterally initiating meaningful transportation or energy alternatives and introduced neo-liberal entrepreneurialism to city planning and development (Kipfer and Keil 2002). Similarly, with regard to electricity production, the conservative government has been working to privatize generation, which effectively stalled any reform of the generation capacity (Stewart 2002). Energy production is dominated by the provincial utility (Ontario Power Generation), which since the late 1980's has had to rely increasingly on coal-fired generation (a relatively dirty source compared to other sources) because of unexpectedly lengthy shutdown of its nuclear plants for maintenance and repair (Ontario Power Generation 2001). In brief, then, the changes that are being discussed are structurally constrained, which means that they would require sizable resource commitments, and centralized coordination and leadership by higher levels of government, and in particular the provincial government. However, as will become shown in more detail below, and in the next chapter, in the absence of coordinated large-scale structural change, much of

¹ Miller (2000) calculate that 80.4% of all GTA trips involve cars and only 10.8% use transit. Automobile usage as a percentage of total trips is lowest in the urban core, at less than 50%, and highest in the lowest density suburbs and the surrounding suburban cities, where 85% of trips use cars. Vehicle ownership reflects this pattern as well. The average occupancy of cars during rush hour in Toronto is 1.2, again stressing the dominance of the private automobile.

² Within metropolitan Toronto the Toronto Transit Commission (TTC) has in the past been praised for the quality and range of service it provides, but the TTC has been struggling since 1990's due to severe funding cuts from the provincial government, which has forced it to reduce service and cut routes (Munro, 2002).

the current politics of air pollution focuses on actions individuals can take to 'spare the air' by helping make existing infrastructure more efficient. Assembling a public at this level is not only important because individual energy conservation is a crucial part of any smog-reduction strategy, even if structural changes are implemented, but also because it impacts what kind of public can be assembled for more comprehensive and controversial changes (e.g. one that is predisposed to support more public transit, or more stringent monitoring of individual vehicle emissions?). A politics of becoming will take place in relation to how individuals respond to the technologies of control that are necessary to mitigate smog. What kind of control network is legitimate?

At first glance, there is little contention about what can be done to improve air quality. One might be tempted to say, along with Barry (2001 p.172), that air pollution is "anti-political", because government bureaucracy suggest that 'we all agree on what needs to be done' and the only questions are those of technical feasibility. Most obviously debate centres principally on the difference in the degree to which the groups are critical of the government's progress and priorities in implementing change, but not on the broad outlines of what needs to be done.³ However, what appears as being predictably

³ In Toronto concern about smog is greatly influenced by the pronouncements of Public Health authorities, and in particular the Ontario Medical Association and Toronto Public Health. That is because, as we will see below, medical science is at the forefront of creating smog as a molar entity and also questioning the limits of such a conversion; medical science provides credibility and legitimacy to the claim that smog is a health threat upon which government should act. Health officials have taken on an advocacy role trying to encourage government to act more quickly and decisively to reduce emissions. At the municipal level, the City of Toronto has created an arms-length agency called the Toronto Atmospheric Fund/Clean Air Partnership (TAF/CAP), whose goal is to promote and support clean air initiatives in Toronto and the Greater Toronto Area (GTA). One of the key initiatives of this agency is to organize the Smog Summit every year, where all three levels of government report on progress towards lowering emissions; they also coordinate the GTA Clean Air Council, which serves to help the sharing of 'best practices' between different government departments and agencies. The CAP is also involved in communicating the efficiency message to the public through programs in schools, the publication of a 'Clean Air Consumer's Guide' and, '20/20 the way to Clean Air', a social marketing program to encourage energy efficiency in the home. Beyond this institutional tier, there are a number of environmental NGO's that work to lobby government to accelerate progress on clean air initiatives. Pollution Probe is active in promoting progress on clean air initiatives by bringing together industry, government and NGO's in conferences to discuss ways forward, and by producing policy proposals – sometimes of their own accord, and sometimes at the behest of government departments. The Ontario Clean Air Alliance (OCAA) is an umbrella group of 82 local communities, faith based and environmental groups, it lobbies for the elimination of coal-generation in Ontario and its replacement with renewable 'green' energy. The Toronto Environmental Alliance (TEA) is active in monitoring municipal progress, including public transit funding, and in lobbying for support for renewable energy alternatives. TEA produces an annual report card on the city's implementation of its corporate clean air initiatives. EnerAct is a non-profit group formed to promote

mundane about air pollution politics in Toronto is actually the result of a complex synthesis of the smog-event that will be unpacked below, and it covers over significant differences in the approaches that can be taken. The hegemonic consensus focuses on the efficient use of fossil fuels, and it is clearly articulated at the annual 'Smog Summit' organized by the City of Toronto, through its agency the Toronto Atmospheric Fund/Clean Air Partnership. The summit is meant to be an opportunity for all three levels of government in the GTA to report on their progress towards cleaner air in a non-confrontation (non-political) environment. In 2002 and 2003 all three levels of government signed the "Intergovernmental Declaration on Clean Air", which included a 'statement of common understanding' that characterized air pollution as 'a serious health threat', recognized the health based evidence on smog, identified ozone and particulate matter (small microscopic particles) as the main health risk factors in smog, recognized fossil fuel as the main contributor to air pollution, and concluded that "Compact urban form, combined with pedestrian and transit-friendly design, fosters opportunities to shift from automobiles to alternative transportation options" (City of Toronto 2002a).

The structure of such a forum, and the wording of the declaration, is such that it avoids addressing why progress on the 'solutions' is slow, or in some cases apparently non-existent. With regard to transportation, for example, it is agreed that the smog-free city will contain a mix of high-efficiency automobiles, public transit and bike/pedestrian accessible urban design; however, what the nature of the mix will be, and how aggressively it should be pursued are matters of contention. At present very little has been done to change the modal mix of transportation in Toronto. The solution to what mix is 'best' is ultimately a somewhat arbitrary decision – i.e. it requires a judgment --

renewable energy, and also runs a social-marketing campaign to promote energy conservation; in addition it offers energy audits of people's homes through a company it created called GreenSaver. Members of EnerAct, in cooperation with a local group called North Toronto Green Door, also created a cooperative in Toronto to fund the construction of wind-generation (the first turbine has been built, and they working a second). EnerAct also now runs a social marketing programme called 'Smart living' living to encourage home energy conservation. At the grassroots community level, I am aware of four groups that work to promote energy efficiency – Greenest City (Active and Safe Routes to School, promoting walking your kids to school), East Toronto Climate Action Group (public education displays, lobbying politicians, raising awareness about Toronto's anti-idling bylaw), Humanize Toronto (free public transit on smog days) and Good Air Safe Power (GASP; lobbies for the closure of a coal-fired plant in the west suburb on Toronto).

because one can always claim to ‘offset’ the impact of one particular action with another (e.g. try to calculate if more efficient cars means it possible to have the same amount of cars and still reduce smog-emissions). It also becomes credible to assume that, given enough time, technological progress will create the necessary efficiency gains to make air pollution a thing of the past without major restructuring of the energy or transportation sectors (e.g. see Goklany 1999).

It is at this point that air pollution politics appears to be ‘all talk and no action’ from the point of view of someone who wants to implement more fundamental changes to transportation and energy production and consumption. The arithmetic of efficiency implies the kind of threshold accounting shown in the above example, and while one can evaluate better or worse options, politics becomes mired in finding the burden of proof to support a particular option. But perhaps even more important than ‘proof’, is the ability to secure public legitimacy. It is in facing this challenge that we start to hear comments like ‘the public does not care’ or that ‘the public is ill-informed’. At the 2003 Smog Summit a series of ‘Citizen’s Forum’s’ were organized that were meant to consult ‘the public’ about what they thought about air pollution. Five hundred concerned citizens showed up at six different forums, and expressed a support for immediate and decisive action to reduce smog. Participants were encouraged to sign the following “Citizen’s Declaration on Clean Air” (Houghton, Levy et al. 2002):

Clean air is a basic human need.

We know that the principle source of air pollution is burning oil, gas and coal in our vehicles, homes, businesses and electricity generating stations.

Now is the time to act.

As individuals, we will reduce our contributions to smog and climate change by using less energy, using cleaner energy, and using the energy we need as efficiently as possible.

As consumers, we demand that business reduce pollution associated with the manufacture, transport and consumption of their products.

As citizens, we the undersigned call on our elected officials to act with us to clean up the air we breathe. We need all orders of government to develop and implement policies that will reduce air pollution by investing in public transit, stopping urban sprawl, enhancing energy efficiency of our vehicles, homes and businesses, and facilitating a transition to cleaner, renewable sources of energy.

These clean air policies are also vital to achieving our international obligations on climate change. We call on our elected officials to ratify the Kyoto Protocol, the international agreement on greenhouse gases, as a public expression of Canada's commitment to take action on smog and climate change. We commit to doing our part to assist Canada in achieving this goal.

This declaration not only repeats the hegemonic consensus, but also portrays citizens as willing to take action in their own lives, but frustrated by the lack of action by government -- it expresses a clear sense of urgency: "Now is the time to act". The Smog Summit report on these fora indicates that participants felt that politicians were "too timid and scared to mandate what people in their hearts really want" (ibid.p.3). Participants expressed the belief that "we know what the solutions are, and we're ready for the consequences costs of action" therefore "just do it" (ibid. p.2). However, if we look to see why government is timid, the only suggestion is that "there is a strong feeling that the general public are not sufficiently educated and knowledgeable about environmental issues..." (ibid. p.6). In other words, it would be a political risk to try to implement bold actions on air pollution and there is frustration that the politics is getting in the way. The Smog Summit, then, is an attempt to de-politicize smog by legitimating the idea that we should all 'be efficient' and that we all know what needs to be done; it outlines the kind of changes that will be necessary to 'be efficient', but sidesteps the debate concerning what exactly would be the best course of action to achieve this goal. Individuals can then evaluate whether or not they are part of a 'responsible' public.

Those who are deemed to not be ‘doing their part’ can in turn be labelled as ‘ill-informed’ or negligent.⁴

The judgment of fellow citizens motives is not restricted to a few concerned and overzealous citizens at the smog forum, we can find within the ecological policy literature a debate about what role individuals beliefs and knowledge about environmental issues, including smog, plays in their actions and responses to environmental matters (Kassirer, 2002; Bickerstaff and Walker, 2003). The critical ecology approach to this debate critiques the idea that all that is needed is ‘more information’, and suggests instead that the problem is with political claims that say ‘too much’ by ignoring, on the one hand, the constraints and discipline that individuals negotiate on a daily basis, and on the other, promising to be able to solve problems which people know, from their everyday experiences, are actually much more intractable and complex. In addition, such literature points to the inherently constructed nature of nature, and the difficulty that this then creates for being to claim to ‘represent’ nature – a point I will return to below (Hinchliffe 1996; Blake 1999; Darier and Schule 1999; Bulkeley 2000; O’Neil 2001; Bickerstaff and Walker 2003; Bulkeley and Mol 2003). The focus is on both the construction of the knowledge claim, as I will do here, and on its reception, which is where I differ. This literature provides a much more sympathetic and realistic reading of public attitudes, but what it shares with the approach that suggests that the public is ‘ill-informed’, is the assumption that there is a public that continually exists beyond the repeated moments in which it is actualized, and that members of this public act based on those beliefs (for critique of this idea see Owens 2000; Hinchliffe 2001). While this is undoubtedly true for some, and perhaps even for many who respond to calls to attend the Smog Summit or participate in research on pollution, it is an assumption that I will refrain from making here because it returns the subjective will and self-present citizen to the heart of political debate – this literature seeks to understand why people adopt recognized positions, whereas I am interested in understanding the potential that is created to go beyond recognized positions by making

⁴ The focus on individual behaviour was even more apparent at the 2003 Smog Summit, where the theme of the summit was ‘Making the Connection’ between home electricity use and smog.

visible the diagram that supports them. The public must be created, and the Smog Summit is an attempt to call a public into being, just as a research interview is (Latour 2003). However, as Warner (2002) argues, institutionally formed publics are usually fairly weak if they simply try to appeal to 'virtue' or beliefs of the citizens and try to impose a public from 'above'. In what follows, and in the next chapter, I will try to make clear why this would be the case in relation to smog.

The weakness of an institutional public in relation to smog in Toronto can be seen in polling results from a survey conducted for the Ontario Clean Air Alliance of a random selection of 1000 Torontonians in December of 2001 (accurate +/- 3.1% 19/20 times)(Ontario Clean Air Alliance 2001). When asked initially what were the most important issues facing Torontonians, only 1% identified air quality. However, when asked directly about air quality, 90% of respondents claimed to be concerned or very concerned about air pollution, 38% thought overall air quality in Toronto was poor and 69% thought overall air quality was poor in the summer, and 82% felt air pollution will pose a health risk to themselves or their families in the future. The survey also found overwhelming support to close down coal fired generating plants (which has subsequently become a government promise), and for more government action on air pollution issues – but given that the question gave no specifics as to what that action might involve, it is unclear how much control and change individuals would be willing to tolerate should it impact their own time and material resources. In short, the survey indicates that there is high awareness of air pollution and its identified sources, but it is hardly at the forefront of an individual's minds, and it is unclear how this concern translates into action and political support in the event of an election, or other decision-making forum.⁵

The focus on what 'the public' thinks leads us away from the challenge of understanding how a public comes into being. There is not just one public, but many, sometimes competing, publics who are able to come into being around different claims about how

⁵ It is worth noting the actualization of a smog public through the technology of polling – it is only once directly confronted with smog as a problem that a person takes a position, and so actualizes their subjectivity.

to attain energy efficiency and clean air (Whose responsibility is it to act? Who should act first? What kind of action should be taken?). Claims about efficiency and air quality are what Deleuze and Guattari (1988) call an 'order-word' that transforms a conjunction of expression and content into a new molar identity – this transformation is an event, or incorporeal transformation.⁶ Therefore, in a particular context it may be possible to legitimately say 'mass-transit is necessary to achieve good air quality', and in another the statement 'new technologies will make smog a thing of the past'. Each of these 'order-words' (statements) will have a discursive and material context that supports them, and which makes the conjunction between statement and content legitimate. However, this temporary stability does not mean that the body politic does not then dissolve back into its molecular reality, where it contains the potential to be called forth again. Therefore, each use of a statement about air quality is indeterminate, but determinable in the actual context where it will be used.

If we want to understand why there appears to be an apparent stalling of action on smog, it is necessary to look at the way that smog is captured (mediated) and circulated as a question of control and efficiency. Central to this stability is an entity called 'air quality', around which struggle can ensue as to 'how efficient' a person needs to be in order to have 'clean' air. However, the incorporeal transformation that legitimates different approaches to 'clean air' is not simply a speech from a podium – it must be repeated over and over again, and there must be people who perform the repetition in their daily practices. Responses to smog are not only a result of a 'rational' appraisal of risks, but are an event where knowledge must be sedimented within the materiality of the city, and this conjunction is always an event. To see this we can begin by looking briefly at the 'solution' to smog that occurred in the wake of the 'Great Killer Smog' of London in 1952; however, the solution here is one of displacement, and smog escapes this initial solution and continues to raise problematic questions about our ability to control smog, which sets the stage for contemporary debates about air pollution.

⁶ For example, Deleuze and Guattari note, bodies grow old and mature, but 'retirement age' is an incorporeal transformation placed over the body, just as 'mature' can an incorporeal transformation performed by the order-word 'You are no longer a child' (p.81, see chapter two above as well).

SMOG-EVENT: London 1952

Within historical and contemporary policy discussions of smog, the justification for air pollution control often refer to ‘air pollution disasters’ (i.e. where many people died as a result of an acute episode) as a way of showing why air pollution is a serious public health problem requiring action (Brimblecombe 1987; Bates and Caton 2000; Dewey 2000; Nugent 2002). The story of London’s ‘Great Killer Smog’ of 1952 is a prominent example of such an event, and since there is abundant historical analysis of air pollution in Britain prior to this event it is useful for showing that the severity of air pollution does not necessarily result in action. In December 1952, a mass of stagnant air, accompanied by foggy conditions, trapped coal smoke over London for three weeks, causing an estimated 4000 deaths and forcing Londoners to stay indoors and curtail their activities (Brimblecombe 1987; Bates and Caton 2000). It is in the wake of this incident that the government decided to get ‘serious’ about reducing coal usage, and enacted its Clean Air Act of 1956. While the London smog of 1952 was dramatic, because of the number of deaths, and because of the popular notoriety of London and its ‘fog’, it is not a particularly unique incident in the history of industrial cities (Dewey 2000; Mosley 2001).⁷

Given the historical context of a population subject to the burdens of dirty air, it will perhaps seem unsurprising that the London smog of 1952 would be a catalyst for a public consensus to ‘get serious’ about cleaning up the air – public legitimacy would flow in light of the magnitude of the death toll, and the availability of cleaner heating and industrial fuels, which would make it seem like ‘common sense’ to enact legislation. But if air pollution advocates continue to refer to 1952 it is because there is nothing ‘natural’ about the progression to a more effective clean air legislation regime, and to a public that supports it. It was an event in air pollution history – after this point government becomes responsible for promoting ‘good air quality’. To think that enacting legislation was simply a ‘rational progression’ towards cleaner air relies on

⁷ In 1880 it was estimated that close to 2,994 people died in the smog incident between January 24th and February 7th, and other such events had been noted throughout the 19th C (Mosley, 2001).

what Dewey (2000) has identified as two misconceptions in air pollution history: 1) that before the mid-20th C there was not adequate technology to reduce air pollution 2) that before the mid-20th C the concerns about air pollution focussed more on their aesthetic and economic costs (e.g. in deteriorated buildings), and not on the dangerous health impacts. However, neither of these assumptions are born out by the historical record. An important point to take from these historical examples, is that the severity of air pollution does not provide sufficient grounds on which to act, nor does any other factor on its own, whether it be 'cultural perception', political economic constraints and interests, or scientific and technological knowledge. Even with active clean air advocacy, 19th C Britain was a stable constellation - a diagram - relating competing discourses of economics, health, domesticity, an urban form that accommodated soot and smog, and cultural discourses that at times even spoke of smog with sentimentality and approval as a sign of progress and wealth (Brimblecombe, 1987; Mosley, 2001).

In 1952 the dynamic of this diagram changes and rearranges the constellation of forces at play. After 1952, the health discourse gains force in relation to the economic concerns. What happened? Clearly it did not happen 'all at once', a revelation in December of 1952. Instead, if action took place after the 'killer smog' of 1952 it cannot be divorced from almost 200 years of concerted efforts to identify smog as a health risk and seek legislative change to enforce reductions in air pollution, including a process of monitoring air quality put in place after WWII. London-1952 therefore could catalyze a number of factors that were held together in repetition. What is interesting from the point of view of speed and politics, is that it was in part the speed of transport and transmission that provided a 'solution' to the problem of air pollution. In 20th C, manufacturing started to move outside of the centre of cities. What's more, the introduction electricity, and electrical heating and cooking technology, meant that it was possible to do away with individual coal fired furnaces and displace the consumption of coal to large centralized generating stations.⁸ In effect, speed allowed a displacement in time and space of the smog problem.

⁸ On a cultural plane, we can speculate on range of diverse factors -- perhaps a population that had been drilled for close to a decade in the threat of a gas attack was not inclined to be 'gassed' by its own

Clearly this event would have had a different genesis and historical marker in different jurisdictions beyond the UK, and its actualization may not have been heralded by a dramatic incident such as the smog of 1952.⁹ I am using London-1952 in the same way that Deleuze and Guattari (1988 p.142) assign a ‘proper name’ to an event to highlight the singularity of the actualization; this allows London-1952 to stand in as expression of an event, but it cannot be used as an example of historical turning-point after which the health benefits of clean air were recognized.¹⁰ To think otherwise is to assume that since the health benefits of clean air were demonstrated and recognized in London in 1952 (and earlier in American cities), it is irrational, or a step ‘backwards’ in time, if current legislation fails to implement and enforce the ‘best practical means’ of pollution control elsewhere, or today in London. As is evident today, such a normative assessment is largely toothless in light of growing concern about the need for a renewed effort to address air pollution. The event, of which London-1952 is one expression, must be sustained through repetition. A crucial factor in maintaining this diagrammatic relation is the ability to demonstrate that action will have an impact on the health of the population, and political struggle shifts to defining the actions that will have a positive impact on ‘air quality’. London-1952 is an event that depends on the stabilization of something called ‘air quality’.

What followed from this event is relatively rapid improvement in air quality in most industrial cities in the second half of the 20th C. However, and again of interest to the discussion of speed and politics, smog returns as disruption after an initial improvement.

practices (Connor, 2003), or perhaps a society that could no longer afford to hire domestic help to clear away smoke dust was not willing to live with the nuisance any more (Brimblecombe, 1987).

⁹ In the US, for example, cities such as St. Louis and Los Angeles were instituting effective air pollution campaigns in the 1940’s (Dewey, 2000).

¹⁰ On the relation between the proper name and the abstract machine Deleuze and Guattari (1988 p.142) write: “The diagrammatic or abstract machine does not function to represent, even something real, but rather to construct a real that is yet to come, a new type of reality. Thus when it constitutes points of creation or potentiality it does not stand outside history but is instead ‘prior to’ history. Everything escapes, everything creates – never alone but through an abstract machine that produces continuums of intensity, effects conjunctions of deterritorialization, and extracts expressions and contents. The Real-Abstract is totally different from the fictitious abstraction of a supposedly pure machine of expression. It is an Absolute, but one that is neither undifferentiated nor transcendent. Abstract machines thus have proper names (as well as dates), which of course designate not persons or subjects, but matter and functions... There is a diagram whenever a singular abstract machine functions directly in matter”.

The initial response to smog – to displace the problem of pollution in space and time – proves to be only a temporary solution, such that by the mid to late 20th C, the growing use of the automobile leads to a new source of pollution that contributes to a return of smog in major centres, this time in the form of photo-chemical smog. In addition, concerns about the impacts of long-range transport of pollutants between cities and regions from the ‘tall stacks’ enters into public circulation. As a result, it is no longer possible to ‘solve’ smog by building a taller smoke stack, and the control of smog in the latter half of the 20th C and into the 21st C is about direct monitoring of emission sources, leading as we will see, to the logic of real-time monitoring and interactive control. In other words, while initially speed allowed for a ‘solution’ to smog through displacement in space, speed is now being used to look for a ‘solution’ to smog through the intensive and interactive control of time and space (an example of what Virilio (1987) identifies as the quintessential transformation of control through speed). It is the ability to maintain a monitoring network in Toronto that sustains the hegemonic consensus outlined above that smog is a matter of greater efficiency, and which then prepares the ground on which different options for mitigating air pollution are debated and considered.

SMOG-EVENT: Tracking the invisible –molecular escape and the problem of ‘no safe level’

Central to being able to sustain and repeat a post-London 1952 smog diagram is ability to monitor whether or not action on air pollution is effective. Early monitoring, public discourse, and legislation tended to focus only on the visible nuisance and effects of coal smog.¹¹ Yet it is the invisible dimension of air pollution that has become visible through better monitoring, and is now central in animating and changing contemporary debates about air pollution. In particular, smog regains its molecular character as scientists claim there is ‘no safe level’ of exposure to air pollution.

¹¹ Brimblecombe (1987) notes that Post-1952 a simple paper filter was used to measure the ‘thickness’ of the ‘smoke’ by judging how dark the filter got when exposed to dirty air. This allowed for a common measurement and calibration of air quality on which to base action. However, it is of course ineffectual for measuring invisible pollutants.

Capture? – Ozone, PM_{2.5}

The tracking and monitoring of smog that is essential for regulation has had the unanticipated effect of changing the nature of the smog-event, because it pushes it towards the invisible, and introduces a number of sources of uncertainty as to when and where smog is present, and how effective control can be. Improvements in monitoring smog and its health impacts show that the visible component of smog – the brown cloud on the horizon – is only an acute expression of a more pervasive problem. Tracking has allowed the smog-cloud to be broken down into its component molecules, and each of these is tracked independently, and sources for each are identified. Two molecules in particular have become the focus of smog-politics because they have the greatest impact on health and continue to exceed standards of safe exposure – ozone (O₃) and particulate matter (PM). Unlike coal smog these particles are not always visible in the air, or even sensible to lungs, nose or eyes, but they may still be present and causing health problems (especially in vulnerable segments of the population such as youth, the elderly and those with respiratory ailments). Confirmation of a smog-event relies upon a mediated display – e.g. a number, or a map generated from a satellite image – which a person has to decide to ‘trust’ or which they can reject in favour of our their own embodied experience. As will become clear, in practice there are good technical grounds on which to be sceptical of these presentations. Molecular smog escapes its capture as a molar number.

The first challenge to representing the ‘presence’ of air pollution is that ozone, and some of the more toxic forms of PM, cannot be traced back to the sources from which they are emitted, because they are actually produced from reactions between precursor chemicals that take place in the atmosphere. Ozone is produced from the reaction of Nitrogen Oxides (NO_x), produced largely from automobile exhaust, and Volatile Organic Compounds (VOC), produced from a wide range of products (e.g. including fuels, paints and solvents, industrial processes, drycleaners, plastics and foams – the list here is very large even if the quantity from each source is very small). When these two chemicals come together in the presence of sunlight they produce Ozone (O₃) (but the reaction is

quite complex, prone to reversals (scavenging), and so is not strictly predictable) (Douw and McKendry 2002). Particulate matter is literally very fine particles, and may just be composed of small dust particles (e.g. cement production is a large source), but it can also form when molecules such sulphur dioxide (SO₂), come in contact with water vapour in the air and produce small droplets of sulphuric acid. It is these 'acid aerosols' that are particularly toxic because they can be breathed deep into the lungs and cause damage to the respiratory and circulatory system (Nugent 2002). The fact that smog is created in the atmosphere, as opposed to emitted directly from chimneystacks or car exhaust, highlights that in reality today's smog is actually a soup of different chemicals that are always present in the atmosphere, but which are only considered dangerous to health above certain threshold levels and/or in reaction with each other. This poses a problem for regulation and monitoring. What exactly should be regulated? The precursors, obviously, but the question is really how much the precursors need to be regulated so that ozone and particulate matter are not formed in the atmosphere at dangerous concentrations. It turns out that this is a complex scientific problem, indeed one that ultimately requires an educated evaluation in the setting of standards and proposing appropriate responses, which in turn means that the problem of how to control smog remains a political question (see below on the Air Quality Index).¹²

In Ontario, the province where Toronto is located, the ambient levels of key smog components and precursors have been dropping, but ozone and fine particulate matter continue to be above ambient air quality criteria (AAQC) for short intervals in the summer months.¹³ The trend in ozone is towards a small but consistent increase through

¹² In Canada the setting of standards is a 'closed door' process, where the government solicits input from experts (Boyd, 2003). The public can challenge standards, and under Ontario's Environmental Bill of Rights the government has to provide a period where the public can give input into the setting of standards to which the government must respond (Bates and Canton, 2000). Barry (2001 chap. 7) has suggested that the setting of standards is in fact an 'anti-political' move, because it attempts to avoid the inherently political process of standard setting in a field of scientific uncertainty.

¹³ Six substances are considered most relevant for measuring air quality because of their risk to human health and well-being: sulphur dioxide (SO₂), carbon monoxide (CO), Nitrogen Dioxide (NO₂), Volatile Organic Compounds (VOC, there are actually a whole series of these compounds), ozone (O₃) and fine particulate matter (PM₁₀ and PM_{2.5}). The standards for these substances are called Ambient Air Quality Criterion (AAQC), and they act as guidelines for government policy, but do not obligate the government to reduce emissions from any particular source. The government is obligated to report on the levels measured, and on any efforts in place to regulate or control them. As a result, monitoring only provides

the 1990's, with ozone showing up in rural areas that were previously considered pristine (Ontario Ministry of the Environment 2001a). As a result, it is possible to claim that air pollution in Toronto has both 'improved' overall since the 1970's, but is also 'getting worse' in relation to key pollutants, depending on how you read these numbers. In Toronto, health officials and environmentalists have argued that the standards are too low and are out of step with other jurisdiction (Campbell, Pengelly et al. 2001; Ontario Medical Association 2001). Ultimately, because of the toxic nature of particulate matter, and because we can't know the synergistic effect of the chemical soup, health professionals argue that there is 'no safe level' for atmospheric pollutants (MacPhail, 1998; Ontario Medical Association 2001), such that while ambient concentrations give us an indication of trends, it is clear that air still poses some form of 'health risk'. But how severe is the problem, and what does it mean that there is 'no safe level'?

It is accepted by the medical community that elevated ozone and particulate levels correlates with increases in morbidity and mortality (DSS Management Consultants Inc. 2000; Campbell, Pengelly et al. 2001; Ontario Medical Association 2001), but the concept of 'no safe level' is not a statement that is meant to indicate – to be absurd – that even one molecule ozone will harm your health. What it says, is that for even the smallest incremental increase in ambient air quality, epidemiological studies are able to correlate adverse health impacts in the population as a whole, an impact that is usually felt by the most vulnerable segments of the population – the young and the elderly. In addition, laboratory work shows adverse biological effects with even trace amounts of ozone and PM2.5, leading the OMA to conclude even people who do not sense ill-effects can be suffering from reduced lung capacity and long-term damage (Ontario Medical Association 2001; Boadway 2003). Therefore, while the elderly, children and those with respiratory ailments are particularly sensitive, for a majority of the population

concerned citizens or lobby groups with a lever by which they can pressure governments to regulate emissions more forcefully. The most recent figures in the *Air Quality in Ontario 2001* report show that only ozone and fine particulate matter exceed the standards, all other monitored substances have reduced considerably since the 1970's and have stabilized since the early to mid-1990's. The report identifies two important trends: First, seasonal mean ozone levels have been increasing across Ontario since 1971. Second, fine particulate matter has just recently begun to be measured, but it indicates that average particulate matter load exceeded the AAQC in the summer months of 2001 in Toronto (Ontario Ministry of the Environment 2001a).

air pollution is truly an invisible threat – one that is made visible only through hazy horizons or the stabilization and circulation of claims about air quality in the public sphere (to which we will return below). In short, ‘no safe level’ is an admission that epidemiology cannot provide us with a ‘safe’ target, but that does not mean we should not act to reduce emissions.

One of the key studies in Ontario that quantifies the health risk was commissioned by that the Ontario Medical Association (OMA), and it estimates that at present ambient levels Ontario suffers about 1900 premature deaths, 9800 hospital admissions and 13000 emergency room visits and 46 million illnesses as a result of air pollution (DSS Management Consultants Inc. 2000).¹⁴ These estimates are based on a computer model create for the OMA, but it is acknowledged that: “The primary value of models is heuristic: models are representations, useful for guiding further study, but not susceptible to proof” (DSS Management Consultants Inc. 2000 p.31). This is because smog, and its health impacts, do not have a singular cause that we can point to (a smoking chimney), but are the result of a confluence of factors that may not stay the same over time, and certainly not for a given individual. Similarly, the model, based on statistical correlation between health effects and pollution levels in the present, does not allow for the determination of a level at which it is possible to detect ‘no’ adverse effects. The presentation of morbidity and mortality numbers in relation to ambient levels of pollutants, then, is not a causal relation, but indicates only a trend, a direction, a vector – this is a mobile system. In short, it says that less is better for the population as a whole, but how much less and how much better must remain a point of contention and debate (particularly so for any given individual). However, given that it is possible to further reduce emissions, it argued that it is not credible to suggest that current mortality and morbidity is at an ‘acceptable’ level.

In addition to the uncertainty of defining a safe level of pollutants in terms of health risk, a further source of uncertainty arises in relation to the weather (Brauer 2002; Douw and

¹⁴ In the summer of 2004 a new study by Toronto Public Health reports 1700 premature deaths in Toronto alone, and 6000 hospital admissions, due to poor air quality (Campbell, M., D. Pengelly, et al. 2004).

McKendry 2002; Yap 2003). The tendency is to think of air pollution as humans pumping toxins into the air until the concentration gets too high, much like a bunch of smokers in a room. While this is essentially true it is complicated by two factors – long range transport of pollutants and the chemical reactions that take place in the atmosphere itself *under correct conditions*. This is particularly important for both ozone and PM_{2.5} concentrations in Toronto, because in the summer months, when atmospheric conditions are conducive to the reactions that produce these harmful molecules, there are also prevailing winds blowing from the Midwestern United States industrial belt. The Ontario Ministry of the Environment estimates that 50% of pollutants come from south of the border carried by climate fronts of warm air (Ontario Ministry of the Environment 2001). What does this mean? At least one climate model suggest that because of these large masses of pollution, even if Toronto were to eliminate all sources of pollutants, it would still experience smoggy days (Yap 2003). In part such a conclusion also reflects the fact that there is lag in space and time between the emission of precursors (e.g. NO₂, SO₂, VOCs) and their transformation into O₃ and PM (the substances that most often exceed AACQ). This means that much of the pollution that Toronto produces moves downwind before it creates ozone.

In addition to the challenge of lag and long-range transport for setting 'safe' standards, the impact of weather is particularly acute. This is apparent by comparing the number of smog advisories called in 2000, which had cool and wet summer, and 2001, which was unusually hot. In 2001 there were three smog advisories lasting 4 days, whereas in 2000 there were 7 advisories, lasting 23 days (Ontario Ministry of the Environment 2001). There is also considerable diurnal variation, with ozone concentrations peaking at mid-day (Brauer 2002). The situation is further complicated by an ironic twist in the atmospheric chemistry of ozone – NO₂, one of the precursors of ozone, also reacts with ozone and so reduces ozone concentrations. This is called 'scavenging' and it leads to the so-called donut effect in large cities, where surrounding suburban and rural areas often have higher concentrations of ozone because of long-range transport, than do car-choked and congested cities that eliminate ozone through scavenging. It has even been

suggested that in some instances reduces car-traffic could actually increase ozone levels in the city core (Douw and McKendry 2002).

None of this is to deny that in Toronto ozone, particulate matter concentrations, as well as those of the precursors, are problematic, and that action should be taken to ensure that ambient concentrations do not rise. But the complexity of the health correlation, the atmospheric chemistry, and long-range transport means that it is difficult to decide how to proceed and *how much* regulation and reduction is actually needed to keep ambient levels with a 'safe' zone, not least of all because it is unclear what a 'safe' zone would be.

At this point we need to conceptualize the implications for politics of what science has done to smog. Following Latour, we can say that the laboratory work on air quality has been an event, it has created something that did not exist prior to this work – an understanding of the smog body as a multiplicity of shifting and interacting molecules (Latour 1999a p.145). In the language of actor-network theory, smog is an actant, which is not something with a will or intention, as we would ascribe to a human actor, but an entity whose vitality requires a constant effort to control. In this synthesis of the smog-event, smog has become a new identity in the city, and it falls to politics to give it an 'acceptable' place within the city by deliberating on questions such as what level of mortality and morbidity is acceptable, and what level of control or modification of our actions is acceptable – these are not primarily technical questions, but political ones (Latour 1999b). Smog has been shown to be immanent to the city, and it cannot be definitively excluded from the city. The molecularity of smog does not just reflect the fact that smog is produced of molecules, but that it is produced by myriad unseen and indeterminable (but not indeterminate in the event) actions, such as reactions between particles of a polluted air masses and the hot sun, or actions by individuals (e.g. an accumulation of unexpected trips to the store by car (NO_x), paint cans left open or a new parking lot being paved (VOCs), an extra shift put on at the cement factory (PM)). In addition, actions distant in time and space can equally surface in the here and now (e.g. the trip in the car last week contributes to smog elsewhere next week etc.). Therefore,

the molecularity of smog is also the molecularity of the city itself, an indicator of the vitality of the city to produce unexpected results (even if not always welcomed). If it is not possible to exclude smog, then it is necessary to figure out how to respond to smog, it becomes a force that society has to content with

However, this new identity is curiously difficult to grasp and control (as indeed are all identities) and poses an ethical dilemma to politics. The nature of smog is well described in Spinoza's terms as 'a body' that emerges at the confluence of different flows (Hardt, 1993 chap 3; Deleuze, 1986 p.39; see above chap.1). A body is something which we encounter and which has the power to affect, and to be affected, but which does not have an essential interiority. The ethical dilemma in encountering another body is that it is only a surface, such that 'we know not what a body can do' (Deleuze 1986 p.39; Proctor 2001). A body forces us into an exploratory stance towards it in light of its ability to affect us, and in light of the uncertain limits of our ability to affect it. With regard to smog, science helps define the surface that we encounter by providing us with the means to identify and measure different components through which air affects us as we affect the air. However, we also learn that these key indicators are the surface of a molecular body. In political discussion the attempt to get to 'know' the air body is equated with a desire for this body to disappear into thin air, i.e. into 'clean' air. This reaction is not dictated by the science, but it is certainly one of the most immediate answers that science can give to the question 'what can we do?' But such a dream of clean air is also a dream of perfect control of the human body and the networks it lives within. Therefore the ethics of the encounter with the smog body are not just a matter of acting with due respect to the uncertainty of our ability to control smog (i.e. the familiar ecological claim to think of future generations), but also acting ethically towards those who will have to be controlled today in the name of controlling smog.

