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Processual media theory, organised networks and the politics of information societies

Ned Rossiter
Edith Cowan University

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Processual Media Theory, Organised Networks and the Politics of Information Societies

Thesis submitted towards the degree of Doctor of Philosophy

Ned Rossiter

Bachelor of Arts (Media Studies)

Post Graduate Diploma (Design)

School of Communications and Multimedia
Faculty of Communications and Creative Industries
Edith Cowan University

2005

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Abstract

This thesis sets out to re-evaluate and re-think theories of communications media and theories of democracy formation under translocal, global and networked conditions. In order to do this, the thesis brings a combination of social and communications theory, political philosophy and "radical empiricism" to the study of the socio-technical dimensions of Net cultures. It examines the ways in which emergent networks of creativity, labour, organisation and intervention challenge the sovereignty of the state-corporation nexus, which functions to restrict access and control information flows in the interests of security and profit. The thesis investigates the relationship between emergent forms of organisation and the seemingly de-nationalised realm of networks. It considers how democratic polities might be constituted in terms of material interventions within the network. The challenge of theorising and inventing new idioms of democracy within an informational paradigm underpins much of the inquiry within this thesis.

This thesis contends that it is in the tensions between social movements, their uses of the Internet, intellectual property regimes, supranational entities and the nation-state that the conditions for democracy within network societies may emerge. By taking a processual approach to the study of the Internet and communications media more broadly, this thesis explores the ways in which socio-technical relations comprise the uneven and spatially differentiated mode of information. A processual media theory inquires into the mutually constitutive relations between conditions of possibility and that which has emerged. In adopting a processual approach to the study of networked information societies, this thesis hopes to open up new perspectives on the ways in which social movements – broadly understood as networks that seek to transform conditions of sociality – at once define and are constituted within communications media such as the Internet.

In summary, this thesis inquires into how informational economies and network societies are defined by scales of tension that are caught up in

contradictory processes that in some instances contest the sovereignty of the nation-state, while in other instances reaffirm the authority of the state. Such dynamics become clear by examining how new social movements and non-state actors such as NGOs challenge or, as the case may be, consolidate the emerging control society through their relationship to technologies such as the Internet. Similarly, analyses into the state and social networks as they intersect with various conditions of informationality enables this thesis to begin to suggest how a strategic engagement with informational architectures such as intellectual property regimes might lead to reform in such a way that enables Indigenous peoples and peoples in developing countries to obtain a degree of economic and political self-determination they are currently denied. In many instances, then, this thesis is interested in how activist networks engage, or potentially might engage, in the challenge of political organisation within networked socio-technical settings.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- (i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;
- (ii) contain any material published or written by another person except where due reference is made in the text; or
- (iii) contain any defamatory material.

I also grant permission for the Library at Edith Cowan University to make duplicate copies of my thesis as required.

Acknowledgments

The passage of this thesis has traversed three homes – Perth, Melbourne and now Portrush-Coleraine, in Northern Ireland – and a few countries inbetween. And while this particular thesis, version 8.4, was completed within just over three years – about the statistical norm for PhD's in the current era of assembly line cognitarials – it had a gestation period of seven years prior to that. During the last decade, the formation of an intellectual and emotional life has transpired. And a lot of people and institutions have helped me on the way! More, in fact, than I can properly acknowledge here.

First, I thank my supervisor, Brian Shoemsmith, who has consistently displayed support, encouragement and an unfashionable amount of patience in seeing this thesis to completion. I'm glad we both made it this far Brian! My life of multiple projects began at Edith Cowan University. Kevin Ballantine was my first mentor, teaching me how to teach, how to become a photographer and how to perceive a world differently. I must also thank the administration of Edith Cowan University, who somehow have let me enrol in more PhD thesis units than can be reasonably possible. Joanna Sassoon gave me much assistance in my early archival work of a thesis that will never be written. The training didn't go to waste.

Most of this thesis was written in Melbourne. Despite its internal difficulties, Monash University provided a lot of institutional support. First, they hired me in my first academic position and allowed me to teach intellectually stimulating material that has informed much of this thesis. Monash is also one of the few universities in Australia that have very reasonable teaching loads. This meant that I could entertain all sorts of useful distractions. David Holmes has been a particularly politically and intellectually supportive friend and colleague. Simon Cooper has been a wonderful collaborator and friend whose idiosyncratic humour is matched by his ability to mess with septic tanks far more than any clean boy should. I also thank him for his helpful comments on this thesis.

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In many ways this thesis has been made possible by the invention of fibreculture, a very special network of intellectual collaboration and friendships. Geert Lovink has been my second key mentor in life so far, and his guidance, friendship and advice has inspired much of this thesis. Danny Butt has been my companion in thinking how creativity, culture and information economies can operate within the cracks of prevailing orthodoxies. Esther

Milne and Andrew Murphie have both been friends and collaborators in fibreculture activities, and then some more.

I thank Mike Hayes for all the encouragement and comments on my work that he's given over the years. Daniel Palmer was one of the first to teach me about writing and style. I thank him for that and more. Quite a few years back now, Jody Berland rekindled my interest in Innis. I thank her for that encounter and her friendship. Allen Chun has been solid as a rock. Along with his whacky humour, the guy's also very cool. Brett Neilson, I thank, for his lessons on Italian *operaismo* and our collaborations. Maren Hartmann has been my long-distance friend in Brussels. Now she's a bit closer in Erfurt. Renata Kokanovic is my dining partner in Melbourne. Let's make sure we eat in Croatia as well!

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Robyn Barnacle has been with the beginning of not just this thesis, but also the many versions prior to it. Rob's support, humour and friendship have endured, without question, through to the completion of this version. I thank her for that, and her top-notch cooking! My very special brother Tom has also sustained the material and social life of this writing body, and I think his cooking is better than our dad's. I'm only hoping he moves to Northern Ireland to inject some sensation into my quite pathetic engagement with the world of taste.

This thesis has been completed in the amazingly supportive and friendly setting of the Centre for Media Research at the University of Ulster. I thank Dan Fleming for having the faith and confidence in hiring me, and for creating working conditions that I suspect I'll never experience again. I've been here for three months now and still feel like I'm in heaven. What did Talking Heads mean when they said heaven is place where nothing ever happens?!

My father, Richard Rossiter, and mother, Miranda Hamilton, have given me an incredible life and their love. My other brother, Will, is an important part of that. My dad has been particularly supportive throughout this thesis. He has also taught me how to read, how to teach and how to keep the madness of university personas at a distance.

Hélène Frichot has been a friend and companion for many years. She has influenced this thesis and my life.

This thesis is dedicated to a dog called sal, who lived alongside this life with friends until recently.

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Introduction

'... the problem is that the term "democracy" has been emptied of all its meaning. Democracy is said to be identified with "the people" – but what is the people?'

Antonio Negri, *Negri on Negri*, 2004.

'The multitude is an infinity of singularities'.

Antonio Negri, *Negri on Negri*, 2004.

'Writing is not a thing, it's a process'.

McKenzie Wark, *Virtual Republic*, 1997.

This thesis contends that it is in the tensions between social movements, their uses of the Internet, intellectual property regimes, supranational entities and the nation-state that the conditions for democracy within network societies may emerge. The thesis explores various socio-technical dimensions of Net cultures. It examines the ways in which emergent networks of creativity, labour, organisation and intervention challenge the sovereignty of the state-corporation nexus, which functions to restrict access and control information flows in the interests of security and profit. A focus on the dissonance of information, as embodied for example in the activities of social movements within network societies, invites a rethinking of the concepts of state sovereignty and civil society. The thesis investigates the relationship between emergent forms of organisation and the seemingly de-nationalised realm of networks. It considers how democratic politics might be constituted in terms of material interventions within the network. The challenge of theorising and inventing new idioms of democracy within an informational paradigm underpins much of the inquiry within this thesis.

While this thesis spends some time discussing mailing lists, my interest is not in duplicating research into instances of democracy as it takes place in online

environments such as chatrooms, MUDS, MOOS and mailing lists (Jones, 1995; Rheingold, 1993). Nor am I concerned with attempts to develop the virtues of so-called "e-democracy" by government departments, councils and businesses seeking to enhance their image as community friendly organisations, as well as techno-libertarians seduced by the wonders of virtual technographics as promised by the "Californian Ideology" (Barbrook and Cameron, 1996).

Rather, this thesis contends that it is essential to identify the ways in which "the virtual" is defined as a field of potentialities that articulate with the material dimensions of social life. The situation of communication and informationality will always hold its own peculiarities – cultural, social, economic, technological and political. The default option for political philosophies of Net cultures is determined by the ways in which these various elements correspond with specific problematics.

This thesis seeks to advance research into the study and analysis of cultural practices within information economies, intellectual property regimes, the Internet and the tension between subnational, national and global social forms. By analysing the relationships between technology and society in terms such as these, an understanding of the complexities of socio-technical systems and their attendant issues can emerge. A processual media theory inquires into the mutually constitutive relations between conditions of possibility and that which has emerged. In adopting a processual approach to the study of networked information societies, this thesis opens up new perspectives on the ways in which social movements – broadly understood as networks that seek to transform conditions of sociality – at once define and are constituted within communications media such as the Internet.

The literature on the relationships between culture, society, technology and the economy is now vast. Since this heterogeneous field of inquiry has been developing at great speed over the past decade, empirical results to date are typically redundant by the time of their publication. This has led to a pernicious situation whereby much research across the humanities and technosciences is agenda driven, functioning at best to serve funding bodies and elite institutions rather than contributing to the needs and interests of

democratic societies. Such a condition is particularly the case within advanced neoliberal economies such as Australia, which has seen the relationship between the university and industry take priority over, and indeed erode, the relationship between knowledge and society.

At this stage of research in the field of new media studies, there is a great need for inquiry into the ways in which social movements and their uses of new information and communication technologies (ICTs) are intersecting with larger questions associated with the status of nation-states and their capacity to act as constitutive frameworks for democracy. A focus on what users do with technologies will not in itself open up the larger field of relations and forces that shape informational societies. This is the predicament, unwitting as it frequently is, of the new media "empirics". This thesis strongly contests that prevailing, dominant and deeply unimaginative paradigm.

Informational economies and network societies, according to some of the most influential researchers working in social theory, international political economy and urban studies, are defined by scales of tension that contest the sovereignty of the nation-state (Castells, 1996, 2001; Hirst and Thompson, 1999; James, 1996; May, 2002; Sassen, 1996, 2000b; Shaw, 2000). Political philosophers Michael Hardt and Antonio Negri (2000) maintain that a new postnational sovereign power – a "post-political" formation they term "Empire" – operates through a process of biopolitics that overdetermines, interpenetrates and infuses all boundaries. In response to this new sovereign form, uses of the Internet by new social movements at subnational, transnational, intra-regional and translocal levels challenge the emerging control society (see Bleiker, 2000; Deleuze, 1995; Lovink, 2002a; Meike, 2002; Nettime; Sarai; Fibreculture).

Control societies are predicated on informational as distinct from industrial modes of production and exchange (Beringer, 1986; Lash, 2002). The shift toward a control society is also evident in government policy concerned with "border protection" as it relates to foreign affairs, migration, trade relations, transnational labour mobility and so forth. Government attention to these issues is often met with a counter-response by social movements, as seen in recent years in the efforts of community organisations, environmental groups,

NGOs, unions, and "anti-globalisation" protestors. An increasing tension has thus emerged between supranational actors, the state and civil society from contestations over the flow of information (Correa, 2000; Drahos and Braithwaite, 2002). Such a condition places the Internet and, more broadly, network societies and informational economies as the locus for any critique of state-civil society relations (Lash, 2002). Central to such a critique is the question of democracy and the ways in which it is being redefined and recomposed within an informational paradigm.

While there has been very important and interesting research undertaken in Australia on Indigenous cultural and media production (Hinkson, 2002; Langton, 1993; Michaels, 1986, 1989; Mickler, 1998; Muecke, 1992), and further research on the significance intellectual property rights hold in the advancement of Indigenous self-determination (ATSIC, 1999a, 1999b; Janke, 1998; Kenyon, 2000; Morris and Meadows, 2000), there has been very little research that relates these issues to the Internet, informational economies and network societies. Thus an important dimension of the study of network and information societies that has been largely overlooked concerns the ways in which Indigenous peoples and social movements are redefining how information flows can persist in spite of regulatory standards that seek to control and restrict the flow of information. This thesis contributes in a small way to the formation of such a project, investigating in chapter 4 some of the political, cultural, theoretical, historical and empirical dimensions to Indigenous cultural and media production, intellectual property regimes (IPRs), the Internet, informational economies and network societies.

The inter-relations between social uses, discourses, policies, institutions, interests and the economic implications of information and technology are still underdeveloped in research on the Internet. And they are forever changing, in any case. By taking a processual approach to the study of the Internet and communications media more broadly, this thesis explores the ways in which socio-technical relations constitute the uneven and spatially differentiated mode of information. The thesis goes on to examine how civil societies and the multitudes are redefined and, indeed, self-inventing within such a mode.

In summary, this thesis inquires into how informational economies and network societies are defined by scales of tension that are caught up in contradictory processes that in some instances contest the sovereignty of the nation-state, while in other instances reaffirm the authority of the state. Such dynamics become clear by examining how new social movements and non-state actors such as NGOs challenge or, as the case may be, consolidate the emerging control society through their relationship to technologies such as the Internet. Similarly, analyses into the state and social networks as they intersect with various conditions of informationality enables this thesis to begin to suggest how a strategic engagement with informational architectures such as intellectual property regimes might lead to reform in such a way that enables Indigenous peoples and peoples in developing countries to obtain a degree of economic and political self-determination they are currently denied. In many instances, then, this thesis is interested in how activist networks engage, or potentially might engage, in the challenge of political organisation within networked socio-technical settings.

Communication Technologies and the Abstract Nation

As contemporary liberal democratic nation-states battle to become non-territorial entities, various institutions, technologies and international organisations are resisting. These issues are not exclusively of this present or of this time, as a brief sketch will show of the formation of Australia as a nation-state, the relationship this moment held with a medium of communication – the telegraph – and the way in which state sovereignty asserts its control within contemporary discourse networks concerned with the terror of security. In 1901 the colonial territories in Australia federated to become a nation. In many respects the precondition for national sovereignty comprised of the intercolonial telegraph network and a desire to communicate (Livingston, 1996; Wark, 1997a).

Today, as many commentators on global economies and cultures speak of the so-called end of the nation-state, it is useful to remember this relationship between territoriality and pre-Internet technologies of virtual communication

such as the telegraph. For all the talk by neocons, dotcom enthusiasts and the like of a "borderless world" and a "New Economy" inaugurated by new information and communication technologies, the more powerful nation-states are as busy as ever in their efforts of border control. Irrespective of whether they were for or against the US-led military interventions in Afghanistan and Iraq, the so-called "war on terror" operates as a legitimising discourse for G8 nations seeking to consolidate their economic interests, along with corporations they represent, in countries experiencing political and civil instability.

The great paradox of 1901 and federation as an instantiation of "post-coloniality" is that it did not herald the onset of a republican system of governance. Absolute rule of Australia continues to be held by the British monarch, the Queen of England, who is represented by the governor general – a head of state appointed by the government of the day, and not the people of the nation. And perhaps this residual colonial system of governance is only proper, since until an Australian government and its peoples are able to reconcile their condition of existence with the socio-cultural destruction and dispossession of land from the Indigenous peoples, then the symbol of a republic remains one underscored by antagonism. Even so, the idea of a republic – what McKenzie Wark (1997b) has termed a "virtual republic" – persists in a very strong way for many in Australia. The potential of a republic was ushered into the Australian popular imagination in a similar way as federation was made possible by the intercolonial telegraph network. Like the network of submarine and cable telegraphy through which communication was relayed from one point to another, changing the culture of places to a relationship between spaces, the virtual republic subsists as a potential within a cartography of relations that emerge out of a desire to communicate in ways that open up the possibility for transformation and new forms of social organisation. From the telegraph onwards, new technological forms reconfigured the abstraction of communication, as Wark describes:

After the telegraph came the telephone, the television, telecommunications: a whole series of developments of a certain kind of experience – *telesthesia*, or perception at a distance. They are what made possible the development of Australia as a progressively integrated economy, society and culture. They are the conditions of possibility for the "abstract community" of nation which can imagine itself, at one and

the same time, as diverse and coherent. They are what make possible the virtual republic, where specific cultures bring their interests and passions into an ongoing conversation about what kinds of things might be possible. (Wark, 1997b: 26)

Thus while nations are never unitary spatio-temporal domains, but rather sites of raultiple, overlapping articulations of space and time coextensive with different media of communication, coupled with the social practices and institutional actors that exist within its geographic and imaginary borders, there are, nevertheless, discursive figurations that present the nation *as if* it is a unified entity (see Sassen, 2000a: 216). Discursive figurations such as "the people" or "the national interest" have real effects. First, at the level of policy formation and the interests various policies may reflect and exclude. Second, in terms of the mediated formation of conscious and unconscious dimensions of subjectivity, which people then invoke as a basis for social interaction – one outcome of which consists of socially antagonistic expressions in the form of sexism and racism.

Various scholars have looked with optimism at the figures of 'migrant consciousness, transnational religious revivals of tradition, and movements of postmodern diasporic hybridity' (James, 1999/2000: 54) as representative of the possibilities postnational and cosmopolitan identities offer as a way out of conundrums such as ethnic violence and singular identity presented by nationalism and the nation-state.¹ Paul James defines postnationalism as a 'faith' in 'form[s] of subjectivity defined as a discursive "attachment" to others who have been lifted out of the modern boundaries of national identification' (James, 1999/2000: 53). One danger of such a faith is that, as James again puts it, 'Postcolonial advocates of postnationalism fail to see that they walk in the shadow of [...] quite differently motivated advocates of global mobility' (1999/2000: 55), namely those institutional, political and corporate actors that present the nation-state as an international force or authority precisely because it too is open to global mobility. Curiously, and to its demise, the problems that have beset Cultural Studies in its joyful uptake of postmodern simulacra, floating signifiers and fragmented identities contributed, some would argue, to

¹ See, for example, Chambers (1994), Clifford (1997) and Hannerz (1996). The figure of the cosmopolitan is seen in more problematic, less celebratory terms in works like Appadurai

a deterioration of conditions within university education and research, and can be seen to be reproduced in the conjuncture of postnationalism just outlined above as universities race to form online consortiums engaged in a thorough commercialisation of education.²

James argues that the debate around otherwise deterritorialised instances of cosmopolitan global mobility will remain hijacked by forces of capital until it is rethought in terms of the 'principles of solidarity and community' (James, 1999/2000: 52-54). Put another way, for every deterritorialisation there is a reterritorialisation.³ While notions such as solidarity and community can be associated with nationalist driven forms of xenophobia and oppressive tradition – symptoms, one could argue, of alienation brought about by structural changes that have dissociated labour and lived relations from a sense of place – they do nevertheless point to the social embeddedness and institutional practices that condition the very possibility of global mobility in the first instance.