If controlling smog increasingly means controlling people and behaviour, the ability to form a public is challenged by the impossibility of completely 'benign' control. In addition, this control is haunted by questions about the technical effectiveness control given that in the past smog has returned after it was apparently solved. In order to

understand such concerns as not simply expressions of scepticism, it is important to understand that they are asked in the context of awareness that smog is a problem of a 'finite' system. Smog returns to the city with the awareness that there is no longer any 'outside' (no sink) where we can send our emissions. This finitude is not relative, but global (pollution comes from long distances). Therefore, control necessitates the control of 'everybody' (not just here, but across the border and around the world). The molecular nature of the smog-event already questions control, but when posed on this scale the idea of controlling smog becomes more daunting. Such a control would depend on being able to control the impact of a multitude of dispersed, and often unanticipated, actions in 'real-time' - in a world of multiple technological networks and speeds, can we not expect a 'loss of control' as we have seen in the past? As Virilio (2003 p.24) argues, a world of finitude is a world where we become aware of the 'generalized accident' or 'integral accident' -- i.e. the constant emergence of the unexpected which is the hidden truth of progress for good or for ill. However, it is important to not get carried away by this conceptual enlargement of the problem, and suggest that the molecularity of smog and the problem of control is intractable, but to understand that this enlargement is a *limit* that is made visible by the molecularity of smog within a finite world. It is not that we should throw our hands up in the face of the challenge of controlling a molecular population; it is not that there is no solution, but no final solution, and there is a need for constant experimentation. It is within this context that we have to consider how to monitor and contain the smog-event, and how to live with our own molecularity. It is necessary to think about how the continued disruption of the smog-event can be used to raise the question of technical limits and social legitimacy of control without delegitimizing all action, which would only produce a weak relativism, and deep cynicism.

Capture? – Air Quality Index and ‘legitimately safe’ air

Smog has a molecular dimension, but in politics it is necessary to be able to legitimate mitigation and control efforts on the basis that it will definitively improve air quality. Given that we have seen that there is actually no threshold of safe air, what is at stake here is being able to say that a particular course of action will move us ‘towards’ better air quality, towards where the air is ‘legitimately safe’ or ‘safe enough’. Therefore, it is necessary to be able to stabilize the unruliness of the molecular air, so that we do not spiral into a kind of weak relativism that suggest we can never know what clean air is, so why bother with models and why bother trying to clean up the air (Bailey 1993; Stott 2003). This is not the message that we get from the molecular smog body, which on the contrary highlights the need for a continual monitoring of, and experimentation with, our relationship with the air. The stabilization of the debate around air quality relies on the creation of an Air Quality Index (AQI) that is said to give a single measure of ‘good’ or ‘bad’ air quality (Elsom 1996; Ontario Ministry of the Environment 1999; Barry 2001). As Barry (2001) suggests, the creation of ‘air quality’ is an event in the history of air pollution, because the air becomes a measure amenable to technocratic management, and politics now focuses on the best way to achieve clean(er) air.¹⁵ In this section I will review Ontario’s Air Quality Index, which is used in evaluating Toronto’s air. I want to stress three key points: First, the air quality index is explicitly constructed as a public communication tool, created in order to help ‘the public’ (and especially those with lung ailments) cope with air pollution, and to encourage individuals and corporations to curtail activities that produce air pollution. Therefore, and second, it is not a scientific measure of air pollution concentrations and is not scientifically valid as tool to track trends in air pollution. As a result, and third, what the AQI communicates is not really a representation of pollution in the air, so much as the idea that the air can be ‘(un)safe’. As long as air quality is sustained as a network, it is possible to legitimate other control networks based on their ability to improve air quality.

¹⁵ It is no longer possible to legitimately say the air is not a problem. Those who feel that air pollution mitigation is unwarranted can only legitimately say that air pollution will, in time, become a non-issue because of technical progress. This is what Barry calls making smog ‘anti-political’, because in the black box of air quality rests a whole series of contentious assumptions about AQ standards and their correlation with health. However, as we shall see, the idea of air quality is not so unproblematically accepted.

Ontario's AQI tracks five particles: ozone (O₃), particulate matter (PM), nitrogen dioxide or (NO₂), sulphur dioxide (SO₂) and carbon monoxide (CO). However, the AQI is presented as a single scale from 1-100, which is divided into five sections labelled Very Good (0-15), Good (16-31), Moderate (32-49), Poor (50-59) and Very Poor (60 – 100 and over).¹⁶ However, while all five substances are tracked, the AQI actually only reports the substance with the highest concentration, such that should any of the five substances exceed its AAQC for more than three hours, it triggers a 'Smog Alert'. When a smog alert is called citizens are advised to avoid strenuous activity, the elderly and young are advised to stay indoors (preferably in an air conditioned space that filters the air), and everyone is encouraged to curtail activities that contribute to smog (including, paradoxically, the use of air conditioners that tax the electricity grid and its coal fired plants) – e.g. don't cut your lawn (uses fuel or electricity, contribute to PM), don't use paints (contributes to VOCs), do bike (but, I suppose, not strenuously) or do take the bus instead of your car etc (Ontario Ministry of the Environment 1999).

The AQI is promoted as a 'real time' indicator of air pollution, which then gets disseminated through the Internet and mass media; but in fact the AQI inserts a lag of three hours between detection of 'poor' air and reporting it to the public. Nevertheless, the claim to work in real time draws attention to the fact that the AQI is only possible given the high-speed of sensing and computing technology, as well as the speed and reliability mass communication technologies that insert the AQI message into daily routines in the form of pithy AQ readings (very good, good, moderate, poor, very poor).

¹⁶ The concentrations of each of the substances are fitted to the 1-100 scale as represented in the index in such a way that should the concentration of the substance rise above the ambient air quality criteria (AAQC) for that particle it would translate to a number that is within the poor range on the air quality index scale (so for example, a concentration of 81-149 ppb ozone would translate into a number between 50 and 59 – i.e. in the poor range -- on the AQI scale). There is nothing particularly scientific about the conversion between AAQC and the AQI scale, except perhaps that scale is weighted in such a way that small increases at low concentrations tend to create a greater change in the index value than do concentration changes above the AAQC (the logic being that at that point an Air Quality Alert has been called, further fine gradation is not useful – the air is doesn't get an 'worse' than 'very poor'). The reason for converting to a single scale is to make the concentrations of all pollutants comparable. Toronto Public Health has noted that for concentrations of SO₂ and CO that exceed the AAQC the AQI indicates that the air is 'moderate', rather than poor. However, the 2001 Air Quality in Ontario report show that these substances never get high enough to exceed their AAQC, and so at present they would not trigger a smog alert or reach the moderate range.

The speed of this translation and transmission is also supported by weather forecasting technology that allows the Ontario Ministry of the Environment (OME) to track long-range climatic conditions that will contribute to air pollution (e.g. warm temperatures, air from the U.S. Midwest). As a result the OME is also able to create 'smog forecasts', which are given when it is expected that a 'smog alert' will need to be called for the following day. The speed of this compilation and translation of data is indeed remarkable (yet is still 'too slow' and limiting of the accuracy of the AQI), but it is an example of the rather mundane use of speed to control the smog event and allow it to be inserted into the multiple speeds that form the duration of a given individual routine (Will I know stay indoors if the air is poor? Will it change my day? No matter what the individual reaction to an AQI posting, we are now reminded of our constant relation to something called poor air).

There are a number of weaknesses to the Ontario AQI, which when taken together amount to showing that it is a quasi-arbitrary construct with little scientific validity or usefulness as a tool for guiding individual action. The weakness of the AQI is most apparent in its failure to act as indicator of health-risk. Toronto Public Health notes that in Toronto "92 % of the premature deaths and hospitalizations attributable to air pollution in Toronto occur when air quality has been classified as good or very good by the provincial AQI" (Campbell, Pengelly et al. 2001). The OMA and Toronto Public Health argue that the primary reason for this discrepancy, is that the AAQC for Ontario are too lax. Second, and related, the AQI does not measure synergistic and cumulative effects of being exposed to different substances (e.g. most often a smog alert' is triggered by high ozone levels, but 'moderate' ozone and fine particulate levels may together create an equally harmful 'air quality'). As a result, the AQI is constructed not to measure local and short-term air pollution episodes, but to measure large regional effects that will last 3 hours or more. This means that when a 'Smog Alert' has been called, most people are likely to sense that the air is poor, but when air is good according to the AQI, many people may in fact be experiencing what they consider to be poor or very poor air (e.g. we need only consider standing at the side of a congested road during rush hour and breathing the air). Finally, because the AQI measures large scale

atmospheric and pollution events (in which much of the pollution is carried in large regional air masses), and because of the nature of the atmospheric chemistry means that there is a lag between the emission of pollutants and their transformation into ozone or PM2.5, the AQI is not sensitive to short term changes in local sources of air pollution. In the words of one scientist, “the city does not pollute itself” – at least according to the AQI network. This means – completely contrary to the message of conservation that accompanies the AQI -- that even if people in Toronto curtailed all smog contributing activities during a ‘smog-Alert’, it would not effect the duration or severity of that particular episode. In summary, the AQI detects the presence of smog at the point when it has become bad enough to be a large, regionally pervasive, problem (a ‘cloud’ covering the whole city), but it is being presented as if it were an acute episode that correlates with individual’s experience of smog, and which is immediately responsive to the actions of the local population in ‘real time’. In doing so, the AQI maintains the idea of smog as a molar body which it is possible to control.

Given these weaknesses we might be tempted to say that AQI is useless, but it serves an important function. By maintaining an AQI network, and providing repeated broadcasts on air quality through the local media, it serves to solidify the idea that there could be ‘cleaner’ air and that there exists an imperative to ‘clean it up’. Those who are critical of the AQI do not want to eliminate it, but improve it to make it more sensitive to local contexts, and so more useful as a health indicator (Cole, Pengelly et al. 1999).¹⁷ As Barry says: “ ‘air quality’ is not just a property of the urban air in general, or even a property of the air at a particular time and place (such as behind a moving vehicle), it is an expression of a relation between air and the government of an urban population” (Barry, 2001 p.169). The AQI is what Serres calls a quasi-object, and Latour an immutable-mobile or factish (Latour 1986, 1999a; Serres 1995; Braun 2002 Chap. 6). A quasi-object is not strictly ‘believed’ to be true, but is recognized to serve a social

¹⁷ In addition to making the AAQC more stringent, such that the AQI would register bad air at lower ambient air concentrations, it is suggested that the AQI needs to measure synergistic effects, and that rather than presenting break points between ‘good’ and ‘poor’ air, the AQI should be presented as a single scale against which individuals can calibrate their personal responses to air pollution (e.g. a scale of 1-10, much like the current UV-index, in which the individual learns to know when they are personally sensitive). (Campbell, M., D. Pengelly, et al. , 2001)..

purpose. The quasi-object enables a conjunction of materiality and discourse that is created with its circulation. On one level it is a material object (immutable), created from a network of measuring stations, and whose existence is said to demonstrate the truth about the existence of another object (in this case air quality as molar entity). However, it is not enough to show a number on a scale, the object has to have some functional value and so it must be circulated in different contexts where it serves to actualize a particular discourse and call a public into being. It is in this sense that the object is only 'quasi', and mobile – it is not just an object, but also includes the performance of making a context in which the object will have an effect and affect. We can see in this dynamic the very process described in chapter two where the public assemblage was called into being through the 'reading' of texts and utterances in particular contexts.

The AQI fails as a 'useful' health indicator for many people (especially the very sensitive), but it succeeds in legitimating a debate about how we can reduce air pollution, and about the individuals role in such a project – in short, it legitimates control. Therefore, the challenge that the AQI poses to politics is not, I would suggest, that it simplifies the complexity of air pollution, and that it makes into simple threshold – that would be to suggest that people simply 'believe' the AQI, when it would be better to say that people make (more or less) use of the AQI as a relative indicator of trends (see chapter 6). The politics of air quality cannot be diffused by 'recognizing' the uncertainty of the AQI, because it is still a matter of deciding what should be done in the face of uncertainty.¹⁸ Similarly, if the AQI were modified it may provide greater

¹⁸ The focus on the recognition of uncertainty is central to ecological rhetoric and underlies the 'precautionary principle'. The normative premise, that I share, is that if we accept the uncertainty associated with ecological knowledge claims, then it should make our political claims more humble. However, while I agree with this, I don't think it is enough to recognize this uncertainty, because there is still the work of actualizing a public around the recognition of uncertainty (we might say the certainty of uncertainty). As we have seen here, it is not just nature that is uncertain and molecular, put the public itself, and the city which it emerges from (Clark, 2002 makes similar argument). Stabilizing a public requires the formation of a quasi-object as detailed here and in other studies, but that is only the beginning of the assemblage. Three excellent studies of the social construction of quasi-objects, which have informed my analysis here, are Whatmore's (2002) work in *Hybrid Geographies*, especially the chapter on elephants and genetic food, Braun's (2002) *Intemperate Rainforest*, especially the chapter on the construction of old-growth rainforest maps, and Barry's (2001) *Political Machines*, especially the chapter on air quality monitoring in the EU. All of these studies stress that the legitimacy of a public claim

urgency for action to address air pollution if the modification resulted in it showing a greater number of ‘smog alerts’, but it would still leave open the question of what form that action would take. What is interesting about the AQI from the standpoint of creating a public assemblage, is that it creates a potential for action, a potential which must subsequently be actualized in a conjunction that expresses a legitimate response to air quality – it creates the conditions where the molecular body of smog and of the body politic can be actualized into a molar public assemblage.

SMOG-EVENT: The incorporeal transformation of the public assemblage

In Ontario the concept of air quality has been essential in calling different publics into being around smog. For example, coal-fired electrical generating plants have become a powerful symbol of ‘poor’ air quality, and the Ontario Clean Air Alliance (an umbrella group of 82 local community environmental and faith based groups), has managed to sustain a – now successful – campaign to have the government promise to shut down coal-fired stations. This effort relies upon the ability to monitor and measure emissions from these plants (reported publicly), in order to show that they are the ‘largest single source’ of air pollution in Ontario, but also in order to call the government to account every time these plants exceeded their emission caps (www.cleanair.web.net). Through an extensive email list and a website, the OCAA could then ask its members to write their elected officials to complain when yearly reports showed emission exceedences, or whenever the government seemed to be wavering on whether to keep coal generation. The following is a text from an OCAA email:

July 22, 2004 – Today is Ontario’s 16th smog day of 2004. In 2003 Ontario had 37 smog days.

The Nanticoke coal-fired power plant, on Lake Erie, is Canada’s #1 air polluter. In total, Ontario’s five coal-fired power plants produce as much

depends on being able to maintain the networks that support the quasi-object, but focus less on the potential this creates for transformation through circulation. Therefore, while normatively I agree with the need to recognize the uncertainty of the knowledge claim, I would argue we have to also understand how the knowledge claim creates a potential for a continued transformation, and think about how to intervene in this process – it is necessary to call a public into being.

air pollution as 6.2 million cars. Fortunately, Premier McGuinty has promised to phase-out our dirty coal plants by 2007.

The concept of air quality, and the reporting of smog alerts, despite all its scientific flaws, is central in maintaining the impetus for coal phase-out. The public is actualized by the OCAA emails, which allow a person to address their concerns about air pollution, and the disruptions it causes in their lives, in a fairly non-intrusive manner – it asks little of the individual. However, the actual public assemblage is a complex and heterogeneous assemblage. On the one hand are statements about air quality and the health impacts of poor air, which is supported by a network of monitoring stations. On the other hand, there exists a personal experience of smog that occurs at the conjunction of multiple technical networks (e.g. transportation, electricity consumption), natural flows (e.g. air masses, sun, biological sensitivity). The public assemblage continues to exist only so long as these networks are maintained and allowed to come into conjunction. Within this conjunction a responsible subject citizen-subject is called into being. As was argued in the previous chapters, we can understand subjectivity here as a product of these of the conjunction of these networks – a networked subjectivity – whose will is not determining in the causal sense, but who nevertheless acts as a relay and active force around which the whole is either recreated or fails to actualize (Michael, 2000; Mackenzie, 2002).

Within this framework, critique remains immanent to these networks as an expression of the possible permutations that can be understood as a reasonable response to smog for a subject within the assemblage. The conceptualization of what is possible is never imagined outside of such networks. As Deleuze argues, the great insight of diagrammatic thinking is that "Each age says everything it can according to the conditions laid down for its statements" (Deleuze 1999 p.54). The threshold concept of air quality polarizes air quality debates between two types of claims, and so polarizes subjective positions. On the one hand, there are claims for the reform of an existing network (e.g. replacing coal by nuclear, gas-generation and wind-turbines; replacing cars by high-efficiency or hydrogen fuel cell vehicles). On the other hand, there are claims that call for the replacement, or radical reform, of the network (e.g. replacing centralized

electricity generation by decentralized renewable sources; building mass transit, more dense and pedestrian friendly cities). With regard to the first, the basic claim is that we can, through monitoring and technical advancement, achieve the 'necessary' efficiency gains to 'clean the air'. In response, the second argues that it is not a matter of incremental improvement and monitoring, but of creating a system that will not require this kind of real-time interactive monitoring and control. The first relies on a more individuated and intensive form of remote control to maintain a version of what exists, the second relies on coordinated and collective decision to switch to a network that requires less individual control (which, it needs to be stressed, would place less burden on the individual to 'be efficient').

Here we have a version of the familiar left-right binary, individual responsibility facing off against collective responsibility, both promising more 'freedom'. Any claim will fall somewhere along a continuum between these two poles. However, this is not in the first instance a question of ideological belief, but of the limits of technical and subjective possibility, and so the limits of control (what is it possible for *me* – a subject with an identity and social expectations -- to see and do today?). Both types of responses are 'reasonable' given the framing of smog as a question of a threshold measure of air quality. However, there remains the question of 'reasonable when and for whom'? Given that the existing relations in which a person lives and works, and given that urban networks are highly individualized in Toronto, as in other North American cities (e.g. car-based patterns of commuting, toll highways, cameras monitoring traffic flow and violations, cell-phones and wireless internet hook-ups), the question of network, or infrastructure reform will always be the more 'radical' reform for many subjectivities – it will take thought, and it will take time to make such change desirable and make visible the limits of individuated and intensive control as a path to reduce emissions – time that is in no way predetermined, it may not happen at all (see chapter six for more on the reactions to transportation reform in Toronto).

For example, if we accept this model of public assemblages and networked subjectivities, it allows us to see in what way 'reformist' approaches to smog and air

quality are the one's that are dominant in public discourse. For example, with regard to transportation reform, there has been little advance on the implementation of public transit reform in Toronto, but there is active promotion of the purchasing of fuel-efficient vehicles (including subsidies for the purchase of electric-gas hybrids).¹⁹ The legitimacy of the role of the fuel efficient car in addressing air quality is maintained by the implementation of the 'Drive Clean' programme, in which cars undergo a yearly test for emissions, and must be undergo the necessary repairs if they fail the test (www.driveclean.com). The actual value of this program in reducing ambient concentrations of pollutants is hard to quantify, especially given that most late model cars easily pass the emissions test (Ontario Ministry of the Environment 2001).²⁰ The risk of such a program is that it may perpetuate the idea of the guilt-free car, as is captured in the Drive Clean logo (Figure 4.3), which is a small car with an angel's halo on top of it, symbolizing the 'innocence' of the well-tuned auto.



Figure 3: Drive Clean logo (source:www.driveclean.com)

A person interested in more substantial transportation reform may then be frustrated by this reformist, perhaps even apologetic, approach to controlling vehicle emissions. They may, for example, point out that in the past efficiency gains have been offset by increased numbers of automobiles, and that without more mass transit this pattern will

¹⁹ Ontario provides a \$1000 CDN tax rebate on all 'alternative fuel' and hybrid cars.

²⁰ The Ontario government claims that in 1999-2000 the tests resulted in cutting NOx and VOCs from vehicles by 11.5% in the Toronto-Hamilton corridor. On being launched, the aim was to reduce emissions by 22% by 2004 (Ontario Ministry of the Environment, 2001). There has been no report to say whether they have reached this goal, but it is likely that Drive Clean will produce diminishing returns as late model cars easily pass its standards (interview, Drive Clean manager, 2003). For example, while 14.3% of cars tested to date have failed the test, this number is sure to drop as older model cars are taken off the road (www.driveclean.com). As a result, the 'returns' of the Drive Clean program will also diminish. At the same time, it has been found that emission standards drop quickly after the car has been on the road, and so a regular testing could have a positive impact if people keep the car tuned and drive 'responsibly' (Pickrell, 1999).

repeat itself (Gilbert, 2000; The Centre for Sustainable Transportation 2001). However, just as one would not want someone to think that there is such a thing as the ‘innocent’ car, it is not credible to suggest that tracking, monitoring and designing fuel efficient automobiles is not a legitimate course of action. The critique cannot simply oppose emission testing, but must focus on the failure to experiment with a flexible range of transportation alternatives, and on any attempts to reactively defend a particular option.

Air quality and efficiency name the problem of air pollution in such a way that a government program like Drive Clean can ‘buy time’ to find a course of action for transportation reform that will be politically feasible – if we wanted to be cynical, such a period could be seen as ‘stalling’ in the face of pressure from auto manufacturers,²¹ but it is more productively understood as a period of repetition, during which time a potential is building that can legitimate future action. It is a tactical move on the part of the State that sets the (admittedly conservative and reformist) terms of the debate, and it is dependent on a complex mediation of the smog-event that we have traced in this chapter. This same mediation, however, also allows for legitimating concrete actions such as the phase-out of coal-generation. The question, then, for a concerned air quality activist, is not to disprove or dismiss the ‘reformist’ position based on monitoring and control, which would be to suggest that people are being ‘duped’ by this moderate approach, but to think about how the limits of such a reliance on control can be made visible within existing networks, and then used to encourage experimentation with the limits of existing networks (Latour, 1999a chap.9).²²

What is at stake in a politics of air quality are the limits of control – what kind of control

²¹ Canada accounts for only 8% of the North American automobile market, which means that it is difficult for Ontario (Nantais, 2003), or the federal government, to unilaterally implement stricter emission controls given that cars are built largely for the North American market (Bates and Caton, 2000; Boyd, 2003). This is further complicated by the fact that the automobile manufacturing industry accounts for 20% of Ontario’s GDP, which gives it a sizable influence on government policy. Canadian vehicle emission standards follow those of the United States

²² Latour (1999a chap.9) argues that critical politics too often proceeds by ‘smashing’ the factish, or quasi-object, under the misguided view that the problem is that people ‘believe’ what quasi-object symbolizes, and once it is gone people will be free of their alienation. However, he shows that the quasi-object is not strictly believed, but expresses a much larger set of relations, both material and social that need to be changed in order for the quasi-object to become illegitimate.

is legitimate in order to make the air 'safe enough'. Smog, as we have seen, is a molecular entity that exceeds our attempts to measure and decisively state how we can capture and contain it. As a result, there is no definitive answer to what course of action will promote air quality, and which particular course of action becomes legitimate and stable is itself an event and not a teleological progression of reason. This is not to say, it must be stressed, that there are not better and worse options – on the contrary, this is precisely what is at stake. There are not only better or worse technical options from the point of view of the limits of what we can reasonably expect to monitor and control, but there are also better and worse options from the point of view of social justice and an accessible and inclusive urban form. It is possible to have clean air in a segregated and inequitable city. The 'solution' to cleaning the air, then, does not present itself merely as a technical problem, but as a problem of social control and the legitimacy and implications of social control. Therefore, within an urban form that is increasingly dominated by interactive, remote and individuated technologies, it is possible that the path of individuated monitoring and control will gain prominence as a 'solution' to the air pollution problem, even if it makes the less sense technically and is least desirable from a normative social point of view. Which option is chosen with regard to any particular future decision (i.e. which option will legitimately speak for 'air quality') will be determined with each conjunction and not in advance – it is an incorporeal transformation, or event, that must be fought for and for which the ground must be prepared. What matters for a politics of becoming that wants to resist reactive or conservative framings of the possible, is to experiment with how the repetition of the smog-event in the present can be used to keep the question of control visible.

Within smog-politics there exists an opportunity to make visible the limits of control and to encourage experimentation with the subjective positions that are called into being in different networks and public assemblages. The opportunity for experimentation is immanent to the 'reformist' stance of controlling through monitoring, because it implies that individuals will be responsible for their own particular 'quota' of emissions. Therefore, everyone is asked to justify their energy use. At present in Toronto, this is reflected in the focus of smog politics on what individuals can do to 'spare the air'. This

means that a concerned individual is going to be constantly asked to consider what kind of control of their actions they feel is legitimate in order to mitigate smog. This opens an opportunity within repetition for a politics of becoming that problematizing existing solutions and raises the question of control; it is possible that the struggle with control opens the subject up to a process of becoming in the wake of the smog-event. However, there is a risk that rather than recognizing that all solutions are premised on a denial of a more pervasive instability, a recognition that ultimately expresses a world of perpetual uncertainty and an open future, politics can too easily degenerate into a 'blame game' (Serres 1995). For example, the quasi-object of air quality allows publics to identify those who transgress a particular articulation of a standard of efficiency, and so harm nature, and those who are within the standard, and so are ecologically sensitive. Rather than systematically dealing with the question of energy efficiency on a social and structural scale, there is a risk that subjects may reactively defend their positions while politics degenerates into a hunt for which actor is to blame, and in so doing political discourse avoids addressing more 'radical' reforms that are raised by the problem of controlling a molecular population. This is apparent in the targeting of Sports-Utility Vehicle (SUV) owner's as particularly irresponsible, self-indulgent and venal character (Caldicott 2003; Meeson 2004).²³ However, while this works as a symbol of excess, it hardly works to promote experimentation with the more pervasive problem of auto-infrastructure in the city, and the limits it places on the urban imagination. Therefore, in the next two chapters, I want explore how the control of the subject can trigger a becoming that moves beyond the positions of responsible and irresponsible action, and how a politics of becoming can engage with this to try to encourage a process of experimentation with what is possible to see and do today.

CONCLUSION

This chapter started with a person driving down the highway and encountering a smoggy horizon, and who in that instant is jolted by the anomalous only to have it almost

²³ Meeson (2004) notes in an article the Toronto star newspaper "Despite being a whipping boy for most of society's ills, sales of the more than 30 [makes of] SUVs available in Canada show no signs of hitting the brakes"

immediately fall into the recognition of smog as a question of energy efficiency. This is an actualization of a public assemblage, and is made possible by the mediation of the smog-event into a measure of air quality. Smog becomes familiar with repetition. But it can also become disruptive and frustrating – if we know what needs to be done to reduce smog, why are we not acting? If our answer is that it is because it would be politically risky to tackle smog aggressively, then does that mean that ‘the public’ is ill-informed? Is it that people are unable to see beyond their own personal interests or are ‘duped’ by dominant ideologies? Perhaps, but this would be a very base interpretation of our fellow citizens, at best it would capture only a very reactive moment of the different subjective stances that can be taken towards smog, and of the problematic nature of our relationship to smog. Nobody, after all, wants air pollution, which points to the fact that it is not the air pollution that is in contention, it is the control that is needed to get rid of it. Controlling the molecularity of smog is controlling my molecularity, making smog molar is protecting my molarity.

Why should we today submit to a particular regime of control in the name of air quality? Can we be sure that it will actually provide clean air? If, as has been argued in this chapter, the answer to the second is ‘no’, that all we can manage is a relative improvement in air quality (which is already enough), then it changes what kind of control can become legitimate. But it does not answer the question of what kind of control will be desirable and legitimate – that is a matter of political struggle, creating a public assemblage that will support a particular course of action will require a creative and attentive effort to the conditions under which people encounter smog in their everyday lives. Whether or not a group, can succeed in assembling a public that will sustain itself in repetition is a matter of an empirical conjunction that cannot be determined in advance. However, what we have seen in this chapter is that the potential to launch a claim depends on an already complex tracking and mediation of the molecular smog-event so that it can be treated as a measure of air quality.

The framing of smog in terms of air quality and energy efficiency both makes possible claims to reduce the levels of pollution in the air, and limits the kinds of claims it is

possible to make today. At the limit of all claims about air quality, is this question of control, and the limits of control – smog always escapes its control. Smog requires a constant experimentation to find what might be a better way to reduce smog-producing emissions. Hence, it is necessary that the public sphere keep the limits of control visible as the problematic excess of all solutions to the problem of smog -- this is the task of a politics of becoming in relation to a politics of air quality. In repetition, in the moment between sensation and recognition, there is an interval which needs to be re-opened such that the moment of recognition does not only trigger indignation/fear/resignation in face of the question ‘what must be done?’, but also musing about the question ‘What might be tried differently today?’

CHAPTER FIVE

Repetition and becoming: exploring the potential of the smog-event

Every smell is now a possibility, a young man
passes wreathed in cologne, that is hope;
teenagers, trceries of marijuana, that is hope too, utopia;

Smog braids the city where sweet grass used to,
yesterday morning's exhaust, this day's
breathing by the lightness, the heaviness of the soul.

Every night the waste of the city is put out and taken away
to suburban landfills and recycling plants,
and that is the rhythm everyone would prefer in their life,

That the waste is taken out, that what may be useful
be saved and the rest, most of it, the ill of it,
buried.

Sometimes the city's stink is fragrant offal,
sometimes it is putrid. All depends on what wakes you up,
the angular distance of death or the elliptic of living.

Dionne Brand – Thirsty (2002)

While it is clear that governments must do more to reduce air pollution, they cannot be expected to act in isolation of the daily habits and routines of the population. No government can hope to fight pollution without involving real people where they live and work.

Toronto's Medical Officer of Health, Dr. Sheela Basur, press release June 20, 2002

There is a telling disjunction between Dionne Brand's poetic evocation of the smells and smoggy air of the streets of Toronto and Dr. Sheela Basur's bureaucratic statement of the responsibilities of every citizen. On the hand a life lived at edge of spinning into the 'angular distance of death', on the other the rational march of the State that does not speak of its destination; on the one hand a life filled with excess that takes a person off course, on the other a rational process that takes care of the excess by making sure it is taken away every night. But with smog, of course, it is not taken away, but returns

(‘yesterday morning’s exhaust, this day’s breathing by the lightness’). As a result, the State wants to enrol the subject in a project of waste management, to heed the warning that smog presents to their health, to change how they live in light of the risk that it poses to them and others; but how do such messages play out in the singularity of a life? It ‘all depends on what wakes you up’ – one day a person may be a ‘good citizen’, on another they may, in the crush of routine forget, or dismiss, such distant concerns (Hinchliffe 1996; 1997; Darier and Schule 1999). As was discussed in the opening chapters, it is the challenge of inserting a political message into a routine composed of multiple speeds that captures that problem of speed for politics, rather than the sense of a subject ‘overwhelmed’ by a singular speed. A person lives in a duration composed of multiple speeds, a life that is punctuated with myriad events that a person must contend with in piecing together a functional subjectivity. It is in this context that it was argued that it is best to approach the question of speed and politics in terms of repetition, disruption and becoming. Rather than focussing solely on what is, it is important to also be able to see the potential that has been created at the limits of what it is possible to do today; beyond the recognized, we have argued, is the potential of becoming leading towards ‘a people to come’. However, we have as yet to engage directly with what is meant by ‘becoming’. In this chapter I present how the continued disruption of the smog event, and its political insertion into routine in the form of messages about ‘energy efficiency’, can be said to make visible a process of becoming as a potential for political engagement at speed.

The potential for disruption to open subjectivity to a desire for change is suggestive, but it also risks being read too optimistically as the hope in the inherent ‘goodness’ of humans and of their potential for enlightenment. Becoming is nothing of the sort, it is much more ambivalent a profoundly post-humanist concept that must be unpacked if we are to better understand the perils and potentials of a politics of becoming at speed. The last chapter presented the diagram of the assemblage of the smog-event, and this chapter presents how a responsible subjectivity that emerges in this diagram is never firmly actualized, but is constantly being repeated and re-negotiated in relation to claims about air quality that call on them to ‘be efficient.’ In order to see this, I present the subject in

two passes, each a different aspect on how we can think of subjectivity in terms of habit, or what Deleuze and Guattari call the refrain. In the first pass, the subject is presented as a person in relation to the physical environment of the city, and subjectivity as a rhythmic passage through this 'coded' milieu. I will show how this rhythm is changed by the smog-event, which in turn opens the subjective refrain to change. However, whether and how a subjective refrain actually changes in response to this disruption will be constrained by recognized norms, and so in a second pass I explore a different aspect of the refrain in relation to the 'moral overcoding' of the milieu. Here I show how the milieu becomes 'expressive' as a 'territory', which allows a subject to be recognized as (ir)responsible. I show how the subject is continually negotiating what is 'reasonable' in relation to the new moral overcode calling on them to 'be efficient.' By presenting repeated encounters and negotiations with smog and the call to be efficient, I aim to give a sense of the varying degrees to which the refrain can be affected by the smog-event, and how repeated disruption opens the refrain to becoming; in the final section I discuss the concept of becoming in further detail, stressing its ambivalent potential to create a desire to move beyond, or experiment with, the existing refrain.

Field note:

The material presented in this chapter is based on a series of interviews conducted in Toronto in the summer of 2002. In the process of assembling and conducting these interviews I was also assembling an example of the public sphere itself, an actualization of a public concerned about smog. Therefore, in keeping with the argument developed thus far, it is best to understand the participants as presenting themselves in public, rather than representing themselves in any objective and essential manner. As one participant stated, when conversation started to stray too much into her personal life: "[laughing] but the smog! I want to talk about the smog!"¹ Participants were not presenting themselves, but themselves in relation to the issue of air quality. Therefore, in a dialogical frame we can say that the interviews does not "reflect a situation, it is a situation. "Each time we talk, we literally enact values in our speech through the

¹ Participant #3

process of scripting our place and that of our listener in a culturally specific social scenario" (Bakhtin 1986; Holquist 1990; Shotter, 1999).² Therefore, in the brief encounter that is the research interview (including diaries and photos), it is untenable, if not unethical, to argue that the researcher is able to understand the other, and be able to represent (literally speak for) their motivations. The interview actualizes a public in which a person adopts a subjective stance. What is taken away from this encounter between interviewer and interviewee, within the context of myriad circulating texts about air-quality, and of political discourse about responsibility, is an understanding of the potential for transformation of the subject in the repetition of the smog-event. In the interview, and by reviewing diaries and photographs, the researcher develops a sense of what is reasonable to say about smog, and why, but he or she also gets a sense that what can be said about smog – one's public position – does not capture the entirety of how smog has disrupted a life. In short, it captures only the position at the time of the interview, and not the potential for change. The challenge in this chapter is to present this potential.

As noted in chapter three, the challenge for an experimental critique and a politics of becoming is to re-actualize the event so that we can propagate its potential (see chapter two and three). In this regard the presentation here will differ, but not contradict, those studies which seek to represent the 'public perception' of environmental issues, including work on air quality (Bickerstaff and Walker 1999; Bickerstaff and Walker 2003).³ In this literature, as has been noted in the previous chapter, the goal is to

² At its simplest, dialogism "refers to what other writers would call the intersubjective quality of all meaning: the fact that it is always found in the space between expression and understanding, and that this space -- the 'inter' separating subjects -- is not a limitation but the very condition of meaningful utterance". This reflects the fact that "implicit in the very idea of communication...is the sense of an event which is not so much reproduction as response" (Holquist, 1999) (see also chapter two on iterability).

³ It would be possible to present the material collected in interviews in this manner, and in this regard we can note that my 'findings' do at various points reflect those of earlier studies. As summarized by Bickerstaff and Walker (2003) these can be classified under the following four themes: 1) Knowing Pollution: Stresses the role of practical everyday experiences in how people "come to know air pollution" and relate the local to the global; noting in particular the role of the senses, in particular vision, and how these different senses are organized spatially, temporally and socially (e.g. smell is more important as pedestrian, vision on the road) 2) The polluters: who is responsible? Generally research shows how people focus on motor vehicles as the primary source of air pollution. However, it has been suggested that people transfer responsibility away from private autos to unpopular transport modes (e.g. buses and trucks). It is possible that this is a form of distancing that absolves individual responsibility. This

understand why ‘the public’ adopts the positions they do with regard to environmental messaging, which once again presumes the existence of the public as a pre-existing group. What gets lost in such representation is the sense of movement and becoming that is precisely what I aim evoke in this chapter. If in the last chapter the assumption of a pre-existing subjectivity was suspended in the effort to understand how a public is assembled; in this chapter I accept that participants in an interview are in an important sense ‘nonrepresentable’, because always in the process of becoming, and the focus is instead on presenting how we might sense in their statements a potential that goes beyond any particular subject positions, and which needs to be captured in order for a public to actualize. Therefore, the quotes and images used here are not meant to reflect the attitudes or intentions of any particular subject. They are used as details to animate the conceptual tools used to think through the disruption of the smog-event, its circulation as air quality and calls for energy efficiency, and the political potential that this sets in motion. In what follows, direct quotes will be placed between quotation marks, and a footnote will indicate the number of the participant (e.g. participant 1 –20) (see similar in Wylie, 2002).⁴ However, what is presented goes ‘beyond’ what any participant intended to say and is meant to reactivate the potential that I sensed and documented in interviews, and through my engagement in air quality politics in Toronto. Photographs are used to animate the statements in the text and give them more resonance. This is done by juxtaposing participants statements, or sometimes my text, with pictures taken by participants; sometimes the picture was taken by the same participant being quoted, at other times I am using a picture from one participant in a

connects with larger discourse that reconfigures air pollution in terms of individual responsibility. The individualizing is said to reinforce processes of social fragmentation, powerlessness and anomie and a belief that governments should provide better policy frameworks combined with a lack of belief that they will. 3) Polluted Places: People try to distance their local places from polluted places. Some authors claim that the desire to distance air pollution from the local community was also related to attachment to place and a desire to ‘purify’ and maintain order and boundaries. When people did not have a strong commitment to a neighbourhood they were more likely to attribute negative qualities, like bad air. 4) Polluted People: explores the physiological problems associated with bad air, again the focus is on localized experiential ‘knowledges’. Some studies show how ingestion of air pollutants leads to the break down of corporeal security with the realization that bodies leak. On the other hand, air pollution is considered only one factor among many that could cause physical illness (e.g. asthma) so people are hesitant to draw strong links. But still there are cases of ‘overprotective parenting’ when there is a perceived risk. Studies also show that while most people link air pollution and poor health, few make this link in their own lives (it is suggested that this is question of denial or fear).

⁴ Textual quotes are taken from interview transcripts, diaries or time-diaries.

section of text that quotes another participant talking about the same context (in effect putting two voices into circulation, to different approaches to the same moment). The pictures repeat the textual narrative. The chapter will unfold in a series of repetitions that seeks to mimic how the smog-event enters a life as a routine disruption.

The need for 'efficient subjects'

There is always a risk of being overly critical about the possibility for individual action on air pollution when we live with inefficient technical systems, and within a social and economic system premised on continual growth. Calls for individual responsibility can be read as a form of 'green governmentality' whose purpose is to enrol the citizen subject in reproducing a structurally flawed, or at least problematic, status-quo – it protects existing values (Luke 1999). This is certainly a legitimate concern, but the answer is not to do away with such discipline, but to push it to its limit so that it acts to progressively transform, and not preserve, the status-quo. No matter how technically efficient or socially just the system, the individual consumer plays a crucial in determining whether or not energy consumption, and hence the resulting air pollution, is reduced.⁵ Indeed, we might say that the individual forms the limit of efficiency, because

⁵ For example, consider residential energy consumption, which accounts for 22 percent of global energy consumption. In California, government incentives to reduce energy consumption during peak months resulted in a reduction of 3100 MW in a one month period in September 2001, including growth in the region – the whole of Ontario requires about 18 000 MW of generating capacity so this saving is significant (Stewart, 2002). The pragmatic programme, then, is to create enough incentives, and public acceptance, for energy conservation measures in everyday life so that, when combined with technical gains in energy efficiency, there is the possibility of a net reduction in energy demand and emissions. In Ontario it is estimated that there could be a 65% reduction in energy demand under technically optimal conditions, but when one accounts for what residents are willing and able to implement under current laws and incentives, potential reduction is expected to be closer to a maximum of 25%. In Ontario, even with increases in technical efficiency, it is estimated that residential energy consumption will rise to 13% above 1990 levels by the year 2010 if no further effort is made to increase up-take of energy conservation (1990 acts as a baseline measure because of the Kyoto protocol on climate change). The impact on the emissions of smog-precursors, in turn, would be dependent on the source of energy production (e.g. coal, natural gas, renewable), but one can assume that given Ontario's reliance on coal generation until 2007-2015 (depending on the pace of phase-out), there will be an increase in emissions – certainly it would not improve (Parker, 2003). A similar scenario exists in the transportation sector. The reduction in smog-producing emissions from cars in North America has been close to 99% since 1978 (the emissions of one 1987 model year car are equivalent to twenty two 2002 model year cars) (Nantais, 2003). However, efficiency gains are stabilizing and not considered sufficient to offset growing numbers of vehicles (in addition, emission from vehicle use does not take in the pollution created in building more cars or the pollution created by having a 'car-based' urban form) (Gilbert, 2000). The efficiency of a vehicle is also

without successful individual discipline any system will lose legitimacy; in addition, within a context where individual consumption can never be fully controlled, there will always be an excessive component through which one can start to glimpse the limit of any system's 'technically optimal' conditions. Accepting a particular form of efficiency discipline is to suggest that the 'remainder' of the efficiency gains have to come from technology, which in turn is implicitly to accept that there will always be some excess, some amount of pollution that is not 'my fault'. However, just because it is not 'my fault' does not mean that it is not 'our problem', and hence pollution remains a problematic excess, which from the perspective of ecological politics needs to be harnessed to encourage experimentation and transformation of existing networks and subjectivities, and to question a social and economic model based on continual, and ecologically damaging, growth.

Given this technical-political scenario it is clear that a public must be sustained that is open to the changes to routine and convention that will be necessary in order to be more energy efficient, a public open to beginning to experiment with different ways of reducing energy use. This is often quite pragmatically framed as a problem of incentives and communication of information (Kassirer and Boddy 2001). However, this still frames the challenge as a purely technical problem of how to insert individuals, as self-present subjects, into an efficient system. Yet at any given 'level' of technical development and social incentive, there will always be the properly political question of why 'I' or 'we' should make an investment in efficiency beyond what I am currently doing and able to sustain. So, for example, why should I give up using my car or pay a road-toll to be used to support public transit I never use? One cannot assume that environmental concerns like smog are recognized as affecting 'everybody', and that political subjects, reflecting on this situation, will want to, or can be convinced, to do their bit (Hinchliffe 1996; Jasanoff 1999; Bulkeley 2000; Bickerstaff and Walker 2003). A public, as we have seen, must be sustained in an assemblage. The logic of current

dependent on how it is driven (e.g. quick acceleration burns more fuel), under what conditions (stop and go is more fuel inefficient), and whether the car is well maintained (Pickrell, 1999). Therefore, if more people continue to drive it will offset gains in efficiency for the automobile. In short, Ontarians need to use less electricity in their homes, and need to drive less, not just produce more efficient systems.

approaches is to hit 'the public' with a big stick of morality (you should be energy efficient, or support higher taxes, or we will all be in trouble) and disguise it as the small carrot of future benefits (IF we all participate it will be better in the future for your kids, you will save money on your energy bill).

This is politically a very weak strategy, which appeals to a subject's supposed self-interest as a motive for action (Slocum 2004). But its weakness is not just a question of poor enforcement and incentives, but of the dynamics set in play by approaching energy efficiency as a question of individual responsibility and self-interest. This approach implicitly assumes that 'the public' and 'the subject' are essentially good or selfish, but above all self-present, and respond to appeals to virtue or self-interest. However, it is also possible to argue that self-interest is a defensive reaction to a moral imperative - i.e. in this case the edict 'be efficient' - that creates the conditions under which the subject is given as 'selfish' and 'self-interested'. The challenge is not to judge in terms of the binary selfish or not, but to explore what it makes visible as conditions for moving into a more affirmative discussion of alternative forms of subjectification.

In what follows I seek to develop an immanent presentation from 'within' the smog-event in order to provide a sense of the potential created to move beyond recognized identities every time a legitimately recognized subjectivity is actualized. Deleuze writes:

A process of subjectification, that is, the production of a way of existing, can't be equated with a subject, unless we divest the subject of any interiority and even any identity. Subjectification isn't even anything to do with a "person": it's a specific or collective individuation relating to an event (a time of day, a river, a wind, a life...). It's a mode of intensity, not a personal subject. It's a specific dimension without which we can't go beyond knowledge or resist power (Deleuze 1995 p.98-99).

A subject as 'a way of existing', 'a mode of intensity' and an 'individuation relating to an event' (like smog), does not have an interiority – here the subject is part of an assemblage, rather than a causal force. To understand how subject provides a 'dimension' from which we can go beyond knowledge and resist power in relation to air

quality politics, it is necessary to understand the subject as an expression of a particular performance of the moral code to 'be efficient'. Exploring the moment of subjectification involves adopting an immanent perspective that makes sense of a "set of ambiguous signs arise, which become diagrammatic features, or infinite movements and which take on a value by right, whereas in the [transcendent] image of thought they were simple, derisory facts excluded from selection..."(Deleuze and Guattari 1994 p.55). As this quote suggests, this is not a mapping of static space, but engagement in relations that are always shifting, and any particular articulation of these 'diagrammatic features' is always exceeded by the potential of different articulations. It is this potential for other actualizations that I want to make visible in the following descriptions of the smog-event. Therefore, without further preamble, we can now move to the first presentation of subjectivity in terms of the relation between a person and the physical milieu of the city.

The Smoggy Milieu:

"My average day would be, I live at Yonge and Eglinton, would be walking to the subway, getting the subway down here to St. Andrews, walking over to [Work] and being at my desk at 930. And then have a meeting, and other meetings, whatever. Take an hour for lunch. And leave at, pffft, 6,7,8 depending on what's going on. And it's five days a week."⁶ Five days a week a person runs through the same loop, there is a certain degree of automation. It's not that it doesn't take some thought, but once routine is in place there's a practiced body that can go through the motions 'on its own'. "So I always leave 20 minutes before my train. Always, I mean that's, well, subject to whatever, but that's my kind of rule of thumb. It means a total low stress drive, I can relax, I don't have to cut people off or drive at 10000 miles an hour...be relaxed, get out of the car, walk out into the station and still have a minute left to stand for the train"⁷ The subject is always embodied, there is no subject without a body and no body that is already subjectively disciplined by the spaces and routines it moves through; but a body

⁶ Participant #4

⁷ Participant #9

also exceeds the subject, buffers it from all kinds of interruptions and makes connections the subject may never know about, or which precede conscious reflection (Harrison 2000; Simonsen 2003). It's the practiced, embodied, routine that is 'first' disrupted by the smog-event in the way that air pollution subtly changes the space of routine in which the body-subject takes shape.

On this particular day it's hot, its 34 Celsius, humid, the air is heavy, the body lethargic, sweaty. A particle of nitrogen dioxide is heated by the sun's rays as it wafts out of the tailpipe of a car, a particle of ozone is produced – invisible, odourless ozone. This happens countless millions of times. Ozone is poisonous to the body, when the ozone enters the respiratory track it enters the blood stream where receptors on the immune systems 't-cells' sense the presence of a foreign body and trigger an immune response – mucus formation, constriction of airways and blood vessels. If this happens repeatedly, as it does, the t-cell becomes more sensitized and reacts more quickly, and not just to ozone but to any contaminant. The body becomes more sensitized, a body develops allergies to substances that had previously triggered no reaction. "I don't, I don't know if it is getting worse, I know that I'm developing allergies, I don't know if its as I get older or if its being in Toronto, but I didn't have allergies before moving here and I definitely have them now."⁸ Constricted airways and blood vessels mean that lung capacity is reduced, the body gets less oxygen. A body feels tired, limbs feel heavy. This reaction varies for every body, by age, by genetic make up, by location in the city – different bodies need greater exposure to be triggered, and some will have a reaction that will be immediate, others only by the next day, some will have a reaction that lasts for a day or more, others it will pass in a few hours.⁹ But the point is that it is *coded*, and a body doesn't even have to sense it consciously for it to take place. A person has a different body when circulating in smog, and each time the body is exposed to smog it changes again, and some of the changes are permanent, setting the stage for a more sensitized body during the next smog-event.

⁸ Participant #20

⁹ The scenario described here is based on a presentation given by Dr. Ted Boadway of the Ontario Medical Association, at the 2003 Smog Summit in Toronto (Boadway, 2003).

The body copes with smog: shallow breaths, slowing down; but at some point the changes taking place in the body accumulate into a conscious reflection. “Man, I can’t believe I have the voice of a fishmonger.”¹⁰ What happened? I feel exhausted. Maybe its that I am “fighting the urge to breathe deeply, which I think really exacerbates the stress levels. And, I certainly feel that way. I go for like days without, consciously, you know....like, like conscious of the fact that I haven’t actually breathed in a really healthy way.”¹¹ With repetition a person can start to consciously sense the smog event even if it has no definite form, no defining characteristics: “Sometimes even before it’s actually a smog day, officially. I can tell, I don’t know, like the air just feels thick, its harder to breathe, and it makes me very tired”;¹² or again and more enigmatically “you just know, you know.” (Figure 5.1)¹³ What triggers the awareness of this accumulative exposure? “Oh everything, I’m always aware.”¹⁴ To say that it is triggered by ‘everything’ is to say that it is triggered by nothing in particular that a person can definitively point to; the body is taken up in the smog-event and it comes into the mind as an irritant, for most nothing more than an irritant and then it is gone. “No, I think when, I think when the air dissipates then, you know, you’re not so conscious of it. But its, its, I’m very aware of it, I just, its just there.”¹⁵



Figure 5.1: ‘you just know, you know’

But what exactly does the body-subject know? It knows how to cope by setting a rhythm, which is different than saying it is necessarily a fully conscious reflection. “But, yeah, living in downtown I’m constantly...aware, actually not constantly aware,

¹⁰ Participant #5

¹¹ Participant #14

¹² Participant #11

¹³ Participant #5

¹⁴ Participant #8

¹⁵ Participant #4

but I constantly have the feeling and when I pay attention, I know its there. So, you know, I kind of ignore it a lot of the time. But, as soon as I think about it, I'm aware of it. It's a constant...state...of, of, yeah, a kind of claustrophobia, and a kind of shrinking, if you think of trying to shrink your way from all these, um, toxic, sort of, things, around me."¹⁶ Claustrophobia – space is shrinking, getting smaller, but also space is getting bigger because it takes more time to cross space in this conscious/sub-conscious state. "I don't care if I'm late, to hell with it. I'm not going to hurry, because I don't want to, you know, do that deep breathing where you're really sucking those particulates down into your lungs. I just take my time, and that's it."¹⁷ A constant modulation of the daily rhythm in response to the air. Where can I go today, what can I do today? Smog changes what is considered possible.



Figure 5.2: let me see what it looks like out there...

"I talk, in my self-talk in my head? You know, some of the bad air days? The first thing I wonder about when I wake up, that's what it is man. You know, and how to get through the day. And you don't say to yourself [mock tone] 'Oooh, how to get through the day?' [Normal tone] But you say [gets up and walks around, like someone who has just gotten out of bed, talking in a whisper] 'I wonder how hot it is, fuck, let me see what it looks like, let me see what it looks like out there' (Figure 5.2). Because it, it's already, you know its eight o'clock and it's lookin', lookin' thhhick, and you're starting [choking

¹⁶ Participant #10

¹⁷ Participant #4

noise] [back to whisper and re-enactment] ‘Oh fuck. Alright, what can I do? Well there’s no point thinking about doing anything before, one or two, its just going to unbearable’ [normal voice] And I realized, wow, away you go, away you go”.¹⁸ Away you go but without every asking yourself consciously ‘Oooh, how to get through the day?’ This, of course, does not apply to *every* body. “...I’ll be damned if lousy weather is going to ruin my enjoyment of going somewhere.”¹⁹ But it can influence *any* body. Smog can change the spatiality and temporality of the city. A city without smog is a different city because the body can do different things, or at least has to put in more effort to defy different constraints. After all, “I mean the air you have to live with”, you must go on.²⁰

A person gets out of bed and paces around a room mumbling to herself, checking out the window. What is she doing? Praying? Singing? Yes, perhaps it’s like a chant: ‘Lost, [a child] takes shelter, or orients himself with his little song as best he can. The song is like a rough sketch of a calming and stabilizing, calm and stable, centre in the heart of chaos...[the song] jumps from chaos to the beginning of order in chaos.’(Deleuze and Guattari 1988 p.311) The morning ritual starts to plug the body back into routine spaces: listen to the radio and hear the traffic and air quality reports, check the time to see if you have to rush, smell the air coming in through the window (Figure 5.3). There is nothing overly mysterious about this, even if is essential; it can be quite mundane and it doesn’t necessarily tune the body into the air quality – it can be a ritual that reflects a body oblivious to the air, and so of the air absent from conscious reflection. “The mornings are pretty normal...I always have my showers in the morning. I always have my coffee. I got fish, and we have a dog...so I feed the fish, I feed the dog...”²¹

¹⁸ Participant #3

¹⁹ Participant #19

²⁰ Participant #8

²¹ Participant #9



Figure 5.3: building momentum

In the morning ritual the body begins to build momentum to launch into routine, but what does a sensitive body ‘look for’ as it builds momentum? “I’m looking for the tone, looking for colour tones, and I figure I’m starting to get pretty, some pretty subtle...gradient [laugh] perception, maybe, you know. I feel like I am. And, uh, sort of the more colour the worse. You know, basically, whoa! It’s a very colourful morning out there...would you call that orange or yellow or green? You know, that’s getting scary. Um, direction of, you know, wind - is there wind? Uh, what direction, what strength?” And what’s good direction for wind? “Well, North of course...If its coming down from the North its coming from the clean air zones, and you’re thinking its going to blow the shit away, its probably going to be cooler, you know a little bit cooler, maybe high pressure, maybe more high pressure, [unclear] feeling good! Coming from the south, mmmmm, you know. And in the heart of summer, you go, oh gosh, its just, when it comes from the south it feels like, um [laugh] sometimes, you know how you can feel the heat coming up off the cement, like when you’re riding your bike, off the pavement, I mean, especially off the dark pavement? Like it’s pushed, eh? Cause, uh, hot air, it is moving, it’s full of energy and its pushing at you. And that’s what the southern wind feels like. Uhhhhh, here I come mother-fuckers, pardon my language. Coming at ya, bringing shit, you know, I’m loaded, I’m dusty, I’m.... particulate, and hell you can taste me.”²² All this grasped in a few seconds at the edge of conscious reflection – heat, wind, smell, take a shallow breath, cough, sigh, here we go.

²² Participant #3

The smog-event is like a force pushing down on a body: “here I come mother-fuckers”. But that’s just the end point, the moment of conscious realization. The body senses a conjunction of a number of flows, a number of forces impacting the body whose effects become recognizable with repetition “I’m starting to get some pretty subtle gradient”:

Colour – light energy diffracted through the atmosphere

Wind direction-- temperature differentials in the atmosphere, the force of falling air mass

Heat and dust -- light energy warming black asphalt and air and pushing air upwards.

Mucus – the force of attraction between ozone molecules and receptors on T-cells



Figure 5.4: smog-event as a conjunction of forces – wind, hot pavement, tired limbs

These are forces of constraint as well as dissipation and relief (winds from the north), forces that open space as well as pushing against the body. These are also forces that come from within (immune system response, conscious intentions and perceptions) as well as from without. A conjunction of flows and forces creates a smog-space, a transient or temporalized space, which can be – but need not be -- sensed as a space to be avoided, or to pass through slowly or with a degree of resignation. The natural and built environment plays an important role in adding to the intensity of these forces. Hot pavement is different from the sheltering shade of trees, tall buildings different from residential streets. “When I set out from my house...you can see in the neighbourhood there’s quite a few trees, and when I’m going on the side streets the air is fine, but its

like once I get to that corner, I usually get my first sort of, like a smell, and sometimes a burning feeling of bad air.” (Figure 5.5)²³



Figure 5.5: I get to the corner...a burning feeling of bad air

Buildings also channel air in cities, trap pollutants in eddies and swirls, that are never detected by the AQI. “Now what you have here [figure 5.6] is this sort of...this is a hill, and there’s these two walls, on either side. So I...the air, the kind of, the heavier air, which is often the smoggy air, kind of falls down. And then combines with the fact that there’s ton of traffic on that street, coming off, because that’s the last exit off of the Gardiner [highway].”



Figure 5.6: the heavier air, which is often the smoggy air, kind of falls down

²³ Participant #2

Inside air conditioned buildings the forces are different as well, the body is different – what path does a body take on a smog day? “I’m actually surprised I walked right into the subway, because on a smog day, I would actually go down to the corner and wait for the bus...and if I had to go from here to City Hall, again, I would always go outside, but again I would choose to go underground through the shopping areas, just to stay out of that air.”²⁴ Even if a person does not plan their day consciously in regard to smog, the body builds momentum in the morning routine and develops a rhythm of passage, moving through points of convergence and intensity, points of dispersal and release. ‘One ventures from home on the threat of a tune. Along sonorous, gestural, motor lines that mark the customary path of a child and graft themselves onto or begin to bud ‘lines of drift’ with different loops, knots, speeds, movements, gestures, and sonorities.’ (Deleuze and Guattari 1988 p.312)

The rhythmic passage through a conjunction of forces can be described as a refrain that takes shape in a ‘coded milieu’. ‘Every milieu is vibratory, in other words, a block of space-time constituted by periodic repetition of the component. Thus the living thing has an exterior milieu of materials, an interior milieu of composing elements and composed substances, an intermediary milieu of membranes and limits, and an annexed milieu of energy sources and actions-perceptions. Every milieu is coded, a code being defined by a periodic repetition; but each code is in a perpetual state of transcoding or transduction.’[ibid. p.313]. The subject is a passage of a body through a coded milieu. It is affected by an exterior milieu of materials – pavement, wind, dust, cars, buildings etc. It is affected by an interior milieu of composing elements and composed substances – ozone molecules, T-cells mucus etc. It is affected by an intermediary milieu of membranes and limits – skin, eyes, nostrils etc. It has an annexed milieu of energy sources and actions-perceptions by which it can discern and affect other bodies – food, technology powered by energy that add to what the body can do, places to avoid, places of intensity and relief. A refrain is a way of going on, it creates a stable repetition between coded forces; this repetition forms habit, and habit is the basis of a recognized

²⁴ Participant #4

subjectivity. However, coding is always in a process of transcoding and can open habit to change.

As already noted in chapter one, it is not possible to objectively see the forces in a milieu, only sense their effects as a qualitative difference: 'Force is infraempirical. No scientist has ever observed a force...Only force-effects are observable. 'Force' is a word used to designate the repeatability or iterability of effects.'(Massumi 2002a p.160) A body is affected by force, is an effect of force, but also a source of new forces as it feeds back into the infraempirical realm of forces that compose the milieu. A repetition in a field of forces, the body takes on a recognizable pattern of effects and affects. But pattern is too static, a subject is a rhythmic repetition, a way of moving through and between coded milieus, it becomes a refrain that exists only in passage through the coded milieu. The subject emerges and develops through 'creative involution' in the refrain (when the body stops it is dead) (Ansell-Pearson 1997 p.139; 1999 p.178-79).

But what kind of body, and so what kind of subject, is this? It is not the sealed body with a clearly defined inside and outside – it is not what Deleuze and Guattari (1988) would call an 'organized body'. It is a body of thresholds, which means it is a body that is in flux with its environment (Grosz 1995 esp. chap. 5, 6, 8; Olkowski 1999). It's exterior milieu leaks into the interior milieu in air particles, its membranes are more or less sensitive creating thresholds that make the separation of outside and inside variable depending on intensity, the variable sensitivity causes reactions -- folds -- that leave the body more or less open to further stimuli or able to make connections to different bodies ('So I wouldn't even consider going outside until after those cars have gone, for the day. Even long before I had a lung problem, I just didn't choose to be out, until after that was over.'²⁵). It is a body whose code is not 'in' the body, but takes shape, actualizes, as part of a coded milieu and rhythmic passage through it. It is a body that is continually making connections and so it is a body that is born again everyday, even if the new body is 'older' because more creased and folded, each new fold is also a new - but not necessarily greater – potential.

²⁵ Participant 20

A subject that is not separable from its milieu, a subject formed at a conjunction of forces, a subject that is a repeated passage between forces -- in short, a subject that is immanent. Deleuze and Guattari conceive of this subject as a body-without-organs (BwO), it has yet to be organized and sealed and remains at the mercy of the forces in the milieu, which also means it is open to changing with the introduction of new forces in the milieu. It is a subject formed not of extension, but of intensity: 'A BwO is made in such a way that it can be occupied, populated only by intensities. Only intensities pass and circulate. Still, the BwO is not a scene, a place, or even a support upon which something comes to pass...The BwO causes intensities to pass; it produces and distributes them in a spatium that is itself intensive, lacking extension. (Deleuze and Guattari 1988 p.153) In the 'first' instance there is a 'program' for making a BwO, a program involves practices for going on through the city (a rhythm of passage, practices and places that allow one to go on), which expresses a conjunction of forces, an intensity that holds different forces together; the program folds the BwO in a way that opens it to certain forces, which can affect the body, while excluding others -- and then there are still forces which can come from the 'outside' and disrupts the sustained intensity, or what Deleuze and Guattari call a 'plane of consistency'.

As a result, the BwO can be deviant, it is always open to deviating with each repetition as it passes through invisible intensive thresholds. Snotty nose, sweaty skin, wheezing airways, the BwO creates a pause in the day, perhaps this deviance changes the day altogether. Organized bodies are easier to deal with, they don't get in the way and embarrass or anger us, it is easier to tell where their limits are, the folds are tighter and repetition deviates little - even if the body is still 'open' in the sense described here, it does not allow the intensities to become excessive and disruptive, it is able to contain the intensity of the event.

The subject as a BwO is a subject that connects and is pulled in all kinds of unpredictable ways, it is an intensity that forms as an unruly desire: "The BwO is desire; it is that which one desires and by which one desires."(ibid. p.165) But desire is not, as

in psychoanalysis, a lack that the body fills; desire as lack, as desire-for (e.g. a new car), misunderstands the desire that is gained by maintaining intensities on the plane of consistency. This is an original concept of desire, because it is never a question of wanting something that can then be supplied to fill the gap, it is a question of creating a body that maintains itself as desire, as a positive potential for connecting to the intensities which it brings together (ibid. p.154-157). The desire here is produced within a milieu, it is an expression of a differential between forces that shapes the body and what it can do. For example, when it is said that someone desires a flash new car, while another a bicycle, it is possible to understand this not in the first instance as a desire for the object, but instead as a BwO in which a car, a bike, or any other object of desire, can be incorporated into the refrain in such a way as to maintain its intensities and its rhythm of passage – it is an object that amplifies or modulates intensities and so maintains its consistency. A desire, then, can also be framed as a potential.

It is in relation to the subject as a field of intensities, or plane consistency, that ‘smog...messes with your good times’.²⁶ Smog is a new force, a new intensity, and the question is how this new intensity will be incorporated, embodied, in the BwO. Will it cause a rupture that needs to be repaired by a new rhythm of passage? Will it lead to a shifting of intensities that changes desire? Or will the new intensity simply magnify and amplify the intensity that was already there, making its loops and knots ever tighter and more insulted from new forces? It is not at all clear that a BwO will react ‘progressively’ to this disruption, it may react in a profoundly destructive manner, the encounter with the hazy horizon may lead to “desiring one’s annihilation, or desiring the power to annihilate.”(ibid. p.165). In the openness of the BwO there is a problematic potential as regards the goal of creating the efficient subject who is responsive to smog. We will return to this ambivalent potential in the final section in the discussion of becoming. However, we can note that in this first presentation of a subject which emerges within the passage through a milieu, that the subjective refrain is always being modified by air pollution, a continuous modulation that has the potential to pull the subject towards a new ‘rhythm of passage’, a new speed, that allows for new connections and so carries

²⁶ Participatn #3

the potential to provoke new thoughts. However, in order to understand this potential better we need to take on a different set of intensities than those of the physical spaces and individual routines, we need to understand the moral ‘overcodes’ that enter into the plane of consistency and, and the way in which the rhythm of passage gains expression in a territory.

The Efficient-Subject

“One ventures from home on the threat of a tune. Along sonorous, gestural, motor lines that mark the customary path of a child and graft themselves onto or begin to bud ‘lines of drift’ with different loops, knots, speeds, movements, gestures, and sonorities.” (ibid. p.312). However, the tune has become strained, and it is said that it is smog that is causing the strain and fatigue, smog that is causing the watery eyes, the runny nose, the allergies, the gritty taste in the mouth. It has a name, but where is smog? “...When you get up on the ridge with Keele St., and you get up, then you really smell the stuff that is coming out of these small factories around here. There’s all sorts of flavours in here, that add to the pollution. And then I’m looking over to Brampton and Mississauga, and then I see this purple haze over here – pollution....a brown haze....and I’m looking down, I’m not kidding myself, I know that, in the horizon I see this brown pollution, and I look at it down here. But I also realize that I’m driving right through it, it’s just optically I can’t see it.”²⁷ At first it is the smells and other senses that trigger reflection, but the visible haze combined with the scientific claim that smog is a pervasive problem, confirm that what has been sensed. If the body is unaffected, then the visual cues and scientific knowledge make a person question whether or not he or she is exposed to smog. “I’ve heard that [the suburban community of] Oakville has the worst air quality in, I don’t know what kind of radius, but I can’t smell it. I don’t believe it. No. No.”²⁸ Or again, overlooking a clear blue sky over Lake Ontario in a suburban part of the city one can see a whitish haze. That could be smog. “I don’t know if that is what we’re looking at really... Well I’m not an expert, but on a sunny day would you normally see

²⁷ Participant #19

²⁸ Participant #1

that?” (Figure 5.7 middle panel)²⁹ Science says smog is pervasive, and so it is no longer sufficient to rely for a person to rely solely on the senses, a person uses the eyes to look for evidence that can be shared with others. “I don’t know if this light [is good], or if you can actually see it.... Just, uh, if your outside, and you’re looking that way [west] you can see that apartment building, and this the other direction, you can really [emphasis] see the smog” (Figure 5.7 right panel)³⁰ But I don’t see the smog, would I have seen it if I were there? The question is debatable, and that is exactly the point – smog mediated as air quality is ‘subjective’ and debatable, it is no longer just an embodied experience, but a question of right and wrong.



Figure 5.7: you can really see the smog

There has been a shift in how the subject is being imagined here. No longer only the subject that is immanent to the smog-event, but the subject that observes space from a point removed from the action; space is seen from a linear objective perspective from which to reflect on where and why smog is a problem. Search what you can see for confirmation of what you feel. This reflects the western epistemological bias of vision as the privileged sense in revealing truth (Crary 1992). No doubt this is not without contention – some ‘just know’ and refuse the need for verification, others can refuse any evidence in the absence of sense evidence and remain sceptical. Another way to make the smog-event visible is the Air Quality Index (AQI) and the smog alert, which acts as a kind of mediated smoggy horizon. But again with the AQI the discrepancy between what one senses and one hears through the media leaves room for scepticism and doubt. Many people ignore the AQI because of its flaws, but also because it wouldn’t change how they go about their day, and it would be “too depressing”³¹ (Stieb, Paola et al. 1996;

²⁹ Participant #13

³⁰ Participant #8

³¹ participants who expressed distrust of AQI #1,5,6,8,9,10,12,13,15,19,20

Bickerstaff and Walker 1999). However, the AQI, just like the smoggy horizon, can be a reminder of a problem in regard to which a person is expected, and wants, to act responsibly. A person no longer only encounters the smog-event as a nuisance that changes what the body can do, but also as a moral dilemma that dictates what a subject should do; how a person responds to this dilemma is a moment of subjectification.

If it is now possible to see smog as a concrete and visible presence in the world, the scientific knowledge of smog also presents a subject with a moral problem -- smog is said to be caused by our behaviour, and smog kills people. What's more, because smog is related to heat, the problem of smog is also related in public discourse with that of climate change. The same actions that will influence the emissions of smog-pollutants will also help curb climate change, any increase in average seasonal temperatures is likely to mean more smog (given stable emissions). Therefore, the moral dilemma is also that smog is potentially a sign of how society is irrevocably changing the conditions for *life in general*. A reflective subject looks with anxiety over the landscape that it has changed, a landscape of hazy skies and hot temperatures: "Heat!! When is this blistering hot summer going to end? I don't like it – it feels spooky and makes me anxious and fearful for the future. Increasingly more preoccupied with anxieties about an oncoming 'Thermageddon'! Worried about what the world holds for my son. My zucchini plants have all dried up – way to early – and my tomato plants have continually shrivelled up for lack of rain this summer. Certain the climate is changing. Nobody tries to keep the grass alive anymore – brown is everywhere."³²



Figure 5.8: brown is everywhere

³² Participant #18

Smog is no longer just visible in the sky, or in the air we breathe and the way our bodies feel. Smog is everywhere there is excessive heat, brown grass and wilting gardens, and it is present as a moral problem. Or again: “You know I might sound like a hippie of something, it doesn’t feel the same as it did five years ago...Yah it doesn’t feel right, you know. It’s like so blistering hot you don’t even want to be out there. And you gotta wear a hat. I remember years ago I never wore a hat, now you have to wear a hat, because, just because the sun is so strong that, if you don’t you get home and you have a headache.”³³ Smog as blistering heat, smog as the memory of not wearing a hat, a hole in the ozone equated with smog, smog as climate change and brown grass – these conjunctions take on moral weight because of the scientific perspective that links these together and then ties them to human behaviour.

Some scientists profess distress at this public ‘confusion’ about issues with separate causes, but if we put aside the technical inconsistencies of these statements, we can see they are not statements that premise action on correct knowledge, but a recognition of a trajectory that needs to be changed, a recognition of what is at stake. To try to correct such statements with facts (e.g. it is often said we can ‘solve’ air pollution and still have climate change because CO₂ is the target in the latter, NO_x, VOCs and PM in the former) is beside the point, because such statements are essentially reflexive and build in the possibility that they could be ‘wrong’ (‘I may sound like a hippie’), while at the same time reflecting the need to make a choice in the face of uncertainty (‘Certain the climate is changing’). To express such concerns is to claim that smog, global pollution, is ultimately a moral question about ends, about the responsibility to the future, and as such it has no resolution, no right answer. Smog, as an example of global pollution, places the subject and his or her actions within a properly historical, even eschatological, frame (Virilio 2003).

But it is too much to think that way all the time. I want an alibi, it’s not all up to me after all. If smog is ‘present’, then one needs to respond, to be responsible. In the mail

³³ Participant #5

today is a booklet, it has a picture of an electricity outlet on its cover in which the sockets are shaped like the snouts of pigs, and it ask rhetorically 'Need to cut back?' It's a 'practical guide to reduce energy use' from the *20/20 The Way to Clean Air* programme, administered by the City of Toronto Clean Air Partnership.³⁴ A person might just throw out such information with the junk mail, just another piece of eco-propaganda that makes one feel guilty or depressed. "Well, [it's] depressing to kind of be inundated with information, detailed information about how...how awful the air is. Which I'm guessing that's the kind of information they're going to, I guess they would be telling you pro-active things that they are doing, yah, which would be a good thing. But I automatically thought, oh, I would get e-mails every day about how awful things are."³⁵ Who needs that? But maybe there is something pro-active. On the first page: "Tired of smog? Looking to make a difference? Some small changes can go a long way...By focussing on some simple changes to reduce your energy use you can help make significant improvement to air quality in your community. The reason? Thousands of other residents will be participating in 20/20 as well –with more joining every day. Everyone reduces energy use. Everyone saves money. Everyone breathes a little bit easier."³⁶ It sounds a little too glib -- 'thousands of people' in a region of millions (tens of millions if we consider the mid-western United States)? It's hardly 'everyone', but perhaps it's a start. The public sphere as 'social-marketing' campaign – 'there is something you can do' (Thomson 2003). In the place of larger questions about morality and ends, the call to turn off your lights provides a welcomed (if dubious) alibi.