It is in the context of the abstract nation that Australia's military interventions in East Timor and more recently the Solomon Islands can perhaps be best understood. Certainly such interventions hold neo-colonial characteristics, with the Australian government imposing its own codes of law, order and administration on its regional neighbours. And while such a governmental habitus is to a degree "inherited" or accumulated from its previous experience of British colonial rule, I would suggest that coupled with this neo-colonial impulse is the frequently destructive logic of capital. The political and social unrest in the Solomons in recent years can be attributed to the effects of the Asian economic crisis of 1997-98 and a decline in foreign investment in the

(1996), Cheah and Robbins (1998), Derrida (2001) and Harvey (2000). For an incisive critique of the essays collected in Cheah and Robbins (1998), see Neilson (1999).

² I'm thinking here of Bill Readings' *The University in Ruins* (1996). For a detailed analysis and history of the inter-relations between economic rationalism and structural reforms within Australian universities, see Considine and Marginson (2000). For a preliminary critique of that book, see James (2001).

³ As Deleuze and Guattari offer by way of one explanation among many: 'In capitalism, capital or property is deterritorialized, ceases to be landed, and is reterritorialized on the means of production; whereas labor becomes "abstract" labor, reterritorialized in wages ...' (1994: 68). In their contributions to the fibre/culture reader, *Politics of a Digital Present*, McKenzie Wark (2001b, 2001c) and Phil Graham (2001) draw inspiration from Marx and others, and dialogue over a similar logic whereby the abstraction of labour is conditioned by the socialisation of abstraction, and vice-versa. See also Papastorgiadis (2000).

region, the imposition of IMF and World Bank programs for institutional reform in the public sector, and fighting between rival militias as a result of social tensions associated with unemployment (see Marshall, 2003).

In other words, there is no single determining power the results in Australia's push for hegemony in the region. Rather, there is a multiplicity of forces at work that condition the Solomons as a state of crisis. The paradox of Australia's expansion into the region is that its empire building – if that's what it can be called – is articulated through a discourse of "fear" rather than hope or celebration on the home front (Hage, 2003). So for all of Australia's lessons in social, political and economic "liberation" and "reform", what emerges is a society of increasing fear and anxiety. This is quite a departure from empire building discourses of previous eras. And in many ways, this example stands as an allegory for the investigation in this thesis of "network states", social movements and the politics of information.

Despite this rather bleak image I have set out, I remain optimistic with regard to the possibilities of social renewal and cultural invention. Since colonisation, Australia has always been a country made up of migrants. The last twenty to forty years has been a particularly rich period of time in terms of the diverse range of cultural formations made possible by an influx of immigrants and refugees from Asian, Middle-Eastern, African, South American and European countries. In this respect, one can speak of a postcolonial condition in as much as the citizens of this country bring with them cultural heritages that are certainly not reducible to the legacy of British colonial rule. Perhaps more importantly, Indigenous peoples in Australia are increasingly asserting their right to cultural, economic and political self-determination. Such expressions can be seen as symptomatic of a postcolonial condition, since there is a new confidence within the Aboriginal communities, from what I can tell, to take control of their futures. As I argue in chapter 4, the juridico-political architecture of intellectual property as practiced within Aboriginal cultural systems provides a key mechanism with which to pursue an Indigenous form of sovereignty.

The extent to which an unofficial postcolonial culture can be detected within Australia in terms of its assumptions, aims and strategies is in many ways hard to locate, since to do so means precisely to situate oneself in those cultures. Scanning the cultural landscape, it's clear that the breadth of radicalised, political cultural activities took a bit of beating throughout the nineties. This was an era of complacency in many respects as an older sixties generation inherited control of cultural and social institutions and set about implementing economic rationalist reforms in stooge-like fashion (see Davis, 1997). This meant that institutions that had previously been enabling ones for cultural invention and experimentation – particularly the universities along with film, television and radio production on public broadcasters – quite suddenly became very poorly resourced and frequently depressing places to be. This story is not of course peculiar to Australia, but is part of a widespread global phenomenon.

While there has been a demise in cultural activities within more traditional institutional settings, there has been a blossoming of projects most particularly in the area of new media cultures and Indymedia style political interventions. An assortment of political activists, human rights and social justice organisations formed a mutable affinity in response to the Australian government's notorious border protection policies of 2001-2002 that resulted in a number of refugee detention centres.⁴ These were frequently located in isolated regional settings such as Woomera in South Australia, and have more recently been "outsourced" to neighbouring Pacific islands such as Nauru who have little alternative but to comply – yet another instance of Australia's regional aspirations! It's examples such as these that highlight the political potential of the multitudes to transform cultural imaginaries and material existences. This thesis elaborates how such instantiations of situated media-cultures and social networks are symptomatic of the politics of information societies.

⁴ One of many examples of the no-border movements in Australia can be found at Angela Mitropoulos' site, <http://antimedia.net/xborder>.

Networks and State Formations

Our present era of divergent spatio-temporal configurations present a special difficulty when addressing the political dimension of informational networks. Internet usergroups, for instance, are often characterised by chance encounters, certain degrees of cultural capital accumulated over time and flexible modes of temporality, whereas supranational organisations such as ASEAN, UN, WTO, IMF, along with NGOs and transnational corporations, are often characterised by their spatial tendencies vis-à-vis their affiliations to the nation-state or global cities. With reference to the work of Canadian communications theorist and political economist, Harold Innis, I explain in chapter 2 how such spatio-temporal disjunctures – or what Innis calls the “bias of communication” – function as an internally generative operation that results in “monopolies of knowledge” which impact upon the cultural life of societies.

The digitalisation of cultural and economic flows that attends the Internet intensify a process of communication that began in the mid to late nineteenth century with the advent of telegraphy, with telephony following close on its heels. At the close of the nineteenth century, colonial empires consolidated their territorial and imaginary rule via the electrification of space. And with the electrification of communication, there has been a radical shift in the organisation of the social, cultural, economic and political dimensions of life. This is a process whereby the “space of place” shifts to the “space of flows” (Castells, 1996; Stalder, 1998; Heiskala, 2003). Flows of communication that were once restricted by the contingencies of place become in the emergent network society electronically decoupled, or disembedded, or deterritorialised from places. Yet most importantly, they are always necessarily re-embedded or reterritorialised, more often than not in social-political and institutional settings. These transformations impact upon the ways in which society defines itself, with communities being reconfigured beyond or alongside the traditional geographic limitations of place and the modern space of the nation-state.

This shift has also been noted by Castells and many others as one in which manufacturing economies characteristic of the industrial age subside to informational economies that characterise network societies. This paradigm

shift is made possible by a combination of economic, social, political and technological forces. It is important to remember that this transformation, as with any societal transformation, is dependent on the intertwining effects of all of these forces, and cannot be reduced to any single agent of change. That is, the world of the electronic network does not reside exclusively in some kind of disembodied virtual space; it is also part of a thoroughly material and socio-technical system. It can't exist without support services in the form of food catering, urban infrastructure, technical staff, creative personnel – in fact all of the social infrastructure that we associate with the contemporary city in advanced economies (see Sassen, 1991). As Castells writes in his book *The Internet Galaxy: Reflections on the Internet, Business and Society*, 'In the last quarter of the twentieth century, three independent processes came together, ushering in a new social structure predominantly based on networks':

... the needs of the economy for management flexibility and the globalization of global capital, production and trade; the demands of society in which the values of individual freedom and open communication became paramount; and the extraordinary advances in computing and telecommunications made possible by the micro-electronics revolution. (Castells, 2001: 2)

The combined effects of these processes has led some critics to see the Internet in utopian terms whereby potential access to and engagement with an informational public sphere is taken as a universal condition since the Internet eclipses the broadcast model of communications media, which functions through a single point or producer transmitting messages to many; instead, the Internet enables interactive communication of many-to-many at a global scale. Communication occurs from one-to-one and one-to-many, as seen for instance with email, listserves, Internet Relay Chats (IRCs) and USENET news groups. It's these sort of multiple possibilities of communication that distinguish the Internet from the older broadcast technologies.

Furthermore, the digitalisation of information means that informational products remain undiminished at the level of properties irrespective of the frequency with which they are reproduced and distributed. One of the key techniques for regulating and ordering the flow of information and structuring the "New Economy" consists of intellectual property regimes (May, 2002).

Intellectual property regimes function to ensure that a regime of scarcity is inscribed upon digitalised information. In so doing, an exchange value is able to be placed on what is otherwise digital code. The digitalisation of information is in marked contrast to the age of analogue technologies of mechanical reproduction whereby a limited number of copies could be made before degradation sets in. Think of what happens when you make a reprint of a photograph or duplicate of a magnetic audio or video tape: with each copy, the quality of the recording gets worse. Whereas when information is digitally encoded as zeros and ones, the quality of the copy remains identical to that of the original. This has led to the often repeated mantra that “information wants to be free”, since its reproduction has no limit, at least in technical terms. The restrictive nature of intellectual property regimes has inspired decentralised socio-technical phenomena such as the “Napsterisation” of MP3 music files. Such socio-technical practices can be seen as one instance of the mutable field of digital piracy challenging the hegemony of the recording industry and its regulated distribution system (Lovink 2002a; Meikle 2002).

Techno-utopians, Dystopians, Speculative Media Theory

The techno-utopians or techno-libertarians see this technical feature of the Internet as the penultimate embodiment of democracy at work. What they fail to understand is the dependency relationship their high-blown rhetoric has with institutional structures of support which house the computer mainframes and ISPs that their “virtual existence” is channelled through. As Peter Lunenfeld remarks, ‘Technolibertarianism was never actually intellectually robust enough to merit being a philosophy; it is more of an attitude. As long as there are successful loudmouths who believe they owe nothing to the infrastructures by and through which they develop and market their products, we’ll have libertarians bloviating on talk radio’ (2002: 241-242). In order to provide some examples of the sort of movements and discourses that do not offer sustainable models for new institutions based upon the logic of organised networks, it is helpful to undertake a brief excursion through the key prevailing “attitudes” within Net history that are not quite yet redundant.

The utopian discourse of techno-libertarians is frequently referred to as the "Californian Ideology", which in turn is a reference to the residual hippy culture that characterised those who worked in computer programming at the University of California, Berkeley where much work was done developing the Internet from its origins in the 1960s within the military-industrial complex as ARPANET. This was a time of new social movements such as feminism, civil rights movements and environmentalism; protests against the US involvement in the Vietnam war were also going on. One of the most prominent spokespeople of hacker culture is John Perry Barlow (2002), former lyricist of the Grateful Dead rock band. There's a reminder of the importance of history there (see Himanen, 2001).

It is useful to contextualise the techno-libertarian position in such a way because we can see why the libertarians maintain their distrust of government, and support the freedom of expression of the individual. That the Internet holds the technical capacity for horizontal, non-hierarchical and decentralised systems of communication adds further weight to the libertarian position. And as it happens, such a position articulates fairly neatly with principles of neoliberalism, which favours the deregulation of industries and privatisation of public institutions, all the while valorising the so-called sovereignty of the individualised consumer.

In many regards, the values of liberal-democracy are similar to those espoused by techno- or cyber-libertarians associated with the "Californian Ideology" and the likes of R. O. Sirius, John Perry Barlow, Mitch Kapor and Kevin Kelly. Nicholas Negroponte, founder of MIT's Media Lab, epitomised the east-coast variant of techno-utopianism. Emerging from the sixties hippy counter-culture, the techno-libertarians reached their apogee during the heady techno-dreaming blue-sky years of the nineties, set up shop in the San Francisco Bay Area and Silicon Valley, cohabited as avatars in online communities such as the WELL (Whole Earth 'Lectronic Link), and pedalled their self-styled futurism and New Age Romanticism in magazines such as *Whole Earth Catalogue*, *Mondo* and *Wired* (see Dery, 1996: 21-41; Sobchack, 1994; Willis, 2001). The techno-libertarian ethos found itself well suited to the principles of neoliberalism (see Gere, 2002: 138-149; Borsook, 2001). As Charlie Gere notes in his book *Digital Culture*:

Both neo-liberalism and the [digital] counter-culture elevated the individual over the collective. Both also proclaimed the necessity of freeing the individuals capacity to act from the tyranny of organizations and bureaucracies. The hedonism that was a characteristic part of the counter-culture is not so far from the neo-liberal appeal of the self-interest of the consumer. In a curious way, the pursuit of neo-liberal policies is also the triumph of counter-cultural ideas. Another shared characteristic is a belief in the positive power of information technology. (Gere, 2002: 140)

In contrast to the techno-libertarian view of the Internet, there exists a decidedly more dystopian position which, unsurprisingly, sees the Internet in more gloomy, pessimistic terms (Webster, 2000, 2002; Webster and Robins, 1998; Robins and Webster, 1999). At the extreme end, the dystopian view blames the Internet as responsible for further alienating and abstracting people from society, for undermining the values and authority of tradition, and for fragmenting what are assumed to be otherwise coherent, tension-free communities. In this respect, the dystopian position also adopts a technological determinist view of communication, yet it is pretty much directly opposed to the liberatory discourses of techno-utopians. At a more sophisticated level, the dystopian view sees the advent of the Net as symptomatic of larger, global forces which have undermined the authority of the nationstate and reconstituted citizens as consumers and functionaries within informational economies. The Internet is seen as encroaching upon the civil liberties and privacy of citizens, encasing people further within the sinister web of control society through techniques of surveillance.

Manuel Castells captures the dominant position of both techno-libertarians and dystopian proponents of virtual communities when he writes that 'exclusion from these networks is one of the most damaging forms of exclusion in our economy and our culture' (2001: 3). This exclusion is often referred to in terms of the "digital divide", or information rich and information poor. Castells transcends these distinctions, and presents us with the challenge of individual and collective transformation: 'Neither utopia or dystopia, the Internet is the expression of ourselves – through a specific code of communication, which we must understand if we want to change our reality' (2001: 6).

Speculative media theory can be considered as a third alternative to techno-utopian and dystopian views of the Net. Speculative media theory is interested in the possibilities of Net practices at all sorts of levels: theory, hactivism, policy formation, open source programming and distribution, design, net.art, community formation, etc. Indeed, a speculative media theory of and for the Net might be so ambitious as to try and accommodate all these diverse and more often than not incommensurable projects. And why not? Let's leave the reduction of what can be said and done to the boundary police. The borders of the Net undergo constant reformation, and even amidst the current intense commercialisation of the Net, there are still open spaces that enable radical projects. As Geert Lovink (2000) notes, 'If you have the impulse to do something you have to stop deconstructing yourself. Just do it, as the Nike slogan states. Hit and run. See how authorities and their sign systems respond. Trial and error' (see also Lovink, 2002a: 22-29).

There might seem to be a residue of techno-utopianism in this statement by Lovink. And that's okay. It would be a denial of life to refuse the positive and affirmative potentialities afforded by communications media. More to the point, Lovink is suggesting that we work within hegemonic orders and manipulate them for they're worth. Speculative media theory is sensitive to the historical formation of Net discourses and practices, and it doesn't shy from recuperating or appropriating the positive dimensions of that which has preceded it. Speculative media theory steals conceptual and technological tools, and puts them to work. If there is a shared concern across the dispersed, often unconnected projects of speculative media theory, then it is based upon a notion of a digital commons. As Lovink states in an interview with Snafu and Subjesus (2001):

I have always been willing to take the risk of promoting digital ideas, knowing that, at the end of the day, they would be perverted, not just to third parties, but also by classic infightings within the alternative ghettos. Increasingly, the media-cultural complex needs new ideas, just to feed itself.... In the case of demand for public access to information and communication networks it is a broad and diverse media culture which counts, in the end.... If the gift economy gets corrupted, move on. If everyone has Internet and the revolution still hasn't arrived, too bad. Change stage. The idea of a Digital Commons is still there, despite IBM and HP buying themselves into the open source movement. (Lovink in Snafu and Subjesus, 2001)

As Lovink suggests, speculative theory has a sense of an enemy: it is alert to the ways in which the Net is being closed down in its current phase of commercialisation, which sees intellectual property regimes, coupled with techniques of control such as authentication passwords, "cookies", and server protocols, as manifestations of corporate power that seeks to restrict both access to the Net through a user-pays system and the mobility of information.

Speculative media theory is unrelenting in its critique of forces which seek to restrict access to the Net. Speculative media theory is attentive to the material dimensions of the Net: both the technical infrastructures which shape communicative forms, and the socio-political settings or institutions within which both technologies and users are embedded. Finally, speculative media theory is experimental. It seeks to reinvent what can be said and done for the purpose of creating a multitude of possibilities.

A Note on Method and Conceptual Framework

For political economist and urban theorist Saskia Sassen, the concept of analytic borderlands 'entails opening up a line (represented or experienced as dividing two mutually exclusive zones) into a border zone that demands its own theorization and empirical specification and that can accommodate its own distinct practices' (2000a: 220). Intriguingly, Sassen asserts that borderlands 'demand' theorisation and empirical investigation. An analytic borderland could be seen then as a domain requiring perhaps urgent attention – we are interpellated by the agency of a demand. This demand, I would suggest, presents us with a curious paradox: the need to measure our own sense of the importance of our projects against the ways in which social practices are organised as networks of strategic interests conditioned by material forces. In other words, there is a need for a mode of reflexive positionality whereby theoretical frameworks, institutional interests and academic conditions (e.g. the resources allocated to research and teaching) are recognised for the ways in which certain objects or areas of study are privileged over and above others, and that such privileging in turn overlaps with larger political economic

interests (i.e. our research on particular objects of study is always embedded in something else) as well as processes by which knowledge production is a pseudo-corporate and commercial activity (at least that's the case in Australia in recent years). Such a mode of reflexivity serves, in my view, the productive function of critiquing the institutional cultures – which include Internet mailing lists like fibreculture, as I discuss in chapters 2, 3 and 6 – and futures of intellectual work more broadly.

In the first instance, this thesis brings together the conceptual insights into the philosophy and history of technology (Guattari, 1995b; Innis, 1951; Kittler, 1999; Latour, 1993; Luhmann, 1995) and theories on the politics of social movements (Hardt and Negri, 2000; Laclau and Mouffe, 1985; Mouffe, 2000; Virno, 2004) in order to analyse how cultural practices associated with the Internet can more properly be understood by examining specific geopolitical, social and economic conditions. The work of Dutch media theorist and activist Geert Lovink has informed much of my understanding as well as experience of Net politics and culture. Similarly, Australian media and cultural theorist McKenzie Wark has for many years now been a benchmark for how to think and write media philosophy. Lovink and Wark are a presence throughout this thesis. Michael Hardt and Antonio Negri's passionate revival of Marxian political philosophy in their book *Empire* (2000) has been a great source of inspiration for this thesis. In her review of *Empire*, Benita Parry gently admonishes Hardt and Negri for their 'dizzying conceptual promiscuity induced by the heady cocktail of Marxist, autonomist and postmodern paradigms. In particular because the Deleuzian notion of lines or paths of flight, of flows and borderless continuums is used as a trope of thinking processes and invoked as a template of real world conditions, these disposals converge in an insouciant disregard of the actually existing circumstances in what the authors insist is a post-imperialist era' (Parry, 2003).⁵

This thesis could also be accused of perhaps not a dizzying, but probably a conceptually promiscuous combination of 'Marxist, autonomist and postmodern paradigms'. It too draws heavily on Deleuze, invoking notions of 'continuums' in order to speak of 'processes', and then some more. Where it

⁵ A much harsher critique of *Empire* can be read in Brennan (2003).

differs with Hardt and Negri, most obviously, is that as a PhD thesis this work is an intellectual and institutional apprenticeship – its readership, at least at the level of examination, is limited to three people; *Empire* has commanded an international readership of thousands and has revitalised Marxist and political debate across disciplines and social movements. At the level of conceptual approach, this thesis mines a slightly different lineage within Deleuze's work, one that I think corresponds in a much more familiar and conventional way with a Marxian approach that is concerned with issues of uneven development and the politics of labour-power. By drawing on the operation of a "constitutive outside" in Deleuze's work, this thesis is able to establish a much more identifiable bridge or connection with a Marxian tradition – the notion of a constitutive outside, for instance, enables the conceptual passage of organised labour and organised networks within this thesis.