It is against this backdrop that a fold of subjectification takes place in relation to smog as a person consciously negotiates how to insert 'responsible' behaviour into their everyday routines. What is reasonable to do today? "Smog Alert day in Toronto! Should I ride my bike so that I don't add to air pollution? If I do, the exercise will force me to take into my lungs more toxic gases and all that particulate stuff. Rode my bike anyway."³⁷ Being able to accomplish such goals gives a sense of accomplishment. Insert into a

³⁴ Similar program is run by EnerAct in Toronto called Smart Living, and the Federal Government promotes energy conservation through its EnerGuide for Homes programme.

³⁵ Participant #15

³⁶ *20/20 The Way to Clean Air* brochure, page 1

³⁷ Participant #18

routine “all the little things”³⁸ that reflect concern for the air – start noticing light switches, idle computer terminals, idling cars, paper to be recycled, opportunities to take public transit, energy saving appliances, air conditioning set too cool. The habit of switching of lights becomes part of the refrain that positions oneself in relation to the moral imperative of the smog-event. A whole set of recognized elements, or motifs, emerge that defines a territory of risk and morality (Figure 5.9). “I feel, things like pollution, I feel very keenly and I, I, see it all the time, and I experience it as poison, and its, whether its cars idling, or,uh, lawn pesticides, I feel this destruction very keenly. It’s not just a, its not just a, uh, intellectual abstraction for me, its heart felt and visceral. And I, don’t feel that when I’m on the TTC, when I’m on public transit, I don’t feel like I’m contributing to the sort of destruction of the whole, the whole, ecosystem, the way I do when I’m in a car.”³⁹



Figure 5.9: Territory of risk and morality

³⁸ Participant #2

³⁹ Participant #6

The intensity of the concern and moral outrage triggered by smog and other pollution is relieved by the moral action. But it then follows that when a person sees people engaged in 'irresponsible' actions it can provoke outrage: "I see people idling particularly on those [smog] days, I get angry when I see daycare kids, outside playing, you know. And school kids, or school kids are playing in the playground, or kids are playing soccer, or, whatever, and I think this is so stupid! They're putting the kids at risk, you know."⁴⁰ Similarly, but conversely, failing to act responsibly can provoke feelings of guilt: "Feeling guilty as hell today. A smog alert day and I'm driving to work...Just one guy in a car like almost everyone else. We can't go on like this" (Figure 5.10).⁴¹



Figure 5.10: just one guy in a car like almost everyone else

If the body-without-organs develops a rhythm and a plane of consistency that allows it to cope with smog, then the moral 'overcode' adds new beats and intensities to the rhythm that can be problematic. The daily rhythm is a practiced passage through different coded milieu, but there are always a whole host of moral overcodings (you must show up at work on time, you must look presentable, you must be fit, you have to have fun) that also discipline how a body can go on. The claim for efficiency is just one more. Is it more important to be punctual, or to be efficient, to be presentable or to ride your bike? In the abstract, against the backdrop of 'global thermageddon' the answer may seem self-evident, but in the cut and thrust of daily life it is harder to fall in line.

⁴⁰ Participant #4

⁴¹ Participant #18

The moral overcode puts the subject on the defensive. Do you change your behaviours on Smog Alert Day? “Nope. Because I avoid the city anyway. I do all of those things they say to do during the smog alert, I do those anyway.” [So it doesn’t change what you do] “ No, I don’t want to know.”⁴² It’s too depressing, leave me alone, I do my bit.

How can you be efficient without being ‘unreasonable’? “I guess I, quote, ‘do my part’, as they say. Trying to reduce smog. Could I go farther? Absolutely, I think everybody could go farther. Even the guy who walks everywhere could still do more. You do, you find a balance in your life, in terms of your personal priorities. Some people have no balance, they just abuse everything, others are at the complete other extreme, you know, their vegans and they, you know, don’t use leather, you know. So there’s like two levels of extremes. I’m kind of in the middle. I’m a realist in that, you know, I have to deal with technology clients and stuff, and can’t very well be promoting [radical views], and yet I can’t, I don’t want to, just abuse everything and waste, waste, waste. So, definitely, that’s one of the prime motivations for [using public transit]. It’s not really about the money, because I could afford to drive. It’s not a price issue. [My employer] will pay my parking, they’ll even pay for my gas. It’s not about money at all.”⁴³ Doing something because it is the right thing, not because you have to, is a moral action, but even so there is a need to defend oneself against doing more. There are all kinds of limits to what is reasonable depending of the moral overcodes and milieus one has to negotiate -- sometimes it is money, sometimes its time, sometimes it’s the recognition that no moral overcode should be followed dogmatically ‘you’ve gotta have fun’. “I do a whole lot, so I figure I should at least have a little bit [of indulgence].”⁴⁴ A very reasonable approach, who could disagree? But it doesn’t mean you are acquitted; on the contrary, at every turn your actions can be judged by your peers and found guilty. The subject is placed in a reactive position, justifying their actions. The subject is on the defensive, the signs of smog – horizons, heat, wilted grass – are also accusations.

⁴² Participant #1

⁴³ Participant #9

⁴⁴ Participant #1

At this point the smog-event starts to move from consistency and intensity to territoriality and extension. The rhythm of passage gets converted into a territorial assemblage. In a milieu the codes are infraempirical forces through which the subject emerges in repetition; forces are 'directional' and 'functional' in as much as they give rise to a particular state of affairs. However, "there is a territory precisely when milieu components cease to be directional, becoming dimensional instead, when they cease to be functional becoming expressive... What defines a territory is the emergence of matters of expression (qualities)." (Deleuze and Guattari 1988 p.312). A territory emerges when it no longer simply a body sensing a force, but the association of that force with a particular object or place (it becomes dimensional e.g. a particular road or behaviour like idling a car), and with a particular meaning (good or bad, joyful, sad etc. – it becomes expressive). A territory, or assemblage, as we have seen, is a combination of matters of content and matters of expression, visibilities and statements (e.g. riding a bike, on a smog day, even given the intensity of pollution = good). If the body-without-organs is formed within a coded milieu, then the organized body of the subject is formed and becomes visible within a territory. A subject can be seen to be 'good' or 'bad' depending on what it is doing, and this judgment has a force that limits what a body can do.

In other words, the territory is also an expression of power. "There is no confusion... between the affective categories of power (of the 'incite' or 'provoke' variety) and the formal categories of knowledge (such as to 'educate', 'look after', 'punish', and so on), the latter passing through seeing and speaking in order to actualise the former." (Deleuze 1999 p.77) In the territory knowledge (statements) are connected to visibilities through affective styles of presenting images and speaking that are used to 'provoke' and 'incite' action (to which we can add a whole list of qualitative descriptors of how power works in the territory: 'persuade', 'deceive', 'seduce'). Hence, the outrage that one can express on seeing an idling car, or the calm indifference, depending on how knowledge passes through content and is given expression. Here power is immanent to the assemblage; it is relational and must be actualized and repeated to be sustained. In order to sustain a public assemblage that sees an idling a car as wrong, there must be an affective spark

that makes the idling car 'bad'. Therefore, even though the refrain takes on dimensionality in the territory, it still remains a dynamic model of subjectivity, for it exists only in repetition as a body and a subject are 'coerced', 'enticed', 'incited', 'provoked' etc. into repeating habits that recreate a particular territory.

It is now possible to see why, and in what sense, Deleuze says that subjectification is "a specific dimension without which we can't go beyond knowledge or resist power" (Deleuze, 1995 p.99). The subject is able to experiment with a particular conjunction of statement and visibility in light of new 'visibilities' that come from the 'outside' of an existing territory and provoke thought (e.g. new forces, that make a person 'see' new potential or accept the truth of a statement). A new force can provoke thought, and a new conjunction can be an act of resistance (however slight) to existing power relations; what's more, it can be a creative act that has nothing to do with a reaction. It is an attempt to 'go beyond' knowledge as expressed in the territory by combining elements that may not have previously been brought together in a given refrain. From the point of view of accepted knowledge, such conjunctions can seem 'irrational' or 'just opinion', but this judgment does nothing to dissuade the individual if the new conjunction allows them to maintain a particular intensity and refrain, i.e. to go on (Haghighi, 2002). In this sense "The refrain is a prism, a crystal of space-time. It acts upon that which surrounds it, sound or light, extracting from it various vibrations, or decompositions, projections, or transformations. The refrain also has a catalytic function: not only to increase the speed of exchanges and reactions in that which surrounds it, but also to assure indirect interactions between elements devoid of so-called natural affinity and thereby to form organized masses." (Deleuze and Guattari 1988 p.348). It is within repetition that the subject is able to experiment with new ways of going on and with the limits of existing statements and claims about air quality. This is not all necessarily a 'progressive' experimentation, nor is it without risk, nor does it lead to immediate or rapid change. "You don't do it with a sledgehammer, you use a very fine file. You invent self-destructions that have nothing to do with the death drive." (ibid. p.160) It is to tracing this potential that we must turn next.

The Play of Judgment

The territory gives expression to a milieu, and in its repetition the subject emerges as 'good' or 'bad' in relation to the moral 'overcode' to 'be efficient'. However, we can distinguish between the moral code as enshrined in law that the state enforces through policing, and the moral overcode of efficiency that as yet has no, or next to no, enforcement. In both cases the law (a statement) is empty of content (it always requires a judge to interpret the law), but in the first we come to know the law through punishment (How bad was the crime? Look at the sentence.) – all law grounds itself in force (Derrida, 2001). We have already seen in chapter two how the judgment can act an 'incorporeal transformation', an event that actualizes identities. But there is no punishment in Ontario for leaving the lights on.⁴⁵ Without punishment a law's demands are infinite because its content remains unspecified. 'Consequently, the person who tries to obey the moral imperative of the Law no longer even feels righteous; on the contrary the Law makes one feel guilty, necessarily guilty' (Smith 1998 p.255). A person needs protection against this kind of 'tyranny'; they have to become their own judge. However, being one's own judge is not protection to the extent that judging leads to increased guilt, *ressentiment* and bad-conscience -- what Deleuze characterizes as a turning-inward of the active forces of the subject, which in turn renders a body inert (removes its ability to affect others and be affirmatively affected by others) (Deleuze 1986 see chapter 4, esp. p.146 on the different qualities of 'will to power' that emerge within assemblage). Therefore, any act of judgment on the part of the subject must go 'beyond judgment', i.e. beyond any purely reactive stance that lets it be defined by universal and imposed principles that are ignorant of the singularity of a life. The

⁴⁵ In Toronto there is an Anti-Idling bylaw which states that you cannot idle your car for more than three minutes in a sixty minute period. But the bylaw is not readily enforceable because the bylaw officer would have to observe the infraction, which would mean observing a person idling for three minutes rather than just telling them to shut off their engine. The bylaw also has many loopholes, including the right to idle your car at temperatures in excess of 27 degrees C in order to keep the air conditioning running (for 'safety' reasons). And it exempts buses, or other working vehicles. The bylaw is a formalization of a moral proscription, the signs not to idle a reminder. In the suburban community of Mississauga this is publicly admitted, there is a bylaw, but no fine or enforcement – purely voluntary.

incorporeal transformation, the event, that calls an efficient subject into being and so actualizes 'the public' is then going to always be an act that goes 'beyond judgment'; as a result, given the singularity of a life, a public will always be a heterogeneous and unruly actuality with competing and perhaps even contradictory actualizations from different individuals, or perhaps even the same individual at different times and places.

In order to get a sense of the unruliness and volatility of the public -- we might even say the speed with which claims shift and fluctuate -- we can return to our discussion of air quality as a quasi-object. Serres describes the circulation of the quasi-object as being akin to a ball in motion in a game; this is a particularly apt metaphor because it diffuses the tendency to judge any particular actualization of the quasi-object and replaces it with an appreciation of how the game is, or can be, played (Serres 1995; Henaff 1997; Brown 2002; Massumi 2002a chapter 3). In a game the ball (the quasi-object, efficiency claims) is constantly in motion in a field of potential created by the goals at either end; rather than seeing the players (the subjects) as the cause of the ball's movement within this field, it is possible to see the movement of the ball as the cause of the players' responses. The rules only formalize -- i.e. limit the variation of -- the relations that keep the ball in motion and make the game work; they do not explain how the game works. The players have a goal (to score, to get through the day, to earn a living), and rules (no tripping, be efficient), but how they achieve the goal will change with each moment as the ball moves across the field and (de)potentializes certain players and regions of the field -- a forever shifting intensity. This only stops when the ball goes in the net, or leaves the field. A player that constantly and consciously reflects on the movement of the ball and how it fits with the rules and pre-game strategy is a poor athlete; the pre-game strategy has to evolve with the movement of the ball, the rules fall into the background as an outer-limit that is constantly tested for their breaking point. The sociality of the game (of society) is not defined by the rules, and the positions (subjects) they define, but by what happens in between these positions, in their relation, and in the event. Each shift of the ball changes the whole field of play, changes what each position can do, and so it is always a global-event. A game is constantly in a state of becoming, even more so when there are no formal rules.

There are no formal rules for energy efficiency. There are rules – don't idle your car, try not to use your car, use less energy etc. -- but when they should be followed is not codified, there are always extenuating circumstances that can be brought to bear. Instead, there is a field of potential created by the circulation of the quasi-object and its polarization of political debate (see above p. 134). This is not just a fluid situation; it is also a frustrating situation. I leave the house with the intention of playing by the rules, get on my bike or head down to the subway on foot. But no one else seems to know the game. Cars cut me off on my bike, make it difficult to cross the road, cars stuck in congestion pollute the air – I am tripped at every turn and no referee to call foul. “And again it's another indication [whisper] that people really don't give a shit. They're not doing anything about it”.⁴⁶ “I generally just feel that people are ignorant about it, and, they're very selfish, and they take, and they know what they problems are, but they don't care because its not directly affecting them, so while they still can do it they will” (Figure 5.11)⁴⁷



Figure 5.11: people really don't give a shit

The game doesn't sound like it is much fun, in fact it sounds pretty masochistic – I'll try to be energy efficient while everyone does anything they can to make my efforts

⁴⁶ Participant #4

⁴⁷ Participant #1

difficult and unpleasant. But such frustration only emerges when a person stops and looks at the scoreboard to check who is winning, but the play actually never stops.

To play the game is not a question of being energy efficient, but to try to get people one encounters to agree on what energy efficiency should be in a particular context – it is about the becoming of efficiency. This game involves being noticed, or making people notice their own behaviour. “I mean, I do what I do, I try to get my family to do the same thing, every opportunity I can, and at work I do it. And then I just go on and on at people [chuckle] makes me feel good. But its, its...an awareness raising, or something, I don’t know. Even my friends they see a piece of paper and they think ‘Oh God its not double sided! Here she is...’ And I don’t mind because at least its making them think, when they might’n have bothered, or they may have dismissed it, or they may still dismiss it but at least it will make them think for, a little minute or something like that.”⁴⁸ *The chuckle is important* – this is not a dogmatic denunciation of friends, it’s a well placed jab that shows them that their technique is poor, you’re skating circles around them, and you’re angling for a response.⁴⁹

⁴⁸ Participant #4

⁴⁹ Some other examples of this constant negotiation of style that keeps a public circulating: Approaching idling cars, trucks and buses and asking the drivers to turn off their engines. He actually enjoys talking with, or confronting, people who are idling because he constantly notices the cars idling, but is always wondering if he should say something - so “it’s a constant anxiousness with me” (participant #6). He knows he can’t fight the whole world, so it’s frustrating and yet he feels oddly compelled. But when he does intervene, on a smog day, he inevitably feels better. This is not always without confrontation, or the frustration of being dismissed, but sometimes it is met with humour (“Stop idling? For you, sure!” (participant #6)) or even an apology. How to approach, and when? “I regret not going up to the drivers of those buses and asking them to shut down their engines. I should have. I will next time” (participant #18). Missed the play, next time. Another strategy is to revel in anomalous behaviour, a stance particularly favoured by cyclists – “It’s funny, the motorists are always looking at the cyclists, and you know, usually the cyclists are zipping up here, and the motorists are going very slowly, and, you know as they’re looking at you they’re going ‘Gee, I should think about cycling once and while, that guy’s really moving pretty fast there’, I always feel that’s what people are thinking” (participant #18). Or again a cyclist wearing a air filter mask “ ‘Look, he’s wearing one of those face things!’ a youngster said to the others in the group. I guess they will think about why. So I wear it for education as well as to protect my lungs” (participant #18). Finally, one last example, a courier riding his large ‘cargo-bike’ around town attracts a lot of attention and uses it to promote the idea that bikes can be working vehicles, not just for recreation. He jokes about how many cases of beer you can carry: “I get comments [about the cargo bike] all the time...I came out of a building one time and there was tourists around the yellow bike posing, taking pictures. Kids love it...[mock tone] Wow man! Wicked bike! [Normal tone] Which is great because I think there’s not enough emphasis put on biking in our culture and kids...love biking because that’s how they get around when they’re kids” (participant #5).

There is no better word for this negotiated rhythm of encounter than style. A style describes how a person performs the moral overcode in different milieu and territories (Spinks 2000; Warner 2002 p.73). A style sustains an intensity and ‘makes me feel good’. A style is not independent of context and constraint, and so is not to be strictly judged as right or wrong, but evaluated as an attempt in context. “I’m very cautious now about preaching and converting and chastising and exhorting to do things...it actually works against you, people just become resentful...If you’ve got two kids, and you’ve got to pick up two kids are you going to take your bicycle? Well, no your not. Do I think it can be done by bicycle? Sure, but given how people are brought up, and the way the world works and is set up, you know it makes it a very, very perverse option. You know, if you chose it you are a perverse individual. So I think I tend to live more by example [unclear] to live a joyful example. You know, say, it can be done without being a freak about it. And I, I don’t even talk about it anymore. Yah, I ride my bike, its just what I do...so.”⁵⁰ A style is not to be taught as a method, it is to be appreciated, learned from and experimented with – can I do that to? Style affects what a body can do. There are two words in the above quote from the cyclist that we can dwell on -- ‘perverse’ and ‘joy’. It is perverse to ride a bike in a congested, pot-holed, polluted city, but one takes joy in it. Joy in perversion, joy in a masochistic game? This perversion is a ‘leap of faith’ that has to be made to go beyond judgment and maintain a refrain, and what draws them there is ‘joy’, i.e. an ability to maintain the intensity of desire on the BwO. This particular refrain is not possible for every body, although it could be for any body.⁵¹

⁵⁰ Participant #20

⁵¹ The concept of a ‘leap of faith’ is taken from Kierkegaard’s essay on the ‘Knight of Faith’, but it is taken up by Deleuze in his critique of a transcendental view morality. Deleuze argues that with Kierkegaard the knight of faith still hopes for a final transcendental salvation, a time in which his or her faith will be proven correct. And so the thinking of such a figure is today filled with ‘*ressentiment*’ in as much as we no longer believe in God – as in Pascal’s wager, you might act as if God existed, but this is a weak and cynical position if you think God is dead. Therefore, from an immanent point of view, the leap of faith has no alibi, it is made purely with the joy and affirmation of playing with chaos without hope of transcendence. So it must ground itself in something in existing reality, something in the milieu. This points to the importance of sense and desire for Deleuze and Guattari in making the evaluation of the milieu, and for regaining our ‘belief in the world’ (see chapter six below). See Deleuze, G. (1986); Deleuze, G. (1998); on the need for a belief in the world see Deleuze, G. (1995).

Deleuze draws out the relationship between a transcendental moral law and perversion in his study of Sacher-Masoch (Deleuze and Guattari 1988 p.150-152; Holland 1996; Deleuze 2004 p.131); the moral law comes down from a transcendental plane and judges everyone guilty in advance, the masochistic move is to design a 'contract' or 'program' in which this transcendental punishment is anticipated and submitted to under set conditions that remove the participants from the usual social convention (e.g. tie me up, whip me etc.); here a new relationship with pain, punishment and authority is set up that has specific limits, and these limits suspend the judgment of the transcendental moral law. The pleasure comes in knowing these limits and being 'absolved' from blame. Masochism, then, is a form of subversion of the moral law in the name of alternate reality. However, Holland (1996) points out that in the literature of Sacher-Masoch that gave expression to this masochistic contract, the mistress (or whoever administers the pain) is joined in dispensing punishment by a sadistic father-figure who does not recognize the alternate reality and the limits of the contract, and so the now betrayed masochist is made to suffer. Therefore, in practice Masochism does not resolve the power relations that support the infinity of the transcendental judgment (there is no escape), and so the jaded masochist becomes cynical, and in a second moment desires revenge on those who broke the contract – while revenge is still a reactive quality, the point here is to point to the potential for a program that then sets up a potential for a transmutation of force from the passive to the active.

The masochist-cyclist, then, is also in a similar situation, submitting to an at times painful and perverse joy in cycling, in an attempt to subvert the moral judgment to be efficient, and in particular the power relations that impose constraints on what a body can do while at the same time pronouncing a interminable set of judgments that say, in effect, that one's attempts to be energy efficient are 'not good enough'. When cycling the cyclist is in an alternate refrain, an alternate reality, but when this 'contract' is exceeded, when the cyclist has 'had enough' of a punishment that will not end, then there can be a conversion to a cynical 'rant': "the worlds going to hell, why have kids, you know [laughter] there's going to be no air for them to breathe, kind of thing. Which then goes into how we set up our cities, and out addictions to cars and blah blah blah

blah blah. So, I can work myself into a lather [unclear] as my friends will attest [laughter].⁵² The point, then, is not to judge masochism as an (in)valid response, but to show that through a refrain a person sets up a ‘program’ that allows particular intensities to pass, and which then also opens them towards accepting the legitimacy of particular claims. It gives them force. It is never a question of judging, but of evaluating the refrain and asking what it can do. The ‘contract’, the refrain, sets up a potential for action and transformation. As in the case of the cyclist, there is a leap-of-faith that takes one beyond judgment that requires humorous and ironic stance, a joy in the perverse. There is a qualitative evaluation to be made here, take this too far and one risks passing into a destructive and resentful cynicism in which transgression seeks simply to snub its nose at what exists – this is particularly destructive when it is the cynicism of the powerful. The challenge is to maintain an ironic or humorous stance that sustains an intensity that creates the potential for transformation (Braidotti 2001) .

There are times when it is necessary to take a stand because a decision has to be made, or one has decided that this time there will be no compromise. “And I think, where do you fight and when do you just become plain unpleasant to everybody, you know? And if the issues is strong enough, I risk being unpleasant.”⁵³ ‘There are time when debunking is necessary. But if applied as a general operating principle it is counterproductive. Foster or debunk. It’s a strategic question. Like all strategic questions it is always a question of timing and proportion. Nothing to do with morals or moralizing. Just pragmatic.’ (Massumi 2002a p.13) The game is not as simple as blaming another, because it also a matter of doing the right thing yourself. Nor is it simply a matter of finding a happy synthesis between competing options. Instead, it is always a question of ‘how efficient and in what way?’; efficiency is always being pushed beyond any particular solution, beyond what is reasonable. But this need not mean it is moving towards ‘greater’ efficiency; it is possible to label fuel-inefficient cars as irresponsible, but an individual can make this irresponsibility understandable and reasonable within a given context. “I have a, yah, Ford Mustang, 5.0 litre”. So why did

⁵² Participant #20

⁵³ Participant #16

you buy such a fuel inefficient car? “Cuz its cool [laugh, mock tone] Cuz its fast [switch to normal tone], and, you know, its got a big engine. And its cheap, my neighbour practically gave it to me. And...I figure, you know what? People do so many things [that are ecological insensitive], that...I think I [who am otherwise responsible] can have one or two things sometimes, you know. I can’t do everything, I can’t drive an electric car, too. You know, I have to have some things for myself. And when people ask me, I often get asked that, I just tell people the stupid like, the stupid typical reason that you get from a politician or developer. Well, its better that the car’s in my hands than some 18 year old punk who would be slamming on the gas, you know its better that its in my hands, were I drive in carefully, cautiously, not too often, you know, so in a sense its better that I have a car than the people who are less responsible environmentally. It makes sense doesn’t it?”⁵⁴ Of course it doesn’t make sense from a strict energy efficiency point of view, but it makes sense *in relation* to what others are doing, and in relation to the refrain that one maintains. The rationale for a 5.0 litre Mustang acknowledges the irony of owning such a car when one professes concern for the environment, but it is an irony that is playful and humorous, and in doing so it ‘goes beyond’ judgment in order to secure itself as a legitimate claim. What’s more, if we focus only on the position and content (i.e. 5.0L Mustang as fuel inefficient), we miss the critical potential of a refrain that resists the duplicity of a system that speaks of efficiency but regularly gives weak rationales for ecologically insensitive actions (‘the stupid typical reason that you get from a politician or a developer’); a refrain which is sustained in part by the 5.0 L Mustang.

Evaluate and experiment, the territory is never fixed but in continual process of repetition. The risk comes when the play stops and a person looks at the score-board, and then risks losing momentum. “We’re doing things, the whole global issue too, of we’re putting things in check, and we, we’re back peddling, and we’re, we’re working as hard as we can to save our environment. But I look at the same time, sort of free market economy, and, and, sort of globalisation, and just, the biggest and the best will win. I think that will...outweigh our efforts. And, that’s kinda a pessimistic way of viewing

⁵⁴ Participant #1

things, I just....I think when push comes to shove I think that capitalists and big money is going to win out and get what they want...maybe we can slow down the destruction, the further destruction of our environment....but I can't see that we're going to make it any better" (Figure 5.12 next page).⁵⁵ It is not that this kind of statement does not contain some truth, but as we saw in chapter two, the truth value is 'undecidable' and so there is a 'falsity' here, the statement says too much. What's more, it is again a question of what this kind of refrain can do, and the answer is very little. It is a pause or retreat that we all adopt from time to time. "I know, we're all going to die, we're on the point of like, you know, were on that track where were going in that direction, and one day everybody's going to be sorry![light tone, almost flippant]."⁵⁶ The tone is again important, it shows that this is a momentary pause, and not a tight spiral into nihilism. A sense of futility can be also turned inwards into a guilty reflection on the self which is then projected outwards to characterize others as well: "You know, sometimes I think I'm greedy when it comes down to it, yah its all about me and what makes my life easier. And I think that's one of the traps we get in, being urban, because our lifestyles is so, ahhhhhhhh, you know, every little second we can save, is so valuable to us, we'll do it. Um.....so to say that...I think that in my head and in my spirit, I'm, so, burdened and conscious and worried about what's going to happen, and how I'm contributing to that, and yah, and feeling a bit guilty that, I, still...be sort of selfish in my decisions."⁵⁷ Similarly, in the face of an apparent futile task it would also be possible to walk away from negotiation of responsibility in disgust: "I mean it's very simple in my terms. The ozone's broken because you [politicians and industrialists] broke it, because you wanted to produce plastics for the industry and for the consumers, and you wanted formica...we got it, the ozone died. You wanted to cut down the trees, you wanted the urban sprawl, there you go, this is what it costs you. Well, get up there and fix it. Like, figure it out! ... I do my bit for the planet."⁵⁸ In all of these moments a person stops experimenting with the subjectivity, and adopts a more rigid (resigned or resentful) refrain that turns inward on itself and away from the disruption of the event. These are moments of

⁵⁵ Participant #15

⁵⁶ Participant #1

⁵⁷ Participant #15

⁵⁸ Participant #17

nihilism, the subject is an expression of a will to nothingness, rather than keeping problematic the search for alternative values.



Figure 5.12: I can't see that we're going to make it any better

All of the positions discussed above are passing and repeated moments of subjectification in response to the moral over-code to be efficient. However, a person can adopt all of these positions at different moments in a day, and in a life. I am the activist, the moralist, the masochist, the cynic. In all cases it is not, for example, masochism, that is 'the problem', but it is a question of evaluating what it is possible for that refrain to do. In terms of a critical politics, is it a refrain that opens the subject to others, and to transformation, or is it a refrain that closes the subject down and pushes them further into a reactive and defensive posture? Or perhaps it is a refrain that leads simply to a kind of suicidal reaction that does not even preserve any subjective dimension from which a person could resist. If we overlay the two presentations of subjectivity given above – the BwO and the territorialized refrain – we can see that on the one hand the refrain is always making connections, being pulled in new directions and subtly changing the rhythm of passage. This disruption then introduces play into the territorialized refrain that challenges the moral overcode to be efficient; but how that will then lead to change is a process that unfolds through small movements and experimentation that may not be easily recognized. However, these small movements are what a politics of becoming seeks to amplify in hopes of moving a subject towards being open to an affirmative experimentation with the new forces in the refrain. Such an outcome is far from predictable, which is why the formation of a public remains an

event, and remains 'volatile'. In order to see this more clearly, we can turn in the final section to considering how the subject as refrain opens on to a becoming-minoritarian.

Becoming-smog

Why do we say that all 'solutions' to the moral over-code 'be efficient' (e.g. take public transit) are shadowed by 'falsity'? First, it is because the subject adopts a position initially in a reactive mode. The subject reacts to the 'coming Thermagedon', to the immensity of the moral weight of global ecological destruction, or even the sight of young children unable to play outdoors because of poor air. In the face of such a moral dilemma, the subject also reacts against taking on the full burden (the impossible burden) of the moral overcode 'be efficient,' and seeks to deflect blame by justifying what it is they are doing – 'I do my bit'. Finally, the subject can react against those who are not 'being efficient' and whose apparent indifference becomes a target for blame (including governments or industries that refuse to provide more energy efficient alternatives). Given all of these reactive moments, anything a subject can do as an individual or group will always seem to be 'not enough', and the claim that 'everyone reduces energy use, everyone saves money, everyone breathes a little bit easier' will carry the ring of falsity (i.e. undecidability) – it says 'too much'. The second reason claims for energy efficiency and individual responsibility carry a ring of falsity, is that on a molecular level, smog continues to act as a disruption, as a force whose intensity disrupts, more or less, the refrain. The disruption that smog causes is all the more acute for those who have tried to incorporate the moral over-code into their refrain because on a daily basis they will be reminded of the 'masochistic' position of someone who tries to transgress or resist the dominant organization of society (e.g. by riding a bike, or even trying to get their colleagues to conserve energy at work). Here the disruption will no longer be only a molecular disruption from smog particles, but the molecular intrusion of an idling car, or a pesticide sign – all the little irritants that show 'people don't care'. In this second case, the disruption remind us that of the 'falsity' of the idea of total control, given the molecular nature of the problem of air pollution. Both of these moments mean that any subjective refrain in relation to smog is always being opened

again to the question of what else can be done, and always open to the risk of closing back down against this question.

It is these disruptive moments that the potential exists to open a subjective refrain to becoming, a potential that is also the peril of a politics 'at speed'. We need to first define how Deleuze and Guattari's concept of becoming in more detail to understand this ambivalence (Deleuze and Guattari 1988 chap. 9 and 10). The first thing that can be said about becoming is that it is a process that is instigated by the encounter with the anomalous or exceptional – something which fascinates, or irritates, and which creates a 'snag' that pulls at the edge of the refrain. Therefore, all becomings are always multiple and in relation. Second, becoming is always molecular, a product of a proximity, or encounter, that starts to pull the subject in ways that go beyond conscious intention. Even when it is a molar individual that fascinates, it is always parts of body that create the connection (e.g. a fascination with a bird's colour, or the irritant of smog as grit in the mouth). Third, becoming has no end – it is never a question of becoming-like that which one enters into relation with, becoming never finishes. Instead, becoming is a process of 'leakage' (variously called a 'line of flight' or 'deterritorialization'), in which the refrain starts to unravel and pull the subject towards a destination that is never a simple imitation. If we take these three points together, the grammar proper to describing becoming is the indefinite article, the infinitive verb and the proper name – e.g. a becoming-smog. The indefinite article indicates it is part of an assemblage (i.e. impersonal), the proper name indicates the relation, and the infinitive verb indicates an indeterminate time with no end or beginning (*Aeon* instead of the pulsed time of *Chronos*).

It is a process of becoming that drives a micropolitics and which takes us beyond recognized identities: "It is wrongly said...that a society is defined by its contradictions. That is true only on the large scale of things. From the viewpoint of micropolitics, a society is defined by its lines of flight, which are molecular. There is always something that flows or flees, that escapes the binary organization...things that are attributed to a 'change in values', the youth, women, the mad etc.' (p.216). This is because becoming

is always in the first instance a becoming-minoritarian; if we recall from chapter two, the minoritarian is always that which not an already recognized identity, that runs between recognized identities. A minority has nothing to do with number, it can even be that which exists in all majoritarian (recognized) identities as a molecular component that disrupts, or creates a connection with others. Therefore, becoming is always in the first instance a connection and qualitative change towards the molecular and minor.

There is a universal figure of minoritarian consciousness as the becoming of everybody, and that becoming is creation. One does not attain it by acquiring the majority. The figure to which we are referring is continuous variation, as an amplitude that continually oversteps the representative threshold of the majoritarian standard, by excess of default. In erecting the figure of a universal minoritarian consciousness, one addresses the powers (*puissances*) of becoming that belong to a different realm from that of Power (*Pouvoir*) and Domination. Continuous variation constitutes the becoming-minoritarian of everybody as opposed to the Majoritarian Fact of Nobody. Becoming-minoritarian as the universal figure of consciousness is called autonomy (p.106).

The becoming-minoritarian, as this quote suggests, is a process that is open to any body, although not every body will open themselves to it or allow themselves to be transformed by it. Indeed, if becoming is molecular it is first sensed, rather than recognized, and it can be disorienting or threatening. A subject may pull-back and be confused. That is why becoming must always be approached with “Sobriety, Sobriety: that is the common prerequisite for the deterritorialization of matters, the molecularization of material, and the cosmicization of forces.” [p.344]. It doesn’t begin with a grand declaration and certainty, but with a process of experimentation which begins with a ‘becoming-imperceptible’ in which one makes oneself indiscernible and so allows oneself to open to the assemblage without judgment, without detection. That is why becoming-minoritarian is equated above with ‘autonomy’. It is never a question of imitating or copying, but of finding a singular becoming, a becoming is always haecceity – which is not to say it is wilful or individualized, it is always a collective-singular because part of multiplicity (Guattari 2000).

Even if becoming itself has no end, the subject never disappears into becoming, but is transformed by it -- at some point it will be reterritorialized on a particular refrain. These are the stakes of a politics of becoming, for if deterritorialization happens too quickly, the subject can enter a 'suicidal' line of flight in which they become recklessly and hopelessly tied to a path that leads to their destruction or enslavement (e.g. the cynicism and nihilism of those who see smog as a sign of unstoppable greed). It is also possible that the subject reterritorializes on even more reactive and defensive refrains -- paranoid or Fascist refrains that seek to exclude and regulate. Therefore, given that smog creates a disruption that opens a subject to deterritorialization, it is possible that this disruption is quickly reterritorialized on a reactive refrain. For example, perhaps a person fears for their health, or that of their children, and so reacts by trying to contain smog by creating 'safe' environments in an air conditioned home, by driving the kids to school, by leaving the city whenever possible. In addition, as we have seen contemporary capitalism works 'axiomatically' and recognizes deterritorializations as potential markets. Indeed, capitalism thrives on constant de/re-territorialization and a reactive subject seeking to contain or repress the new intensity that is driving it beyond itself (Olkowski 1999). In this reactive mode the new intensity, and the new desire it could create, is experienced instead as 'a lack' (e.g. of security, of a future for the kids, of health) that one can seek to fill with a consumer product that has little to do with addressing the new intensity proactively and affirmatively (indeed, it may in fact exacerbate the situation -- e.g. an SUV sold as a safe vehicle, signifying country life and youthful vitality). It is also possible to accept the new intensity with the greatest degree of naivety (or is it cynicism?) as a simple fact of life -- in Toronto the first 'Oxygen Bar' has opened, and new cars are sold with air filters on the air intake vents. If there is a becoming-smog, then it can be a whole becoming-reactive that leads nowhere even as the same subject retrofits their home with new insulation, and switches off the lights.