While this thesis often makes reference to 'a continuum of relations' between that which has emerged and the conditions of possibility – especially in its discussion of processual media theory – it also insists that limits play an operative role in the formation of relations. For example, in chapter 3 I question the notion of "immaterial labour" and argue that *disorganised labour* more accurately describes the precarious condition of labour within informational economics and the new media industries. And unlike Hardt and Negri have often asserted, I maintain that the nation-state continues to play a substantive role in regulating the movement of people and things. I would also question whether we are in an entirely new phase of capitalism. This is not an argument I explicitly develop, and I don't profess to have expertise in the disciplines of international political economy, world history and global economics to properly support such an assertion. What I would suggest, more modestly but with unwavering conviction, is that there can be little question that the shift from broadcast communications media to networked, digital communications media has enabled a radical transformation in the ways in which socio-technical relations and modes of communication are organised within a capitalist system. That much is obvious.

Gramsci and Lenin do not feature in this thesis and they probably should, since much of the concern here is with strategies and techniques of organisation.

Though perhaps their absence is not so surprising. The argument for organisation in this thesis is not premised on the logic of the party. Indeed, this thesis is openly hostile to the cultural and structural features of party politics. Moreover, it does not see the party form as one that corresponds with the mode of communication peculiar to networked technologies such as the Internet. This thesis understands the possibility of organisation as that which is immanent to the media of communication. Such a focus was not the concern of Lenin or Gramsci. And how could it have been? In their time, the party headquarters, the worker's association, the factory and the streets were the primary architectonic forms of communication. Today, that has all changed. As such, the ways in which politics becomes organised has also changed. New modes of communication necessitate new theoretical tools in order to make intelligible and actionable the ongoing force of living labour.

Citing David Harvey's (1995) call for the need for a 'socialist avant-garde' to facilitate in the creation of 'organizations, institutions, doctrines, programs, formalized structures and the like', both Parry and Harvey remain wedded to a mode of political organisation that is as utopian as the charges levelled against Hardt and Negri. Parry and Harvey are typical of a Marxian radical intelligentsia who, for all their attentiveness to the peculiarities of materiality, so often attribute so little significance to perhaps the most important dimension to any form of organisation: communication.

Political organisation can never again take the form of a revived Internationalist worker's movement. Aside from the primacy granted to class as the condition of possibility, Internationalism fails to comprehend one of the central lessons of Marxist analysis: the geography of uneven development. The principle and material condition of uneven development is nothing if it does not also take into account the situation of communication. This is perhaps more so than ever, as communications technologies become the primary means by which production, distribution and exchange are managed. From ATMs on every downtown street corner and village square to satellite and radio navigation using Global Positioning Systems (GPS) in agriculture industries and leisure cruise boats, from computer systems used in finance modelling, online domestic banking and dating services, information technologies are common to

the reproduction of capital and the exploitation of labour-power. This thesis stages a series of interventions into the parasitic logic of capital in the passionate belief that another world is indeed possible. And it is the world we live, now.

The style, genre and composition of this thesis shifts between academic, journalistic and informal tonal registers. Many would see this as a problem, particularly in terms of its departure from the convention of the PhD thesis as a tome of standardised and sustained "scholarly" inquiry. Traditionally, research into a particular object of study would be written within the limits and conventions peculiar to a single discipline. Ten years ago it was expected that a thesis that displayed signs as a "theoretical" piece of work would be one that is written in a dense, frequently impenetrable style. If a researcher in the emergent discipline of cultural studies wanted to hold any degree of credibility, then it was routine for their essays to agonise through the ever-shifting sands of "contemporary French philosophy", or what is reductively labelled "post-structuralism". And frequently enough they got it all wrong.

While academic warfare was waged around the structuralist theories and controversial political biography of Louis Althusser within British and European universities in the 1970s, the importation of continental philosophy in the United States in the 1980s gave rise to star-studded departments and blossoming publishing industries whose respective successes were centred around the figures of Derrida, de Man, Lacan, Foucault, Baudrillard and Lyotard. Increasingly the finely tuned concepts and methods developed by these philosophers became abstracted as empty signifiers, divorced from their initial conditions of existence. Concepts became decoupled from their relationship with problems. This situation was largely shaped by the logic of capital, which requires the commodity object to become severed from its mode of production in order for the object to acquire an exchange value. Such developments correspond with the transformation of the university and education into a commercial institution and "service provider".

For researchers wishing to investigate contemporary social, cultural and technological formations, it is frequently inappropriate to write in a style that

imitates the theoretical rigour and brilliance of canonical figures such as Derrida, Foucault, Heidegger, and so on and so forth. This thesis could have been written in a single tonal register; it could have been a consistent, unrelenting exercise in theory speak or academic prose. But it wouldn't have been written by me. Aside from not having the patience, time or attention required for such an endeavour, I also haven't had the sort of training, intellectual formation or institutional setting required to pull off such a job. Moreover, the genre of the PhD thesis is up for grabs, and for a variety of reasons. Nowadays there is great pressure for PhD students to transpose their thesis into a book form in as short a time as possible. This means writing the thesis in a style that will hopefully require minimal revision for it to appeal as a book to a range of readerships. PhD graduates entering the academic labour market face pressure to publish from their faculties and departments whose funding is related to "output" and "performance indicators", thus the job security of young academics depends on engaging in such activities. The status of young academics amongst their peers also requires an ongoing publishing profile, perhaps even more so than in the past when academics could engage in book writing at a more leisurely pace. These are some of the possibly negative forces that shape the style of new PhD theses in the arts and humanities. And they are forces that also create new possibilities.

There are other reasons for a thesis to adopt a polyvocal, transdisciplinary writing style. Here, I am thinking of the counter-histories and intellectual formations that surround the importation of "French theory" into local settings and provincial intellectual traditions. Many of the early translations of French structuralist and post-structuralist philosophers occurred in the "little magazines" and independent publishing houses in Australia during the seventies and early eighties. Publications like *Local Consumption* and *Art&Text* in Sydney, *Tension* and *Meaujin* in Melbourne and *Praxis M* in Perth were the scene of inventive and passionate writing that engaged with a rapidly changing cultural landscape. Publications such as these, and many others, provided a platform for a generation of feminist, artistic and political thinkers and activists who would go on to shape the intellectual and cultural institutions and industries in the 1990s and onwards. People such as Meaghan Morris, Moira Gatens, Paul Patton, Tom O'Regan and Eric Michaels, and younger writers

following in their wake such as Philip Brophy, Adrian Martin, McKenzie Wark, Anna Munster, Darren Tofts, Scott McQuire, John Hutnyk and Andrew Murphie are among the many who have played defining roles in the creation of media and cultural theory that is distinctly Australian in as much as it displays a capacity for inventiveness and boundary pushing. When set against the dulling effect of theory that typifies the global publishing industry and international lingua franca dominated by university presses and journals from Britain and the United States, the vibrant activities and writing associated with local publishing industries during the seventies and eighties in Australia resonate strongly and, in the case of this thesis, provide a rich source of inspiration.

There are also reasons and forces more immediately related to the task of researching new media cultures that require a different approach for writing that necessarily traverses a range of disciplines and styles in order to illuminate and articulate the object of study. In the case of this PhD, much of its method of composition holds an elective affinity with what Marshall McLuhan referred to as "probes" into different media of communication, each with its distinct audiences, readerships and materialities of expression. Thus the shifts in tone in this thesis from academic to journalistic to informal registers of writing are symptomatic of a time of production that in many instances cuts and pastes together earlier pieces of writing that initially started out as art reviews and opinion pieces for magazines and broadsheets, postings to mailing lists, conference papers, journal articles and interviews. Even bits of lecture notes and course outlines make a brief appearance. These have then all been revised and refashioned into the material form of this thesis. Such a method may well make for instances of unsatisfactory reading at times. No doubt more linking sentences are needed in some places, a smoothening out of prose in others. Certainly some of the theoretical propositions and assumptions could be elaborated in greater detail. These sort of glitches or problems are always going to feature in writing that leaps into the complexities of the immediate, of the present, and of a period in world history that is undergoing rapid social, economic and cultural transformation.

Despite the seemingly arbitrary eclecticism in method, there is a rationale behind the technique of investigation in this thesis. And in no way is it part of the "anti-theoretical" turn that has infected so many universities and researchers in ways that more often than not revive an intolerance for intellectual invention, passion and commitment; rather, this thesis conducts its theoretical engagement through means that are slightly different from the kind of theoretical writing of the past thirty years or so. Bit by bit, stage by stage, this thesis has endeavoured to undertake and advance a processual theory of media cultures. The relationship between modes of writing, the formation of arguments, the media platforms and institutional settings of expression and reception, and the distributed, uneven field of objects and subjectivities function as a combinatory feedback system. A shift in one aspect or of one element in any instance transforms the diagram of communication. A processual, mutually constitutive relationship exists between the respective elements within the system. Each hold a capacity or potential to effect change.

In summary, this thesis brings a combination of social and communications theory, political philosophy and "radical empiricism" to the study of socio-technical dimensions of Net cultures. This is an area of study that has not been subjected to such analysis, at least not to any great extent. The thesis sets out to re-evaluate and re-think theories of communications media and theories of democracy formation under translocal, global and networked conditions. Where appropriate, I document case studies as evidence of the way democracy is a mutable condition subject to the capacity of various actors, both human and non-human, to negotiate the field of antagonism that defines sociality. Finally, a very small but no less significant part of this thesis extends its analysis of information societies and Net cultures into the realm of policy recommendations that address the specific practices that define translocal and intra-regional communication flows and concepts of intellectual property in such a way that can be transferred to Indigenous communities and social movements.

The thesis is organised in two parts: sections and scales. The first corresponds with what Gilles Deleuze and Félix Guattari (1987) term the 'plane of immanence'. The second part is a refrain of what they term the 'plane of organisation'. The two planes are never separate, but always interleaved, overlapping, moving between and across each other. Their intersections resonate with the event of "the political". For all the distinctions between organised networks and networked organisations, at an architectonic level the formal aspects of sections and scale comprise a continuum of relations that diagram the aesthetic organisation of sociality. Within architectural plans, sections enable the potential occupant to peer into relations between parts that are otherwise invisible in the constructed building. Like an orange sliced in half. Scale, on the other hand, situates the vertical and horizontal dimensions based on a measure exterior to that which is drawn. A shift in scale transforms the sense and perception we have of the world. This thesis adjusts the planes of section and scale in order to ask new questions about some common processes.

In chapter one I argue that new media studies is dominated by a particular empirical mode of research that overlooks the dynamic relationship between that which has emerged as an object, code or meaning and the conditions of possibility. The chapter proposes a processual model for media theory that extends the current empirical paradigm into what Deleuze terms 'radical empiricism' (1991, 2001). New media aesthetics are considered in relation to systems theory in order to register the processual dimension of sensation. The chapter concludes by suggesting that a politics of time is central to processual systems.

It has become common for contemporary media and cultural theorists to claim that "there is no more outside". Such a position pushes the idea of a horizontally organised information society to the extreme and fails to account for how exclusion is a condition of possibility. Chapter 2 analyses how a "constitutive outside" functions within the Creative Industries as a result of the exploitation of intellectual property generated by labour-power. The chapter develops the notion of an outside as it figures in Theodor Adorno's (1990)

method of immanent critique and Gilles Deleuze's logic of immanence. Finally, the chapter examines how the constitutive force of an outside is a key component of Harold Innis' (1951, 1986) theories of communications media and cultural formation. Overall, the chapter argues that a political theory of media-culture is one that addresses how the outside operates as an affirmative force that holds the capacity for transformation.

Chapter 3 reports on findings from a survey posted to the fibreculture mailing list prior to the third annual fibreculture meeting in Brisbane in July, 2003. Broadly speaking, the survey was interested in the extent to which the exploitation of intellectual property defines the condition of labour within the Creative Industries. At a methodological level, the chapter challenges prevailing assumptions about conducting empirical research in new media studies and enlists a processual media theory approach as a technique for drawing out the relationships between the condition of creative labour and reflexive, non-linear media-information systems of communication. Central to this chapter is an argument about the merits of the Italian autonomist concept of "immaterial labour" against what I term "disorganised labour". The chapter suggests that the latter more accurately describes the current, frequently precarious condition of creative labour. The chapter concludes by advocating the political strategy of organising creative labour in the form of networks rather than the model of the party, as traditionally adopted by unions.

Chapter 4 situates intellectual property regimes as a condition of possibility for Indigenous sovereignty movements within Australia. I argue that rational consensus models of democracy have failed to accommodate the interests of Indigenous peoples. While supranational entities such as UNESCO have been able to confer a degree of political legitimacy upon Indigenous peoples as partially denationalised political subjects, I maintain that this has failed to articulate with the national form in the process of renationalisation. I suggest that intellectual property regimes offer Aboriginal polities the opportunity to reassert claims for self-determination in the national form in as much as the political subject of Aboriginality is positioned in the first instance as a partially autonomous economic actor as distinct from a partially denationalised political subject. Such positionality then enables political and cultural issues to be

fashioned within the realm of intellectual property law, as distinct from an exclusive focus on international human rights law. This chapter does not intend to present easy answers. Rather, it seeks to pose questions, problematise assumptions and suggest possible strategies.

Everyone likes to claim their organisations operate in ways that adhere to basic democratic principles. The complex of informational relations between African states, supranational entities, corporations, civilian populations and NGOs is defined by various scalar tensions that seriously undermine the constitutive dimensions of a democratic polity. Herein lies the logic of uneven modernities. Chapter 5 considers the paradoxical role played by NGOs in developing civic infrastructures, and suggests that greater focus needs to be placed by NGOs on securing intellectual property rights for developing states as the condition of political and economic sovereignty within informational economies.

The last chapter is interested in how networks using ICTs as their primary mode of organisation can be considered as new institutional forms. The chapter suggests that organised networks are emergent socio-technical forms that arise from the limits of both tactical media and more traditional institutional structures and architectonic forms. Organised networks are peculiar for the ways in which they address problems situated within the media form itself. The organised network is thus one whose socio-technical relations are immanent to, rather than supplements of, communications media. The chapter argues that the problematics of scale and sustainability are the two key challenges faced by various forms of networks. The organised network is distinct for the ways in which it has managed to address such problematics in order to imbue informational relations with a strategic potential.

In many respects, any writing today is a writing of and within crisis. Perhaps for this reason, much of this thesis enlists the genre of a polemic in so far as it seeks to extend and contest current debates and theorisation within media and cultural studies, social theory and political philosophy in such a way that

registers the importance of new institutional forms as vital components of the technics of social networks.⁶

In another way, this writing has, I am pleased to say, been a process of discovery and collaborative-formation. This thesis has been an adventure in the technics of writing. A major breakthrough occurred when I learnt what a technics of writing could become, and for some reason that lesson took a lot of years! I thank Eudora's free email application for that and subscribers to the fibreculture and nettime mailing lists who have responded to various drafts of these chapters over the past few years, more often than not challenging and informing my arguments in ways that have only been constructive to my intellectual development. Indeed, those two mailing lists, most particularly fibreculture, have given so much, and to many people. They embody the sort of intellectual relationships I had only previously dreamt of: spaces in which friendships, adversaries and collaborations are made possible.

Finally, and perhaps more importantly, this thesis is also a writing that has an investment in the potentialities of invention, renewal, hope, intensities, humour and affirmation of an ethico-political life as a creative force.

⁶ Andrew Murphie (2004: 136) defines the term "technics" 'as a combination of technologies, systematic processes and techniques, whether these are found in the organization of living or non-living matter'. I will adopt this sense of technics throughout this thesis. See also Mumford (1934), Latour (1993) and May (2002: 28-35).

Part One

Sections

Chapter 1

Processual Media Theory

'Sense-perception happens without our awareness: whatever we become conscious of is a perception that has already been processed'.

Friedrich Nietzsche, *Writings from the Late Notebooks*, 2003.

'Process as such', writes Michel Serres, 'remains to be conceived...' (1995: 96). Furthermore, if we take Gilles Deleuze and Félix Guattari at their word (something they warn us not to do!), then all concepts are connected to problems (1994: 16). The relationship between concepts and their problems constitutes a situation. For the purpose of this chapter, the formation of intelligibility is a system consisting of concepts, problems and situations. Process is something ongoing in nature, an emergent quality whose expression is shaped by the contingencies and field of forces of any particular situation. In this respect, process can never be conceived in itself. Given this immediate predicament, this chapter investigates the possibility of at once conceiving a processual theory for media studies whilst locating the emergent concept of process alongside a series of problems. Or rather, the concept of process emerges through the encounter with a series of problems, which in turn can be understood as situations of possibility or 'a continuum of variation' (Massumi, 1992: 38-39). The central problems addressed in this chapter include those of aesthetics, new media empirics, time and movement. Of course this series of problems, this continuum of variation, in no way outlines the totality of the field of new media studies.¹ That would be absurd, or just plain stupid. These problems emerge as instances of encounter, as framing devices, in thinking the concept of process.

The term aesthetics (*aesthesis*) is used in this chapter to speak of the organisation and management of sensation and perception. My interest is in the way

¹ To speak of a field of new media studies is problematic in itself, since 'there is no stable object or ontology around which a conceptual economy can be concentrated' (Holmes, 2003b).

sensory affect and an aesthetic regime, as distinct from representation (*mimesis*), can be discussed in relation to new communications media. The aesthetic dimension of new media resides in the processes – the ways of doing, the recombination of relations, the figural dismantling of action – that constitute the abstraction of the social. Herein lies the unconscious code of new media empirics. That is to say, new media empirics can become something other than what it predominantly is at the current conjuncture. It is the potential for a superempirics of new media that this chapter seeks to translate through the concept of process. A super- or renewed empiricism is coextensive with the processual as a diagramming of different layers and registers of relations and regimes of value that constitute the possibility of the event where ‘affect [is] expressed as pure potentiality’ (Deleuze, 1986: 109). Following Brian Massumi, a Deleuzian superempiricism comprises a mode of encounter that articulates the field of forces, the sensing of sensation, which traverses the movement between that which has emerged as an object, code, or meaning and their conditions of possibility (see Massumi, 2002a: 1-25). It is by paying attention to these very local instances, which are of course bound up and tangled with larger structural forces, that the political and ethical work of a renewed empiricism might proceed.

A processual aesthetics of media culture enables things not usually associated with each other to be brought together into a system of relations. The combination of art, commerce and the routine practice of stock market day trading constitutes such a system, as I will go on to discuss. Far too frequently the creation of art is divorced from economic forces. With such oversights, one could be excused for thinking the modernist project was well and truly intact. Michael Goldberg’s installation *catchingafallingknife.com* instantiates the ways in which aesthetic forces are not simply underpinned by economic relations; aesthetics, as the sensing of sensation, also plays an important substantive role in shaping economic outcomes. There is vital lesson at work here, namely that art does indeed have effects that go beyond the typically self-aggrandising ghetto of spotlight obscurity and cyclical fashions of the culture industries. Art is part of a process of ‘*difference which makes a difference*’, as the anthropologist Gregory Bateson (1972: 453; italics in original) neatly put it.

A processual media theory describes situations as they are constituted within and across spatio-temporal networks of relations, of which the communications medium is but one part, or actor. As with any approach, processual media theory itself is implicated in the systems of relations it describes; as such, it too operates in a reflexive mode that contributes to change within the system. Aesthetic production is defined by transformative iterations, rather than supposedly discrete objects in commodity form. Processual aesthetics is related to the notion of the sublime, which is 'witness to indeterminacy' (see Lyotard, 1991, 1994; Redowick, 2001: 20). The media sublime unravels the security presupposed by the political economy of empirical research on new media.

Political economy has a tendency to treat the media as a set of objects and, accordingly, objectivises media technologies or media content as "products", such as advertisements. Political economy and functionalist sociology of the media cannot understand the locus of socio-technical transformations that are relational and have sensory effects whose operation is not determined by a positivist empirics of the media as seen, for example, in traditional media impacts/effects analysis, content analysis and 'uses and gratifications' functionalist research (see Lasswell, 1927; Katz and Lazarsfeld, 1970; Blumler and Katz, 1975; Fowles, 1992).² Then there is the political economy of new media empirics. That is, the political, economic and institutional conditions which shape neo-empirics as the emergent paradigm in the field of new media studies.³ While new media empirics is useful for cataloguing observable trends and phenomena, this paradigm is not so adept at reflecting upon the dominant interests and questions of power that condition its own legitimacy.⁴

The political dimension of aesthetics is manifest in the power relations that attend processual systems. In order to undertake an analysis of the socio-

² For critical appraisals of these empirical approaches, see Mattelart and Mattelart (1998: 19-42); see also Holmes (2003a).

³ The first paradigm of Net studies consisted of a techno-utopianism associated with the "Californian Ideology", the second, unsurprisingly, of techno-dystopianism. Terry Flew (2001) provides a useful overview of these paradigms and the emergence of the third paradigm of "new media empirics".

⁴ Admittedly I'm being very reductive about the diversity within political economy approaches. My point is not so much one about political economy *per se*, as about the lack of reflexivity within new media empirics that adopt political economy approaches. For a useful overview of political economy, see Hesmondhalgh (2002: 27-48). For a discussion of political economy, the Braudelian *longue durée* and new media, see Flew (2002: 52-75). For interesting ethnographic empirical studies, see Lally (2002), and Miller and Slater (2000).

technical assemblages that constitute the processual, attention would need to be paid to the institutional settings of new media and their uses, be they in the office, at home, or in networked gaming arcades, for example, and the conditions of cultural production. A processual aesthetics of the socio-technics of these arrangements attests to the politics of post-representation. The articulation of various elements that constitute a network can be thought of in terms of duration (a mode of temporality that is antithetical to instrumental time), which might also be termed the processual aesthetics of new media. So, a processual aesthetics of new media is related to and constituted within the time and space of the media event (see Wark, 1994a; Munster, 2001). Networked gaming, online opinion polling, web petitions and blogs are all instances of new media that incorporate an aesthetic regime defined by non-linearity, interactivity and real-time that constitutes everyday media events.

A processual media theory can enhance existing approaches within the field of new media studies, registering the movement between that which has emerged as an empirical object, meaning or code, and the various conditions of possibility. Processual media theory inquires into that which is otherwise rendered as invisible, yet is fundamental to the world as we sense it. Thus, processual media theory could be considered as a task engaged in the process of translation (see Latour, 1993). To this end, this chapter addresses the problematic of a renewed empirical mode that has come to dominate intellectual practice within media studies; indeed this predominant mode extends beyond any single discipline and prevails across the humanities and technosciences. The new media empirics has found itself enlisted in the mission of neoliberalism, which subordinates the practice of life to the demands of a market economy. Hence, this chapter develops a processual model of media theory as an alternative to, and mode of critique of, empirical research. Further, this chapter contends that a processual model of communications is useful in addressing the politics of information societies. As Deleuze has written, 'concepts, with their zones of presence, should intervene to resolve local situations' (1994: x). This thesis begins its correspondence between concepts and problems with a discussion of "new media empirics".

New Media Empirics

Over the past few years, one is increasingly able to detect the emergence of empirical approaches to the study of new media as the current dominant paradigm. An empirics of new media describes the various forms, objects, experiences and artworks that constitute new media. The empiricist desire to fix all that is virtual into concrete is coextensive with a certain weariness, boredom or distrust of the excesses of "postmodern theory" that came to characterise much work going on in media and cultural studies and contemporary art during the eighties and nineties. Work carried out in sociology, international relations and architecture has also taken this empirical turn.

These fields all share a desire to ground their objects of study, to retrieve them from the ravages of "speculative theory", and in so doing, perhaps begin a process of reconstructing or securing disciplinary identities. Arguably, all of this coincides with the perceived displacement of national and local communities wrought by communications media such as satellite TV, the Internet and the mobile phone. Very real displacement across social scales accompanies the structural transformations of national and regional economies in a post-Soviet era in which populations have become increasingly mobile at transnational levels as professional or unskilled labour, as refugees, or as tourists.

It is the task of empirical studies to describe and analyse these various transformations, yet to delimit such work to the scholastic mode of production is to overlook the ways in which such research corroborates the interests of capital which, in the corporatisation of universities, finds the current empirical paradigm as the new frontier of instrumental reason. Much research on the Internet is quantitative and commercially driven, measuring, for example, the number of hits and counting users on web pages. Researchers, or information workers, in many instances are providing data analysis that has commercial applications in ascertaining consumer habits and, in the case of new media studies, there is an attempt to foreclose the myriad ways in which users engage

with media forms and content. It's all quite desperate. And it's all related to a quest to capture markets.

A non-reflexive and non-reflective new media empirics assumes that the various uses of new media forms, or the practices constituted by media forms, define the horizon of intelligibility of new media. Different uses, different meanings. But is that all there is to it? Are the arrangements or networks of new media confined to their uses, whether it's by human or non-human actors? And at what point does one say the field of actors has been identified? When does the list of actors end? Upon what plane of abstraction does use manifest? Are there registers of use that are overlooked because the multi-dimensional planes of abstraction are not identified? These are all questions which begin to problematise the security, even arrogance, presupposed by a method which seeks to quantify the semiotics of new media in terms of the uses made of particular new communications media.

Empirical research typically proceeds by securing what is otherwise a fluid, contingent and partially unstable process constituting a system of inter-relations. While there are significant distinctions between the two, empirical research across a range of disciplines is often based on principles found in positivist empiricism. Louis Althusser locates the problem of empiricism as a method in terms of its assumption of having captured the essence of an object through the process of abstraction. As he wrote over thirty years ago in *Reading Capital*: 'Empiricist abstraction, which abstracts from the given *real* object its essence, is a *real abstraction*, leaving the subject in possession of the *real essence*' (Althusser, 1979: 36). In order to extract the real essence from the object, empiricism undertakes an operation that eliminates the object's constitutive outside. This procedure serves as an epistemological validation of empiricism, since 'To know is to abstract from the real object its essence, the possession of which by the subject is then called knowledge' (Althusser, 1979: 35-36). Hence a relationship based on presence-absence is produced between that which is revealed as real (i.e. the objects of knowledge) and the procedural mode that has enabled this operation (i.e. the form of knowledge and its structural forces). For Althusser, empiricist knowledge is part of a larger hegemonic episteme or 'apparatus of thought' that grants primacy to vision, seeking to make visible the

invisible (Althusser, 1979: 37-38, 41; see also Jay, 1993). The fundamental error of such abstraction is that it fails to reflect critically upon the conditions of possibility for such a procedure.

As a methodological practice, empiricism is captured by a delirium in which there is an assumption that the essence of the object can be revealed. Due to an incapacity to reflexively engage with the field of forces which condition its methodology, empiricism eliminates the processual dimension that underpins the emergence of the supposed essence of the object, revealed as a form whose meaning is stable. In contrast to empiricism, Marx and Engels write in *The German Ideology* that 'Empirical observation must in each instance bring out empirically, and without any mystification and speculation, the connection of the social and political structure with production' (1976: 41). And: 'As soon as this active life-process is described, history ceases to be a collection of dead facts, as it is with the empiricists (themselves still abstract), or an imagined activity of imagined subjects, as with the idealists' (Marx and Engels, 1976: 43). As a result of these sorts of oversights, empiricism offers nothing by way of political critique. Indeed, to do so would endanger the very legitimacy of empiricism as a method. Further, as David Holmes has noted, 'The more it [empiricism] establishes the visibility of what it sees, the more it establishes knowledge, the better able it is to guarantee itself' (1991: 101). Since the social relations of production that condition the space and time of "the political" are part of the constitutive outside that the empiricist problematic excludes, empiricism attributes, according to Althusser, an 'inessential' value to socio-political and historical conditions of formation (1979: 37-38).

While Althusser is one of the principal theorists of ideology-critique responsible for giving positivist variants of empiricism a drubbing, as outlined above, I would suggest that Althusser's work holds a useful enough foundation, actually, for empirical – as distinct from empiricist – research. Ideology, for Althusser, is associated with the imaginary. This image repertoire, most importantly, is reproduced in material practices located in institutional settings, from which subject formation occurs (through, admittedly, the flawed notion of interpellation). In order to begin talking about the processes of ideology and its attendant power relations, one needs to start identifying, in an empirical

manner of the kind argued by Marx and Engels, the very local practices within which ideology is reproduced.

In the case of new media empirics, which reproduces the methodological procedure of empiricism, a reflexive encounter with its techniques of operation would begin to take into account the plurality of forces, including those of institutional interests, which condition the formation of a practice, code or meaning. In doing so, the multidimensional pluralism that functions as empiricism's constitutive outside would come to bear. Moreover, the politics that attends such an operation could be situated in an "agonistic" framework (Mouffe, 2000) in which pluralistic discourses, practices, forces and interests procure a legitimacy that is otherwise denigrated by empiricism's claim to have abstracted the essence of the object from the real.

The shift in media studies and other disciplines to a non-reflective and non-reflexive empirical mode is perhaps best accounted for by paying attention to the shift that has occurred in the conditions of production associated with intellectual labour within a neoliberal paradigm. Within this mode is a pressure for intellectual practices to become accountable. This pressure is not motivated by ethical considerations, which include the delivery of knowledge and engagement with teaching and research in ways that are responsive both to their own disciplinary circumstances and to those who are subjects within a particular institution and its disciplinary formations. Rather, there is a managerialist demand for the products of intellectual labour – knowledge coded as intellectual property, which makes possible the commodity object – to be accountable to the logic of exchange-value and market mechanisms.

The neoliberal imaginary seeks to subject all socio-cultural practices to the laws of the market, which are one manifestation, albeit limited, of the logic of capital. As such, a technique of verification is required, and the humanities has turned to the sciences for such a tool. This is hardly surprising, since the sciences have long held a relationship with industry, which sees the output of labour within the sciences as holding commercial and industrial application. A perception dominates within the managerial culture of academe that assumes vulgar

empirics to be the technique that best enables intellectual labour to be measured, quantified and reported in terms of stasis or stability.

The key problem of an empirics of new media aesthetics resides in its failure, in a number of instances, to understand that the aesthetics of artworks, software applications and technologies are conditioned by social relations as well as the theoretical paradigms through which analysis proceeds. Technology, as understood by Raymond Williams (1974: 9-31), is found in the processual dimension of articulation, where the media is but one contingent element that undergoes transformation upon every re-articulation. This presents a challenge to the empirical turn in Net studies, which seeks in vain to pin down a terrain that is made historically redundant prior to its emergence. By way of an alternative, Scott Lash proposes that 'Empirical meaning is neither logical (as in classification) nor ontological, but everyday and contingent' (2002: 17). Empirical approaches to the Net, if nothing else, need to work in a reflexive mode that is constantly aware of the conditions attached to funded research, to critique them, to describe the institutional cultures that shape the emergent third paradigm of Net studies, and to see the seemingly secure ground of any empirical moment as something which is always interpenetrating with something else.

Processual Aesthetics as Radical Empiricism

- With the invention of the telegraph came the genre, form or style of telegraphic writing, of news wires. Think of Ernest Hemingway, with his telegraphic, machine-gun writing style – a mode of writing within and through media of communication. Moreover, a zone of indistinction between the human and non-human emerges with the advent of new communications media. As Friedrich Kittler suggestively notes of Nietzsche upon his use in 1882 of a Malling Hansen typewriter: 'Our writing tool not only works on our thoughts, it "is a thing like me"' (1999: 206). With failing eyesight, the 'mechanized philosopher' undergoes a transformation of expression: Nietzsche 'changed from arguments to aphorisms, from thoughts to puns, from rhetoric to telegram style' (Kittler, 1999: 203).

The Malling Hansen model initiates a kinaesthetics based on touch, since its 'semi-circular arrangement of the keys itself prevented a view of the paper' (Kittler, 1999: 203). The shift from visual control and linearity associated with the pen and paper to the blind activity of typing constitutes a feminisation of philosophy, argues Kittler (1999: 203, 206). The primacy of the classical author corresponds with a closed system predicated on socio-technical distinctions associated with the 'phallogocentrism of classical slate pencils' and 'the sexually closed feedback loop' of the Gutenberg Galaxy (Kittler, 1990: 198, 1999: 184). The machinic philosopher, by contrast, is part of a combinatory system that brings together philosopher, typewriter, a "delicacy" of touch, and women, who dominated the ranks of secretaries in printing houses in the late nineteenth century. Piano fingers turn out to be good typing fingers.

With the Internet, we have seen hypertext, listserves, net.art, and so forth. With the mobile phone, short-text messaging (SMS) has emerged as one the most popular socio-technical forms of communication. These could all be talked about in terms of media aesthetics. However, I think it is more interesting for an aesthetics of new media to consider the ways in which social and cultural formations not immediately attributable to the media with which they are contemporary might also be included in the pantheon of media aesthetics. Such articulations might constitute the unthought of media aesthetics: social and cultural forms that are not determined by media technologies, but are potentialities that coincide with or are parallel to contemporaneous communications media.

A processual aesthetics of new media goes beyond what is simply seen or represented on the screen. It seeks to identify how online practices are always conditioned by and articulated with seemingly invisible forces, institutional desires and regimes of practice. Furthermore, a processual aesthetics recognises the material, and embodied dimensions of Net cultures. When you engage with a virtual or online environment, are you simply doing the same thing as you would in a non-virtual environment, where you might be looking at objects, communicating, using your senses – vision, sound, etc? In other words, if the chief argument of the new media empirics lies in the idea that we simply

ought to pay close attention to what people “do” on theNet and ignore any grander claims about virtual technologies, is this adequate? Is there anything in this “do-ing” which deserves greater analysis?

Do virtual environments simply extend our senses and our actions across space and time, or do they reconstitute them differently? There is a strong argument to be made for the latter. In the same way that visual culture – especially the cinema – legitimised a certain way of looking at things through techniques such as standardised camera work and continuous camera editing, then virtual technologies re-organise and manage the senses and our modes of perception in similar ways. As Kafka once noted: ‘cinema involves putting the eye into uniform’ (Janouch, 1953: 48).

Software design, virtual environments, games, and search engines all generate and naturalise certain ways of knowing and apprehending the world. We can find examples of this with database retrieval over linear narrative, hypertext, 3D movement through space as the means to knowledge, and editing and selection rather than simple acquisition. So if empirics can record that we have virtual conversations, look up certain sites, and so forth, it doesn’t consider *the technics of combining visual and tactile perceptions* in certain ways and in certain contexts to allow for distinct modes of understanding the world. Nor does a new media empirics inquire into the specific techniques by which sensation and perception are managed. This is the task of processual aesthetics.

The repetition of technics of sensation and perception are partially distinguished by the regimes of value (economic, legal, political and cultural) which are inscribed upon such ways of doing. A processual aesthetics of media theory seeks to identify the various methods that typify empirical research on the Internet, and to follow this up with a critique of the empirical mode by considering the institutional desires and regimes of practice that condition the types and methods of research undertaken on new ICTs at the current conjuncture within informational societies. While recognising that the Internet does make our social and cultural transactions more “abstract” – i.e. reconstituted from place-bound relations into the ‘space of flows’ (Castells, 1996: 376-428) – this of course does not mean that everyone uses the Net in the

same way, or that the Net has the same significance for everyone. Instead, an emphasis is placed on process, on the organisation and management of sensation and perception, which are understood here as the basis of aesthetics. The experience of time, space, others and embodiment cannot be encompassed by a new media empirics which simply lists and categorises what an actor does, overlooking the forces and contexts that allow action to occur.

In *The Language of New Media*, media theorist and artist Lev Manovich (2001) undertakes a media archaeology of post-media or software theory. He focuses on a very particular idea about what constitutes the materiality of new media, and hence aesthetics. In excavating a history of the present for new media, Manovich's work is important in that it maps out recent design applications, animation practices and compositing techniques, for example, that operate in discrete or historically continuous modes. However, Manovich's approach is one that assumes form as a given yet forgets the socio-political arrangements that media forms are necessarily embedded in, and which imbue any visual (not to mention sonic) taxonomy or typology with a code: i.e. a language whose precondition is the possibility for meaning to be produced.

The aesthetic that constitutes a code is only possible through a process of articulation with modes of practice, of interpenetrative moments, of duration. In Niklas Luhmann's terms, a code is integral to the reproduction of structural difference within a functional system (see Luhmann, 2000: 185). As Luhmann writes: 'Codes are distinctions, forms that serve as observational devices. They are mobile structures that are applied differently from situation to situation' (2000: 187). Structural determination is thus dependent on the code, whose function is to symbolize. Such an operation enables self-organisation within a system, as I discuss below. In Gregory Bateson's (1972) terms, codes are the 'difference which makes a difference'. These are all processes that new media empirics eliminates.