However, it is also possible that the disruption of the smog-event opens the subject to a more affirmative stance towards the new intensities, a realization that it is not a matter of excluding smog, but of becoming with smog. "That's what I've learnt from being [in this housing estate surrounded by a factories and freeways]...um, there's a continuum,

um, both in terms of the environment, but also in terms of the environment internally. And I can, I can, um, balance out, what the external environment is doing by my internal environment. By drinking more water, by eating better food, by taking supplements...um, I don't have to be afraid, and I can go out there, and breathe that smog, and not be so afraid of it." These habits allow a new refrain to take shape, one which allows a person to also feel comfortable walking and cycling in the city – it opens other possibilities. However, making such a change requires new limits as well: "You know, there's a lot of jobs that I don't think I could do. That I wouldn't feel comfortable with, um, doing it. You know, where I could make a lot of money. So, in terms of success, on a...cultural level, definitely, yeah, it hampers my style."⁵⁹ The privilege of those 'who don't have to', 'who refuse', cannot be reduced to wealth, but it is privilege nonetheless, and so it has to be recognized that such a life is not for everybody. How does a person find the time and privilege to engage in this 'becoming-smog'? - by giving up the privilege of status and wealth, by raising a family in a home that is shared with others, by living in a place where 'good food' is close at hand, but which is a place exposed to the pollution of industry and heavy traffic. The conjunction of factors is incidental to the point being made because – *the specifics don't apply to you*. It needs to be stressed again that it always a question of style and transmission of the force of the event, and never a question of 'imitation'. It is a matter of exploring potentials for turning from reactive stance to an affirmative and experimental stance in which one explores the potentials that exist in one's milieu. Becoming-minoritarian is an opportunity to deviate from the majority because one has the 'privilege' of not suffering the consequences of a repressive force. How can one create a routine with gaps or holes that go 'unnoticed' by everyone but you? This is not a question of 'hiding' what one is doing, but of creating a style that does not set itself up in imitation or opposition. -- 'becoming-imperceptible' or 'becoming-everybody/everything (*tout le monde*)' (p.280).

Becoming, then, is not a determined process and there is no promise of a better future. In addition, becoming is not something that someone plans or wills, it the unintended effect of assemblage and its constant repetition in world of multiple flows and speeds, its

⁵⁹ Participant #10 (both quotations)

constant circulation between the virtual and actualization. Therefore, a politics of becoming is not charged with instigating becoming, but of thinking about how to ‘capture’ becoming in ways that ‘do justice to the event’ by affirming the new intensities.⁶⁰ Speed here is not ‘fast speed’, these are not changes one expects to see overnight; it is instead a process of encouraging the search for the ‘right speed’, a qualitative evaluation of rhythm that allows for a new connection to take place. ‘Intensity of deterritorialization must not be confused with speed of movement or development. The fastest can even connect its intensity to the slowest, which, as intensity, does not come after the fastest but is simultaneously at work on different stratum or plane’ (ibid. p.174). The repetition of the subjective refrain, the play of judgment and subjectivity, can appear as stagnation but politics is characterized by ‘the infinite slowness of the wait (what is going to happen?)’ during which time becoming is at work, and ‘infinite speed of the result (what happened?)’ in which a new identity emerges (ibid. p.281). It is possible to ‘botch’ a politics of becoming, and to try to ‘reterritorialize’ too quickly on a majoritarian claim. It is always a matter of timing and evaluation, of sensing the potential of a refrain.

In light of the molecularity of the smog-event, the critical project is one of always keeping visible the limits of control, so as to then always question the degree and kind of control that is legitimated in the name of controlling smog. This involves ensuring that the circulations of claims to ‘be efficient’ to not simply result in a reactive subjectification that seeks to avoid or contain. Therefore, we can see that the strategy of circulating claims that individuals should ‘be efficient’ is not sufficient in this regard – it will require the *addition* of a different kind of circulation to take a subject beyond the reactive stage. At least in its initial stages, efficiency claims contribute to a thoroughly reactive subjectivity of someone who has ‘done their bit’ and who is ready to point to ‘who is to blame’. What’s more in justifying actions based on concern about personal and collective health (fear) and obligation, it also contributes to a reactive stance. This is even more problematic when one takes into account power differentials in a

⁶⁰ Which does not mean passively accepting, it means actively engaging them rather than trying to reactively exclude them.

hierarchical society, where there are institutional subjects who can mobilize immense resources to 'blame' others rather than seeking to affirm and experiment with change (e.g. the car industry, the 'clean coal' lobby).

All of this, however, is a reflection of majoritarian politics, a politics that will proceed by binarized choices. But there is also a minoritarian politics set in motion by the claim to 'be efficient' that can be used to get beyond the impasse of opposition. A politics of becoming would seek to instigate what Nietzsche calls a 'transmutation' of the reactive forces into an affirmative becoming-smog that seeks to explore how to live with smog rather than seek total control. To do this we have to look to see how smog-events instigate deterritorializations of certain elements in an assemblage, which can then react back on the whole and transform it. However, this process is not abstract, but concretely related to particular contexts, and so it will require that we look more closely in the next chapter at how we can sense, and encourage, a process of becoming-minoritarian in the transportation reform debate in Toronto.

CONCLUSION

Produce a deterritorialized refrain as the final end of music, release it within the Cosmos -- that is more important than building a new system.

(Deleuze and Guattari 1988 p.350)

The smog-event is global event, both in the sense of global ecology and the interdependence of regions and individual actions, but also in the sense that the smog-event changes all the subjectivities in play in the social field – it gives them a different expression and potential. A person does not have the same body as they did 'before' the smog-event. Smog opens the organized body and reminds us of the body's potential as a disorganized body-without-organs, and points towards the ambivalent potential of a subject's 'desire'. The subject is composed within changes in intensity, it is a rhythm through a coded milieu that allows us to go on; as long as it is successful the subject remains organized on its surface, or remains as a surface of organization. The subject does not do this independently of its milieu, the distinction between inside and outside

comes after the fact, the body-without-organs (BwO) is open to its milieu and a successful rhythm is not independent on the built and natural environment that sustains it – hot pavement/air conditioned buildings, dirty air/filtered air, outside/inside, the BwO moves between these binaries. But the BwO never exists alone or ‘first’, it always exists in tandem (below, behind etc.) with an organized body and its recognized subjectivity. The BwO becomes disciplined, or oscillates between discipline and unruliness.

Central to the disciplining of the body is a space organized to sustain a particular disciplining, and a series of moral statements that give expression and legitimate this state of affairs. The moral overcode is ‘second’ layer of force and relation within the coded milieu, and it limits what the body can do. It is at this point that the subject and the milieu cease to be only directional and functional, and become dimensional and expressive as well – they form into a territory and become visible. The subject exists within a territorial refrain, and a territory is defined by the relations between matters of expression that define an ‘inside’ (territorial motifs) and ‘outside’ (territorial counterpoints). However, the territory is not fixed, it does not pre-exist the rhythmic passage it expresses. Therefore, the territory exists only in repetition. That means that what is considered ‘good’ or ‘bad’ is not a fixed practice that can be determined by virtue of its ‘content’ (e.g. how much it is technically efficient). Instead, moral judgments of this nature are always relational and dependent on context.

Rather than defining fixed subjectivities, the territory that finds expression in the moral overcode to be efficient actually makes possible a range of subjective positions that can be occupied by the same person during different moments of subjectification. I am a cynic, a devout eco-virtuous citizen, a sceptic etc. But the range of different positions, as well as the content they contain, is constrained by social hierarchy and sedimented power relations. There is a surface of stability and predictable visibility in any given territory. It is not a question of complete fluidity, but of a repetition that is open to change, which in turn requires experimentation to go ‘beyond judgment’ and set up a new refrain, a new territory. It is also not a question of ‘expecting’ an individual to

change, not a matter of telling them what they should do, but of making visible what they can do.

Within every majoritarian position is a becoming-minoritarian that is excessive to any position. The challenge of a minor politics of becoming is one of thinking about how to use the circulation of claims in the public sphere to release the potential of this minoritarian element and open existing positions to transformation. It is a matter of thinking about how one can see the potential for 'a people to come' and engage in the labour of calling a public into being. Rather than supporting one or another majoritarian claim solely by virtue of a moral judgment (e.g. it is more efficient, more fair), it is necessary to also evaluate the problematic question for which different majoritarian positions (and their accompanying subjectivities) are a 'solution'. All territorial assemblages discipline and limit what a body can do, and so it always a matter of evaluating whether such disciplining is 'acceptable', or whether we can go 'beyond judgment' in order to affirm new relations, and in order to let the body go further along towards the limit of what a body can do. In smog politics, it is not only a question of simply dictating efficient behaviour, but of making visible how efficiency requires control of an open body-without-organs, and its accompanying 'distracted' subjectivity. In posing the question of smog in this way, the problem of efficiency becomes 'problematic' (without solution) and 'radical' inasmuch as it connects the problem of smog with a more general problem of subjectification in contemporary capitalist society. Because there is no single solution to this process of disciplining, it always a question of encouraging the experimentation with what a body can do by using political claims to make visible the disciplining of the body. I turn now in the final chapter to an example of such an attempt.

CHAPTER 6

EXPERIMENTING WITH CIRCULATION

The pedestrian, painstakingly circumscribing the blocks of the old city, harbours no doubt about what moves and what is fixed...the speeding car projects itself into a space that is never formed, forever evolving, emerging ahead while disappearing behind. This creates a liquidity in which the dance and dancer are fused in a swirling, self-engendering motion promoted by the darting driver's eyes, touching (because so intimate, so familiar) street, canopy, house, adjacent car, red light, side street, radio station Tejano 106.5, car upon car, instruments, tree trunks, joggers, barking dog, drifting leaves, large welt and dip, patch of sunlight. This is navigational space, forever emerging, never exactly the same, liquid rather than solid, approximate rather than precise, visual but also visceral in that it is felt by the entire body, not just through the eyes and the soles of the feet. The body in this liquid space is suspended, held and urged by the trajectory.

Lerup (2000 p.55)

Once again Lars Lerup evocatively captures the experience of living in the mobile city, at the confluence of multiple flows and speeds. Here in 'liquid space' the body is urged by the trajectory, but as we saw in the opening pages of the thesis, it is precisely this distracted and mobile body-subject that is of concern for those engaged in politics and political analysis – how can the political subject be engaged for more than a fleeting moment, how can one sustain a claim in a world 'forever emerging'? In the preceding chapters I have tried to chart a path that unpacks the processes that form this temporalized space in order to understand how to engage the public assemblage at speed. The first move was to argue that the body and the subject are not overwhelmed by a singular speed, but instead emerge within duration formed at the confluence of many speeds. Duration is stabilized in routine, and repetition forms the foundation around which a subject can engage and experiment with a problem manifest as repeated disruptions. The smog-event is an example of such a repeated disruption. Therefore, and second, I explored how the molecular smog-event is captured by the speed of the networks of measurement and monitoring, and how this then allows the smog-event to be inserted into political discourse

in terms of a molar entity called air quality, which legitimates calls for energy efficiency. This does not eliminate the disruptive quality of the smog event, but it makes it comprehensible and repeatable, and so open to political debate. It is now possible to actualize moments of subjectification as individuals engage with (play with) what it can mean to 'be efficient'. The task of making a public within this repetition is still radically indeterminate, and the 'incorporeal transformation' is always prone to disruption with each repetition. Therefore, and third, I unfolded the nature of this indeterminacy in more detail by following the circulation of claims about energy efficiency; we saw that the subject emerges within a continually shifting and negotiated refrain and territory, which both contains the disruption of the smog-event by allowing the subject to maintain a functional subjectivity, but which also opens the subject to becoming-minoritarian – a becoming that can just as easily lead to a reactive turn away from the smog-event, as it can to the opening of the refrain to becoming-smog. Becoming is the potential that moves between recognized majoritarian identities, but it is an ambivalent potential. We are now able to return to the question of how to engage the mobile and distracted subject in the public sphere, because we now no longer have a self-present subject opposed to 'speed' (singular), but can think of a subject that has been opened to becoming within an assemblage composed of multiple speeds, and which is sustained through repetition. As a final pass, I will now turn to address how to affirm becoming as the shifting terrain on which a political claim is maintained, and think about how one can experiment with intervening in this process in the hope that a claim might influence the trajectory of becoming.

In this chapter I explore the use of images and artwork to intervene and support claims in a politics of becoming in relation to debates about transportation reform. Moving away from a car-based transportation system is, of course, central to the politics of air quality. A very strong case can be made for why the car will have to make room for bicycles in Toronto and other North American cities, just as they will have to make more room for transit and pedestrian safety (Freund and Martin 1993; Newman and Kenworthy 1999). Not only are there issues of air pollution and health, congestion, access to mobility and the impacts on sociability of public space, but there is also the problem of dwindling oil supplies in the

coming decades without as yet a reliable alternative to the internal combustion engine (Roberts 2004). It may be tempting to suggest that we are at the end of the auto-age in the city, but everything is up in the air as to how long that will take and what shape it will take. The normative concerns – whether it be pollution from smog, health and safety, or the inequity of who has to suffer congestion and time constraint – do not require the removal of the car in the short term because there are other options that can be attempted.¹ In addition, as was discussed in chapter four, it is difficult to begin to implement such reforms when subjectivities are formed within existing infrastructure, and in this case an infrastructure dominated by the automobile (Sheller and Urry, 2000). The case for switching away from the car, and car-based design, cannot be based solely on the argument that it is ultimately technically necessary and feasible, but must also include an engagement with why it is *desirable* -- the force of the better argument is not in its technical merit alone, but in its ability to deterritorialize the dominant car-based subjectivities.

In what follows I will look at different ways to problematize transportation-based subjectivities. This is an experiment in how to intervene in an example of a ‘hard opposition’, which was identified in chapter one as one of the risks of a politics ‘at speed’ within the controlled and disciplined spaces of the city. In order to do this, the discussion will have to move away from a strict focus on smog and air quality, to engage with how claims associated with air quality – such as reducing car-use – must enter into a conjunction with a wider range of claims when trying to call a public in to being and becoming. In short, we

¹ For example, in the short to medium term it is possible to imagine extending the life of the car through hybrid electric/petrol vehicles, or even a switch to hydrogen fuel cells; while this does not solve the problem of energy consumption in the long term, it does push back the date at which we (in the first world) will face an energy crisis (The Centre for Sustainable Transportation, 2000). Similarly, it does not solve the problem of pollution if, as has been suggested, the electricity demand is met in by increased burning of non-renewable fuels (Pembina Institute, 2000). On the issue of congestion, it is possible to extend the car age by attempting to address congestion through charging tolls at peak times and congested places, a scheme that could be implemented through GPS units embedded directly in the car, and which could even be used to control the speed of the car in order to address safety and emission concerns. It has even been suggested that the private car will become part of integrated ‘smart-car’ network in which freeway travel will involve the car becoming fully automated through a system of traffic monitoring so as to maximize the efficiency of the road for all users (Monbiot, 2004; Zielinski, 1995). As concerns the health problems related to obesity caused by car-based city design, we will need to ask why people who are at present willing to seek fitness through private gyms in compensation for sedentary car-based routines would rather seek fitness through the design ‘active’ living spaces.

do not abandon the car only because of air pollution, but air pollution provides one of the grounds on which the subject is actualized as someone who is aware of the need to live without (or with less of) the car. The examples that follow then reflect the arguments in chapter two that a public is formed when a claim creates a conjunction between a disparate set of statements in a particular context – this is particularly clear in the final example, where the politics of the war in Iraq come into conjunction with the ecological arguments to use a bicycle as a mode of personal transportation. In all of the examples, smog is still present within the conjunction, but not necessarily central. The chapter will begin with an engagement with photographs of roads and highways in Toronto taken by participants as representations of places that reminded them of air pollution. I will argue, through an engagement with the art of Martha Rosler, that as a series, these pictures can be understood to critique and judge car-based urban design, but they do little to encourage experimentation. Therefore, I engage in more detail with the conflict between cyclists and car-drivers in Toronto, and ask how such a conflict can be used to encourage experimentation with mobility in the city. I use the artwork of Rainer Ganahl as an example of a successful experiment in re-activating the becoming-minoritarian of all positions in relation to the opposition between car and bike-based subjectivities, and in doing so problematizing the relations and control that support existing transportation infrastructure.

The affect and percept of gridlock – the end of the road

The goal of an experimental critique, one that would seek to support a politics of becoming, is two fold. First, it is necessary to make visible the fact that the subject emerges within an assemblage, and so is not ‘in control’, but continually open to forces of becoming that pull beyond the self. This is a problematizing moment, and a moment of humility. It is a moment where critique makes visible the power of ‘falsity’ – i.e. the indiscernible dimension of truth that renders all claims problematic. However, this in itself will not be enough, for as we have seen becoming can lead to a reactive stance, or worse a spiral toward nihilism (some would rather will nothing, Nietzsche argues, instead of affirming the limits of our will). Therefore, there is a second moment that is needed, a

moment of experimentation where a subject affirms the radical indeterminacy of action, and so the necessity of choice. Choice as necessity is not free will, and is not the choice of unconstrained liberal individualism. It is choice that emerges within the context of the necessity to act, and so a constrained choice that must be evaluated – what can I see and do today? Choice, as understood here, is better framed as what Nietzsche calls the ‘dice throw’, or gamble, in which one acts into indeterminacy with the hope that what will return (what will actualize), will affirm and strengthen what one is doing – ‘whatever you will, will it in such a way that you also will its eternal return’ (Deleuze 1986 p. 68). It is therefore necessary for circulation within the public sphere to encourage this gamble, this experimentation, and such an attempt to encourage experimentation will itself be a form of experimenting – a ‘dice throw’ into an assemblage in the process of becoming.

Experimentation with becoming when circulating texts (broadly understood as not just words, but images and sounds) in the public sphere is experimentation with re-activating the event, with making the charge of the event live again, and so be able to draw those who encounter a text out of the habitual in order to form a connection with the ‘forces of the outside’ (those forces excluded from the refrain, that disrupt the refrain and throw us into becoming) (Deleuze 1999 p.70, 120). However, as we have seen in the last chapter, becoming is a process that is not recognized, but sensed at the limit, or in between, recognized identities. That is why it always ‘falls back’ into reterritorialization. Making becoming visible, then, is a process of maintaining an intensity, a sense, of a world where what exists is always a partial expression of a more excessive reality. Therefore, to experiment with becoming is to experiment with sensation. It is a question of thinking about what is sensed in the problematic moment of disruption, and then creating a text that will re-activate that sense and allow it be circulated and repeated, such that sensation can problematize the oppositions of majoritarian politics. This is necessarily experimental because the attempt always risks failing to re-activate intensity, which means that it falls back into the ‘mere opinion’ of the phenomenological subject, which does nothing to promote a becoming-minoritarian of recognized identities. If successful, a text will reactivate a sense of world that is excessive to representation, and so will delegitimize (humble) the certainty of any authentic grounding, or transcendental authority.

Experimental attempts, then, are not true or false until they actually *do* something, and aesthetic analysis is an evaluation of 'more or less' interesting, rather than the binary true/false (Deleuze 1986 p.105; 1994 p.54). The aim of such an aesthetic analysis would be to describe how the claim is understood to work, how its components form an assemblage with the viewer to re-activate the event. This leaves open the question of whether such an actualization will come to pass in a different repetition of the event.

Those people who agreed to talk with me about their experiences with smog were asked to take pictures of times and places where they encountered or thought about air pollution. It is perhaps not surprising, then, that a majority of those pictures are of roads, cars and gridlock. Changing transportation design and behaviour is at the heart of addressing air pollution. However, it is the utter banality of such pictures that makes them difficult to talk about – in describing their pictures, participants would often just move through the pictures with little commentary ('this is another road scene'), the rationale for taking a picture of a road being implicit. When asked what bothered them about the road, answers were again often unsurprising, including frustration over the lack of proper transport alternatives, the desire for more green landscapes, the stink of the air. In short, the road pictures prompt clichéd questions from me and clichéd answers. Deleuze has often remarked that it is not error or untruth that is the enemy of thinking, but cliché, because it signals our inability to think – or at least articulate – beyond what is recognized and accepted as 'common-sense' (Smith 1996 p.33, p.50-51 fn 9; Rajchman 2001 p.138). Therefore, it is necessary to think again about such road scenes, and try to understand why they provoke such a gridlock in thought. This can be done by addressing all of the participants photographs as a series, taking them beyond what any given individual intended and presenting them here as a series of images circulating in the public sphere.² In doing so we are looking to evaluate their potential to provoke thought and re-activate becoming.

² Some photographs pointed to spaces that displayed alternatives – such as green spaces, roads without cars, or in one case a bike-lane that was illegally spray-painted down the side of the road. Had there been enough of these I might have also tried to make a series out of them.

In evaluating the images through a Deleuzian lens, the focus is on how images create sensations that impart sense to the claims that are associated with the images, and so influence what the claims can do (Deleuze, 1994 chap. 7, Deleuze 1998; Smith, 1996; Zourabichvili, 1996; Kawash, 1998; Rajchman, 2001 chap. 6; Massumi, 2002b; Bogue, 1996, 2003a,b). For Deleuze, a picture or painting is not first and foremost about its contents (meaning), but the way in which it assembles colours, shapes, textures etc. in a composition that transmits ‘affects’ and ‘percepts’ – i.e. sensations that come before fully formed affections and perceptions.³ A percept and affect, then, are forces of sensation and as such non-representable. A picture has content (a car, a person, a bowl of fruit etc.), but what gives it sense falls between what we see and what we can say about the picture. Zourabichvili (1996) describes the percept as the ‘spark of sense’ that exists whenever a field of affects and percepts is depotentialized within a particular knowledge claim – the claim is always exceeded by these forces (the spark) that gives it sense. An artist assembles affects and percepts in such a way that what is ‘intolerable’, ‘shameful’ or problematic, becomes ‘visible’ (Deleuze 1995 p.36).⁴ To use a simple example, Deleuze notes “it is easy to articulate the madness of a monomaniac, but it is very difficult to see it in time and to intern him when we ought. Many people are in the asylum who ought not to be there, but many are also no there who ought to be” (Deleuze 1999 p.64). Sensation opens thought to a world of non-representational forces that exceed it, and so renders visible the limits of any given representation.

Since we cannot represent affects and percepts, the analysis of images works through the analysis of composition – if we think it works, how does it work (Deleuze and Guattari 1994 p.191)? For Deleuze this means that analyzing art and film is an analysis of signs, as distinct from symbols and signifiers (Deleuze and Guattari 1988 p.67-68; Bogue 2003a). While symbols have fully coded meanings dependent on interpretation (the tower as

³ Deleuze and Guattari write (1994 p.164): “Percepts are no longer perceptions; they are independent of a state of those who experience them. Affects are no longer feelings or affections; they go beyond the strength of those who undergo them. Sensations, percepts, and affects, are *beings* whose validity lies in themselves and exceeds any lived. They could be said to exist in the absence of man because man, as he is caught in stone, on the canvas, or by words, is himself a compound of percepts and affects”.

⁴ Deleuze always uses these melancholic descriptors, but it follows that art can also make visible what is joyful.

phalus), the signs are created through a relation between components in the picture and transmit sense that admits no final resolution or certainty:

[signs] are no longer even recognizable as objects, but rather refer to sensible qualities or relations that are caught up in an unlimited becoming, a perpetual movement of contraries. A finger is never anything but a finger, but large finger can at the same time be said to be small in relation a third...Recognition measures and limits these paradoxical qualities by relating them to an object, but in themselves these 'simultaneously opposed sensations'...perplex the soul and set it in motion, they force it to think an demand further inquiry (Smith 1996 p30-31)

The components that can be thus composed are of colour, shape, texture, volume etc. The analysis of images works by pointing to the relations amongst these, which means that the sensation exists in the very materiality of the image itself, and never strictly represents a reality that exists beyond it (although a viewer can, and will, draw connections). The role of art is to transmit affects and percepts (sensation) and so reactivate the event in a way that can make it can provoke thought, and play a part in the production of a new reality that goes beyond what is – following Paul Klee, Deleuze argues that the role of art is “*not to render the visible, but to render visible*” (Smith 1996). “In art, and in painting as in music, it’s not a question of reproducing or inventing forms, but of harnessing forces” (Deleuze quoted in Bogue, 1996 p.257). We can now turn now to analyze the images participants created as part of this project. I am not addressing my participant as ‘artist’ (as if they had an artistic intention in making these), but presenting this series as my own composition as a way to think about how different kinds of images work in the public sphere – there is an ‘art’ to any intervention – in order to evaluate whether or not such images would work to encourage experimentation and engagement with issues of mobility.⁵ The pictures on the following pages are presented not as individual places, but as a single series (Figure 6.1 below p. 198-209); however, they are all of the streets of Toronto, or the highways that surround it. I have included a large number of photographs (23) in the hopes of

⁵ Deleuze and Guattari display a rather elitist approach to the artist; not all art is good art, and not all art is able to transmit affect and percept. This move anticipates critiques of relativism in their aesthetic theory. But strictly speaking this cannot be avoided, for what works for me may not work for you, what Deleuze senses in art of Francis Bacon another may sense in Las Vegas. Deleuze and Guattari seem to recognize this in as much as they encourage, and believe in, an art of living, an art of the everyday, that is accessible to anyone (Deleuze and Guattari, 1988 p.321). Ultimately, then, their elitism is not about ‘good art’, but about art that can provoke thought – it is a question of what it can do.

encouraging the reader to linger in the series for awhile, but also to try to present the force of the affects and percepts that I think come through best with repetition.

























The first thing I would note about these photographs is the lack of bicycles or pedestrians; their absence is for the most part not one of timing, but of the fact that these are roads in which bicycles and pedestrians do not often venture or are banned. In other words, the dominant fact of these pictures is apparent lack of transport alternatives, and when we do see a streetcar it is trapped in traffic. The sense of being trapped by the lack of alternatives is also echoed and magnified by the way in which the pictures reveal a body that is trapped and controlled within the road system. This is most obvious in pictures of congestion; however, it is also made apparent by the fact that in many of the pictures parts of the car windshield, a rear-view mirror, or steering wheel intrude awkwardly into the edges and foreground of the frame, disrupting a linear perspective and the flow of 'navigational space' so familiar to the driver of highway, and obscuring the photographer's intended subject matter.⁶ This affect is also created by road infrastructure, such as the concrete barricades along the side of the highway that bisect some pictures, parts of bridges or the lampposts that intrude into other pictures. In some the rear-view mirror even captures a scene that was behind the lens, again disrupting the traditional linear perspective of the photograph and immersing the photographer and viewer in the space. In these pictures, then, we get the sense of body being controlled (and so being themselves out of control).

This in turn is related to a second key point, which is the dominance of the technical infrastructure over the human presence – not just the car, but also the electrical and communication infrastructure and, in one case, the fossil fuel storage tanks, and in another a gas station. In most of these photographs there are no people; it is a landscape of machines, and even when the photograph is one that is taken at a human scale (i.e. close up, for example in congestion), we are often struck by the size of neighbouring vehicles, especially trucks and truck tires and by the sheer volume and density of machinery and infrastructure.

Finally, I would note that the affects and percepts of these pictures call on all the senses – we see chipped and dirty windshields, dusty clouds and hazy horizons, sun shining

⁶ I owe this insight to Alexander Alberro's reading of Martha Rosler's *Rights of Passage*, see below in main text.

directly into the lens backlighting some scenes, glinting off car hoods and windshields, or casting hard shadows on the ground (this is a direct light and hot one). While many shots are of congestion, there are also many shots in which movement is suggested by the blurring of vehicles. Together these signs evoke our senses of touch, smell, hearing and even taste (dusty air); they evoke the sense of space that is visceral, dynamic and multidimensional, relating us back to the observation above that the photographer and viewer are immersed in what is at times a chaotic and disorienting space, rather than being removed and in control as in a traditional linear perspective of landscape photography.

What role could such images play in the public sphere within a politics of transportation reform? What I like about these photographs is the way that they vividly capture the way in which the body is controlled by transportation infrastructure, and so transmit the sense that change is necessary, a sense of something 'intolerable'. I would argue that these images act as a critique of the current state of affairs, an interpretation that is inspired by the artist Martha Rosler's *Rights of Passage* (Rosler 1997). This work consists of a series of panoramic shots of highways and roads around New York, and they bear a striking resemblance the photographs taken by the participants in this research project (I have included three of them below).⁷ The pictures evoke the same sense of being trapped, the same prevalence of the technical over the human, and of an encompassing, visceral and disorienting space (Alberro 1997; Vidler 1997).

⁷ The most obvious difference with Rosler's photographs is the inclusion of billboards and corporate logos, an indication of the kind of ideological interpretation that Rosler wishes to impart to these images. Some of the photographs are also more technically sophisticated, using long exposures to blur lights, or paying attention to balance and cropping to draw the viewer in to the frame even as she presents a bleak landscape.

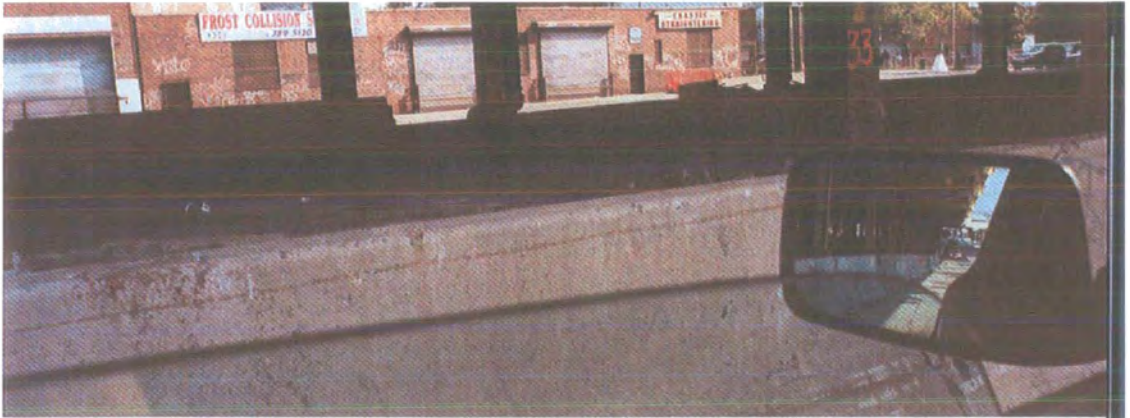


Figure 6.2: Images from Martha Rosler's *Rights of Passage* (from top to bottom): Routes 1 & 9, New Jersey, 1995; Donuts, New Jersey Turnpike, 1995; Greenpoint, under Brooklyn Queens Expressway, 1994

Rosler's goal in such a series is an explicitly ideological diagnosis and critique of capitalist production and culture, as is all her artistic work (Alberro 1999 p.73). The image is meant to confront and disorient the viewer, and so make them think again about the mundane and everyday. In *Rights of Passage*, the photographs are accompanied by a text that asks the viewer (her public) to consider how these images challenge the ideology of speed, progress and freedom associated with the road. "The twin dreams of escape and of possession [of novel consumer goods c.o.] are foreclosed by the advancing sameness of the landscape called into being by the advancing progress of the road... This mirage of liberation has as its unintended end-point the redundancy of the entire world, demolishing place and time in favour of space... Together, the glossy and the stolid are the orb and the sceptre of the present kingdom of desire" (Rosler 1997 p.15). The critical lament is augmented by the photographs, in which the cluttered composition mimics the loss of progress, but which also carry with them a sense of exhaustion, risk and foreboding. This is most clear in the photograph reproduced above where a skeleton is reflected in the windshield, and so floats above a smoggy skyline traversed by an airplane; the horizon is foregrounded by the road, and a sea of cars which sits in front of a now marginalized railroad and some oil storage tanks. The photograph reminds us of how oil corporations and car manufacturers played a key role in ensuring the car dominated American transportation (Alberro 1997), while the skeleton and smoggy horizon traversed by the plane remind us of the cost to our health and environment of the dream of total mobility. I would also add that her pictures, just like those of my participants, force us to contemplate a landscape that has been built to an increasingly inhuman scale; with Rosler this is also an explicit critique of capitalism and the profit motive that drives its relentless (re)construction and expansion.

We can thus appreciate Rosler's and my participant's photographs as a critique of a society that restricts mobility, and imperils health and ecology in the name of profit. Aesthetically the pictures work as a bleak condemnation, they confront us with that which is usually simply endured and forgotten. However, the sense of being trapped and overwhelmed also risks arresting critical thought. This is especially so when tied to the ideological narrative of progress, where we understand the pictures as signalling its end – "the underlying theme

of all these photographs: that of the ‘Road Closed’ whose interminable psychic and physical repairs signal the end to our twentieth century ideology of the free way” (Vidler 1997 p.25). As a result, the pictures work as a lament for “a lost dream or absent utopia” (Alberro 1997 p.43). As an intervention in the public sphere, then, pictures such as these contain the force of judgement and moral conviction. What’s more, in Rosler’s photographs, and the text that accompany them, there is a clear corporate subject who can be held accountable. Taken together, statements and image present a resentful take on the modern landscape, one that wants to turn away in disgust and point a finger in condemnation. In doing so, the photographs say too little because they confront us with the all too familiar signs of our failures without engaging us in a contemplation of how we might move forward. In addition, the pictures say too much because driving can be pleasurable. As much as one may be horrified by such landscapes, or the problems of the automobile, we cannot deny that there is another experience of the automobile – one of convenience, safety and freedom – that has not wholly come to an end, and which is daily promoted by the automobile industry (Wollen 2002; Edensor 2003). Rosler places her images (and I would argue those of my participants would carry the same affective force) in opposition to this positive evaluation of the car, but given the dominance of the car indignation risks sliding quickly into resignation and scepticism. While opposition may provoke the desire for change, it is also against the backdrop of such a mundane and daunting everyday reality that advertisements such as the one below gain their force: submit and dominate (Figure 6.3 directly below).



We can understand the series of pictures taken by participants as a collective expression of frustration, while Rosler’s are a more explicitly ideological critique; yet if we are to

evaluate how they would work in the public sphere, I think they will ultimately deflate critical momentum. In *Rights of Passage* Rosler has used her art to call a public into being, but the moment of moral indignation that accompanies the actualization of a public on viewing such images, is one that risks immediately falling back into bitterness and resentment. The images mark only a lack – a lack of a public and public space from which we could launch an affirmative critique, and a lack of vision from those ‘in power’. However, while such moments of judgment and condemnation are unavoidable and perhaps even necessary, such images risk becoming complicit in the absence they lament because they impart the sense that there is nothing we can do, or more to the point, would want to do.⁸ This is not to dismiss the aesthetic impact of Rosler’s work, nor even what it does. However, it is also possible – and I would say necessary – to create something that takes us beyond the negative critique of the everyday. In particular, what I would say is lacking in these photographs is a clinical (as opposed to critical) approach in which one might harness those forces that trap a body within the transportation infrastructure. We have here images in which the body is at the centre of a complex assemblage (road, car, dust, sun, body, speed), but no sense of what the assemblage might provoke us to think, and so what the body might then be able to do, and desire to do. In order to engage this problem, I turn to look at the conflict between cyclists and car-drivers in Toronto.

Once we get off the highway, the bicycle is an obvious alternative to the car as a form of urban mobility, but my interest in the bicycle is not with how we might get people to ride a bike (although I don’t exclude that), but with how encounters between bicycles and cars

⁸ The limits of Rosler’s critique is, I think, well caught in a set of images in Rainer Ganahl’s photographic series *S/L Seminar/Lectures*. In this series Ganahl photographs famous intellectuals giving lectures as well as photographing their audiences. One of his photographs is of Martha Rosler giving a talk about the loss of public space (see www.ganahl.info/s_sl_rosler_moma.html). The picture shows Rosler from the vantage point of the auditorium seats; she is partially obscured by the podium and in the background is a large projection of one of her airport photographs from her work *In Place of the Public* (a work which challenges us to think of the control, exclusion and banality in travel spaces created for and by capital) (Rosler, 1998). Another picture shows a large auditorium filled with attentive listeners. Rosler is clearly in a position of authority and influence here, and yet we are confronted with the contradiction of the artist telling her public about how contemporary spaces lead to the absence of a public and in doing so overlooking the fact that she is, at that very moment, constituting a public. What will/can this public do with Rosler’s work and with their own absence? This interpretation is my own, and in his commentary on this work Ganahl seems more concerned about the commercialization of educational spaces and questioning who will have access to these ideas – a concern that parallels Rosler’s concern with airports, but which I think in Ganahl’s work is more reflexive in its focus on our own intellectual production and consumption.

can be used to make visible the need and desire to experiment with personal mobility. In order to do this, I will examine first how the conflict between bikes and cars in the congested streets of Toronto is an example of how identities, which emerge partly in relation to the smog-event, can become entrenched as hard oppositions in political debate, while at the same time being open to becoming. I will then look at how Rainer Ganahl's art engages this becoming as an example of what I take to be a successful experimentation with affects and percepts in re-activating becoming and encouraging experimentation.

The car and bike in Toronto's gridlock

As part of efforts to mitigate air pollution, as well alleviate congestion, the City of Toronto is trying to move away from its car-centred urban design and encourage people to use alternative forms of personal transportation. While there are clearly many reasons why someone would choose not to give up the car, including convenience and social propriety, safety is certainly a key concern that prevents people from making the choice for alternative forms of personal transport – the roads are designed for cars and so other road users (pedestrians, cyclists) are at a disadvantage not only in terms of convenience, but in terms of personal safety as well (Lucas 1998; Decima Research Inc. 2000).⁹ While safety could be improved by building pedestrian and cycling infrastructure, this would require a redistribution of road 'resources' – not only money from the transportation and planning budgets for construction and maintenance, but more importantly actual space on the road. Smog provides a moral imperative for why such a redistribution should take place (as well other as issues such as promoting healthy, or fit, lifestyles and access to mobility for different classes and ages and global warming), but when the issue of road re-design emerges as a political conflict it does not get discussed primarily in terms of moral overcodes (the 'right thing to do'), but in terms of a reactive defence of which road users have a right to the road, and what kind of redistribution is reasonable to accommodate that right. So, for example, while there may be agreement that more people cycling is good for health and air quality, it does not follow that improvement in air quality legitimates taking

⁹ In Toronto, while cyclists make up only 2 per cent of the traffic, they account for 8 per cent of the injuries and 5 per cent of the fatalities. Similarly, half of all traffic fatalities in the city of Toronto involve pedestrians (Lucas, 1998; DeMara, 2002; City of Toronto, 2004b).

road resources away from car-drivers. Instead, one can argue that it is a matter of sharing the road, and it is here that an opposition between transport-based subjectivities emerges and acts to slow down attempts at reform. The conflict I want to focus on, is that which takes shape between the 'irresponsible, uncaring, car-driver' and the 'self-righteous, reckless, cyclist.'

In Toronto there is vibrant activist community focussing on transportation reform, and Toronto is a North American leader in limiting car use, although a laggard by European standards (Newman and Kenworthy 1999).¹⁰ That being said, the status quo in Toronto is biased in favour of the car – cars are the baseline against which the possibility for change is measured. Ultimately the car-inertia comes to a head whenever road redesign is proposed that would redistribute road resources (Egan 1995).¹¹ The question asked in each

¹⁰ On the pedestrian front, Toronto has recently adopted a Pedestrian Charter, which officially commits the city to trying to encourage pedestrianism in all of its urban design (this not a legally binding document, but an expression of intent) (City of Toronto, 2000). This document was the result of lobbying by the Pedestrian Planning Network, a dedicated group of citizen activists who are intimately involved in planning issues in Toronto. With regard to cycling, the City of Toronto has an official Bike Plan, which involves creating a network of bike lanes on city streets (City of Toronto, 2002b). However, the implementation of the plan is behind schedule, and cycling activists note that it does not adequately meet the needs of cyclists in the urban core (which accounts for the majority of cyclists). There is also a vibrant and active cycling culture. The Toronto Bike Network promotes cycling and monitors the city's progress on creating bike infrastructure. More pro-actively, the group Advocacy for Respect for Cyclists (ARC) promotes cycling by providing legal information and support to cyclists who have been in collisions, educating cyclists about their rights, engaging in direct action to promote cycling culture and awareness of cyclists rights, and publishing an annual report card that tracks the city's progress in implementing the bike plan and addressing other cycling related issues such as policing and education. Finally, as a statement of general intention, the City of Toronto Official Plan commits the city to a program of urban densification, with the goal of promoting more pedestrian and bike travel (Dill and Bedford, 2002). See also www.getoutofthebikelane.com which fights to have the city enforce the no-parking bylaws in the bike lane, as well annual creation of car-free zones during the summer to promote car-free urban spaces e.g. www.pskensington.ca and www.carfreeday.ca

¹¹ In a recent court case a cyclist the city was found liable for the injuries incurred by a cyclists who was 'doored' (knocked of their bike by a driver getting out of their parked car) on a busy downtown street (Queen St) that cuts east-west across the city (the Bike Plan has be critiqued for its failure to provide east-west linkages in the core). However, in order to provide a bike lane on most downtown streets in Toronto it would be necessary to remove on-street parking. In their reaction to the ruling, the City of Toronto Planning Department suggested that the present time this was not feasible for political reasons. In another case, the implementation of a bike lane on Dundas St. East, which was included in the Bike Plan, met with opposition from commuters who were worried about congestion caused by the loss of one lane of car traffic (a fear that turned out to be unfounded, but which was supported at the time by analysis from city traffic engineers). Finally, the plan to put a dedicated right-of-way for the streetcar on one of North Toronto's main east-west arteries (St. Clair Ave.) is presently meeting with intense opposition from businesses and residents worried about the impact on car traffic. The city planners have been forced into a position where they must promise to maintain existing car volumes in any road re-design, even if it could be argued that more people could access the area by bike, foot and transit. This has precluded any redistribution of road space to encourage

case is whether encouraging cycling or walking requires road-redesign, or is the lack of safety a result of irresponsible behaviour by road users? The expert/technical evaluation is moving on balance towards the latter, but the public debate and political opposition takes place along the lines of the former, because there is opposition to displacing car infrastructure. The *National Post*, a Toronto-based paper, ran two articles in the summer of 2004 under the headline “Door prize! Bikes v. cars” that captures the essence of the divisions at work.¹² The pro-car article ran under the headline “It's cyclists' hatred of cars that's so troubling” (Richler 2004) and captures the story from the driver’s side of the windshield:

The roads of Toronto are a testy and hostile place in which to operate. At every intersection a cabbie lurks ready to jump the next green light and race you to the back of the traffic jam waiting across the intersection. Thanks to our ridiculous streetcars, the traffic never flows...But nothing contributes more ill will to the daily commute than that angry bang on the roof -- and "F--- you, asshole!" -- as said biker weaves off bitterly into the traffic battleground up ahead. Try and catch up to give him a piece of your mind, and you cannot, because the cyclist does not stop for the red light....Automobiles, like [sic]. The single most valuable invention since the printing press. Cars, and their drivers. The people whose registration fees, taxes, fines and parking tickets generate the government income used to build and, after a fashion, maintain the roads we now have to cede, chunk by chunk, to the freeloaders in the bicycle lane. If they insist on sucking up a pack of Marlboro's worth of industrial smog on the way to work each day and call it exercise, that is their business. But they should do it quietly and stay out of my way. Because the days when I think I've saved enough of you from your own stupidity are getting more and more frequent. Squashed cyclists can be sad to look at, but at least they can no longer swear at you.

Driving is a highly disciplined activity, the driver is focussed on the road ahead of them, and the cyclist literally comes out of nowhere and breaks all rules. The cyclist appears to be taking undue risk, and what is perhaps most annoying for the driver, is making better headway in downtown traffic, sometimes by ignoring traffic regulations and sometimes by using sidewalks or pedestrian paths. The driver stuck in congestion, then, harbours a

cycling (all examples based on my own experience in cycling activism in Toronto, as recorded in my field diary).

¹² A ‘door-prize’ in cycling lingo is when someone in a parked car suddenly opens a door into a traffic lane and cuts off a cyclists before they have time to stop, causing injury and at times fatal accidents as cyclists are pushed into motorized traffic.

certain hostility towards the cyclists, but so too does the driver who is moving freely but has to contend with cyclists moving in what appears, from the driver's seat, to be an erratic fashion. Therefore, when it comes to redistributing road resources, there is a twin resistance as summarized in the above rant: 1) there does not appear to be enough cyclists to justify redistribution; a claim that gets framed as the – incorrect – assumptions that drivers pay for the roads through licensing fees.¹³ 2) Cyclists could make do with existing 'road share' if they rode safely. This twin claim support the perception that it is just not reasonable to redistribute road resources to the cyclist and that cycling is not a 'serious' mode of transport, but one for children or those who do not have 'adult' responsibilities. As a result, the cyclist is seen as unnecessarily putting themselves at risk of accident and pollution.

From the cyclist point of view, of course, the road looks very different (Kuitenbrouwer 2004):

Why the hostility? I'm doing a public service when I commute by bicycle on the half-hour trip from home to my office (dropping my daughter, who still fits in the bike seat, at daycare along the way). I don't pollute or bang up the streets. (When I hear my young son coughing in the morning, I blame the cars.) I don't take up a parking space or add to traffic jams. Plus, I stay fit, arrive where I'm going faster and save money. My company benefits because I don't bill for mileage, parking or cabs when I ride my bike to an assignment. Taxpayers are happy because I stay healthy and out of the doctor's office... Motorists stink up the air, idle in the drive-through burger joints and clog the streets. Cars are ridiculously large and getting larger, which is strange, considering even the biggest ones tend to have a single person sitting in them. Drivers apply makeup and chat on cell phones, threatening cyclists and pedestrians with their hurtling hunks of metal. To say nothing of the perils of drunk drivers. (Drunk cyclists, meanwhile, imperil only themselves.)

In this excerpt it is the driver who is irresponsible, cocooned in their steel machine they are unaware of the road around them, and portrayed as wilfully neglecting the environmental and social consequences of car-based transport. The cyclist has moral leverage over the car-driver – first, the cyclist does not pollute the city, congest the streets and lead to unhealthy lifestyles, and second, the cyclist does not kill others when they are inattentive

¹³ License fees and gas tax are only a portion of the total tax revenue that is used to construct and maintain roads. All Ontarian's subsidize the car.

(the cyclist is the more vulnerable road user, and so also has a moral claim to be protected from the excesses of the stronger). From this point of view, the car-driver seems brutish, oblivious of the needs of those who do not drive. But despite their real domination of the road space, the car-driver also seems somewhat pathetic from the point of view of the cyclist. This is reflected in nicknames given to car-drivers by cycling activists, such as ‘car-head’ or ‘cager’, which are meant to reflect the fact that the cyclist enjoy greater freedom on the road. The driver sees a cyclist being ‘irresponsible’ for sneaking through stop signs, hopping on the sidewalks or pedestrian paths in parks, cycling the wrong way down one-way streets or hopping road medians on multi-lane roads; but the cyclists understands these to be perfectly ‘natural’ and safe manoeuvres, it is a flexibility that makes the bicycle “the ultimate urban vehicle” (quoted in Porter 2002).

The binary opposition created in the newspaper articles overplays the division that characterizes hegemonic discourse, where it is recognized there must be some form of redistribution of road resources (Dill and Bedford 2002). Yet this moderation and reasonableness plays to the favour of the status quo (the car), and what these articles show is that that hegemonic discourse is removed from tension that exists in everyday confrontation, and so downplays the divisiveness that can characterize actual political confrontation in particular cases of proposed design change. What is of interest here in relation to our discussion of speed and politics in chapter one, is how these subjectivities are examples of ‘hard oppositions’ that develop within multiple speeds of the city, and in particular in relation to the control and discipline the city imposes. It is precisely this kind of hard opposition that was identified in chapter one as one of the risk of a politics ‘at speed.’ We are now in a position to use the conceptualization of a public, and its subjectivities, as formed in an assemblage as a way of understanding how one can intervene in the tension, or intensity, set up by this binary, not in the interest of resolving it into one or the other side (or even sedimenting it in a compromise), but instead in order to use this intensity to keep open the desire for experimentation with alternative forms of personal mobility.

The encounter between the car driver and the cyclist is a momentary disruption in both the cycling and driving refrains – a disruption which is intimately related to the disruption of air pollution in as much as pollution provides the cyclist with a moral leverage against the ‘inconsiderate’ driver, while at the same time placing the driver in a reactive and defensive stance that labels the cyclist as crazy for ‘sucking up a pack of Marlboro's worth of industrial smog’. However, these defensive and moralizing subjective moments, are also surpassed, I would argue, by a more ample movement that has nothing to do with who has the right to the road, but with glimpsing of the limits that the transportation infrastructure places on what a body can do.

Both the cycling and driving subjectivities emerge within an assemblage that limits what they can do – both through material control (e.g. lights, lanes, medians, congestion) and through moral overcodes (e.g. drive responsibly) (Michael, 2000). When not in congestion or dense urban traffic, these become fused for a car-driver into an automatic space; but in the urban core this control starts to break down – the driver is cut off by the cyclist, the pedestrian suddenly steps off from the curb etc. and control becomes contested. It is in congestion and dense urban traffic that the bike is suddenly able to ‘deterritorialize’ – it is able to break rules by hopping curbs, weaving between traffic etc. Elements within the transportation territorial refrain can be recombined by the cyclist – a sidewalk can be a cycle path, a post can be a parking space, a park can be a short cut. These are moves that a car could never do without reeking havoc, and the cyclist senses freedom:

Setting out along the cracked pavement of Queen St., navigating the fissures carved into the concrete by streetcar tracks...the traffic stops and starts, smog rising. Weaving in and out, through the snarl of bumpers and tires, horns blaring, there's a settling calmness as you transcend the rules of the road. Technically, you're a vehicle, subject to them, but in practice, you're free: Such rules are for clunky cars and the fools that feel a need to use them. It's the satisfaction of self-righteousness, and it feels sinfully good...In a vast city where we are more subject to its rhythms - of traffic, of time, of regulations and transit schedules - than it is to ours, that freedom is rare, and to be savoured (Whyte 2004):

In congested traffic, the bicycle is the most deterritorialized component of the traffic assemblage, even pedestrians are still largely constrained to the sidewalk. The cyclist

experiences this as freedom, while the driver experiences this both as a further constraint (they have to be more attentive for cyclists) and as an indication of their own relative immobility. Deleuze and Guattari argue that the most deterritorialized element is that which “bring[s] ‘play’ to what it composes; it fosters the entry of new dimensions of the milieus by releasing processes of discernability, specialization, contraction and acceleration that open new possibilities, that open the territorial assemblage onto interassemblage” (Deleuze and Guattari 1988 p.336). The bicycle, then, introduces a degree of play into the traffic assemblage and opens it to an ‘interassemblage’ that points towards an alternative reality.

For a brief moment the whole becomes uncoded, as the quote above indicates, even the threat of smog can be forgotten as the cyclist weaving through traffic: “You are longitude and latitude, a set of speeds and slownesses between unformed particles, a set of nonsubjectified affects. You have the individuality of a day, a season, a year, a life (regardless of duration) - a climate, a wind, a fog, a swarm, a pack (regardless of regularity). *Or at least you can have it, you can reach it.* (ibid. p.262 my italics). As the cyclist weaves off ahead in traffic, the car-driver is pulled into a ‘becoming-bike’ that makes them aware of the limits on what a body can do in traffic, while the cyclist gains force in this moment and becomes temporarily dominant – a becoming-car of the cyclist that makes them aware of what a body can do. Together the two speeds connect and form a ‘block of becoming’ that pulls both subjectivities beyond the territory for even the briefest of moments, before reaction sets in, or before the traffic starts to move again and the cyclist dutifully takes their place in the bike lane and signals their turns properly.

Here, then, is an example of the kind of encounter in which a subject might be encouraged to consider the limits of existing subjectivity in relation to an issue intimately connected to smog. In this moment of disruption, a subject can sense the extent to which their own perceptions and beliefs are forged within an assemblage that goes beyond their subjective intention. It needs to be stressed that it is not that a subject can see the bicycle is ‘better’; what is made visible is the necessity to choose to make a transportation system that maximizes what a body can do – this will require a willingness to experiment and the dice throw of affirmation. However, this moment of becoming can in turn fall back in reactive

positions – the moralizing of the cyclist or the reactive vitriol of the drive -- and so we must now turn to consider how this block of becoming might in turn be sustained within the circulations of claims in the public sphere and used to encourage experimentation with the networks and infrastructures of control.

Bicycle by Rainer Ganahl

Rainer Ganahl is an artist whose work has been centrally concerned with the question of knowledge, communication and language, and the impact that technology and global capitalism is having on these. Running through all his work we can see an attempt to question the production and circulation of critical knowledge, as well as how that knowledge might inform practice (artistic or otherwise) (see www.ganahl.info for his various projects past and ongoing). While his past work has focussed on reading, education and language (e.g. Ganahl 2001), his more recent work, in the wake of September 11th and the ‘war on terror’ focuses more directly on how to intervene in high-speed mediated communication, and its domination by the propaganda of President Bush’s administration.¹⁴ The exhibit I will focus on here, called *Bicycle*, is connected to his interest with the war on terror, but the primary focus is on questioning how the bicycle is seen as an innocent escape from the complexity of the current global reality. In the exhibition statement Ganahl writes: “Bicycles have very complex social realities and in developed rich countries stand for some kind of utopian environment-friendly mobility. Bicycles belonged to the first products that were outsourced to China and other low cost producers, where bicycling today means being poor confronted with the new exploding

¹⁴ Ganahl (2004b) is aware of the limits placed on written communication and reflection under present conditions: “Reading has become very difficult for me. I simply don't dare easily to risk that much time away with books. Reading is as painful as writing since it often pressures me into writing. With the arrival of a high-speed Internet connection, I feel my mind has gone public, consumed by messages, by news, by these wars, by the terrifying politics of this current Bush administration. I switch nervously back and forth between the internet browser, this writing platform and e-mails. The world on the net is now vaster than the map that wrapped the globe of Borges. Whatever comes to my mind can be instantly corroborated and multiplied with the help of powerful search machine on the Google empire of references. My private world more and more dissolves in conversations catatonically scattered over e-mails I misspell throughout all day. The concentrated containment of a book, if it not only looks like a book but is written as one, is provocatively challenging. It suspends me. It renders me incompatible with the rest of my activities and obligations. I am a very slow reader if the text isn't just a text, a text, a text. And as I practically miss out on the requested time frame of a book, I am also unable to write or finish my own writings. Remaining remnants of bitter-amer feelings of failure to address fully the complexity of things linger on. I walk away and move on to the next assignments, the next tasks, the next attempt, the next deadlines.”

class of car owners” (Ganahl 2004a). This statement captures the essence of the problem Ganahl wants to address with the bicycle – in rich countries a bicycle is viewed as a purely innocent alternative to the automobile and the oil based economy, but it is not enough to simply blindly embrace the bicycle when it is immersed in a complex global reality. *Bicycle* works as a celebration of the bike as an alternative form of transportation, but not without also using it as a means to pry the viewer open towards a broader reflection about how to experiment with our (controlled) existence within an image mediated global capitalism. Ganahl’s art is related to the concerns about air quality not only because the bicycle is a ‘clean air’ alternative (‘utopian environment-friendly mobility’), but also because we have argued in chapters four and five that it is precisely the question of control that is made apparent by the smog-event, and which needs to be kept in the forefront in any politics of becoming. The smog-event makes us aware of the molecularity of the body politic, and Ganahl’s work engages with this molecularity, and the assemblages that try to contain it. By looking at four of the pieces from this exhibit, I think we can trace a progression between critique and a clinical diagnosis of the need to experiment, which culminates in a video that manages to re-activate the block of becoming that is glimpsed in traffic when bicycle meets car, and in doing so transmit the joy and desirability of experimentation.¹⁵

The first piece that one sees upon entering the exhibit is a large montage of postcards entitled *use a bicycle. mail art project with self made stamps*, which consists of 18 commemorative postcards of the World Trade Centre with the message “USE A BICYCLE” written on them.

¹⁵ An almost complete exhibition display is available at www.ganahl.info/petro04.html, including an artist’s statement



Figure 6.4: Detail of *use a bicycle*. mail art project with self made stamps by Rainer Ganahl, 2004

Ganahl sent these postcards from New York, through the US postal service, to the gallery in Toronto with self-made stamps carrying messages such as “War on Terror”, “Shock and Awe”, “Evil Doers” and “Al Qaeda”. Ganahl is playing with the heightened sense of security and loss of innocence in the US post-9/11, and in particular with reference to the fear of ‘anthrax’ being circulated through the mail that was prevalent just after the attacks. The postcards and self-made stamps are remaking the ‘patriotism’ that has been so stifling of public discussion about terror (especially in the US), and which is represented by the stars and stripes on the postcard – it is patriotic to ride your bike. The bike here is presented as a somewhat subversive, but nevertheless innocent technology, slipping beneath the radar. The bike, like the postcard, is a do-it-yourself technology; we can here recognize the virtuous bike that was part of our discussion above, and so the explicit focus on the politics of 9/11 relates also to other concerns, such as air pollution in our homes and cities. The DIY, or self-made, character of this piece is also stressed by the fact that Ganahl is using ‘snail mail’ – the postal service – to send his message and reach across borders. He is then explicitly ‘slowing down’ and stepping outside the high-tech system that is used to monitor and control; in doing so he is pointing to the subversion that can

come from simply 'opting out' and finding different technologies to connect -- this is not, to be sure, to say that the postal service is not (and has not historically been) monitored and censored; however, it works here in contrast to instant telecommunication as a message about re-appropriating the means of communication and transport. This first piece carries a rather simple and positive message, if a bit naïve – get on your bike, do-it-yourself, reject a reliance on a system that propagates violence and threatens your everyday well-being.

If we consider how this piece works, we can see that it works by creating a synthesis between two things that might not otherwise have been related and gives both new meaning – terrorism and the world trade centre is brought closer to the everyday life of the city, and riding a bicycle is given more historical resonance. Therefore, this piece works through the content of the postcards – not just the words, but the symbolism and the viewers understanding of the context of the anthrax scares. It is for this reason that the shock to thought that this piece carries is rather short-lived, and soon devolves into 'mere opinion'. The postcards do not transmit affects and percepts that reactivate a problematic event that would make us think and go beyond our subjective perceptions – quite to the contrary, they rely on a subject who is able to make recognized connections between elements of content. The work gives an opinion of how we might solve the problem of 'oil imperialism' and its associated violence. It is a playful attempt at jarring accepted thought, but once we have assimilated the different segments of content the piece loses force if we don't agree (or don't know if we want to agree, feel ambivalent) with the critique offered. In this regard, the postcards are much like Rosler's road pictures; more playful certainly – and this is important, because less resentful -- but nevertheless acting only as a moment of critique that stands precariously against an actuality that opposes the utopian message given here, and makes it seem naïve. Tactically it serves to strengthen an already formed subjective refrain, rather than question its limits.

The innocence of the bicycle, and the simplicity of the message in this first work are troubled in the next two pieces, which are large acrylic paintings: *Forbes.com, Reuters World News Highlights 1900 GMT, 1/9/04* and *Newsday.com, bicycle bomb, 1/6/04*.

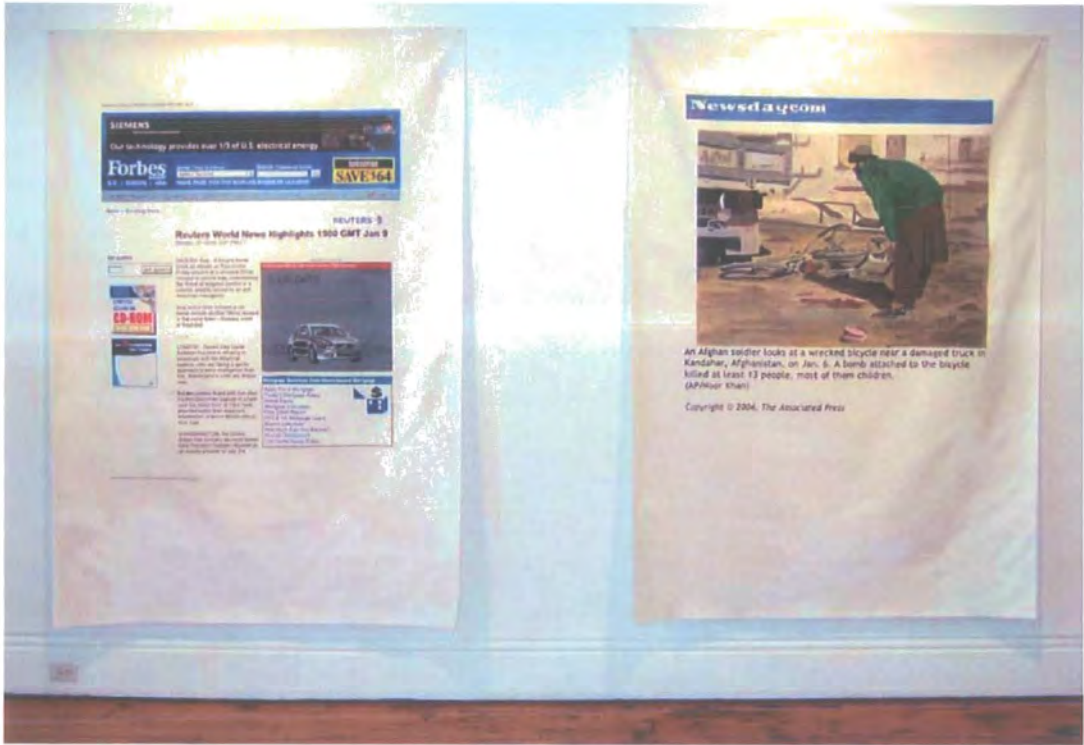


Figure 6.5: Forbes.com, Reuters World News Highlights 1900 GMT, 1/9/04 (left) and Newsday.com, bicycle bomb, 1/6/04 (right) by Rainer Ganahl, 2004

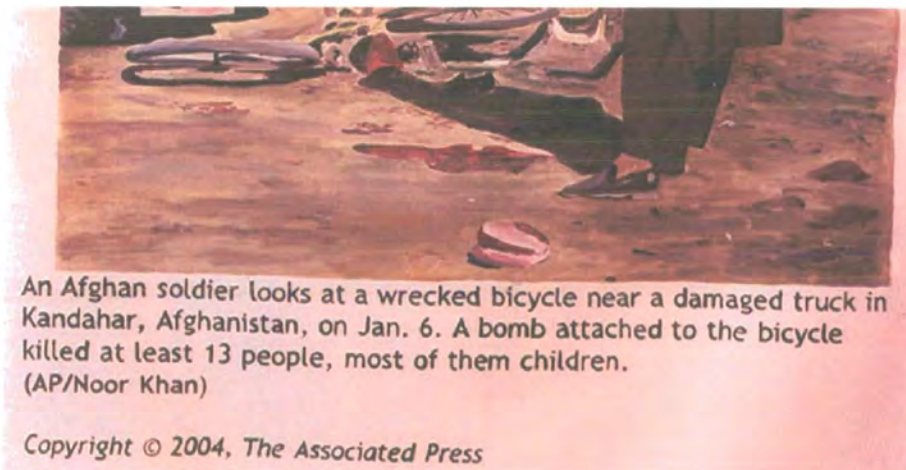


Figure 6.6: Detail from Newsday.com, bicycle bomb, 1/6/04, by Rainer Ganahl, 2004



Figure 6.7 Detail from Forbes.com, Reuters World News Highlights 1900 GMT, 1/9/04, by Rainer Ganahl, 2004

Ganahl calls these pieces 'news paintings', for the obvious reason that they are paintings of news items as represented in the medium in which they are distributed, and at the time that they occur. The first thing that strikes the viewer is not the content of the news, but the size and colours of the image. These paintings have an aesthetic value that does not simply reproduce the web page, but also beautifies and memorializes; a web page is normally a fleeting and temporary image with rather harsh and crisp affects and percepts shining out of the screen. What's more the news web page is usually scanned by the viewer distractedly for items of interest, and lasts only until the viewers click to the next link. Once again, Ganahl has subverted a high-speed medium and made it his own through a simpler (low-tech) technology. Here the image takes on more depth and permanence, its vivid colours and size is a sign of greater importance and permanence (or at least curiosity)

– the instant that would normally pass within duration is now memorialized as History, and it invites the viewer to linger. But linger over what? The content of the news item is about a suicide bombing that took place in Afghanistan using a bicycle. Ganahl (2004a) writes in the exhibition statement:

The bicycle is usually associated with non aggression and environmental friendliness. In these paintings, bicycles are involved in the most horrific and unsettling [sic] crimes that parade our news horizons [sic] in these days. The (suicide) bombings that have become so frequent in the last couple of years are associated with issues of religious fundamentalism, the Middle East, national self-dertermination [sic] and oil. The interpretation [sic] and representation of this theatrics of death and total distruction [sic] in the media is as contested as the complexity of the political, economic, social, religious [sic], historical and ideological problems that create the context for these incomprehensible and self-annihilating acts of absolute violence. As it is the case with all of my news related [sic] art works, I only reproduce mains [sic] stream news reports as they are fludding [sic] us, the active and passive consumers of media. I see this freeze framing of news content that changes on the internet by the second and on the news stand by the day in the tradition of European history paintings. It is ironic that the taste of "Old Europe"'s for history paintings partially coincided with the onset of its imperialist interests and colonial actions.¹⁶

Ganahl uses a very welcoming and familiar aesthetic to draw the viewer in (his image stand somewhere between painting, comic book and corporate logo), but then confronts them with a very troubling content – the suicide bomber and our relation to this violence. The complexity of the situation that gives rise to these ‘acts of absolute violence’ is symbolized in the advertisements and windows that surround and clutter the text of the news article (including a car advertisement), which is notably taken from the website of the financial magazine Forbes. In relation to the bicycle, the image disrupts the innocence of the bicycle, because it is now associated with a context that draws attention to the viewers relative wealth and privilege.¹⁷ In this regard, we see the politics of car vs. bike as a reflection of a privilege that is in part afforded by the inequity and control of global

¹⁶ All of Ganahl’s texts are filled with spelling errors. It is likely that this is not an accident, but serves to highlight his interest in communication across languages (English is not his mother tongue) and his interest in communication in fast-paced environments. The spelling errors do not take away from the content of the message, but they raise questions about the universality of the writing medium when dominated by one language. See www.ganahl.info for more on his work on language.

¹⁷ In the context of riding his bike in Tirana, capital of Albania (poorest country in Europe), Ganahl writes in the exhibition statement: “In some countries poverty can make people with bicycles look priveledged [sic].”

capitalism; the viewer's relation to a system that in the postcard piece seemed so 'easy' to step outside of is now more vexed. What's more, unlike the postcards, where the postal medium allowed a direct engagement and subversion, the internet and the barrage of news media draws attention to a much more difficult medium for individuals to engage with as other than just passive observers. The act of painting the website works as a kind of 'witnessing', which also reflects its weakness and inability to intervene. In switching medium between digital flux and painting, memorializing and so freezing the instant, Ganahl is drawing attention to the high-speed axiomatic dynamic of contemporary capitalism and its technologies of control, presenting them here as a problem for us to consider. In recording these images as they are 'flooding' us, Ganahl is subverting the tradition of the historical painting, which was meant to glorify the acts of colonial power once they were completed and accepted as historical 'fact'; Ganahl's paintings intervene in the middle of the act in an attempt to disrupt and question the inevitability of imperial power, and to expose its violence.

We can pause again, and consider how these images work. Once again, much of what the viewer sees here relies on the content of the paintings – text and symbolism. However, the first thing we can note is that Ganahl is not providing us with a concrete message or opinion, but simply re-presenting the messages we see on our screens every day (the explanatory text above is taken from the exhibition statement and is not displayed with the images). The viewer, then, has no immediate answer as to what to make of these painted web pages. Second, what draws us in are the affects and percepts of the painting – its colours, shapes and size which act as signs of both accessibility and importance (or at least curiosity). The viewer is therefore drawn to linger in front of this painting, and in the disjunction between the accessibility of its aesthetic, and the seriousness of its content, the viewer is perhaps drawn towards sensing a relation that is 'intolerable' and 'shameful' in our contemporary existence -- not only the trivialization of violence, but the way in which the subject is caught up within an assemblage where such violence becomes mundane. This 'spark of sense', however, is perhaps too weak, and is potentially overshadowed by the literal content of the piece, which perhaps means that it is simply experienced as a clichéd statement on the horrors of war and global capitalism.

In all of the above examples, Ganahl's art points towards the need to engage in the assemblages through which we learn and connect with others, and in so doing engage in repeated moments of subjectification. Ganahl's work brings together the technologies and forces that create moments of subjectification, but he does so in a novel fashion; and while these first three examples do not perhaps connect the viewer to what is 'outside' our subjective refrains, and engage us in a block of becoming, they still require that we think for a moment about our opinions and what we believe. They slow us down by making us re-play moments of subjectification that we undergo at many points and times in our daily routine, but usually in an unconscious, or at least unreflective manner.

The two pieces discussed above can be seen to be in tension – on the one hand a more hopeful, perhaps naïve celebration of the bicycle, on the other, a more troubling 'news paintings' that questions how the viewer could ever meaningfully intervene in the relationships that have been problematized. Into this tension, I would like to insert a final video piece called *bicycling*. Here we return more directly to the problem of the road as it was represented in the photographs above, and discussed in relation to the car/bike opposition in Toronto. But rather than simply representing the actual road, Ganahl reactivates the hidden (constrained) potential of the road as a place of movement (the video can be viewed at www.ganahl.info/videos.html, where it is stored under the title *bicycle – 51st street*). In this piece, I will argue, Ganahl succeeds in moving fully beyond opinion and creating a block of becoming with his audience.



Figure 6.8: Still shots from *bicycling* by Rainer Ganahl, 2004 (it is advised to view it in motion)

In this video the viewer is looking straight down on a pedestrian crossing that runs at slight angle across the screen. It is a bright sunny day. Streams of car-traffic, dominated by the bright yellow of taxicabs, move in from the bottom, and bottom-right, of the screen and are interrupted at intervals by the crossing of pedestrians. In background we hear the constant ambient hum of traffic. Into this scene, indeed even before the first pedestrians cross, a wobbly bicycle skirts the edge of the frame and then loops in to the centre; the bike continues this erratic and playful looping in and out of the frame for the remainder of the video. The cyclist is dressed somewhat festively in bright red trousers, with a yellow hat and green shirt (this in Ganahl), and on his handlebars sits another person, with their legs stretched forward. This somewhat reckless duo weaves dreamily between the traffic and

pedestrians, only occasionally having to stop briefly so as not to hit a pedestrian, or be hit by a car. For brief moments they are alone in the frame, at others they are crowded and forced to make dizzying turns, at others they are forced out of the frame all together. Rarely does a car honk, never does a pedestrian get upset.

Ganahl says very little about this video in his artist's statement, other than to marvel with a child-like glee at the indifference of New York traffic to his antics, but the video is one of several 'playful' bike videos that one can find on www.ganahl.com/videos; they are found under the heading "something is driving me...with this bicycle thing" and indeed there is something very compelling, yet difficult to articulate, when we watch *bicycling*. Perhaps the reason that Ganahl says little about this video is that, unlike his other pieces, it has no overtly political content, and works primarily on an aesthetic plane. The video works at the conjunction of three different speeds, which effortlessly weave together and are animated by the erratic and playful path of the cyclists – the cyclist provides a rhythm that runs between the regular meter of traffic. This movement, in conjunction with the bright colours, works to create a compelling pattern that can be watched simply as abstract movement independent of any human interpretation. However, when we stop to consider what is going on, the video becomes even more compelling, because we are always wondering when the cycling duo is going to get knocked down, yelled at, or fall down. But much to the viewer's delight they avoid these fates, sometimes narrowly, and keep tumbling through the frame, sometimes disappearing, only to reappear from a different vantage point. The whole effect is dream-like.

What I find compelling about this piece is that it takes the viewer beyond easy judgment, even more so it suspends judgment as the viewer is taken up in the movement on the screen. The aesthetics of the video takes the viewer beyond themselves, and so reactivates a moment of becoming (or at least it can, you can reach it). We need to consider how this works and what it accomplishes. The video creates what Deleuze calls, in his analysis of modern cinema, a time-image (Bogue 2003a). A time-image is one in which the irrational cut disrupts the familiar sense of time as unfolding in a progression through space, forcing the viewer to try to create connection between disjointed images or different takes on the

same image. This is not just a matter of assembling these moments into a coherent flow, but the fact that there is no necessary connection between them, so that they can always be combined again and differently – they are problematic. The time-image is a ‘crystal-image’ of time, in which all of time is present within the frame of the camera as a series of ‘planes’ presented in succession, overlapping, or melting into one other etc.(Ansell-Pearson 2002 p.180; Bogue, 2003a). In Deleuze’s analysis of the time-image he presents it as composed of a series of ‘signs’, which reflect different ways that directors have sought to combine these ‘planes of the past’ within the film to create affects and percepts. The sign that is relevant here is the ‘chronosign’ which Deleuze argues renders indiscernible the distinction between true and false, and so evokes the power of ‘falsity’ (Bogue, 2003a). The chronosign does this by presenting a series of incompatible (or in the Spinozist terminology adopted by Deleuze – impossible) images. These are images that cannot all be true at the same time. For example, an image of someone getting murdered, and then the same scene with the murderer arrested in the act, are two images that cannot both be ‘true’ at the same time. In this fragmented space and time, images lose their reference to being true or false, and become by default not necessarily true – i.e. truth is indiscernible.