The network is not 'decomposable into constituent points' (Massumi, 2002a: 6). That is what a non-reflective and non-reflexive empirics of new media, of informational economies and network societies, in its reified institutional mode attempts to do. The network is not a 'measurable, divisible space'. Rather, it

holds a 'nondecomposable' dimension that always exceeds – or better, subsists within – what in the name of non-reflexive empirics are predetermined regimes of quantification, which, as Brian Massumi has it, 'is an emergent quality of movement' (Massumi, 2002a: 8). This is not to say that things never occupy a concrete space. An analytics of space (and time), if it is to acknowledge the complexity of things, cannot take as its point of departure the state of arrest of things. Instead, attention needs to take a step back (or perhaps a step sideways, and then back within), and inquire into the preconditions of stasis. And this does not mean occupying a teleological position, which seeks to identify outcomes based on causes. Or as Massumi puts it, the 'emphasis is on process before signification or coding' (2002a: 7).

That is, there is a multi-dimensionality to socio-aesthetic experiences. They are not bound or contained by any particular communications medium or transport technology. Thus we can say, on precisely these sort of grounds, that the "virtual" and the "material" are always intimately and complexly intertwined. And to overlook this fundamental principle is to impoverish, among other things, the practice of research on new media. What Massumi terms a "superempirics" would register this multidimensionality of socio-aesthetics: a complex of practices that is constituted within and across pathways, passages and vectors of mediality.

In formulating a processual model for media theory, this chapter does not dispense with empirical work. Far from it. A processual media theory registers the ways in which communications media – any medium of expression – are bound in a system of relations, a singularity of expression, that consists of a field of forces in which things are defined or registered as a concrete stable form, which in turn becomes a condition for transformation and change. In his book *Parables for the Virtual*, Massumi describes this process in terms of the *movement* between that which has emerged and the conditions of potentiality or "the virtual", understood in a Deleuzian sense of radical empiricism (see Massumi, 2002a: 16-17, 208-256; see also Deleuze, 1991). Time for new media empirics, which is not to be confused with radical empiricism, consists of the present, where things are manifest in concrete form. This kind of presupposition cannot account for the multiplicity of time immanent to the

operation of the virtual and the actual, which Massumi explains in the following way: 'The virtual is the future-past of the present: a thing's destiny and condition of existence.... A thing's actuality is its duration as a process...' (Massumi, 1992: 36-37). Similarly, as Deleuze notes, 'Movement always relates to a change, migration to a seasonal variation' (1986: 8). Thus a processual media theory examines the tensions and torques between that which has emerged and conditions of possibility; it is an approach that inquires into the potentiality of motion that underpins the existence and formation of a system.⁵ Herein lies the practice of a radical transcendental empiricism. New media studies is yet to express this particular encounter.

If anything, the dominant mode of empirical research unwittingly defines 'the axis of escape along which the differential object ... [slips] quietly away from its own growing objectivity' (Massumi, 2002a: 216). With regard to encountering the empirical, Massumi notes:

If by "empirical" is meant "pertaining to predictable interactions between isolatable elements, formulatable as deterministic laws", then the conditions of emergence of vision are superempirical. They actively *include* the constancy of empirical conditions. The superempirical conditions of experience complexly include the empirical in the mode of responsive accompaniment. As experience takes off, its empirical conditions fall away. (2002a: 152)

The superempirical is immanent to the concept of the processual, which questions the logic of the grid, of categories, of codings and positions (see Massumi, 2002a: 8). That which precedes these orders of distinction are in fact bound together on a continuum of relations as partial zones of indistinction. Categories are only ever provisional, and emerge to suit specific ends, functions, interests, disciplinary regimes and institutional realities. To this end, the mode of empirical research that predominates in the humanities and sciences – and in particular current research on new media – needs to be considered in terms of not what categories say about their objects, but rather, in terms of what categories say about the *movement* between that which has emerged and the conditions of possibility. Herein lie the contingencies of process.

⁵ On the role of "formations", see Massumi (2002b: xvii-xix).

As the sensing of sensation, of the experience of pre-linguistic attributes, superempiricism corresponds with that other pre-linguistic category – the imaginary.⁶ Within Marxist-Lacanian psychoanalytic theory, an imaginary construction signals that there can be no essence, but multiple imaginary terrains that contest, support or ignore one another. Each imaginary formation is articulated with a series of material preconditions. A genealogy of any imaginary formation would involve examining the constellation of material forms and practices and symbolic dimensions that distinguish one imaginary formation from another. So, the imaginary does not forego the possibility of the real, but actively inculcates the real or non-discursive entity as a necessary condition of its own formation. If there is a fundamental lesson to be gained from Althusser's (1971) seminal essay 'Ideology and Ideological State Apparatuses', it was this: ideology consists of lived relations or social practices organised in part by a logic of sensibility found in symbolic realms. The imaginary, as such, is constituted by material practices located within institutional settings. The work of cultural industries, which circulate images of celebrities in abundance, evinces the relationship between the imaginary and materiality. The latter, it must be noted, is not to be confused with 'the real', whose surplus resists integration into the symbolic order (see Žižek, 1989).

Unlike the Classical Marxist view of the superstructure as a reflection of the economic base/mode of production, Althusser's advance on Marxist theory was to explain how the ISA's displayed a 'relative autonomy' from the determining influences of the economic base, except 'in the last instance'. Many critics over the years have taken the opportunity to attribute this seeming contradiction and regression to a vulgar Marxian orthodoxy as evidence of the failure of Althusser's model of ideology. Further, the overdetermining role of the economic base on the realm of ideology suggests a point of finitude whereby a distinction of mutual exclusion or incommensurability exists between the realm of the imaginary and that of the real. However, as John Frow has argued:

⁶ In this relation, then, are the seeds to explore the relationship between empiricism, the imaginary and ideology.

There is no 'determination in the last instance by the economic' because the last instance never comes. Rather, determination is exercised by 'permutations, displacements and condensations', and this means that the social formation is characterized by the uneven and nonteleological play of its elements, since the invariant structure of the complex whole exists only through discrete variations for which it is a precondition. This is not a pluralism, but it allows an understanding of the effect of a plurality of determinations within a structure where one instance is dominant as a necessary condition of complexity. (1986: 22-23)

One key relationship of determining forces, then, is found in the relationship between the imaginary and the real. Indeed, the imaginary is intricately linked with and plays an active role in both constructing and being constructed by the real. In other words, while the imaginary may appear to be violated by the presence of the real, this does not mean the real resides irrevocably in a space of alterity, impossible to locate within either the imaginary or the symbolic order. For Slavoj Žižek's Marxian reading of Lacanian psychoanalytic theory, 'the real' is inscribed within spectral dimensions. As Žižek argues, the 'resistant kernel' of 'the real' is always 'present *within* the symbolic process itself' (2000: 311), often in the form of some antagonism that is played out in the cultural domain. In this respect there is a materiality that attends the interplay between the real, the imaginary and the symbolic.

A superempiricism that registers the interplay of forces in the constitution of the event can be found in much of media theorist McKenzie Wark's work on 'weird global media events': those media imaginaries that implode, or better, exceed, the logic of discourse, the symbolic order of things, and constitute the event as that which escapes, momentarily, the restrictive confines, conventions and representative structures of news narratives.⁷ Such events – the September 11 terrorist attacks on New York City being the most obvious recent example – consist of signs, certainly, but they perhaps are better understood as 'a-signifying' semiotic systems.⁸ Such systems involve what Guattari calls an 'aesthetic processual paradigm', 'autopoietic machines', and 'processual assemblages' in which expression is 'extra-linguistic' and semiotic substance is relatively untranslatable' (Guattari, 1995b: 24, 39, 105, 106). That is, such media

⁷ See, in particular, Wark (1994a).

⁸ I am drawing this term from Guattari. For an outline of this concept, see 'The Place of the Signifier in the Institution' (Guattari, 1996a). Gary Genosko's own work is enormously helpful in understanding Guattari. See Genosko (2002).

events are irreducible to a semiotic encoding/decoding model, as seen in the early work of Stuart Hall and adopted by many within cultural studies. While the encoding/decoding model of ideology played a key role in opening up new questions pertaining to the cultural and political dimensions of meaning that were not being addressed by uses-and-gratifications and effects schools of empirical research in mass communications, the model remains very much one concerned with structuralist understandings of the sign, representation and language.⁹

By contrast, a-signifying semiotics only partially relies on semiologies of signification as a substrate in as much as the prior semiotic order of content/form (e.g. the redundancy of news narratives) is radically torn apart (deterritorialised) and rendered anew as a different configuration (Genosko, 2003b). The constitutive operation of a-signifying semiotics is a process of 'escaping coding and redundancy' (Genosko, 2003b). In such cases, empiricism, maybe at its best, can diagram the transversal co-ordinates beyond the space and time of the relatively contained instance of news instalments. This includes the externality of relations, namely percepts, concepts, affects and their habits (see Deleuze and Guattari, 1994: 163-199). One of Wark's techniques for registering this inter-relationship between the mediated event and its movement within the event of the socio-technical assemblage or arrangement is to incorporate the everyday into, and as part of, the singularity of the event.¹⁰ The key point, as noted by Gary Genosko (2003b), is that 'semiotic-machinic or sign-matter fluxes are unmediated by representation'. Experience, on the other hand, is mediated or governed by properties, forces, rules, habits and relations that constitute the event. To this extent, a translation has occurred. Most basically, I see a renewed empiricism or superempiricism as coextensive with the processual, where a diagramming of different layers and registers of relations and regimes of value constitute the possibility of the event in which, as Deleuze puts it, 'affect [is] expressed as pure potentiality'. I will address this dimension of affect after I locate the emergence of processuality as a concept within cybernetics theory.

⁹ Of course Hall is no slouch, and is the first to acknowledge – in typical reflexive fashion – the limitations of the encoding/decoding model. See Hall et al. (1994: 255-256).

Feedback Loops and Dissipative Structures

... cybernetics, the theory of self-guidance and feedback loops, is a theory of the Second World War.

Kittler (1999: 259)

A processual media theory can be related back to cybernetics and systems theory and early models of communication developed by mathematician and electrical engineer Claude Shannon in the 1940s. However, there is no single originary point of development of cybernetics. As Gregory Bateson notes, 'The ideas were developed in many places: in Vienna by Bertalanffy, in Harvard by Wiener, in Princeton by von Neumann, in Bell Telephone labs by Shannon, in Cambridge by Craik and so on' (Bateson, 1972: 474-475).¹⁰ Shannon's model is often referred to as the transmission model, or sender-message-receiver model. It is a process model of communication, and for the most part it rightly deserves its place within an introduction to communications programs since it enables a historical trajectory of communications to be established (see Mattelart and Mattelart, 1998).

However, it quickly becomes clear that this model holds considerable problems because it advances a linear model of communication flows, from sender to receiver. And this of course just isn't the way communication proceeds – there's always a bunch of noise out there that is going to interfere with the message, both in material and immaterial ways, and in terms of audiences simply doing different things with messages and technologies than the inventors or producers might have intended. The polyvocal, multilayered character of communication, culture and the production of meaning was indeed one the key tasks Hall's encoding/decoding model set out to establish in response to the assumption of transparent, unilinear communication flows by

¹⁰ Wark's book *Dispositions* (2002a) is one that I would consider as exemplary of the sort of superempiricism I'm describing. I think Eric Michaels' work also fits the category and maybe even Malinowski's diary. Certainly Serres. Enough names!

¹¹ Interesting accounts of cybernetics and computer processing can also be read in Beniger (1986) and Bardin (2000).

traditional empirical, positivistic research in mass communications.¹² As Katherine Hayles puts it, 'Claude Shannon defined information as a probability function with no dimensions, no materiality, and no necessary connection with meaning' (1999: 52). Such a model has limited uses in calculating choice, probability, behavioural patterns and risk – and hence holds an appeal for determining likely economic outcomes, as the young Rupert Murdoch was to discover in his encounter with games theory¹³ – but it flounders when conditions are not stable but contingent, variable, and embedded in socio-technical and biological forms.

The point to take from this process model is that it later developed to acknowledge factors of noise or entropy (disorder and deterioration), once in the hands of anthropologists such as Gregory Bateson. Central to second-order cybernetic theory is the problem of change and relationships. As Bateson notes of self-referential relationships, 'Cybernetics is, at any rate, a contribution to change – not simply a change in attitude, but even a change in the understanding of what an attitude is' (1972: 475). As distinct from understanding information as a homeostatic thing in itself, Bateson, by Paul Virilio's account, 'who was one of the first to think of information as a general process, added that "Information is a difference that makes a difference"' (1995: 125).

Second-order cybernetics shifted from a closed system to an open system of communication. Or, more correctly, it shifted from a linear system to one that took feedback loops into account. This becomes interesting for a model of processual media and cultural theory, which is interested in mutually determining relationships between that which has emerged and the conditions of possibility. The notion of feedback loops is homologous with the concept of "organisational closure" in second-order cybernetics, as found in the work on neurophysiology and biological systems by Humberto Maturana and Francisco

¹² Hall stresses that his encoding/decoding paper was motivated by very local concerns: at the level of methodology and theorisation, he sought to contest the impasse of traditional uscs-and-gratifications content analysis undertaken by the Centre for Mass Communications Research at the University of Leicester in the late 60s, early 70s. See Hall et al. (1994: 253-256).

¹³ Neil Chenoweth (2002: 19-21) discusses the influence of games theory on Murdoch during his studies at Oxford in the early 1950s.

Varela, for example.¹⁴ The central feature of Maturana and Varela's autopoietic systems consists of the organisation of organisation. Difference intermingles with the operations of a system in order to maintain a dynamic equilibrium.

Organisational closure acknowledges the role of the observer in the functioning of a system, and hence introduces the concept of reflexivity where the observer constitutes a node within the scene or operation of observation. In this respect, second-order cybernetics shares something with post-structuralist critiques of the subject: both are concerned with questioning the primacy of the individual and the autonomy of the subject/consciousness from the environment in which it is embedded. Even a summary as cursory as this suggests the implications such a model has for political and ethical considerations: at issue is the status and limits of boundaries understood as constructed, and hence open to change. On the question of a system and its context, Hayles notes that 'For Bateson, decontextualization is not a necessary scientific move but a systematic distortion' (1999: 77).

A significant extension of the cybernetic model is necessary in order to recast the limits of "organisational closure". In so doing, it becomes possible to acknowledge the ways in which networks of communication flows operate in autopoietic ways where media ecologies develop as self-generating, distributed informational systems (see Guattari, 1995b; Massumi, 1992). Within the theory of social systems developed by Niklas Luhmann, a system is a set of possibilities whose relations are regulated, organised and distinguished by combinatory forces of interpenetration-penetration, indeterminacy-de'termination and contingency-stasis (Luhmann, 1995; see also Massumi, 2002a: 8). Together, these features constitute the conditions of possibility for change within a self-referential or autopoietic system. For Luhmann, 'in the self-referential mode of operation, closure is a form of broadening possible environmental contacts; closure increases, by constituting elements more capable of being determined, the complexity of the environment that is possible for the system' (1995: 37). Thus closure is temporary in the sense that closure

¹⁴ For a discussion of Maturana and Varela, see Hayles (1999: 131-159). An example of a second-order feedback model applied to the development of open source content and collaboration with African universities can be found in Keats (2003).

offers a distinction or boundary that feeds back into the system, making change and transformation possible.

Time is an important operation within any system. The multidimensionality of time corresponds with the varying planes of abstraction within which the movement between that which has emerged and the conditions of possibility occur. Luhmann expresses the organisational closure afforded by time and change within a system as follows: “time” symbolizes the fact that whenever anything determinate occurs, something else also happens, so that no single operation can ever gain complete control over its circumstances’ (1995: 42). There is a seemingly paradoxical aspect to the notion of organisational closure within autopoietic systems whereby the ongoing process of feedback in the form of incorporating entropy and perturbations conditions the future of the system. Keith Ansell Pearson explains it like this:

The claim that autopoietic systems are organizationally ‘closed’ can be misleading if it is taken to imply that these systems do not interact with their environment. Such systems are simply closed in the sense that the product of their organization is the organization itself. (Pearson, 1997: 141)¹⁵

Just as autopoiesis is understood as self-referentiality within the organisation of organisation, processual aesthetics can be understood as the resonance of the sensation of sensation (see Massumi, 2002a: 14). Resonance is a feedback loop. Moreover, processual aesthetics of new media occupy what philosophers of science Ilya Prigogine and Isabelle Stengers call a ‘dissipative structure’ that organises and incorporates contingencies, non-linearities and fluctuations into a dynamic state in ‘far-from-equilibrium conditions’ (1985: 12-14; see also Massumi, 1999; Stengers, 2000; Whitehead, 1978). A temporal dimension is reintroduced into the equation here, since ‘dissipative structures seem to prolong indefinitely the fertile instant of the genesis of structures’ (Prigogine and Stengers, 1985: 71). Elsewhere, Stengers enticingly proposes the following: ‘The contingent process invites us to “follow” it, each effect being both a prolongation and a reinvention’ (2000: 72). Put another way, if a continuum of variation ceases to be, so too does communication within a system.

The Art of Day Trading

We are yet to see what capital can become. So goes the "New Economy" mantra as its proponents go about laying claim to the future, which is synonymous with the "free market". Mastery of the latter supposedly determines the former (see Frank, 2000: 343). Bubble economies – exemplified in our time most spectacularly with dotcom mania and the tech wreck in April 2000, which saw the crash of the NASDAQ¹⁶ – are perhaps one index of the future-present where the accumulation of profit proceeds by capturing what is otherwise a continuous flow of information.¹⁷ Information flows are shaped by myriad forces that in themselves are immaterial and invisible in so far as they do not register in the flow of information itself. The condition of motion nevertheless indelibly inscribes information with a speculative potential, enabling it to momentarily be captured in the form of trading indices.

Michael Goldberg's (2002a) installation at Sydney's Artspace – *catchingafallingknife.com* (Figure 1) – nicely encapsulates aspects of a processual media theory (see also Lovink, 2002d). The installation combines various software interfaces peculiar to the information exchanges of day traders gathered around electronic cash flows afforded by the buying and selling of shares in Murdoch's News Corporation. With \$50,000 backing from an anonymous consortium of stock market speculators cobbled together from an online discussion list of day traders, Goldberg set himself the task of buying and selling News Corp shares over a three week period in October-November, 2002.

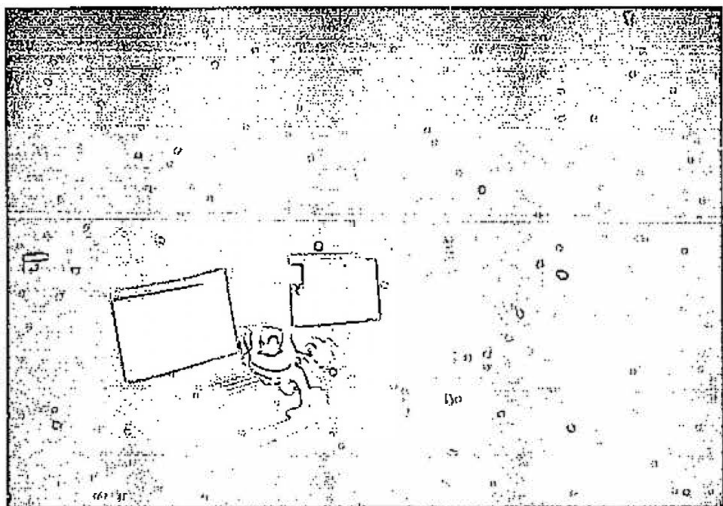
¹⁵ Genosko (2002: 195-200) also picks up on this point by Pearson in his discussion of how Guattari extends the model of autopoiesis and second-order cybernetics into the realm of social relations and 'machinic autopoiesis'.

¹⁶ As Chenoweth recounts in *Virtual Murdoch*, 'The Nasdaq composite index of high-tech stocks, which was the surest guide to the state of the tech economy, in the first three weeks of April had dropped 34 per cent down to 3200' (2002: 339). By 2001 the fall had increased to 90 per cent. See also Brenner (2000).

¹⁷ For a rich analysis of the Wall Street stock market crash of October 1987, see Wark (1994a: 167-228). For an idiosyncratic analysis of foreign exchange markets, traders and the role of the computer screen, see Cetina and Brugger (2002).

Figure 1

Artist at work and *catchingafallingknife.com* installation, Artspace, Sydney, 2002



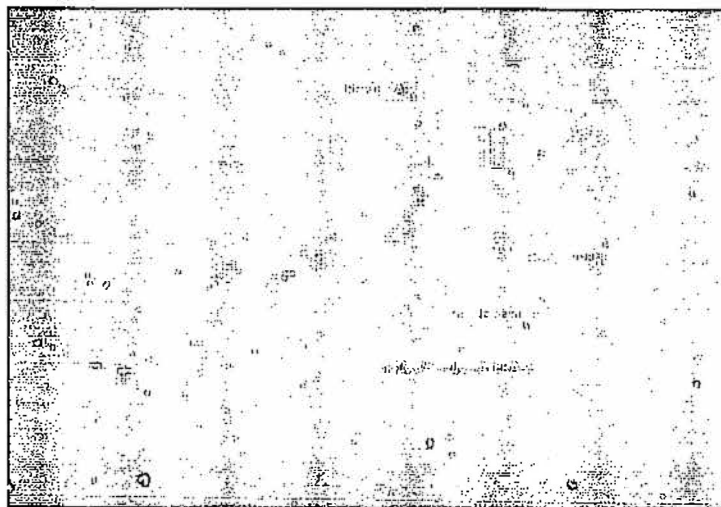
Source: Michael Goldberg

Information flows are at once inside and outside the logic of commodification. The software design of market charts constitutes an interface between what Felix Stalder describes as informational “nodes” and “flows” (Stalder, 2002). The interface functions to capture and contain – and indeed make intelligible – what are otherwise quite out of control finance flows. But not totally out of control: finance flows, when understood as a self-generating system, occupy a space of tension between “absolute stability” and “total randomness” (Stalder, 1997). Too much emphasis upon either condition leaves the actor-network system open to collapse. Evolution or multiplication of the system depends upon a constant movement or feedback loops between actors and networks, nodes and flows.

Referring to the early work of political installation artist Hans Haacke, Goldberg explains this process in terms of a “real-time system”: ‘the artwork comprises a number of components and active agents combining to form a volatile yet stable system. Well, that may also serve as a concise description of the stock market ... Whether or not the company’s books are in the black or in the red is of no concern – the trader plays a stock as it works its way up to its highs and plays it as the lows are plumbed as well. All that’s important is liquidity and movement. “Chance” and “probability” become the real adversaries and allies’ (Goldberg and Lovink, 2002).

Figure 2

“Technical analysis” (“candle-stick”) trading chart



Source: Michael Goldberg

Trading or charting software can be understood as stabilising technical actors that gather informational flows, codifying such flows in the form of ‘moving average histograms, stochastics, and momentum and volatility markers’ (Goldberg, 2002a). Indicators of this sort provide the basis for “technical analysis”, which is concerned with discerning the movement of prices

according to the supply and demand of particular shares (Figure 2). While simplistic, the attention paid to supply and demand as basic concerns of financial management can be seen to correspond with the focus cultural studies and new media empirics places on the conditions of possibility and that which has emerged. In both instances a processual dimension is overlooked: that is, the very movement within and between these variables, which acts to continuously refigure both conditions, challenging the assumption that the world exists in a state of arrest.

Scott Lash claims that 'The feedback loop is the locus of the critique of information' (2002: 112). Software trading charts operate as a closed self-referential and self-generating system: movement up or down the trajectory of a graph is determined at one level by inputs of information that register the value of a particular share. Yet at another level, the stochastic chart is an interpenetrative system. That is, the movement of the graph is contingent on a wider field of forces. For example, Goldberg notes in his diary that he was unable to make a trade on a particular day. The Australian Stock Exchange had gone down. Not only does this impact upon the flow of information that enables the possibility of economic exchange, it also suggests the stability of a system interpenetrates with a wider political economy that articulates with technical standards. In this instance the maintenance of finance networks is subject to the vulnerability that attends concentrations of IT infrastructures. Herein lies a political and economic argument for distributed informational systems.

Chart-analysis software simulates the market situation, computing the movement and value of stocks. However, chart-analysis by a modelling program alone is insufficient. While the system is dynamic – in so far as the reaction of the user manifests as the sale or purchase of stock, which in turn feeds back into the system – the system is necessarily a closed one. Parameters have to be defined that represent the effect various data inputs have on likely market outcomes. Any simulation model is thus based upon a principle of inclusion/exclusion. In his essay on breakdowns within international stock market systems, Wulf Halbach explains the construction of a simulation model as follows:

In order to create a model for any reality in question, as many details and parameters must be taken into consideration as possible (also a question of costs). The details and parameters chosen are the most relevant – maximum parameters – and those that are left out are the least influential – minimal parameters. (1994: 338)

By design, the simulation model reduces the complex field of forces that shape the perception one might have of the market value of a particular stock. That is, there is *something more* that comes to bear to shape the perception and actualisation of value. As Genosko (2003b) writes, 'The output values feed back through the possible parameters, which re-engage the minimal parameters, causing a crash in as much as the minimal parameters could not become maximal'. In other words, 'the simulation is unresponsive to its own terms'. The field of emergence is comprised of distributions of chaos, 'not to mention fear, momentum, noise, caffeine-induced phantasms, etc' (Genosko, 2003b).

The surfeit of force that escapes the parameters of chart-analysis software is augmented by "fundamental analysis". Fundamental analysis looks 'at the realities underlying price movements – broad economic developments, government policies, demography, corporate strategies' (Henwood, 1998: 105). Such market indicators are then rearticulated or translated in the form of online chatrooms, financial news media, and mobile phone links to stockbrokers, eventually culminating in the trade. In capturing and modelling finance flows, trading software expresses various regimes of quantification that enable a value-adding process through the exchange of information within the immediacy of an interactive real-time system. Such a process is distinct from 'ideal time', in which 'the aesthetic contemplation of beauty occurs in theoretical isolation from the temporal contingencies of value' (Shanken, 2001).

The *something more* that escapes both the parameters of chart-analysis software and fundamental analysis can be understood as 'the question of the constitutive gap between "reality" and simulations' (Halbach, 1994: 341). The aesthetic figure for this constitutive gap consists of the power of affect (see Deleuze and Guattari, 1994: 65). An affective dimension of aesthetics is registered in the excitement and rush of the trade; biochemical sensations in the body modulate the flow of information, and are expressed in the form of a trade. As Goldberg

puts it in a report to the consortium mid-way through the project after a series of poor trades based on a combination of technical and fundamental analysis: 'It's becoming clearer to me that in trading this stock one often has to defy logic and instead give in, coining a well-worn phrase, to irrational exuberance' (Goldberg, 2002b). Here, the indeterminacy of affect subsists within the realm of the processual, where a continuum of relations defines the event of the trade. A continuity of movement prevails. Yet paradoxically, such an affective dimension is coupled with an intensity of presence where each moment counts; the art of day trading is constituted as an economy of precision within a partially enclosed universe or system.

McKenzie Wark makes a similar point in his analysis of the stock market crash on Wall Street in October 1987. Drawing on Serres' notion (or was it an intuition?) of 'noise as a "third man" present in the exchange of information' (1994a: 189), Wark employs the metaphor of noise to explain the 'competing and contradictory interests', irrationality, feedback loops and unconventional techniques used by traders arguably more attuned to the informational patterns and flows in global finance markets. As Wark puts it:

Noise becomes a tool among others in what Donald Trump christened "the art of the deal". Profiting from noise becomes equivalent to profiting from information, and in the short term, possibly more profitable. The volume of movement caused by noise in the short term may be more profitable than the tendency of movement in the long run. Which is bad news for the fortunes of the firms that make and sell things on the terrain of second nature. One can indeed make "cash from chaos", as the self-styled pop svengali Malcolm McLaren proposed. The third nature of global finance, like the third nature of global style, admits the *false move* as a profitable option. (1994a: 190)

The borders of a processual system are also open to the needs and interests of extrinsic institutional realities. The node of the gallery presents what is otherwise a routine operation of a day trader as a minor event, one that registers the growing indistinction between art and commerce. Interestingly, the event-space of the gallery expresses the regularity of day trading with a difference that submits to the spatio-temporal dependency news media has on the categories of "news worthiness". A finance reporter for Murdoch's *The Australian* newspaper gives Goldberg's installation a write-up. Despite the press package which details otherwise, the journalist attempts to associate

Goldberg's trading capital with an Australia Council grant (which financed the installation costs) as further evidence of the moral and political corruption among the "chattering classes". In this instance of populist rhetoric, the distinction between quality and tabloid newspapers is brought into question. The self-referentiality that defines the mode of organisation and production within the mediasphere prompts a journalist from Murdoch's local Sydney tabloid, the *Daily Telegraph*, to submit copy on the event. Unlike the dismissive account in *The Australian* and the general absence of attention to the project by arts commentators, Goldberg notes how the *Daily Telegraph* report made front page of the Business section (rather than the News or Entertainment pages), in full colour, with his picture alongside the banner headline 'Profit rise lifts News'. The headline for Goldberg's installation was smaller: 'Murdoch media the latest canvas for artist trader'.

Here, the system of relations between art and commerce also indicates the importance narrative or storytelling has in an age of information economies. Whether the price of stocks go up or down, profit value is shaped not, of course, by the kind of political critique art might offer, but rather by the kind of spin a particular stock can generate. Or, as Neil Chenoweth puts it in his book *Virtual Murdoch*, 'Markets work on appearances' (2002: 76). Goldberg's installation discloses various operations peculiar to the aesthetics of day trading, clearly establishing a link between narrative, economy, time and risk, performance or routine practice and the mediating role of design and software aesthetics. *catchingafallingknife.com* demonstrates that it is the latter – a theory of software – that still requires much critical attention. And unlike most players in the new economy, Goldberg's installation is a model in accountability and transparency.

There is a process at work in all this, part of which involves a linear narrative of stabilisation by structural forces. Massumi explains it this way: 'The life cycle of the object is from active indeterminacy, to vague determination, to useful definition (tending toward the ideal limit of full determination)' (2002a: 214). Yet this seemingly linear narrative or trajectory, if that's what it can be termed, is in no way a linear process. Quite the opposite. It is distributed or is constituted through and within a process of feedback where the technical

object, in its nominated form, feeds back and transforms its conditions of possibility, which can be understood as 'the field of the emergence' (Massumi, 2002a: 8).

Given that the production of art has been ensconced within the cultural industries throughout the 20th Century – and most particularly since the end of World War II – it really is remarkable how little attention is given by artists and critics to the basic economic conditions of production which make possible their very existence. Certainly, there are exceptions, as evidenced in the case of Goldberg's installation. But for the most part, artists have failed to inquire into the role of the economy as a constitutive force *within* and not outside of aesthetics. Yet strangely, both artists and critics seem to think the object or process of art is somehow immune to or autonomous from prevailing economic conditions. That strikes me as a hopelessly naïve and incredibly self-undermining position to adopt.

Don't get me wrong, I'm not suggesting artists return to some kind of social realist portrayal of workers in the factory and peasants in the field. Nor am I calling on critics to revert back to vulgar Marxist ideology-critique. Let's not bore ourselves with regressive pastiche that's incapable of addressing the situation of contemporary media-cultures. By engaging in a post-representational way with the economy, critical artists have a key role to play in redistributing the contingency of relations between economic conditions and aesthetic sensibilities. Now is the time to set a new aesthetic intelligence into play by creating new institutions of possibility, by organising networks of sustainability, and by asserting a relationship between aesthetics and the economy in a way that does not resign the artist to the role of yet another self-governing entrepreneur within a "creative economy".

Towards a Politics of Processual Time

Media cross one another in time, which is no longer history.

(Kittler, 1999: 115)

I speak once more in the language of history, processual time and its multiple circumstances pass through the cramped network of their own monuments.

(Serres, 1995: 95)

The processual locates the temporal modes that operate within the information age. This is precisely why a processual model facilitates a political critique of network societies and information economies. Processes, after all, *take* time. That is, processes abstract time. A politics of legitimacy coextends with the instantiation of abstraction. Further, the fundamental problem with Lash's thesis in his book *Critique of Information* is his failure to engage with "the political" by reducing the complexities of time.¹⁸ Time is not simply "long-duration" that corresponds with old media and its mode of representation, as distinct from the "short-duration" or immediacy that supposedly defines the new media as ephemeral presentations (Lash, 2002: 72-74). Time consists of a multiplicity of modes: rhythmic, instrumental, scalar, biological, compressed, flexible, and so forth. Each temporal mode has a different function in the regulation, control and organisation of entropy. Irrespective of its encoding mode, time is an agent of translation between stability and randomness. In this respect, time corresponds to the processual.

Modalities of time are also central to the constitutive framework within which politics happens. In the case of new media, a tension is played out across the temporal modes that distinguish new media forms and their concomitant uses and conditions of production. Each temporal mode is socially inscribed with varying degrees of legitimacy. For this reason, one can speak of a politics of time. New communications media consist of various temporal modes: mobile phones and instant short-text messaging, the web and real-time video and audio files, the interactive real-time of day trading, 24/7 and net-time,¹⁹ and as Wark notes, 'many kinds of time intersect' (1994a: 222). Whatever the operative

¹⁸ For a particularly engaging critique of Lash's book, see Hassan (2003).

¹⁹ See Lovink's analysis of "swatch-time" in 'Net.Times, Not Swatch Time: 21st-Century Global Time Wars', in *Dark Fiber: Tracking Critical Internet Culture* (2002a: 142-159).

mode may be, time's multiplicity is internally situational to self-organisational closures or limits in socio-technical complexity.²⁰ The contest over such closures thus constitutes the politics of technological time.

On the question of time and space, there are two key points to make. First, new media are characterised by their "remediation" of the spatio-temporal aspects of old media (see Bolter and Grusin, 1999). The form, content, meaning and techniques of use peculiar to old media such as cinema and the novel are refashioned and reformed within new media technologies. New media technologies are thus better characterised in terms of the multi-dimensional layers of space and modalities of time; there is a continuum of relations, albeit reconfigured, rather than strict rupture between old media and new media. Referring to McLuhan, Kittler explains the media continuum as 'partially connected media links' in the following way:

... one medium's content is always other media: film and radio constitute the content of television; records and tapes the content of radio; silent films and audiotape that cinema; text, telephone, and telegram that of the semi-media monopoly of the postal system. (1999: 2)

Second, within a capitalist system, time determines exchange-value in as much as the smaller and more flexible the increment of time the higher the exchange-value. This operation also makes possible what Marx termed the 'annihilation of space through time', where more intensive cycles of production and consumption are required to speed up capital circuits, as David Harvey (1990) has analysed. And as Holmes (2003b) has noted, 'If capital can't get the cycle speeds it needs, it lobbies for war – the exchange-value of armaments will go up as others deflate; capital flows to war according to the law of equalisation of value, until the war's over'. A processual model investigates the multiple, competing dimensions of time that condition the instance of exchange. Exchange-value itself is processual, yet it appears as a simple linear instance of exchange. This feature is symptomatic of the politics of labour-power and the ways in which the process of abstraction within a technologically enriched capitalist system subsumes the field of forces that condition the instance of exchange. The processual model attempts to register the complexity of forces

²⁰ Thanks to David Holmes for reminding me of this idea, among others.

and non-linearity of communications systems. What is at stake, finally, is the question of the legitimacy of existence that is irreducible to the techniques of instrumental time promulgated by new media empirics.

Conclusion

More than anything, processuality is best understood as a mode of communicating. For this reason, the processual is integral to media theory. Communication is based upon relationships. Processual media theory attempts to identify the diagram of relations peculiar to particular media-information situations and events. Such a task inevitably addresses the operation of power as a constitutive force. Inquiries into power relationships can happen in two key ways: first, under the delusion of the detached, disinterested observer. Such an option is a false one. And it is one this thesis starts to fall into in chapter 5, where I stage a critique of non-governmental organisations with regard to their relationship with developing states and supranational entities. What salvages that chapter from a fully-blown descent into the illusion of detached observation is the way the issues of that chapter fold into a larger inquiry that underpins much of this thesis – namely, how political activists might best organise themselves in ways immanent to the media of communication as it articulates with the network of social relations.

In its own modest way, this chapter, and indeed the rest of this thesis, engages with what Paul Miller, a.k.a. DJ Spooky that Subliminal Kid, identifies as *the* problematic of our time: ‘...twenty-first-century aesthetics needs to focus on how to cope with the immersion we experience on a daily level’ (Miller, 2004: 88). This brings me to the second option in analyses of power relations: immanent critique. Strange as it might sound, such a mode of critique within this thesis is informed by the histories of colonialism and the ravages and violence that attends epistemological and ontological frameworks that assume one can be detached or separate from a communicative situation. As the discussion in this chapter of day trading makes clear, a rationalist approach to the problem of communication systems is simply never going to work. While a direct engagement with the histories and literature of colonialism is not present

in this thesis beyond a passing reference here and there, the lessons from colonialism can be detected in the reflexive empiricism adopted in many of the chapters that follow. Immanent critique, as developed most explicitly over the next two chapters, occupies a situation of reflexivity in terms of the inter-relationships between institutional settings, epistemological frameworks and the media of communication.

These sort of elements operate as constitutive forces in the development of the case studies and objects of critique. The mode of critique within a processual situation is never negative in the sense of negativity being that which subtracts something from something else. Since processuality consists of systems of relations that are mutually constitutive, the immanent critique or radical empiricism of processual media theory is an affirmative operation. This thesis has been motivated by a curiosity and passion for the potentiality of transformation within and intervention by networks of critical Internet researchers. Process, in this sense, involves modes of experimentation as far as techniques of critique and research go. I'm speaking here of something that Antonio Negri calls a "tendential" method, one that 'consists of anticipating the value of things that form an evolving system of tendencies, or trends, which is to say things one thinks will end up coming to pass in the future' (Negri, 2004: 49). The reason a degree of experimentation, chance and potential "defeat" attend such a mode of inquiry has to do with the inescapable contingencies of life as it subsists within media-information systems. Similarly, processuality, as a mode communicating, is coextensive with what Negri (2004: 49) calls "forms of life" that constitute the common. Life as it resides within relations immanent to media of communication constitutes the common of this thesis.