Deleuze argues that the indiscernability of truth in the chronosign engages the viewer in a block of becoming in which we become aware of, “on the one hand, the unthinkable within thought, which would be at once its source and its barrier; on the other, the presence to infinity of another thinker within the thinker, who shatters every monologue of a thinking self” (Deleuze quoted in Bogue 2003a p.177). The other thinker within the thinker is made present by providing a number of different views on the same set of circumstances, while the unthinkable within thought is that which was not visible within the habitual and possible, but which becomes visible when non-compossible images are juxtaposed. In this way the viewer is taken beyond their own thoughts and connected to an ‘outside’ – i.e. to the chaos of forces, the virtual realm, that is the very condition of thought. The viewer senses the presence of the outside because they are continually taken up into the image as part of the presentation of the unfolding of events in particular plane, and then jarred out of the scene by irrational cuts that make the viewer aware again of their

position watching a film. In this moving in and out of comprehension, the viewer senses an impersonal force in thought beyond their control, an awareness of an inhuman dimension that forces the subject to think (or which lulls them into not thinking). In this way, then, the time-image reactivates becoming, and makes the viewer aware of the necessity to choose, because what is impossible to reconcile (a world of impossible realities), must be decided in action through a necessary choice (the dice throw). The viewer is led to a belief (a belief grounded in sensation) in a world that is not stable, nor completely comprehensible, but eventful and continually in a process of becoming. This belief in the world as becoming, Deleuze argues, is central to ethical political action, because it affirms the possibility for intervention without premising it on truth or transcendental criteria, or the certainty of success. In this belief one is led to affirm a way of being in which one is forced to choose, and where one no longer seeks the false protection of transcendental certainty, or the self-satisfied and cynical retreat into nihilism.

This is certainly a tall order to place on a short video installation, but we can see the outlines of the chronosign in *bicycling*, and it is this which makes it so compelling. First, we can note that camera angle is one that sits outside the subjective perspective of someone in traffic, whether it is that of the pedestrian, cyclist or car driver. As a result, we are already taken out of the habitual, and presented the world through the eye of the machine. Second, rather than seeing the video as a single shot, we can view it as a series that repeats the same scenario from different perspectives – these are the planes, or sheets, of the crystal of time, and we see a new sheet each time the cyclist leaves and then re-enters the frame of the video. We can see at least five different perspectives on this scene. The first, in which there is no bicycle at all, no pedestrians either, just a smooth and fast stream of traffic. Here the car dominates. In the second cars, pedestrians and the bicycle all intermingle effortlessly (e.g. at 1 min 38 sec in the video). This is a transportation utopia, but the flow is a bit awkward and stilted at times. Third, there is another utopia, where the cyclist and his passenger are all alone on the road for brief moments making large looping circles, and evoking a playful nostalgic past of children and bicycles (e.g. 2 min 05 sec). Fourth, there are those moments when the cyclist is forced out of the frame by oncoming traffic, sometimes moving at very high velocity (e.g. 2 min 33 sec). Here the

cyclist is a marginalized road user. Finally, and fifth, there is the cyclist as ‘reckless’ road user, forcing cars to stop suddenly, or pedestrians to move out of the way as the cyclist forces his way into a crowded cross-walk (e.g. 2 min 53 sec). None of these perspectives on the urban cyclist are necessarily true, and indeed some of them are strictly impossible (e.g. the first utopia of traffic harmony is impossible with the fourth and fifth takes where cyclist is marginalized and reckless). These multiple planes make the ‘truth’ of the virtuous cyclist undecidable, and instead draw us towards a sense of the necessarily problematic control of mobility in the city – we sense that we must try to maximize what a body can do in the transportation infrastructure, but that we are still falling short. Finally, the rhythm, bright colours, and hushed lull of the video draws us into movement at times completely, in a dream-like fashion in which our own memories of cycling can come to the foreground of our thoughts, only to have the smooth motion suddenly changed by a the cyclists precariously wobbling, or even having to put a foot down to stop falling, or being suddenly pushed out of the frame by a rush of speed. In these jarring juxtapositions, pulling us in and out of the frame, we sense the inhuman in thought, we are connected to the outside.

For all these reasons, I would argue that bicycling creates a block of becoming with the viewer. It composes and presents affects and percepts in such a way that the viewer is drawn into the scene, and actualizes different subjective responses to the traffic encounter, none of which can capture totally the different ‘planes’ of the crystal image. The viewer is pulled beyond their subjective refrain, and ‘forced to think’ about the problematic nature of mobility and control in the contemporary urban infrastructure. In the gallery space, with video technologies that are becoming increasingly common, Ganahl creates a public assemblage, and engages in a politics of becoming. However, the real genius of this piece, is that it leaves the viewer with the sense of why one would want to engage in experimenting with transportation reforms and subjectivities; while it makes visible something ‘intolerable’ in the existing control, it also evokes the joy and playfulness of free movement, and hence the desirability of trying to go beyond what is in the name of a perhaps impossible goal (a goal for a people to come). Therefore, if the postcards and newspaper paintings are primarily critical in intent, judging the actions of those in power, raising

awareness of a problematic situation and pointing to the need to experiment with the assemblages within which we live, this latter piece is less overtly political, working instead to transmit a sense of joy, or what Nietzsche would call 'great health' of those who want to experiment as opposed to the merely 'good health' of those who have accepted their fate - *bicycling* encourages experimentation.

CONCLUSION

The formation of a public, and its attendant subjectivities, is an event that can actualize in the briefest of moments. The challenge for any engagement in the public sphere is to intervene in this moment, or better re-create it and sustain it, through the circulation of claims. Like the public it hopes to actualize, the claim is itself is an assemblage between expression and content, an assemblage that it is hoped can re-activate the intensity of the event it addresses and so open the subject again to the potential of becoming, and to the desirability of experimenting with new ways of going on. The images and artwork reviewed here are examples of how a person might create such texts. The expressive components are those that release and transmit sensations – relations between colour, form, volume, movement -- while the content are those elements such as written text and recognizable objects. In the conjunction between these two assemblages the artwork hopes to make visible something 'intolerable' or 'shameful' that provokes the viewer to think again, and think differently, about the situation being presented. The spark of sense will also hopefully open the subject to the 'outside', i.e. to the reality of a subject's existence as part of a complex assemblage that goes beyond the subjective will and perception, beyond any particular form of the possible. This is a moment that is both problematic, because we sense something excessive that we cannot fully control or know, but also humbling. The challenge in this regard is to transmute this problematic moment into a joyful affirmation of necessity of choice, the need for the dice throw in which one acts into indeterminacy.

In this chapter I have evaluated a series of images for their potential to intervene in the debates around transportation reform in Toronto which can at times descend into hard oppositions. When we compare, on the one hand, the images taken by my participants, and the kinds of claims they might be used to animate, and on the other hand, the art work of

Rainer Ganahl, we can see that it is not enough to simply represent, and confront, the subject with the world in which they live, it is also necessary to re-present that world in a novel way. Ganahl's work is successful because it forces us to relive a moment of subjectification in a novel fashion. There is not just a moment of critique, but also a moment of diagnosis that makes visible the problem of how else a subject might engage in the assemblages in which they live and think. The content of Ganahl's work, focussing on the politics of oil and the reflecting on the status of the bicycle as a socially and ecologically benign alternative, is augmented by an aesthetic that is at once playful and problematizing. On the one hand, the images draw the viewer into them through their composition of affects and percepts, but this accessibility is jarred by the content of the work. In this uneasy disjunction the viewer is forced to think again about what they believe and how they come to believe. The artwork also works by providing an example of experimentation with existing networks and practices in which subjectivity is formed (e.g. communication through the post and the Internet, commercial mass media, transportation). However, it is in Ganahl's video *bicycling* that I find his art to be most effective in re-activating the sensation of the event of encounter between different modes of transportation in the city. In this piece he not only problematizes control, but he also transmits a sense of the joy of movement and so encourages a desire to experiment with the limits of what exists, of going beyond the possible. In this regard his video is very much directed at 'a people to come'.

While I have focussed here on images and visual art, it needs to be stressed that words and sounds are also crucial elements to reactivating the event – literature and music, no less than cinema or the visual arts, can provoke us to think again about how to create effective, and affective, claims in the public sphere. It is perhaps true that in contemporary control dynamics images and the sounds (and perhaps even smells and touch) are more important than the word in maintaining a predictable subjectivity, especially given the dominance of television and the Internet in the public sphere. In a fluid and navigational space we are continually bombarded with images, and it is necessary to evaluate how we might use images to get past cliché, and to encourage experimentation and reflection. The value, and the challenge, of the image is that unlike the written text it takes less time to assimilate, but

it may have an effect (and affect) that lingers and can provide a hook around which becoming can be reactivated. However, I do not want to suggest that the image has priority because of its ‘instantaneous’ character, as if intervention in the public sphere had to take place on the fly, as if thought had been reduced to impulsive reflexes. No doubt there is an element that works in this way (e.g. billboards), but as we have argued in chapter two, a society infused with speed is not one that is characterized by a universal ‘fast’ speed. All routines are characterized by a rhythm of fast and slow timespaces, and a claim/text can be tailored to intervene in both of these – we may create books or posters, symphonies or sound bites. As we saw in chapter two, texts and the assemblages they actualize, have a temporality of circulation – they create time. However, in all cases what is important is that the text re-activates a sensation associated with a moment of disruption within routine, and in so doing make it available to repetition and to thought.

Becoming is not recognized, but sensed at the limits of recognition and representation, and therefore a politics of becoming cannot avoid an engagement with an aesthetic dimension. If, as has been argued throughout, we are dealing subjectivities that exist only in repetition, and within often mobile and fluid assemblages, then the force of affect and percept (sensation) becomes increasingly important in understanding how we ‘make sense’, and so how a political claim will gain or lose legitimacy. This is not to say that content does not matter, but it is to say that content only makes sense against this backdrop of sensation – a spark of sense that exceeds the content of the claim. The subject is opened to becoming in the briefest of intervals between sensation and perception, and a politics of becoming must seek to experiment with how to create claims that will pry open this interval and re-activate the charge of the event. What makes this task possible is that the disruptions of the event are repeated, and it is in their repetition that they develop a kind of ambiguous familiarity that can be oddly compelling and pull the subject into becoming. What will make this task successful, is if the claim is able to compose affects and percepts in such a way as to create a sensation that resonates and reactivates memories of the event, but in a new context that provokes the subject to think again, and differently, about recognized and familiar claims circulating in the public sphere. The aim is to try to impart a sense of a world that is becoming and so affirm the necessity to choose to act into indeterminacy – to

throw the dice or experiment – in an attempt to influence the becoming of the world. However, creating claims that work on this register is necessarily experimental, because while a person can evaluate how they think a claim works, it is only in the event – when it actually does something – that we can say our evaluation was correct.

CONCLUSION

[The] bizarre (some would say absurd) result [of the critique of mobility and speed] is to describe the processes of reality in such a way that at first all that remains is that 'nothing needs to be done' – insofar as all those who are ready to leap into action will make fools of themselves when faced with what has to be done first, namely to hesitate, to step back into a more attentive perception, to cease doing what has always been done in some ways, to become imperceptibly free for the right movement. One can be sure that anything else will result once more in blind mobilization, no matter how splendid the slogans.

Peter Sloterdijk (1998 p.51)

There is no singular objective speed that can characterize society, nor any qualitative experience of speed that is shared by everyone. We live in a world of multiple temporalities, and it is untenable to suggest that we have today, because of the proliferation of technology, reached a singular 'new' speed after which critical political debate finds itself in crisis. Concerns about speed and politics have long lineage in political thought and, as is the case today, the concerns focus on the loss of the self-present political subject, whose critical will can direct and legitimate political discourse. It is the hope of sustaining such a subject that has been eroded by speed, in particular through an apparent erosion of the grounds that are argued to support a self-present and critical subjectivity (the city, the community, public space). While the concerns about the character and control of public space are certainly to be taken seriously, it is less clear that we should attach these concerns to a loss of political subjectivity and an erosion of public debate. Instead, I have followed a path that tries to understand how a public, and its implied subjectivities, are maintained 'at speed', as a person moves through the multiple timespaces of the contemporary city. A public formed of subjects on the move is one that we cannot assume is self-present, not least of all because that which is moving eludes representation – it is by definition that which is becoming. Moving away from premising critique on the will of a self-present

subject (individual or group), I have been working with theory that allows us to understand how a public, and its attendant subjectivities are 'assembled' within movement, within the circulation of texts/claims in the public sphere. The analysis developed here does not deny a place for individual/group will, but this will is understood to be only one force within an assemblage, and so a force that is in no way determining. This changes the focus of political analysis, for we are no longer primarily focussed on ideal-normative conditions and the critique of ideology, but on exploring the limits of the assemblage in which a particular claim is sustained and given legitimacy. It is for this reason that I agree with Peter Sloterdijk in the above quote when he says that the bizarre outcome of a critique of speed and mobility is that 'nothing needs to be done' – there is no need for a 'new politics' if by this we mean some kind of radical departure from what we have done before. What is needed instead is the addition of a critique that encourages experimentation with recognized political identities, so as to 'cease doing what has always been done in some ways, to become imperceptibly free for the right movement.' However, while Sloterdijk uses words such as 'hesitate', and 'step back', I would stress that such an experimental critique has nothing to do with 'slowing down'. It is instead a call for a renewed engagement in understanding the processes that create and maintain identity, and the potential this creates for new identities to emerge within the public sphere.

In concluding, then, I will review the steps that were taken in transforming the concerns about speed and politics into an exploration of the assemblage of publics and the intensity of becoming, and how this conceptual framework was then used in relation to the smog-event in Toronto. Rather than critique the loss of ideal-normative grounds for critical intervention, the argument here began by acknowledging that speed is an ambivalent quality in politics, both creating a potential to open debate to new identities, and posing the risk that oppositional politics will stall in hard oppositions, or in a failure to recognize that which is truly novel in an event and which may take us beyond recognized identities. Both of these risks require that recognized identities begin to 'leak', and become open to a world whose potential exceeds the permutations of the possible. However, in order to see how this might happen, and

how we might intervene in the process, it is necessary to de-centre the focus on the subjective will at the centre of political analysis. Therefore, I argued that the concept of the public sphere provided a useful bridge between, on the one hand, concerns with the presence of certain ideologies and subjectivities, and on the other, how these are related to a subject's experience of 'speed' in a world of temporal complexity. In particular, the focus was on the mediation of the public sphere, because it is here that we begin to appreciate that the political subject does not pre-exist the circulation of texts within the public sphere, and that this circulation is in turn characterized by the indeterminacy associated with the iterability of all acts of communication. Within this framework, we begin to see that the subject emerges at the conjunction between a text and context, a conjunction that exists only in repetition.

If the public and its subjectivities exist at a conjunction and in repetition, the next move was to understand how 'speed' impacts this process. Rather than a singular speed, we approached speed as a proliferation of timespaces. Here speed was transformed into intensity through an examination of time as duration. The quintessential question that speed raises for social analysis (and so subjective understanding) is 'what happened?' The conceptualization of speed as duration shows that this momentary disruption can be understood as existing in repetition, and so the disorienting question 'what happened?', changes into a more affirmative and problematizing question: 'what is happening?', or the anticipation associated with 'what is about to happen again?' The crucial point, is that time as duration turns critical focus to the interval between a virtual event, and its actualization in a particular state of affairs. Through habit and repetition we close the interval between the virtual and the actual, but the disruption re-activate the potential for a person to once again enter into the interval.

In relation to the public sphere, it was argued that rather than understanding publics as existing in time, we can understand publics as duration – a time of the public. The public is an assemblage whose repetition fabricates time. Therefore, it was necessary to review how the event gets transformed into an assemblage; here we reviewed three

synthesis of the event that lead to a public assemblage – the connective synthesis that gives rise to a repeated disruption, the disjunctive synthesis that codes the disruption in knowledge, and the conjunctive syntheses that leads to a moment of subjectification in the actualization of a public. A public emerges in the conjunction between statements and visibilities, or expression and content, and it is in this moment that a person can also sense the limits of recognized subjectivities and so become open to reflecting on the limits of the assemblages they create. A critical public sphere, then, is one that keeps this excessive dimension visible, because the overcoding of the capitalist state is always seeking to contain the becoming of subjectivity so that it remains manageable and predictable within existing assemblages. The dynamics of axiomatic and interactive control are increasingly replacing those of older forms of place-based discipline. Under such conditions, the subject is most ‘radical’ when imperceptible, when moving away from coding within a singular-collective becoming that questions the limits of control.

Having developed this theoretical framework, the second half of the thesis provides examples of how theoretical concepts can be used to open the recognized identities of oppositional politics to a sense of their limits and to becoming. These chapters engaged with air quality politics in Toronto, because smog not only provides an example of an event whose disruptions are controlled by speed, but also an event that continues to be disruptive after its capture, thus providing an example of how a public forms, and enters in to becoming, in relation to a repeated disruption. The first move was to understand how political identities come into being within an assemblage, which required an engagement with how the molecular (virtual) reality of smog is transformed in to molar actuality as a measure of air quality. It is through the concept of air quality that the smog-event can be made to repeat as a recognizable identity, an identity in relation to which a person can adopt recognized, and (ir)responsible subject positions. However, even while the argument charted the technical difficulties associated with this translation, it was stressed that for political analysis, which seeks to understand how particular claims about air quality are sustained, or become dominant, it is not sufficient to suggest that we need to ‘recognize’ the uncertainty

associated with constructing and measuring air quality (i.e. as in the ecological precautionary principle). The molecularity of smog that becomes visible in the tracking of the smog-event, also makes visible the molecularity of the urban population and practices that produce air pollution, often as a result of action distant in space and time. Therefore, to sustain a particular approach to controlling air pollution depends on being able to legitimately sustain control of the molecular population, which requires the assemblage of a public in which individuals will accept the subjectification that control implies.

An example of such an event, were the reforms in Britain in the wake of the Great Killer Smog of 1952; what is interesting about that event is the extent to which speed allowed the problem to be solved through a distancing in space and time of the sources of pollution. However, such a strategy is undermined by the long-range transport of pollution, and so mitigation efforts today seek a different form of control through speed, which relies on the interactive monitoring and disciplining of a heterogeneous set of practices. This raises questions about what kind of control is both technically feasible and socially desirable, questions which need to be addressed in relation to particular contexts and decisions. In this regard, the construction and circulation of a measure of air quality (however flawed) plays an important role in marking a direction for political action – towards cleaner air – but it does not provide final grounds on which to legitimate a particular course of action. The recognition of air quality as a problem still leaves open the challenge of creating a public whose practices will legitimate a particular course of action for mitigating air quality. To fail to affirm the need to create a public around the quasi-object of air quality plunges political analysis into undue urgency, by implying that ‘the public’ lacks information or are being wilfully selfish. At present in Toronto, dominant claims about air quality tend to be reformist and conservative, reflecting what is possible to do in the short-term given the existing networks and assemblages in which subjectivities are formed, and so a politics of becoming seeks to explore how the current assemblage creates a potential that can be used to push beyond the recognized limits of the reasonable and the possible.

The potential to move beyond the possible and recognizable is sustained in the circulation of claims about air quality, and in particular the moral overcode to 'be efficient'. Chapter five presented this potential by discussing subjectivity in terms of a refrain, viewed both as body-without-organs (BwO), open to its milieu, and as a territorial refrain in which the subject experiments with the limits of the reasonable. In the first pass, the routine passage through space is disrupted by the changing intensities of the smog-event. The subject as body-without-organs, develops different practices for sensing and coping with these different intensities, which may or may not reach the level of conscious reflection, but which regardless create a 'rhythm of passage' through the coded milieu. In repetition this rhythm forms into an intensity, or plane of consistency. A BwO is an intensity that creates desire, but not desire understood as a lack (desire-for), but desire that seeks to add to the refrain only practices that will intensify and sustain the refrain. Desire seeks to augment the force of intensity, the desire of the BwO is a potential that opens the body to certain kinds of experiences, while closing it down to others. The smog-event enters this intensive refrain as a new force, a disruption of intensity, and it is an open question as to whether it will trigger a more intense folding of the BwO that turns away from the smog-event, or whether it will trigger experimentation and transformation that is open to the new intensities of the smog-event.

In order to better sense this potential, the second pass explores how the subject engages with the smog-event as it is assembled and circulated as the moral overcode 'to be efficient'. In addition to the moments of subjectification associated with the folding of intensity in the BwO, there are also moments of subjectification that take place when the forces and intensities of the milieu become expressive and form a territory. A territory is defined by recognized 'motifs' and 'counterpoints', i.e. relations among recognized elements and practices that define a subject as acting responsibly in relation to recognized norms. However, these territorial motifs and counterpoints are not fixed, but emerge in relation, such that there is a continual play as to which practices are considered reasonable and acceptable in different contexts.

A recognized subject forms within a territory, and creates a style that makes the territory more or less open to experimenting with new combinations, more or less open to de-territorialization. However, because the demands of any moral proscription are always infinite, the subject is never good enough, the territory that forms in relation to the moral overcode is initially reactive, seeking to defend itself against further demands. Therefore, it was argued that rather than judging a territorial refrain against the infinite demands of the moral overcode, it is necessary to evaluate the potential that inheres in a particular refrain – whether it be that of the ‘masochistic’ cyclist, or the more ironic refrain of a person who professes concern about air quality and drives a 5.0 L mustang, the point is not to focus only on what people do, but what it can allow them to become.

The smog-event opens the body-subject to a problematic situation, a need to re-evaluate the refrain. This in turn means that a subject is opened to becoming-minoritarian, to questioning and probing the connections that can be made at the limit of the refrain. A becoming-minoritarian does not involve recognizing minorities, or imitating ‘radical’ alternatives, but is instead a process of becoming-imperceptible, or discovering a singular-collective becoming that is appropriate to one’s circumstances. Sensing becoming is not a wholly conscious exercise, and it can lead to a reactive turn away from the new forces that have been introduced, but it can create a potential for an opening of the refrain to experimentation with the possibilities of new refrains, and with the limits of control. A politics of becoming will seek to nurture this second possibility.

A subject open to becoming creates an ambivalent potential for political practice, there is nothing inherently progressive about becoming. The challenge for a politics of becoming is to encourage movement beyond the reactive position of the territorial refrain, to encourage experimentation with what is possible to see and do today. This requires that a claim circulating in the public sphere re-activates the problematic moments of disruption, when a subject can sense the limits of recognized identities. It also requires that this re-activation be presented in such a way that it imparts the

necessity of choice, the necessity to take a leap beyond judgment to try and actualize a different possibility. This is necessarily an experimental process, both for those circulating the claim and for those who must in turn experiment with the limits of their subjective refrain. Becoming is not a process that can be strictly represented and recognized, it is instead sensed at the edge of what is recognized, and so re-activating becoming requires a necessary engagement with an aesthetic dimension.

Following a Deleuzian critique of aesthetics, we can say that sensations are re-activated through the compositions of affects and percepts; compositions of form, colour, volume, movement etc, that create signs that re-activate the sensation of the event (as distinct from recognized symbols that must be interpreted and which read the event as a version of what existed before). There is always a need to evaluate how well the claim, through images, sounds or texts, is able to re-activate the sensation of the event. As an example of this process, I examined different approaches to how visual art might engage in the politics of transportation reform in Toronto in order to encourage de-territorializing transportation-based subjectivities.

I began by comparing photographs taken by participants in the study with the photography of Martha Rosler as presented in *Rights of Passage*. It was argued that these road scenes, largely devoid of human presence, and taken at odd angles from behind windshields and with a cramped perspective (e.g. blocked by rear-view mirrors, the frame of the car, or road infrastructure) conveyed the sense of a body trapped and so 'out of control'. In Martha Rosler's work this was explicitly connected to a critique of ideologies of progress and freedom associated with the road, critiques which argue that this mode of development no longer (if it ever did) serves progressive ends. However, against a context of the dominance of the automobile, it was suggested that such claims say 'too much', because they fail to acknowledge the pleasure and freedom still associated with the car, and 'too little' because in this critique there is no diagnosis of how a subject might move beyond the 'end of the road'. Therefore, a public called into being with these images and texts, would risk sliding into disillusionment, or a reactive condemnation. It is necessary to not just

represent disconcerting moments within everyday urban experience, but re-present such moments in a way that encourages – i.e. re-activates the desire --to experiment with the limits of transportation infrastructure that restricts what a body can do.

The confrontation in congestion between car and bicycle-based subjectivities in Toronto was given as an example of an everyday encounter that might be productively re-presented by a politics of becoming. In practice these moments of confrontation often actualize in hard oppositions, in which the struggle is over who is being (ir)responsible, and who has a right to the road. This in turn re-surfaces in political conflicts discussing re-distribution of road-resources, for it is argued that redistribution would be unnecessary if road users simply behaved responsibly. The upshot of such oppositions is to slow down the pace of transportation reform in Toronto, and to limit the degree of experimentation with alternative forms of transportation. As an example of an intervention that tries to break open this oppositional dynamic, I turned to the work of Rainer Ganahl in his exhibition *Bicycle*. While Ganahl celebrates the bicycle as an alternative to the car, and in particular in relation to the global violence associated with the politics of oil, he refuses to simply embrace the bicycle as a socially and ecologically benign alternative. Instead, his artwork places the bicycle within a much larger set of social and technical relations, which forces the viewer to re-live moments of subjectification, which in turn makes us think again, and perhaps think differently, about the potential for intervention. However, the composition of these pieces, and in particular his video *bicycling* also imparts a sense of the potential to experiment with these moments of subjectification, as well as a desire to experiment, a desire to go beyond what is recognized as possible and reasonable today.

Each of the chapters that examined the assemblage and circulation of the smog-event tried to impart a sense of the continued disruption of the smog-event as it was translated and circulated in the public sphere. If successful, these examples will have imparted a sense of the potential that exists for intervention into a public sphere whose assemblage relies on speed, but which is opened to becoming through repeated

disruptions. At the same time, these examples make clear that any such intervention will require an evaluation of conditions that cannot be defined and described in advance, an affirmation of the need for an experimental intervention. When we talk of potential, a note of caution is in order, so as not to leave the reader with the impression that the undue urgency of the narratives of speed can simply be countered with a vital and affirmative optimism and experimentation. In order to avoid this reading, we need to conclude with a brief review of the distinction between the possible and potential, and for this we will need to return to the discussion of time as duration, since both the possible and potential describe a relation to the future (Massumi, 2002 P.92-99).

In chapter two, we saw how duration can be considered as a movement that closes the interval between an open and closed multiplicity, between the actual and the virtual. The actual can be represented as a series of networks whose repeated connections create multiple timespaces. The *possible* is a term we can use in discussions of the future when we limit the discussion to the actual; the possible describes permutations of actual existing objects and relations that make up a timespace. As we saw in chapter two this is what allows us to imagine and predict a linear extension of the present into the future, assigning different possibilities their own probability. However, it was also argued that time cannot be adequately described in this way, because there is always something unexpected, a 'schiz' or swerve, that can introduce a new possibility, something completely novel, and we must also account for this *potential*. It is here that the concept of the virtual was introduced; the virtual as an open multiplicity that exceeds any actualization. *Potential*, refers to this excessive dimension of the virtual, a dimension of time that is only ever sensed within the moment of actualization, but which is nevertheless crucial for problematizing recognized identities, for sensing their limits and so opening thought beyond the possible. The challenge of working with potential is to make visible the interval between the virtual and its actualization.

While this works conceptually, it is necessary to respond to those who would ask what good such a potential is if we are in practice limited to what is possible. In response

we can say, first, that while the pragmatic goal of political action is to achieve what is possible to do today, the pragmatic goal of a politics of becoming is to make visible why a person would want to go beyond what exists today. Hence its importance in a critique of speed concerned with a reduction of political discourse to the hard oppositions of recognized identities, or the failure of oppositional politics to be open to novelty. In a world where the control of time and space – in part through high-speed technologies – is often used to severely limit the possible, this potential becomes an important source for revitalizing politics. Second, and related, it is important not to see the possible and the potential as unrelated. This is because a sense of potential informs our choices with regard to the possible – e.g. the smog-event can make visible the excess of molecular populations, and informs our choice of what kinds of social and technical control are not only feasible but also desirable. The choices made in turn feedback into potential, changing it – hence Deleuze’s Nietzschean criteria that ‘whatever you will, will in such a way that you also will its eternal return.’

What we can do tomorrow is informed by the potential that is kept visible by a politics of becoming and its experimental critique – i.e. what we can do is informed by a sense of the almost limitless range of things a person might imagine doing. This sense of openness and excess reminds us of the necessity to create a public, to affirm one’s choice, and to realize that this affirmation will always require a ‘leap of faith’, or gamble, and that success or failure is indeterminate prior to the event of actualization. What’s more, it reminds us that ‘success’ is always an event that is sustained in repetition, and that we must be mindful of building potential (becoming) within repetition even if nothing has yet actualized. It is therefore important to stress again that the style of critique presented here is not in opposition to a dialectical critique, but differs from it and is complementary to it.

A politics of becoming seeks to nurture the potential for a novel actualization of the event that is created by its repetition and circulation in the public sphere. Therefore, an experimental critique must stand back from any particular actualization with the

aim of foregrounding the potential that exceeds them. The challenge for the researcher in presenting an experimental critique, is to evaluate how far one should follow the event towards its actualization in any given state of affairs. If we stay too far from any actualization, we risk creating a text that is overly speculative and normative, a vague potential. If we follow the event too far towards its actualization in a particular state of affairs, we risk falling into a description of a singular case that has no resonance to other contexts. One risks losing a sense of potential, which is replaced with a sense of causal relation and determination between the virtual and its actualization. In addition, getting too close to any actualization would draw us into judging between possible options, which might risk suggesting that there is something to be 'recognized' in the virtual potential that informs what we should do. However, such a choice cannot be determined in advance, it will require an ethical evaluation in the event, and what will transpire will depend on the success in assembling and maintaining a public assemblage. The challenge of presentation, as was argued in chapter three, is one of how much detail to give, and what details, in order to make visible the kinds of relations that need to be tended to in order maintain the assemblage, as well as the intensity and becoming that exceeds the assemblage. Implicit in this challenge is a question about how to present the limit of what textual and analytical work can do, and make visible the need to carry action beyond the text. The analysis of becoming should bring us to a sense of openness and potential, just as the analysis of opposition shows us a demarcation of the possible. Closing the interval between potential and a particular possibility, or allowing the thought of new possibilities to enter politics, will be an event that will take place, as Deleuze says, 'in the midst of events that have nothing to do with books'.

BIBLIOGRAPHY

- Adam, B. (1995). Timewatch: The Social Analysis of Time. Cambridge, Polity Press.
- Agamben, G. (2003). The Coming Community. Minneapolis, University of Minnesota Press.
- Alberro, A. (1997). The Mobile Passage. Rights of Passage. New York, self published by Martha Rosler with help from New York Foundation for the Arts: 39-43.
- Alberro, A. (1999). The Dialectics of Everyday Life: Martha Rosler and the Strategy of the Decoy. Martha Rosler: Positions in the Lifeworld. C. de Zegher. Cambridge MA, MIT Press.
- Allen, J. (1999). Spatial Assemblages of Power: From Domination to Empowerment. Human Geography Today. D. Massey, J. Allen and P. Sarre. Cambridge, Polity Press: 194-218.
- Amin, A. and N. Thrift (2002). Cities: reimagining the urban. Cambridge, Polity.
- Andrejevic, M. (2003). "Monitored Mobility in the Era of Mass Customization." Space and Culture 6(2): 132-150.
- Ansell-Pearson, K. (1997). Viroid Life: perspectives on Nietzsche and the transhuman condition. London, Routledge.
- (1999). Germinal Life: the difference and repetition of Deleuze. London, Routledge.
- (2002). Philosophy and the Adventure of the Virtual. London, Routledge.
- Armitage, J. (1999). "Paul Virilio: an introduction." Theory, Culture and Society 16(5-6): 1-23.
- Augé, M. (1995). Non-paces: introduction to an anthropology of supermodernity. London, Verso.

Bailey, R. (1993). Eco-Scam: the false prophets of ecological apocalypse. New York, St. Martin's Press.

Bains, P. (2002). Subjectless Subjectivities. A Shock to Thought. B. Massumi. London, Routledge: 101-116.

Bakhtin, M. M. (1986). The Problem of Speech Genres. Speech Genres and Other Late Essays. C. Emerson. Austin, University of Texas Press: 60 - 102.

Barry, A. (2001). Political Machines. London, Athlone.

Bates, D. V. and R. B. Caton, Eds. (2000). A Citizen's Guide to Air Pollution. Vancouver, David Suzuki Foundation.

Bates, D. V. and V. Sverre (2002). Adverse Health Effects. A Citizen's Guide to Air Pollution. D. V. Bates and R. B. Caton. Vancouver, David Suzuki Foundation: 67-152.

Bauman, Z. (2000). Liquid Modernity. Cambridge, Polity Press.

Beck, U., A. Giddens, et al. (1994). Reflexive Modernization. Stanford, Stanford University Press.

Bell, M. and S.-T. Leong, Eds. (1998). SlowSpace. New York, Monacelli.

Beller, J. L. (1998). Capital/Cinema. Deleuze and Guattari: New mappings in politics, philosophy and culture. E. Kaufman and K. J. Heller. Minneapolis, University of Minnesota Press: 77-95.

Bennington, G. (1998). "Emergencies." Oxford Literary Review 18: 175-216.

Berman, M. (1982). All that is Solid Melts Into Air. New York, Simon and Schuster.

Bertman, S. (1998). Hyperculture: the human cost of speed. Westport, Conn., Praeger.

Betsky, A. (1998). Nothing But Flowers: Against Public Space. Slow Space. M. Bell and S.-T. Leong. New York, Monacelli: 456-472.

Bickerstaff, K. and G. Walker (1999). "Clearing the Smog? Public Responses to air-quality information." Local Environment 4(3): 279-294.

----- (2003). "The place(s) of matter: matter out of place -- public understanding of air pollution." Progress in Human Geography 27(1): 45-67.

Bickford, S. (2000). "Constructing Inequality : City Spaces and the Architecture of Citizenship." Political Theory 28(3): 355-376.

Bielik-Robson, A. (2000). "Bad-Timing: the subject as a work of Time." Angelika 5(3): 71-91.

Blake, J. (1999). "Overcoming the 'Value-Action Gap' in Environmental Policy: tensions between national policy and local experience." Local Environment 4(3): 255-278.

Boadway, T. (2003). Keynote Address: "What people don't know about what smog does to their bodies", Smog Summit, Toronto, 2003.

Bogue, R. (1996). Gilles Deleuze: The Aesthetics of Force. Gilles Deleuze: A Critical Reader. P. Patton. Oxford, Blackwell: 257-269.

----- (2003a). Deleuze on Cinema. London, Routledge.

----- (2003b). Deleuze on Music, Painting and the Arts. London, Routledge.

Boudreau, J.-A. (2000). The MegaCity Saga. Montreal, Black Rose Books.

Bourdieu (1984). Language and Symbolic Power, Harvard University Press.

Boyd, D. R. (2003). Unnatural law: rethinking Canadian environmental law and policy. Vancouver, UBC Press.

Braidotti, R. (2001). How to Endure Intensity: Towards a Sustainable Nomadic Subject. Micropolitics and Media Culture: Reading the Rhizomes of Deleuze and Guattari. P. Pisters. Amsterdam, Amsterdam University Press: 177-204.

Brauer, M. (2002). Sources, Emissions, Concentrations, Exposure, Doses. A Citizen's Guide to Air Pollution. D. V. Bates and R. B. Caton. Vancouver, David Suzuki Foundation: 11-49.

Braun, B. (2002). The Intemperate Rainforest: Nature, Culture and Power on Canada's West Coast. Minneapolis, University of Minnesota Press.

Bridge, G. (1997). "Mapping the terrain of time-space compression: power networks in everyday life." Environment and Planning D: Society and Space 15: 611-626.

Brimblecombe, P. (1987). The Big Smoke: a history of air pollution in London since medieval times. London, Methuen.

Brown, S. D. (2002). "Science, Translation and the Logic of the Parasite." Theory, Culture and Society 19(3): 1-27.

Bulkeley, H. (2000). "Common Knowledge? Public understanding of climate change in Newcastle, Australia." Public Understanding of Science 9: 313-333.

Bulkeley, H. and A. P. J. Mol (2003). "Participation and Environmental Governance: Consensus, Ambivalence and Debate." Environmental Values 12: 143-153.

Burchell, D. (1995). "Virtue, manners and the activity of citizenship." Economy and Society 24(4): 540-558.

Caldicott, A. (2003). Calm this SUV madness. Toronto Star. Toronto: A23.

Calhoun, C., Ed. (1994). Habermas and the Public Sphere. Cambridge, MA, MIT Press.

Campbell, M., D. Pengelly, et al. (2004). Air Pollution Burden of Illness in Toronto:2004 summary. Toronto, Toronto Public Health: 27

Campbell, M., D. Pengelly, et al. (2001). Condition Critical: Fixing our Smog Warning System. Toronto, Toronto Public Health

Caputo, J. D., Ed. (1997). Deconstruction in a Nutshell: A Conversation with Jacques Derrida. New York, Fordham University Press.

Carpignano, P. et. al.. (1993). Chatter in the Age of Electronic Reproduction: Talk Television and the 'Public Mind'. The Phantom Public Sphere. B. Robbins. Minneapolis, University of Minnesota Press: 93-120.

Castells, M. (1989). The informational city. Cambridge, MA, Blackwell.

Castree, N. (2003). "Environmental issues: relational ontologies and hybrid politics." Progress in Human Geography 27(2): 203-211.

Cavell, R. (2002). McLuhan in Space: A Cultural Geography. Toronto, University of Toronto Press.

Cendrars, B. (1998). Profound Today. Speed - Visions of an Accelerated Age. J. Millar and M. Schwarz. London, The Photographers' Gallery: 24-25.

Chesneaux, J. (2000). "Speed and Democracy: an uneasy dialogue." Social Science Information 39(3): 407-420.

City of Toronto (2000). Toronto Pedestrian Charter, <http://www.toronto.ca/pedestrian/index.htm>. 2004

----- (2002a). Toronto Smog Summit 2002 Inter-Governmental Declaration on Clean Air,
http://www.city.toronto.ca/cleanairpartnership/pdf/declaration_final062102.pdf.
2004

----- (2002b). City of Toronto Bike Plan - Shifting Gears,
<http://www.toronto.ca/cycling/bikeplan/index.htm>. **2004**

----- (2004a). City of Toronto Key Facts,
www.city.toronto.on.ca/ourcity/profileo2.htm. **2004**

----- (2004b). Backgrounder: Pedestrian Safety Statistics (City of Toronto, Transportation and Planning),
http://www.toronto.ca/trasportatuin/publications/pedestrian_safety/pdf/ped_safety_stats.pdf. **2004**

Clark, N. (2002). "The Demon-Seed: Bioinvasion as the Unsettling of Environment Cosmopolitanism." Theory, Culture and Society **19**(1-2): 101-125.

Clough, P. T. (2000). Autoaffection: unconscious though in the age of technology. Minneapolis, University of Minnesota Press.

Cole, D. C., D. Pengelly, et al. (1999). "Consulting the community for environmental health indicator development: the case of air quality." Health Promotion International **14**: 145-154.

Colebrook, C. (1999). A Grammar of Becoming: Strategy, Subjectivism, and Style. Becomings. E. Grosz. Ithaca, Cornell University Press: 117-140.

Connolly, W. E. (2002). Neuropolitics: Thinking, Culture, Speed. Minneapolis, University of Minnesota Press.

Connor, S. (2003). An Air that Kills: A Familiar History of Poison Gas,
<http://www.bbk.ac.uk/eh/skc/gas/>. **2004**.
<http://www.bbk.ac.uk/eh/skc/gas/>

Coole, D. (2000). "Cartographic Convulsions." Political Theory **28**(3): 337-54.

Copjec, J. and M. Sorkin, Eds. (1999). Giving Ground: the politics of propinquity. London, Verso.

Crang, M. (2000). "Urban Morphology and the Shaping of the Transmissible City." City **4**(3): 303-316.

----- (2001). Rhythms of the City: Temporalised Space and Motion. Timespace: geographies of temporality. J. May and N. Thrift. London, Routledge: 187-207.

Crang, M. and P. Travlou, S. (2001). "The city and topologies of memory." Environment and Planning D: Society and Space 19: 161-177.

Crary, J. (1992). Techniques of the Observer: on vision and modernity in the 19th century. Cambridge MA, MIT Press.

----- (1999). Suspensions of Perception: Attention Spectacle and Modern Culture. Cambridge MA, MIT Press.

Crocker, S. (1998). "Prolepsis: On Speed and Time's Interval." Cultural Values 2(4): 485-498.

----- (2001). "Into the Interval: On Deleuze's reversal of time and movement." Continental Philosophy Review 34: 45-67.

Cronon, W. (1991). Nature's Metropolis. New York, W.W.Norton and Co.

Darier, E. and R. Schule (1999). "'Think Globally, Act Locally?' Climate change and public participation in Manchester and Frankfurt." Local Environment 4(3): 317-330.

Davies, K. (2001). Responsibility and Daily Life. Timespace: geographies of temporalities. J. May and N. Thrift. London, Routledge: 133-148.

Davis, M. (1999). Ecology of Fear. New York, Vintage Books.

De Landa, M. (2000). A Thousand Years of Nonlinear History. New York, Zone Books.

Decima Research Inc. (2000). City of Toronto 1999 Cycling Study. Toronto, Prepared for City of Toronto: 74

Deleuze, G. (1986). Nietzsche and Philosophy. New York, Columbia University Press.

----- (1995). Negotiations 1972-1990. New York, Columbia University Press.

----- (1998). Essays Critical and Clinical. London, Verso.

----- (1999). Foucault. Minneapolis, University of Minnesota Press.

----- (2004). Desert Islands and Other Texts 1953-1974. Los Angeles, Semiotext(e).

Deleuze, G. and F. Guattari (1984). Anti-Oedipus: capitalism and schizophrenia. London, Athlone Press

----- (1988). A Thousand Plateaus: capitalism and schizophrenia volume 2. London, Athlone Press.

----- (1994). What is Philosophy. London, Verso.

DeMara, B. (2002). Cyclists fight for more lanes ; Bicycle trails, safety programs face dramatic funding cuts, advocates say. Toronto Star. Toronto: B01.

Demeritt, D. (2001). "The Construction of Global Warming and the Politics of Science." Annals of the Association of American Geographers **91**(2): 307-337.

----- (2002). "What is the 'social construction of nature'? A typology and sympathetic critique." Progress in Human Geography **26**(6): 767-790.

Dercon, C. (2001). Speed Space. Virilio Live. J. Armitage. London, Sage: 69-81.

Derrida, J. (1984). "No Apocalypse, Not Now (full speed ahead, seven missiles, seven missives)." Diacritics **14**(2): 20-31.

----- (1998). Of Grammatology. Baltimore, Johns Hopkins University Press.

----- (2001). Acts of Religion. London, Routledge.

Deutsche, R. (1996). Evictions: art and spatial politics. Cambridge MA, MIT Press.

----- (1999). Reasonable Urbanism. Giving Ground: the politics of propinquity. J. a. S. Copjec, M. New York, Verso: 175-206.

Dewey, S. H. (2000). Don't Breathe the Air: Air Pollution and U.S. Environmental Politics, 1945-1970. College Station, Texas A&M University Press.

Dewsbury, J.-D. (2000). "Performativity and the event: enacting the philosophy of difference." Environment and Planning D: Society and Space **18**: 473-496.

----- (2003). "Witnessing Space: 'knowledge without contemplation'." Environment and Planning A **35**(11): 1907-1932.

Dewsbury, J.-D., P. Harrison, et al. (2002). "Enacting geographies." Geoforum **33**: 437-440.

Dill, P. M. and P. Bedford (2002). A citizen's guide to Toronto's new official plan. Toronto, City of Toronto Urban Development Services and City Planning Division: 19

Dodgshon, R. A. (1999). "Human geography at the end of time? Some thoughts on the notion of time-space compression." Environment and Planning D: Society and Space 17: 607-620.

Doron, G. M. (2000). "The Dead Zone and the Architecture of Transgression." City 4(2): 249-263.

Douw, G. S. and I. G. McKendry (2002). Meteorology and Chemistry of Air Pollution. A Citizen's Guide to Air Pollution. D. V. Bates and R. B. Caton. Vancouver, David Suzuki Foundation: 49-67.

DSS Management Consultants Inc. (2000). Illness Costs of Air Pollution. Toronto, Ontario Medical Association

Edensor, T. (2003). "M6-Junction 19-16: Defamiliarizing the Mundane Roadscape." Space and Culture 6(2): 151-168.

Egan, D. (1995). Calming Traffic, Exciting People. Beyond the Car: Essays on Auto Culture. S. Zielinski and G. Laird. Toronto, Steel Rail Publishing/Transportation Options.

Eisenstein, E. (1983). The printing revolution in early modern Europe. Cambridge, Cambridge University Press.

Ellegard, K. (1999). "A time-geographic approach to the study of everyday life of individuals - the challenge of complexity." GeoJournal 48: 167-175.

Elsom, D. M. (1996). Smog Alert: managing urban air quality. London, Earthscan Publications.

Flyvbjerg, B. (1998a). Rationality and Power: Democracy in Practice. Chicago, University of Chicago Press.

----- (1998b). Empowering Civil Society: Habermas, Foucault and the Question of Conflict. City for Citizens. M. Douglas and J. Friedmann. Sussex, John Wiley and Sons Ltd.: 185-211.

Fraser, N. (1994). Rethinking the Public Sphere: A Contribution to the Critique of Actually Existing Democracy. Habermas and the Public Sphere. C. Calhoun. Cambridge MA, MIT Press: 1-32.

Freund, P. E. S. and G. Martin (1993). The Ecology of the Automobile. Montreal, Blackrose Books.

Ganahl, R. (2001). Reading Karl Marx. London, Book Works.

----- (2004a). About this exhibit, http://www.ganahl.info./petro04_about.html.
2004

----- (2004b). For Christ's Sake! - Cursing with Deleuze, Laurence and Nietzsche, <http://www.ganahl.info/argentina.htm>. **2004**

Gershuny, J. (2001). Changing Times: Work and Leisure in Postindustrial Society. Oxford, Oxford University Press.

Gilbert, J. (2002). "A Certain Ethics of Openess: Radical Democratic Cultural Studies." Strategies 14(2): 189-208.

Gilbert, R. (2000). Sustainable Mobility in the City. Toronto, Centre for Sustainable Transportation: 23
makes the argument that technology is not enough

Gleick, J. (2000). Faster: the acceleration of just about everything. New York, Vintage Books.

----- (2002). What Just Happened?: a chronicle from the information frontier. London, Abacus Books.

Glendinning, S. (1998). On Being With Others -- Heidegger, Derrida, Wittgenstein. London, Routledge.

Glennie, P. and N. Thrift (1996). "Reworking E. P. Thompson's 'Time, Work-discipline and Industrial Capitalism'." Time and Society 5(3): 275-299.

Goankar, D. P. and E. A. Povinelli (2003). "Technologies of Public Forms: Circulation, Transfiguration, Recognition." Public Culture 15(3): 385-397.

Goklany, I. M. (1999). Clearing the Air: The real story of the war on air pollution. Washington, D.C., Cato Institute.

Golloway, A., J. Brucker-Cohen, et al. (2004). Panel: Design for Hackability. Designing Interactive Systems (DIS), Cambridge MA.

Gren, M. (2001). Time-Geography Matters. Timespace: geographies of temporality. J. May and N. Thrift. London, Routledge: 208-225.

Grosz, E. (1995). Space, time, and perversion. London, Routledge.

----- (1999). Thinking the New: Futures Yet Unthought. Becomings: Exploration in Time, Memory and Futures. E. Grosz. Ithaca, Cornell University Press: 15-28.

Guattari, F. (1995). Chaosmosis: an ethico-aesthetic paradigm. Bloomington, Indiana University Press.

----- (2000). The Three Ecologies. London, The Athlone Press.

Habermas, J. (1992). The Structural Transformation of the Public Sphere: An Inquiry into a Category of Bourgeois Society. Cambridge MA, MIT Press.

----- (1994). Further Reflections on the Public Sphere. Habermas and the Public Sphere. C. Calhoun. Cambridge MA, MIT Press.

Hagerstrand, T. (1982). "Diorama, Path and Project." Tijdschrift voor Econ. en Soc. Geografie 73(6): 323-339.

----- (1984). "Presence and Absence: A Look at Conceptual Choices and Bodily Necessities." Regional Studies 18(5): 373-378.

Haghighi, M. (2002). Neo-Archaism. A Shock to Thought: expressions after Deleuze and Guattari. B. Massumi. London, Routledge: 131-148.

Hardt, M. (1993). Gilles Deleuze: an apprenticeship in philosophy. Minneapolis, University of Minnesota Press.

Hareven, T. K. (1991). Synchronizing Individual Time, Family Time and Historical Time. Chronotypes: the construction of time. J. Bender and C. E. Wellberry. Stanford, Stanford University Press: 167-182.

Harrison, P. (2000). "Making Sense: embodiment and the sensibilities of the everyday." Environment and Planning D: Society and Space 18: 497-517.

----- (2002). "The Caesura: remarks on Wittgenstein's interruption of theory, or, why practices elude explanation." Geoforum 33: 487-503.

Hartley, J. (1997). The Sexualization of Suburbia: The diffusion of knowledge in the postmodern public sphere. Vision of Suburbia. R. Silverston. London, Routledge: 180-216.

Harvey, D. (1989). The Condition of Postmodernity. Oxford, Blackwell.

Henaff, M. (1997). "Of Stones, Angels and Humans: Michel Serres and the Global City." SubStance 83: 59-79.

Hinchliffe, S. (1996). "Helping the earth begins at home - The social construction of socioenvironmental responsibilities." Global Environmental Change 6(1): 53-62.

----- (1997). "Locating risk: Energy use, the 'ideal' home and the non-ideal world." Transactions of the Institute of British Geographers 22(2): 197-209.

----- (2001). "Indeterminacy in-decisions - science, policy and politics in the BSE (Bovine Spongiform Encephalopathy) crisis." Transactions of the Institute of British Geographers 26: 182-204.

Hirschkop, K. (1999). Mikhail Bakhtin: An Aesthetic for Democracy. Oxford, Oxford University Press.

Hochschild, A. R. (1997). The Time Bind. New York, Henry Holt and Company.

Holland, E. W. (1996). Schizoanalysis and Baudelaire: Some Illustrations of Decoding at Work. Deleuze: A critical reader. P. Patton. Oxford, Blackwell: 240-256.

----- (1999). Deleuze and Guattari's Anti-Oedipus: Introduction to Schizoanalysis. London, Routledge.

Holquist, M. (1990). Dialogism: Bakhtin and his World. London, Routledge.

Houghton, E., E. Levy, et al. (2002). The Future is Clear: smog citizen's forums final report. Toronto, Smog Summit (Clean Air Partnership)

Huntley, B. (2003). The SUV culture can't be sustained. Toronto Star. Toronto: A29.

Isin, E. (2002). Being Political. Minneapolis, University of Minnesota Press.

Jarvis, H., A. Pratt, C., et al. (2001). The Secret Life of Cities: The Social Reproduction of Everyday Life. Edinburgh, Prentice Hall.

Jasanoff, S. (1999). "The Songlines of Risk." Environmental Values 8(2): 135-152.

Kassirer, J. and S. Boddy (2001). 20/20 - The Way to Clean Air Literature Review. Toronto, Toronto Public Health: 59

Kawash, S. (1998). 415 Men: moving bodies, or the cinematic politics of deportation. Deleuze and Guattari: new mappings in politics, philosophy and culture. E. Kaufman and K. J. Heller. Minneapolis, University of Minnesota Press: 127-141.

Kay, T. (1998). "Having it All or Doing it All? The Construction of Women's Lifestyles in Time-crunched Households." Loisir et Societe/Society and Leisure 21: 435-454.

Kearney, R. (1986). Modern Movements in European Philosophy. Manchester, Manchester University Press.

Kern, S. (1983). The Culture of Time and Space 1880-1918. Cambridge MA, Harvard University Press.

Kilian, T. (1998). Public and Private, Power and Space. The Production of Public Space. A. Light and J. M. Smith. Oxford, Rowman & Littlefield Publishers Ltd.: 115-134.

Kipfer, S. and R. Keil (2002). "Toronto Inc.? Planning the Competitive City in the New Toronto." Antipode **34**(2): 227-264.

Kirsch, S. (1995). "The incredible shrinking world? Technology and the production of space." Environment and Planning D: Society and Space **13**: 529-555.

Kittler, F. (1986). Gramophone, Film, Typewriter. Berlin, Brinkmann & Bosse.

----- (2001). What's New About New Media. Mutations. R. Koolhaas, S. Boeri, S. Kwinter, N. Tazi and H. U. Obrist. Bordeaux, ACTAR: 58-69.

Kuipers, D. (2000). I am a bullet: scenes from an accelerating culture. New York, Crown Publishers.

Kuitenbrouwer, P. (2004). Why do some people hate cyclists so much? National Post. Toronto: T01.

Laclau, E. and C. Mouffe (1985). Hegemony and Socialist Strategy: Towards a Radical Democratic Politics. New York, Verso.

Lash, S. (1998). Being After Time: Towards a Politics of Melancholy. Time and Value. S. Lash, A. Quick and R. Roberts. Oxford, Blackwell: 147-161.

----- (2002). Information Critique. London, Sage.

Latham, A. (2003). "Research, performance, and doing human-geography: some reflections on the diary-photograph, diary-interview method." Environment and Planning A **35**: 1993-2017.

Latour, B. (1986). "Visualization and Cognition: thinking with eyes and hands." Knowledge and Society: Studies in the Sociology of Culture Past and Present **6**: 1-40.

----- (1993). We Have Never Been Modern. London, Harvester Wheatsheaf.

----- (1997). "Trains of thought: Piaget, formalism and the fifth dimension." Common Knowledge 6(3): 170-191.

----- (1999a). Pandora's Hope. Essays on the reality of science studies. London, Harvard University Press.

----- (1999b). Politiques de la nature: comment faire entrer les sciences en démocratie. Paris, Editions la decouverte.

----- (2003). "Is Re-modernization Occurring -- And if So, How to Prove It?" Theory, Culture and Society 20(2): 35-48.

Law, J. and J. Hassard (1999). Actor-Network Theory and after. Oxford, Blackwell.

Lawlor, L. (1998). "The end of phenomenology: Expressionism in Deleuze and Merleau-Ponty." Continental Philosophy Review 31: 15-34.

Lekhi, R. and M. Fiser (2001). "The Genealogy of Politics." Space and Culture 7: 71-78.

Lenntorp, B. (1999). "Time Geography -- at the end of its beginning." GeoJournal 48: 167-175.

Leong, S.-T. (1998). Reading the Attenuated Landscape. SlowSpace. M. Bell and S.-T. Leong. New York, Monacelli.

Lerup, L. (2000). After the City. Cambridge MA, MIT Press.

Light, A. and J. M. Smith, Eds. (1998). The Production of Public Space. Oxford, Rowman & Littlefield Publishers Ltd.

Lucas, W. J. (1998). A report on cycling fatalities in Toronto 1986-1998, http://www.toronto.ca/cycling/coroner_index.htm. 2004

Luke, T. (1999). Environmentalism as Green Governmentality. Discourses of the Environment. E. Darier. London, Blackwell.

Mackenzie, A. (2002). Transductions: Bodies and Machines at Speed. New York, Continuum.

MacPhail, J. (1998). OMA Ground Level Ozone Position Paper. Toronto, Ontario Medical Association

Martinotti, G. (1999). A City for Whom? Transients and Public Life in the Second Generation Metropolis. The Urban Moment: cosmopolitan essays on the late-20th century city. R. A. a. B.-G. Beauregard, S. London, Sage: 155-184.

Massumi, B. (1992). A User's Guide to Capitalism and Schizophrenia: deviations from Deleuze and Guattari. Cambridge MA, MIT Press.

----- (1998). Requiem for Our Prospective Dead (Towards a Participatory Critique of Capitalist Power). Deleuze and Guattari: New Mappings in Politics, Philosophy and Culture. E. Kaufman and K. J. Heller. Minneapolis, University of Minnesota Press: 40-64.

----- (2002a). Parables for the Virtual. Durham, Duke University Press.

Massumi, B., Ed. (2002b). A Shock to Thought. London, Routledge.

Matteson, K. (1998). Creating a Democratic Public. University Park, Pennsylvania State University Press.

May, J. and N. Thrift (2001). Introduction. timespace: geographies of temporality. J. May and N. Thrift. London, Routledge: 1-46.

May, T. (1996). "Gilles Deleuze and the Politics of Time." Man and World 29: 293-304.

----- (2001). "The Ontology and Politics of Gilles Deleuze." Theory & Event 5(3).

McCormack, D. P. (2002). "A paper with an interest in rhythm." Geojournal 33(4): 469-485.

----- (2003). "An event of geographical ethics in spaces of affect." Transactions of the Institute of British Geographers 28: 488-507.

Meeson, A. (2004). Big or Small, SUVs let you escape chaos; even in heavy traffic the world seems safer in motorized versions of a gated community. Toronto Star. Toronto: G25.

Melucci, A. (2000). The Playing Self: person and meaning in the planetary society. Cambridge, Cambridge University Press.

Merrifield, A. and E. Swyngedouw, Eds. (1997). The Urbanization of Injustice. New York, New York University Press.

Mesner, M. (1996). Becoming-Heterarch: On Technocultural Theory, Minor Science and the Production of Space. Technoscience and Cyberculture. S.

Aronowitz, B. Martinsons, M. Menser and J. Rich. New York, Routledge: 294-295.

Michael, M. (2000). Reconnecting culture, technology and nature. London, Routledge.

Millar, J. and M. Schwarz, Eds. (1998). Speed - Visions of an Accelerated Age. London, The Photographers' Gallery and the Trustees of the Whitechapel Art Gallery.

Miller, E. J. (2000). Travel in the Greater Toronto Area: past and present behaviour in relation to urban form. Toronto, University of Toronto Joint Programme in Transportation

Mitchell, D. (1995). "The End of Public Space? People's Park, Definitions of the Public and Democracy." Annals of the Association of American Geographers **85**(1): 108-133.

Monbiot, G. (2004). Think Inside the Box. The Guardian. London.

Mosley, S. (2001). The Chimney of the World: a history of smoke pollution in Victorian and Edwardian Manchester. Cambridge, White Horse Press.

Mouffe, C. (1993). The Return of the Political. London, Verso.

Munro, S. (2002). Transit's Lost Decade. Toronto, Rocket Riders Transit User Group

Nantais, M. A. (2003). Automakers' Perspective - Clean, Cleaner and Doing Even More (Canadian Vehicle Manufacturer's Association), Pollution Probe Conference on Transportation, Air Issues and Human Health. Toronto April 28.

Newman, P. and J. R. Kenworthy (1999). Sustainability and Cities: overcoming automobile dependency. Washington DC, Island Press.

Nowotny, H. (1994). Time. Cambridge, Polity Press.

Nugent, O. (2002). The Smog Primer. Toronto, Pollution Probe.

Olkowski, D. (1999). Flows of Desire and the Body Becoming. Becomings: Explorations in Time, Memory and Futures. E. Grosz. Ithaca, Cornell University Press.

O'Neil, J. (2001). "Representing people, representing nature, representing the world." Environment and Planning C: Government and Policy **19**: 483-500.

Ontario Clean Air Alliance (2001). Questionable Air - Survey Results. Toronto, Ontario Clean Air Alliance

Ontario Medical Association (2001). Ontario's Air: Years of Stagnation. Toronto, Ontario Medical Association

Ontario Ministry of the Environment (1999). Smog Alert A Municipal Response Guide. Toronto, Ontario Ministry of the Environment

----- (2001a). Air Quality in Ontario. Toronto, Queen's Printer for Ontario

----- (2001b). Drive Clean Continues to Cut Smog-Causing Emissions, www.ene.gov.on.ca/envision/news.061101mb.htm. **2004**

Ontario Power Generation (2001). 2001 Progress Report. Toronto, Ontario Power Generation: 31

Owens, S. (2000). "Engaging the public': information and deliberation in environmental policy." Environment and Planning A **32**: 1141-1148.

Parker, P., I. H. Rowlands, et al. (2003). "Innovations to reduce residential energy use and carbon emissions: an integrated approach." The Canadian Geographer **47**(2): 169-184.

Passy, F. and M. Giugni (2000). "Life Spheres, Networks and Sustained Participation in Social Movements: A Phenomenological Approach to Political Commitment." Sociological Forum **15**(1): 117-144.

Patton, P. (1997). "The World Seen From Within: Deleuze and the Philosophy of Events." Theory and Event **1**(1).

----- (2000). Deleuze and the Political. London, Routledge.

----- (2001). Redescriptive Philosophy: Deleuze and Guattari's Critical Pragmatism. Micropolitics and Media Culture. P. Pisters and C. Lord. Amsterdam, Amsterdam University Press: 29-42.

Pembina Institute (2000). Climate Friendly Hydrogen Fuel: A comparison of the life-cycle Greenhouse Gas Emission for Selected Fuel Cell Vehicle Hydrogen Production Systems. Dayton Valley, Pembina Institute: 50

Pickrell, D. (1999). "Cars and clean air: A reappraisal." Transportation Research Part A: Policy and Practice **33**(7-8): 527-547.

Pisters, P. and C. Lord, Eds. (2001). Micropolitics and Media Culture: reading the rhizomes of Deleuze and Guattari. Amsterdam, Amsterdam University Press.

Pooley, C., G. and J. Turnbull (1999). "The Journey to Work: A Century of Change." Area 31(3): 281-292.

Porter, C. (2002). Bike Boosters on a Roll. Toronto Star. Toronto: B01.

Porter, J. N. (2001). "Intentional Disturbances: Making the Toronto Movement Scene." Public 22/23(Cities/Scenes): 174-193.

Pred, A. (1981). "Social Reproduction and the Time-Geography of Everyday Life." Geografiska Annaler 63B(1): 5-22.

----- (1990). Lost Words and Lost Worlds: modernity and the language of everyday life in late nineteenth-century Stockholm. Cambridge, Cambridge University Press.

Prendergast, C. (1995). Paris and the Nineteenth Century. Oxford, Blackwell.

Proctor, J. D. (2001). Solid Rock and Shifting Sands: The Moral Paradox of Saving Socially Constructed Nature. Social Nature. N. Castree and B. Braun. Oxford, Blackwell: 225-240.

Putnam, R. (2000). Bowling Alone: The Collapse and Revival of American Community. New York, Simon & Schuster.

Rafael, V. L. (2003). "The Cell Phone and the Crowd: Messianic Politics in the Contemporary Phillipines." Public Culture 15(3): 399-425.

Rajchman, J. (1999). Diagram and Diagnosis. Becomings: Explorations in Time, Memory and Futures. E. Grosz. Ithaca, Cornell University Press: 42-54.

----- (2001). The Deleuze Connections. Cambridge MA, MIT Press.

Rasmussen, C. and M. Brown (2002). Radical Democratic Citizenship: Amidst Political Theory and Geography. Handbook of Citizenship Studies. E. Isin and Turner.

Richler, J. (2004). It's cyclist's hatred of cars that is so troubling. National Post. Toronto: T01.

Robbins, B., Ed. (1993). Phantom Public Sphere. Minneapolis, University of Minnesota Press.

Roberts, K. (2002). Are Long and Unsocial Hours of Work Bad for Leisure? Social Conceptions of Time. G. Crow and S. Heath. New York, Palgrave Macmillan: 165-178.

Roberts, P. (2004). The end of oil: on the edge of a perilous new word. Boston, Houghton Miffling.

Rosler, M. (1997). Rights of Passage. New York, Martha Rosler, self published with grant from New York Foundation of the Arts.

----- (1998). In Place of the Public: observations of a frequent flyer. New York, Distributed Art Publishers.

Schivelbusch, W. (1986). The Railway Journey: The Industrialisation of Time and Space in the Nineteenth Century. New York, Urizen Books.

Schrift, A. D. (2000). "Nietzsche, Foucault, Deleuze and the Subject of Radical Democracy." Angelaki 5(2): 151-161.

Schlor, J. (1998). Nights in the Big City: Paris, Berlin, London 1840- 1930. London, Reaktion Books.

Sennett, R. (1970). The Uses of Disorder. New York, Vintage Books.

----- (1977). The Fall of Public Man. Cambridge, Cambridge University Press.

----- (1994). Flesh and Stone. London, Faber and Faber.

----- (1998). The Corrosion of Character. London, W.W.Norton.

----- (1999). The Spaces of Democracy. The Urban Moment: cosmopolitan essays on the late 20th century city. R. A. Beauregard and S. Body-Gendrot. London, Sage: 273-286.

Serres, M. (1995). The Natural Contract. Ann Arbor, University of Michigan Press.

Shapiro, M. J. (1997). "Bowling Blind: Post Liberal Civil Society and the Worlds of Neo-Tocquevillean Social Theory." Theory and Event 1(1).

Shaw, J. (2001). 'Winning Territory': changing place to change pace. Timespace: geographies of temporality. J. May and N. Thrift. London, Routledge: 120-132.

Sheller, M. and J. Urry (2000). "The City and the Car." International Journal of Urban and Regional Research 24(4): 737-757.

Shotter, J. (1999). Writing from within 'living moments': 'withness-writing' rather than 'about-ness writing'. Fourth National Writing Across the Curriculum Conference: Multiple Intelligences, Cornell.

Simonsen, K. (2003). The Embodied City - from bodily practice to urban life. Voices from the North: trends in Nordic human. J. Ohmar and K. Simonson. Aldershot, Ashgate: 1-111.

Slocum, R. (2004). "Polar bears and energy-efficient lightbulbs: strategies to bring climate change home." Environment and Planning D: Society and Space 22: 413-438.

Sloterdijk, P. (1987). Critique of Cynical Reason. Minneapolis, University of Minnesota Press.

----- (1998). Modernity as Mobilisation. Speed - Visions of an Accelerated Age. D. Miller and M. Schwarz. London, Photographer's Gallery and the Trustees of the Whitechapel Art Gallery: 43-52.

Smith, D. W. (1996). Deleuze's Theory of Sensation: Overcoming the Kantian Duality. Deleuze: A Critical Reader. P. Patton. Oxford, Blackwell: 29-56.

----- (1998). The Place of Ethics in Deleuze's Philosophy: Three Questions of Immanence. Deleuze and Guattari: new mappings in political philosophy and culture. E. Kaufman and K. Jon Heller. Minneapolis, University of Minnesota Press: 251-269.

Soberman, R. (2001). Reducing car-dependency: transportation options for the City of Toronto. Toronto, Transportation Planning and Urban Development Services: 52

Sorkin, M. (1999). Introduction: Traffic in Democracy. Giving Ground: the politics of proximity. J. a. S. Copjec, M. New York, Verso: 1-15.

Spinks, L. (2000). "Thinking the post-human: literature, affect, and the politics of style." Textual Practice 15(1): 23-46.

Stein, J. (2001). Reflections on time, time-space compression and technology in the nineteenth century. Timespace: geographies of temporality. J. May and N. Thrift. London, Routledge: 106-119.

Stengers, I. (2000). The Invention of Modern Science. Minneapolis, University of Minnesota Press.

Stevenson, J. (1998). The Mediation of the Public Sphere: Ideological Origins, Practical Possibilities. Philosophy and Geography II: The Production of Public Space. A. Light and J. M. Smith. Lanham, Rowman & Littlefield Publishers Inc.: 189-206.

Stewart, K. (2002). Greening Public Power: Protecting the public interest in electricity restructuring. Toronto, Toronto Environmental Alliance: 24

Stieb, D. M., J. Paola, et al. (1996). "Do Smog Advisories Work? Results of an Evaluation of the Canadian Smog Advisory Program." Canadian Journal of Public Health **87**(3): 166-170.

Stone, A. R. (1995). The war of desire and technology at the close of the mechanical age. Cambridge MA, MIT Press.

Stott, P. (2003). "You can't control the climate." The New Scientist **179**(2413): 25-25.

Tekeli, I. (1999). Anytime as an Interpretation of Time and its Prospects for Reflections on the Future. Anytime. C. C. Davidson. Cambridge MA, MIT Press: 226-232.

Teyssot, G. (2000). "Public Space and the Phantom of the Agora." Lotus International **106**: 68-74.

The Centre for Sustainable Transportation (2001). The sustainable transportation monitor: issue on technology and sustainable transportation. Toronto, The Centre for Sustainable Transportation: 16

Thomson, S. (2003). Interview with manager of 20/20 campaign, Toronto Public Health.

Thrift, N. (1983). "On the determination of social action in space and time." Environment and Planning D: Society and Space **1**: 23-57.

----- (1994). Inhuman Geographies: Landscapes of Speed, Light and Power. Writing the Rural: five cultural geographies. London, Paul Chapman Publishing: 191-248.

----- (1996). "New Urban Eras and Old Technological Fears: Reconfiguring the Goodwill of Electronic Things." Urban Studies **33**(8): 1463-1493.

----- (1996). Spatial Formations. London, Sage.

----- (1999). Steps Towards and Ecology of Place. Human Geography Today. D. Massey, J. Allen and P. Sarre. Cambridge, Polity Press: 295-322.

----- (2000a). "Afterwords." Environment and Planning D: Society and Space **18**: 213-255.

----- (2000b). "Still Life in Nearly Present Time." Body and Society **6**(3-4): 34-57.

----- (2001a). Spacing and Timing,
<http://www.emp.uc3m.es/~quattron/conference/Thrift.doc>. 2001

----- (2001b). "Performing Cultures in the New Economy." Annals of the Association of American Geographers **90**: 674-692.

----- (2003). "Performance and..." Environment and Planning A **35**: 2019-2024.

Thrift, N. and J.-D. Dewsbury (2000). "Dead geographies - and how to make them live." Environment and Planning D: Society and Space **18**: 411-432.

Thrift, N. and S. French (2002). "The automatic production of space." Transactions of the Institute of British Geographers **27**: 309-355.

Toiskallio, K. (2002). "Navigation of Styles of Social Agents in Urban Traffic." Space and Culture **5**(2): 169-184.

Vidler, A. (1997). Construction Ahead. Rights of Passage. New York, self published by Martha Rosler, with grant from New York Foundation for the Arts: 21-25.

Virilio, P. (1987). Speed and Politics. New York, Semiotext(e).

----- (1997). Open Sky. London, Verso.

----- (1998). Critical Space. Paul Virilio Reader. J. DerDerian. Oxford, Blackwell: 58-72.

----- (2000). A Landscape of Events. Cambridge MA, MIT Press.

----- (2003). Unknown Quantity. London, Thames and Hudson.

Warner, M. (2002). Publics and Counterpublics. New York, Zone Books.

Weidman, A. (2003). "Guru and Gramophone: Fantasies of Fidelity and Modern Technologies of the Real." Public Culture **15**(3): 453-476.

Whatmore, S. (2002). Hybrid Geographies: natures, cultures, spaces. London, Sage.

Whyte, M. (2004). Two wheels and the city's yours; Flat Toronto is a cyclist's dream Forget bike paths and go for gridlock. Toronto Star. Toronto: B05.

Williams, J. (2003). Gilles Deleuze's Difference and Repetition: a Critical Introduction and Guide. Edinburgh, University of Edinburgh Press.

Wolin, S. (1997). What Time is It,
http://muse.jhu.edu/journals/theory_and_event/v001/1.1wolin.html

Wollen, P., Ed. (2002). Autopia. London, Reaktion.

Wylie, J. (2002a). "Becoming-icy: Scott and Amundsen's South Polar voyages 1910-1913." Cultural Geographies 9: 249-265.

----- (2002b). "An essay on ascending Glastonbury Tor." Geoforum 33: 441-454.

Yap, D. (2003). Interview, Ontario Ministry of the Environment.

Young, I. M. (1990). Justice and the politics of difference. Princeton, N.J., Princeton University Press.

Zawadzki, P. (2002). Malaise dans la temporalite. Dimensions d'une transformation anthropologique silencieuse. Malaise dans la temporalite. P. Zawadzki. Paris, Publications de la Sorbonne: 11-66.

Zielinski, S. (1995). The Future of the Automobile. Beyond the Car: Essays on the Auto Culture. S. Zielinski and G. Laird. Toronto, Steel Rail Publishing/Transportation Options Toronto: 173-186.

Zourabichvili, F. (1996). Six Notes on the Percept. Deleuze: A Critical Reader. P. Patton. Oxford, Blackwell: 188-216.

Zukin, S. (1995). The Cultures of Cities. Oxford, Blackwell.

Zurbrugg, N. (2001). Not Words, but Visions! Virilio Live. J. Armitage. London, Sage: 154-163.