Creative Industries, Comparative Media Theory and the Limits of Critique from Within

'Every space has become ad space'.

Steve Hayden, *Wired Magazine*, 2003.

'Obsession with economic considerations illustrates the dangers of monopolies of knowledge and suggests the necessity of appraising its limitations'.

Harold A. Innis, *Empire and Communications*, 1950.

'The limit is not outside language, it is the outside of language'.

Gilles Deleuze, *Essays Critical and Clinical*, 1993.

Marshall McLuhan's (1964) dictum that media technologies constitute a sensory extension of the body holds an elective affinity with Ernst Jünger's notion of "organic construction" [which] indicates [a] synergy between man and machine' and Walter Benjamin's exploration of the mimetic correspondence between the organic and the inorganic, between human and non-human forms (Bolz, 2002: 19). Today, new information and communication technologies (ICTs) communicate with each other, seemingly independent of human intervention. Think of the dialogue between financial transactions and interest rates in banking systems, the registration of calls in telephone bills, the updating of information in your computer system. In the world of signs, the logo or brand is co-extensive with various media of communication – billboards, TV advertisements, fashion labels, book spines, mobile phones, etc. Often the logo is interchangeable with the product itself or a way of life. It appears that the social life of things is always defined by relations internal to their operation within a socio-technical system. Since all social relations are mediated, whether by communications technologies or architectonic forms ranging from corporate buildings to sporting grounds to family living rooms, it

follows that there can be no outside for sociality. The social is and always has been in a mutually determining relationship with mediating forms. It is in this sense that there is no outside.

Such an idea has become a refrain amongst various contemporary media theorists. Here's a sample:

There is no outside position anymore, nor is this perceived as something desirable. (Lovink, 2002b: 4)

Both "us" and "them" (whoever we are, whoever they are) are all always situated in this same virtual geography. There's no outside.... There is nothing outside the vector. (Wark, 2002b: 316)

There is no more outside. The critique of information is in the information itself. (Lash, 2002: 220)

In declaring a universality for media culture and information flows,¹ all of the above statements acknowledge the political and conceptual failure of assuming a critical position outside socio-technically constituted relations. Similarly, they recognise the problems associated with the "ideology critique" of the Frankfurt School who, in their distinction between "true" and "false-consciousness", claimed a sort of absolute knowledge for the critic that transcended the field of ideology as it is produced by the culture industry. Althusser's conception of ideology, material practices and subject formation, while more complex than that of the Frankfurt School's, nevertheless also fell prey to the pretence of historical materialism as an autonomous "science" that is able to analytically determine the totality of lived social relations.

One of the key failings of ideology critique, then, is its incapacity to account for the ways in which the critic, theorist or intellectual is implicated in the operations of ideology. Such approaches displace the reflexivity and power relationships between epistemology, ontology and their constitution as material practices within socio-political institutions, discursive formations and socio-

¹ Or perhaps, more correctly after Baudillard, a *globalisation* of media culture and information flows, since universality, for Baudillard (2003), is homologous with ethical principles such as human rights, whereas globalisation is a term that has emerged with the advent of new ICTs, post-1989 world events and the re-scaling of capital. One does not speak of "global" human rights, for example. Rather human rights are a set of principles that may be idealised, and rarely adhered to.

technical historical constellations, all of which are the primary settings for the instantiation of ideology. The notion of ideology as a lived relation between people and things can be retained, I think, when it is located within this kind of post-representational, materialist analytical framework. Scott Lash abandons the term ideology altogether due to its conceptual legacies within German dialectics and French post-structuralist aporetics, both of which 'are based in a fundamental dualism, a fundamental binary, of the two types of reason. One speaks of grounding and reconciliation, the other of unbridgeability.... Both presume a sphere of transcendence' (Lash, 2002: 8).

Such assertions can be made at a general level concerning these diverse and often conflicting approaches when they are reduced to categories for the purpose of a polemic. However, as I established in chapter 1, the work of "post-structuralists" such as Foucault, Deleuze and Guattari and the work of German systems theorist Niklas Luhmann (1995) is clearly amenable to the task of critique of and within information societies (see also Bogard, 1996; Feenberg, 2002; Lyon, 2001; Rasch and Wolfe, 2000). Indeed, Lash draws on such theorists in assembling his critical *dispositif* for the information age. More concretely, Lash advances his case for a new mode of critique by noting the socio-technical and historical shift from 'constitutive dualisms of the era of the national manufacturing society' to global information cultures, whose constitutive forms are immanent to informational networks and flows (2002: 9; see also Wittel, 2001). Such a shift, according to Lash, needs to be met with a corresponding mode of critique:

Ideologycritique [ideologiekritik] had to be somehow outside of ideology. With the disappearance of a constitutive outside, informationcritique must be inside of information. There is no outside any more. (2002: 10)

Lash goes on to note that 'informationcritique itself is branded, another object of intellectual property, machinically mediated' (2002: 10). Or as Adorno proclaimed a few decades earlier, 'No theory today escapes the marketplace' (1990: 4). It is the political and conceptual tensions between information critique and its regulation via intellectual property regimes (IPXs) which condition critique as yet another brand or logo that I wish to explore in this chapter and the next. Further, I will question the supposed erasure of a

"constitutive outside" of the field of socio-technical relations within network societies and informational economies. Lash is far too totalising in supposing a break between industrial modes of production and informational flows.² Moreover, the assertion that there is no more outside to information too readily and simplistically assumes informational relations as universal and horizontally organised, and hence overlooks the significant structural, cultural and economic obstacles to participation within media vectors. There certainly is an outside to information! Indeed, there are a plurality of outsides. These outsides are intertwined in singular ways with the flows of capital and the operations of biopower.³ As difficult as it may be to ascertain boundaries, they nonetheless exist. Just ask the so-called "illegal immigrant"!

This chapter assumes that three key forces comprise a constitutive outside of any media-information system: material (uneven geographies of labour-power, disjunctive socio-technical system and the digital divide), symbolic (cultural capital and a-signifying semiotic systems), and strategic (figures of critique and situated interventions). In a basic sense, legal and material outsides are indeed no more than just that. One may be said to be "outside" the rule of law when downloading pornography or music files from the Net, for instance; another is without access to a particular database due to uneven funding across and within universities, or unable to access the Net due their remote geographical location (to say nothing of their economic circumstances); or else, as a result of an individual's socio-cultural disposition, there is just no interest in such matters. Yet legal and material outsides also amount to more than this. Irrespective of how often we have heard about issues such as the digital divide, we need to hear about these outsides again and again; even better, we need to be confronted by them, and to encounter their violence – be it symbolic or material (rather than "Real", I think, since "the Real" is always already present, disruptively penetrating the imaginary and the symbolic order). We need to work out ways of addressing such issues if we want to engage with some of the basic ethico-political situations of contemporary life. Material and legal outsides at once articulate with and act as a constitutive force for ontological

² The best critique I've read so far of Lash's book is Hassan (2003).

³ Or as Kafka elegantly deduced: 'Capitalism is a system of relationships, which go from inside to out, from outside to in, from above to below, and from below to above. Everything is

and biopolitical dimensions of life. This takes us to the challenge of thinking difference within negativity, which I address in the second half of this chapter.

Over the next two chapters my point of reference in developing this inquiry will pivot around an analysis of the importation in Australia of the British "Creative Industries" project and the problematic foundation such a project presents to the branding and commercialisation of intellectual labour. The Creative Industries movement – or "Queensland Ideology", as I have discussed elsewhere with Danny Butt (2002) – holds further implications for the political and economic position of the university vis-à-vis the arts and humanities. The institutional variant of Creative Industries – as promulgated by the likes of Tony Blair's Creative Industries Task Force (CITF) and their academic counterparts in Australia – constructs itself as inside the culture of informationalism and its concomitant economies by the fact that it is an exercise in branding. Such branding is evidenced in the discourses, rhetoric and policies of the Creative Industries, as adopted by university faculties and academics, government departments and the cultural industries and service sectors seeking to reposition themselves in an institutional environment that is adjusting to ongoing structural reforms. These reforms are attributed to demands by the "New Economy" for increased labour flexibility and specialisation, institutional and economic deregulation, product customisation and capital accumulation.

The content of Creative Industries produced by labour-power is branded as copyrights and trademarks within the system of intellectual property regimes. However, a constitutive outside operates in material, symbolic and strategic ways that condition the possibility of Creative Industries. The constitutive outside of Creative Industries marks its limit, and thereby its extent.⁴ To this end, a critique of the limits of Creative Industries contributes to rather than detracts from the various mapping projects undertaken in the name of Creative Industries. In terms of media or information critique, I am not denying that the critic or intellectual is situated within a media system – social relations are always already mediated through different communications media and

relative, everything is in chains. Capitalism is a condition both of the world and of the soul' (quoted in Thoburn, 2003: 69).

⁴ Here I am appropriating a phrase by Susan Buck-Morss (2003), who is referring to the constitutive outside as it operates within secular Islamic discourse in Turkey.

architectonic forms which constitute the *dispositif* of expression. However, we don't all occupy the same situation within a media system. Much of the work in media and cultural studies has examined the delimiting role played by class, ethnicity, gender, age and so forth with regard to the production of meaning and the uses of media forms.

There are also considerable political and conceptual limits to any critique that dispenses with the constitutive force of the "outside". Obviously, a substantial limit to any critique consists of the different theoretical and disciplinary knowledge accumulated by any intellectual or critic. Epistemic boundaries coupled with their institutional settings define different historical epochs and operate as a horizon of intelligibility within which the present may be understood by actors with varying capacities of expression. I will argue that Deleuze's notion of a plane of immanence provides a particularly rich conceptual framework with which to theorise the role of a constitutive outside within the logic of informationalism. My critique of the Creative Industries project also serves as a mechanism for extracting a concept of communications media that acknowledges the constitutive role of the outside – or what Deleuze terms the 'limit' – within the plane of immanence.

Finally, my approach corresponds with the "comparative media theory" research conducted by Ian Angus, who draws on the rich tradition of media and communications theory in Canada, as pioneered by Harold Innis, Marshall McLuhan, Walter Ong and Eric Havelock. This work is characterised by its interest in the constitutive force of communications media as a social relation, and distinguishes itself from research in the field that is concerned with analysing media content and its effects (see Angus, 1994). Comparative media theory, as set out by Angus, places an emphasis on the polemical role of critique of "the dominant culture". At times this chapter also adopts a polemical stance against aspects of the dominant culture as it is played out in the arts and humanities. My target is the Creative Industries and a growing tendency within media theory to ignore the constitutive force of the outside. In undertaking such a critique, my interest is in the possibilities for new institutional formations, particularly as they emerge within a field of new ICTs underpinned by antagonistic socio-political and economic relations.

Creative Industries, Intellectual Property Regimes and the "New Economy"

The Creative Industries project, as envisioned by the Blair government's Department of Culture, Media and Sport (DCMS) responsible for the Creative Industry Task Force Mapping Documents of 1998 and 2001, is interested in enhancing the "creative" potential of cultural labour in order to extract a commercial value from cultural objects and services. The DCMS cast its net wide when defining creative sectors and deploys a lexicon that is as vague and unquantifiable as the next mission statement by government and corporate bodies enmeshed within a neoliberal paradigm.⁵ The list of sectors identified as holding creative capacities in the CITF Mapping Document include: film, music, television and radio, publishing, software, interactive leisure software, design, designer fashion, architecture, performing arts, crafts, arts and antique markets, architecture and advertising. The Mapping Document seeks to demonstrate how these sectors consist of '... activities which have their origin in individual creativity, skill and talent and which have the potential for wealth and job creation through generation and exploitation of intellectual property' (CITF: 1998/2001).

The CITF's identification of intellectual property (IP) as central to the creation of jobs and wealth firmly places the Creative Industries within informational and knowledge economies. Unlike material property, intellectual property such as artistic creations (films, music, books) and innovative technical processes (software, biotechnologies) are forms of knowledge that do not diminish when they are distributed. This is especially the case when information has been encoded in a digital form and distributed through technologies such as the Internet. In such instances, information is often attributed an "immaterial" and nonrivalrous quality, although this can be highly misleading for both the conceptualisation of information and the politics of knowledge production. I address the problematic of "immateriality" with reference to creative labour in the next chapter.

⁵ At least one of the key proponents of the Creative Industries in Australia is ready to acknowledge this. See Cunningham (2003).

For all the emphasis the Mapping Document places on exploiting intellectual property, it's remarkable how absent any consideration of IP is from Creative Industries rhetoric. It is even more astonishing that media and cultural studies academics have given at best passing attention to the issues of IPRs.⁶ Perhaps such oversights by academics associated with the Creative Industries can be accounted for by the fact that their own jobs rest within the modern, industrial institution of the university, which continues to offer the security of a salary award system and continuing if not tenured employment despite the onslaught of neoliberal reforms since the 1980s. Such an industrial system of traditional and organised labour, however, does not define the labour conditions for those working in the so-called Creative Industries. Within those sectors engaged more intensively in commercialising culture, labour practices closely resemble work characterised by the dotcom boom, which saw young people working excessively long hours without any of the sort of employment security and protection vis-à-vis salary, health benefits and pension schemes peculiar to traditional and organised labour (see McRobbie, 2002; Ross, 2003). During the dotcom mania of the mid to late 90s, stock options were frequently offered to people as an incentive for offsetting the often minimum or even deferred payment of wages (see Frank, 2000).

The attraction of stock options and the rhetorical sheen of "shareholder democracy" adopted by neoliberal governments became brutally unstuck with the crash of the NASDAQ in April 2000, which saw the collapse in share value of high-tech stocks and telcos. This "tech-wreck" was followed up by the negative impact of September 11 on tourism and aviation sectors. The 'market populism', as Thomas Frank (2000) explains, of the high-tech stock bubble was defined by a delirious faith in entrepreneurial culture and the capacity for new ICTs articulated with corporate governance and financementscapes to function as a policy and electoral panacea for neoliberal states obsessed with dismantling the welfare state model and severing their responsibilities for social development. The Creative Industries project emerged out of a similar context and adopted much of the same rhetoric, with a greater orientation towards "creative capital". It remains questionable as to the extent to which such rhetoric is transposable

⁶ Flew (2002: 154-159) is one of the rare exceptions, though even here there is no attempt to identify the implications IPRs hold for those working in the Creative Industries sectors.

on an international scale and the extent to which it is then appropriate to be adopted by countries and regions with significantly and sometimes substantially different socio-political relations, industrial structures and policies, and cultural forms and practices.

Another key precondition for the growth of the Creative Industries consists of a crisis within the "art system". As new ICTs became an increasing part of social and economic life within advanced economies throughout the 1990s, the culture industry continued on oblivious to this socio-technical transformation. In Australia, the traditional forms of artistic expression – classical music, ballet, and opera in particular – have their well established systems of patronage and government funding. Even though one might think that it should have been the task of the arts to deal with media and creative industries, they weren't about to let anything like new media arts disrupt the comfort of the status quo. While public sectors across the board were grappling with the impact of economic rationalist ideologies, the "high" arts held dear to their myth of somehow being autonomous from prevailing socio-economic forces. The disjuncture between art and informationisation functions as a constitutive outside of the Creative Industries, especially once that disjuncture is articulated with other forces (outsides). Two key forces consist of, firstly, a neoliberal, post-"New Left" in Britain in search of electoral legitimacy through a Third Way discourse that sought a more comprehensive bonding between culture and the economy. And secondly, a substantial increase in both Britain and Australia of students coming out of vocationalised humanities programs (media and cultural studies, performance studies, art and design, journalism, multimedia and IT) who want jobs as either creative producers, service workers, or cultural intermediaries, and who therefore hold government interest as an emergent electoral constituency.

While the Creative Industries is emergent as an institutional formation, it is, I would suggest, gaining dominance at a discursive level. The ensemble of articulation consists of four principle components that together hold a hegemonic force: 1) government policies on higher education that privilege industry affiliation over the pursuit of core values of scholarship and pedagogy within the arts and humanities; 2) Third Way ideology that is ready to

legitimate a plurality of socio-cultural values, but only if they can translate into commercial form; 3) research by the OECD and an assortment of supranational research agencies, think-tanks, corporate R&D teams and government departments that have an interest in establishing intellectual property as the architecture for a global information and knowledge economy that can extract profit from education and culture; and 4) a populist strand within the field of media and cultural studies that considers consumer (audience-student-citizen) desire as relatively autonomous and self-forming and hence the basis upon which university curricula should be shaped. This approach within media and cultural studies gained purchase in the eighties and nineties as an alternative to the impasse of ideology critique, advocating the sovereign power of the consumer over the structural forces of the state and affiliated organisations. In this regard, the populist approach has established the preconditions necessary for a relatively smooth transition within the arts and humanities into the current era of the university as a pseudo-corporation.

Many would argue that this is all proper and good – Creative Industries is a truly responsible project, since rather than imposing a set of cultural values from above, it is giving students-as-consumers what they want and need in order to realise and obtain the kind of lifestyle and professional satisfaction and challenges they desire. I wouldn't deny that these are important factors; my argument is that for all the populism – which, in any case, is and always has been a great fallacy at a structural level if not a rhetorical one – of Creative Industries style discourses, there is a substantial constituency which holds no interest for proponents of the Creative Industries. A focus on the role of intellectual property regimes reveals that the labour-power of the core constituency of the Creative Industries – information workers, programmers, designers, media producers, and so forth – is the primary vehicle for exploitation and exclusion. Even though it is situated within the socio-technical and discursive system of the Creative Industries, the labour-power of creative workers functions as a constitutive outside for the Creative Industries. Just as there is no outside for informationcritique, for proponents of the Creative Industries there is no culture that is worth its name if it is outside a market economy (see McNamara, 2002). That is, the commercialisation of “creativity” – or indeed commerce as a creative undertaking – acts as a legitimising function

and hence plays a delimiting role for "culture" and, by association, sociality. The institutional life of career academics is also at stake in this legitimising process.

The valuation of culture in terms of its potential exchange value is in direct contrast to the "aesthetic" value of culture set out in the work of nineteenth century social reformer and school inspector Mathew Arnold and his mid-twentieth century extension, the literary critic F. R. Leavis. The guiding principle within their paternalistic, "civilising" and humanistic worldview consisted of evaluating culture as 'the best of what has been thought and said' (Arnold, 1960: 6). Such an evaluative regime became the basis upon which to uphold the moral and political authority of the ruling classes whose value system was perceived to be under threat by the emergent "mass culture" of the working classes and expanding bourgeoisie. Thus elite cultural forms such as painting, classical music and sculpture were privileged over the commercial cultural technologies of popular songs, novels, newspapers, radio and the cinema that appealed to the working and middle classes. Within the "culture and civilisation" tradition exemplified by Arnold and more particularly Leavis and others involved in the literary critical journal *Scrutiny*, the "inherent quality" or aesthetics of elite cultural forms was assumed to transcend social and economic relations. Culture in this sense was static, unchanging and exclusive. The British cultural studies tradition inaugurated by the materialist work of Williams, Hoggart and Thompson contested this view of culture. Emerging out of the growth in adult education with the return of soldiers from the Second World War, British cultural studies was interested in the everyday aspects of culture and paid particular attention to the symbolic dimensions and social uses of cultural forms. This foundation myth of cultural studies is now well rehearsed and repeated verbatim within literature in the field (see Turner, 1990: 41-84; Bennett, 1998: 87-101; Brantlinger, 1990: 34-67).⁷ My purpose in reproducing this story of origins is to set out some initial parameters in which to locate the paradox of culture within the Creative Industries.

⁷ As one would expect from the "internationalisation" of Cultural Studies, counter-readings of the emergence of cultural studies within Britain, and the significance it holds for local contexts, are inevitable. Interesting work on this topic from a younger generation of scholars writing

Despite the efforts of Creative Industries' academic proponents to argue for the merits of popular cultural forms, within a Creative Industries discourse informed by policies and rhetoric of the information or knowledge economy, "culture" reclaims a privileged location. And it is one that is remarkably similar in a structural sense to the discursive economy that informed the Arnoldian and Leavisite concept of culture: "quality" culture is defined within the Creative Industries as that which has the capacity to generate and exploit intellectual property. Because the political and economic architecture of IPRs is premised on the capacity to restrict access to the object or form enclosed within the informational and legal system of IP, culture that has been incorporated as IP is available only to those with the economic and cultural capital that enables them access to the particular cultural form encoded as IP. In this sense, culture is elite; it is certainly not "working class", and while it may be "popular" it is only popular within a particular class setting that has the means to access and control it.⁸ Since access is the means to the reproduction, expansion and thus innovation of culture, the enclosure of culture as forms of knowledge within a system of IP raises questions of elitism against the populist rhetoric found within much Creative Industries discourse.

Intellectual property, as distinct from material property, operates as a scaling device whereby the unit cost of labour is offset by the potential for substantial profit margins realised by distribution techniques availed by new ICTs and their capacity to infinitely reproduce the digital commodity object as a property relation. Within the logic of intellectual property regimes, the use of content is based on the capacity of individuals and institutions to pay. The syndication of media content ensures that market saturation is optimal and competition is kept to a minimum. However, such a legal architecture has run into conflict with other Net cultures such as open source movements and peer-to-peer networks that operate by alternative intellectual property codes, as seen in the examples of the Creative Commons licence, the open content Wikipedia encyclopedias,

from an Australian perspective includes Wark (1992a), Flew (1997), Gibson (1998, 1999, 2003), Lewis (2003, 2004) and Gregg (2003, 2004a, 2004b).

⁸ And in this respect, it is possible to draw a parallel between the Creative Industries project within Queensland and its institutional predecessor, the Australian Key Centre for Cultural and Media Policy, directed by Tony Bennett. For a critique of the tendency by advocates of cultural policy studies – particularly Bennett – to read Foucauldian "governmentality" as a variation of Althusserian, "ISAs", see Grace (1991). Interestingly enough, McKenzie Wark (1992b) adopts the position of an "outsider intellectual" in his critique of Bennett and cultural policy studies.

and Linux software (Lovink, 2002a, 2003; Meikle, 2002). Other instances of political conflict that are set to become an increasing concern for hegemonic media, and international diplomacy and trade agreements consist of the digital piracy of software and digitally encoded cinematic forms, particularly within China (see Wang and Zhu, 2003). To this end, IPRs are an unstable architecture for extracting profit.

As Scott McQuire has noted, there is a 'strategic rationale' behind the Creative Industries project: 'It provides a means for highlighting the significant economic contribution already made collectively by areas which individually may pass unnoticed all too easily' (McQuire, 2001: 209).⁹ In this respect, the Creative Industries concept is a welcome and responsible intervention. But as McQuire also goes on to point out, the Creative Industries 'provides a template for change in educational curricula' (209). This aspect warrants a more circumspect approach to the largely enthusiastic embrace of the concept of Creative Industries. Change of course is inevitable and is often much needed. However, there is a conformist principle underpinning the concept of Creative Industries as it has been adopted in Australia – namely the reduction of "creativity" to content production (Cunningham, 2002) and the submission of the arts and humanities to the market test, which involves exploiting and generating intellectual property (McQuire, 2001: 210). What happens to those academic programs that prove unsuccessful in the largely government and market driven push to converge various media of expression into a digital form? How are the actual producers – the "creative" workers – to be protected from the exploitation incurred from being content producers?

It is understandable that the Creative Industries project holds an appeal for managerial intellectuals operating in arts and humanities disciplines in

⁹ A recent QUT report commissioned by the Brisbane City Council provides some illuminating statistics on the varying concentrations of workers in the Creative Industries across Australia. There aren't too many surprises. Of the seven capital cities in Australia in 2001, Sydney holds the highest proportion of creative industry workers (90, 6000/40.1%). Melbourne has 63, 453 (28.1%), Brisbane (25, 324), Perth (21, 211), Adelaide (15, 345), Canberra (6, 516), and the Greater Hobart Area (3, 055) (Cunningham et al., 2003: 16). At a statistical level then, Sydney pretty much leaves Melbourne for dead when it comes to that rather parochial old debate over which city is Australia's "cultural capital". Still, you'd have to disagree when it comes down to which city has better food, bars, galleries and quality of life for the "bourgeois bohemians", or "bobos" (Brooks, 2000) – Melbourne wins hands down when the quantitatively feeble indices are considered.

Australia. The Queensland University of Technology (QUT), which claims to have established the "world's first" Creative Industries faculty, has been particularly active in reproducing the British model of Creative Industries.¹⁰ The Creative Industries model provides a validating discourse for those suffering anxiety disorders over what Ruth Barcan (2003) has called the 'usefulness' of 'idle' intellectual pastimes.¹¹ As a project that endeavours to articulate graduate skills with labour markets, the Creative Industries is a natural extension of the neoliberal agenda within education as advocated by successive governments in Australia since the Dawkins reforms in the mid 1980s (see Marginson and Considine, 2000). Certainly there is a constructive dimension to this: graduates, after all, need jobs, and universities should display an awareness of market conditions; within managerial discourses of "quality assurance" and "accountability", academics also have a responsibility to do so. It is remarkable that so many university departments in the field of communications and media studies are so bold as to make unwavering assertions about market demands and student needs on the basis of doing little more than sniffing the wind! Time for a reality check. This means becoming more serious about allocating funds and resources towards market analysis based on the combination of needs between students, staff, disciplinary values, university expectations and the political economy of markets.

The extent to which there should be a wholesale shift of the arts and humanities into a Creative Industries model is open to debate. The arts and humanities, after all, are a set of disciplinary practices and values that operate as a constitutive outside for Creative Industries. In their Creative Industries manifesto, Stuart Cunningham and John Hartley (2002) adopt a polemic that casts the arts and humanities as past its shelf-life. Paradoxically, such a stance establishes the arts and humanities as a sort of cultural and ideological outside without acknowledging the constitutive power of that outside. To subsume the

¹⁰ Creative Industries Faculty, QUT, <http://www.creativeindustries.qut.com>. A number of research papers and reports can be found at the Creative Industries Research and Applications Centre, <http://www.creativeindustries.qut.com/research/cirac/index.jsp>.

¹¹ Barcan is referring here to the accusation by Australian Prime Minister John Howard regarding 'the idleness of so many in academia'. Barcan is contesting the widespread perception that "useful" teaching is vocationally oriented and "useful" research has outcomes with commercial application (2003: 364-365).

arts and humanities into the Creative Industries,¹² if not eradicate them altogether, is to spell the end of Creative Industries as it's currently conceived at the institutional level within academe. This isn't to say the arts and humanities were not in great need of reform. For too long they had drifted into complacency and frequent bad teaching and administrative practices. What I am suggesting is that a vibrant and sustainable intellectual culture and economy is best achieved with the existence of a plurality of disciplinary formations and practices. The Creative Industries project closes down that option in a number of ways.

Too much specialisation in one post-industrial sector ensures a situation of labour reserves that exceed market needs. One only needs to consider all those now unemployed web-designers who graduated from multi-media programs in the mid to late nineties. Vocational specialisation does not augur well for the inevitable shift from or collapse of a Creative Industries economy. Where is the standing reserve of labour shaped by university education and training in a post-Creative Industries economy? Diehard neoliberals and true-believers in the capacity for perpetual institutional flexibility would say that this isn't a problem. The university will just "organically" adapt to prevailing market conditions and shape its curriculum and staff composition accordingly. Perhaps. Arguably if the university is to maintain a modality of time that is distinct from the just-in-time mode of production characteristic of informational economies – and indeed, such a difference is a quality that defines the market value of the educational commodity – then limits have to be established between institutions of education and the corporate organisation or creative industry entity.

The Creative Industries project is a reactionary model in so far as it reinforces the status quo of labour relations within a neoliberal paradigm in which bids for industry contracts are based on a combination of rich technological

¹² Ironically enough, this PhD has been written in a period in which Edith Cowan University's Faculty of Arts was dismantled, giving rise to the Faculty of Communications and Creative Industries in 2003. The Faculty of Arts became the Faculty of Community Studies, Education and Social Sciences minus Media Studies. Media Studies was joined with Multimedia to form the School of Communications and Multimedia, which was placed in the Faculty of Communications, Health and Science. Later it was joined with School of Contemporary Arts and Western Australian Academy of Performing Arts to create the Faculty of Communications and Creative Industries

infrastructures often subsidised by the state (i.e. paid for by the public), high labour skills, a low currency exchange rate and the lowest possible labour costs. It is no wonder that literature on the Creative Industries omits discussion of the importance of unions within informational, networked economies. What is the role of unions in a labour force constituted as individualised units? (see Beck, 1992; Bauman, 1992; McRobbie, 2002). I'll address this question at greater length in chapter 3.

There is a great need to explore alternative economic models to the content production one if wealth is to be successfully extracted and distributed from activities in the new media sectors. The suggestion that the Creative Industries project initiates a strategic response to the conditions of cultural production within network societies and informational economies is highly debateable. The now well documented history of digital piracy in the film and software industries and the difficulties associated with regulating violations to proprietors of IP in the form of copyright and trademarks is enough of a reason to look for alternative models of wealth extraction. And you can be sure this will occur irrespective of the endeavours of the Creative Industries.

The conditions of possibility for Creative Industries within Australia are at the same time its frailties. A significant portion of the Creative Industries sector in Australia is engaged in film production associated with Hollywood's activities "downunder" and, if it is ever realised, IT developments attached to MIT's planned media lab in Sydney. These are both instances in which IP is not owned by Australian corporations or individuals, but is held more often by US based multi-nationals. The success of the Creative Industries sector depends upon the ongoing combination of cheap labour enabled by a low currency exchange rate and the capacity of students to access the skills and training offered by universities. Of all these factors, much depends on the Australian currency being pegged at a substantially lower exchange rate than the US dollar. The economic effects in the United States of an expensive military intervention in Iraq and the larger costs associated with the "war on terror", along with the ongoing economic fallout from the dotcom crash and corporate collapses, have all led to a creeping increase in the value of the Australian dollar.

Recent reports in *The Australian Financial Review* support these claims, noting that foreign investment – most particularly from Hollywood film studios – in Australian feature film and television drama production ‘fell for the first time in eight years’ (Williams, 2003: 20). The 23 per cent drop is directly attributed to the rising Australian dollar. In the case of TV productions, the lack of refundable tax incentives has had a negative effect, unlike New Zealand which adopted incentives for foreign investment in the industry. The drop in expenditure was even greater for international joint ventures: ‘Expenditure on international co-productions was down 50 per cent in 2002-03, from \$102 million in 2001-02 to \$51 million, reducing the size of Australian TV and film production by nearly a quarter’ (Williams, 2003: 20). A fall in post-production and foreign production in studios in Sydney, Melbourne and Queensland is also expected in the coming years. The security of creative labour will also be effected by the largely secret negotiations of the Free Trade Agreement (FTA) between Australia and the United States concluded in early February, 2004. While full details of the deal are still to be released, it is clear it will have a substantial impact on Australia’s media and cultural industries. Australian copyright laws will be extended from 50 to 70 years, bringing them into so-called “harmonisation” with the US. While the FTA has retained local content rules that require 55 per cent of all free-to-air TV programming in Australia to consist of locally produced programs and ads, there is uncertainty over the impact this will have on pay TV, multi-channelling and new media technologies such as the Internet, mobile telephony and interactive digital cinema. The likely result for many media industries is an increase in US content and market control. As Australian new media scholar and teacher Chris Chesher (2004) has pointed out, ‘This one bilateral agreement may restrict future governments from making policy that fosters the development of a new media industry in Australia’.¹³

In a globalising economy that is substantially shaped by the US domestic economy and its transnational corporate interests, the sum effect of these developments is a downgrading of skills and experience in the media industries

¹³ For an informative study of free trade agreements between the United States and Australia, and their effect on Australia’s cultural economics, see Given (2003).

and fewer jobs for Australian technicians, musicians and actors – a number of whom will be graduates from Creative Industries programs. The security of labour is contingent then upon the relative stability of global financial systems which are underpinned by risk, uncertainty and a faith in the hubris peculiar to discourses on growth and expansion associated with the “New Economy” (Brenner, 2002; Gadrey, 2003; Lovink, 2002c; Tickell, 1999). Additional contingencies emerge with government policies that seek to intervene in the supranational, regional and national regulatory fields of trade agreements, privacy rights, and so forth.

In relation to matters such as these there may appear to be no outside for the Creative Industries. However, a model of communications and informationality that locates points of tension, conflict, or antagonism will often discover the constitutive force of an outside at work. As I’ve argued above, the operation of intellectual property regimes constitutes an outside within Creative Industries by alienating labour from its mode of information or form of expression. Lash is apposite on this point: ‘Intellectual property carries with it the right to exclude’ (Lash, 2002: 24). This principle of exclusion applies not only to those outside the informational economy and culture of networks as a result of geographic, economic, infrastructural and cultural constraints. The very practitioners within the Creative Industries are excluded from control over their creations. It is in this sense that a legal and material outside is established *within* an informational society. At the same time, this internal outside – to put it rather clumsily – operates in a constitutive manner in as much as the Creative Industries, by definition, depend upon the capacity to exploit the IP produced by its primary source of labour. In order to further develop a notion of a constitutive outside, I now turn to Deleuze’s logic of immanence and elaborate the elective affinities it holds with Marxian post-negativity. I will then suggest how a constitutive outside is assumed within a “comparative media theory” of technology and culture.

Post-Negativity and the Logic of Immanence

The challenge for a politics of informational cultures and socio-technical systems is to define limits at the current conjuncture. In ways similar to New

Age devotees, cyber-libertarians, spokespeople for the IMF and many political activists, proponents of the Creative Industries so often insist on and valorise "openness". In case we have forgotten, openness itself is conditioned by the possibility of exclusion. What are the limits of the informational inside? In the case of Creative Industries, what are the implications of experiencing what Giorgio Agamben calls the event-horizon, or *qualunque* ("whatever") as 'the event of an outside [...] of being-within an outside' (Agamben, 1993: 68)? This sort of question underpins what it means to theorise about those working with the Creative Industries – a cultural sector that enlists actors with multiple capacities whose innovative labour-power is the condition for their exclusion from absolute self-governance, as bequeathed upon them by a managerial intellectual class within universities, government, R&D agencies, and conservative policy think-tanks such as Demos (UK), the Cato Institute (US) and the Centre for Independent Studies (Australia).

In order to build a theoretical framework for thinking the role of the constitutive outside for the Creative Industries, I will briefly outline the notion of post-negativity and then distinguish a Deleuzian logic of immanence from Lash's problematic deployment of a concept of immanence, which he enlists as a metaphor to describe the absolute interiority of relations within information societies. Perhaps part of the problem here is that Lash invokes the metaphor of immanence as a concept, while Deleuze and Guattari insist that the plane of immanence 'is neither a concept nor the concept of concepts' (1994: 35). The finite movement of concepts subsists within the infinite movements of the plane of immanence (Deleuze and Guattari, 1994: 36-39). Thus immanence is better understood as a process of singular events rather than a ubiquitous condition, as many critics and theorists have posited.

For Lash the notion of a constitutive outside is untenable since it is overdetermined and revealed as transcendent by the action of dialectics. The outside is always already that which is beyond, impossible, false. Lash believes the socio-technical time of dialectics and the technics of industrial production have been surpassed by informationalism (real-time, interactivity, flow). However, is there a way of constructing difference within negativity in such a manner that understands the antagonism of the constitutive outside as a

processual force of affirmation as distinct from the “negation of negation”?¹⁴ Is there a combinatory practice for media and cultural studies that goes by the name of affirmative critique? Unlike Lash, Chantal Mouffe argues that ‘the “constitutive outside” cannot be reduced to a dialectical negation. In order to be a true outside, the outside has to be incommensurable with the inside, and at the same time, the condition of emergence of the latter’ (2000: 12).¹⁵ For Mouffe, the constitutive outside is not so much a dialectics as a *suspension* (a state of exception), a *movement* whereby that which is excluded or outside is also the condition of possibility for, and conditioned by, the inside, which incorporates the outside as it simultaneously excludes it.¹⁶ I argue that the emergence of Creative Industries is caught up in such a process.

Deleuze understands the operation of this condition in terms of a “fold”, which I discuss below. Adorno’s concept of “immanent criticism” provides a first point of connection between thinking difference within negativity, the logic of immanence as understood by Deleuze, and the constitutive outside. By my reading of Deleuze, the constitutive outside is the difference within negativity. In her recent book *Thinking Past Terror*, Susan Buck-Morss summarises the characteristics of negative dialectics and immanent criticism as follows:

Relying on the Hegelian dialectics of negativity, combined with a Kantian humility as to the limits of what can be known, immanent criticism as practiced by Theodor Adorno, Max Horkheimer, and others sought to transcend the untruth of the present society in a non-dogmatic, critical, hence negative mode, showing the gap between concept and reality – how, for example, so-called democracies were undemocratic; how mass culture was un-cultured; how Western civilization was barbaric; and, in a classic study, *Dialectic of Enlightenment*, written in the catastrophic context of World War II, how reason, the highest value of European modernity, had become unreason. (2003: 94)

¹⁴ Žižek reads the Hegelian “negation of negation” as ‘nothing but repetition at its purest: in the first move, a certain gesture is accomplished and fails; then, in the second move, this same gesture is simply repeated’ (1999: 74). Such a manoeuvre, I would argue, does not account for the indeterminacy of difference that attends the affirmative role of the constitutive outside.

¹⁵ Mouffe acknowledges that she is drawing on the work of Derrida for her understanding of a constitutive outside. I am taking quite a different route to an understanding of a constitutive outside by engaging the work of Deleuze, who defines the relationship between inside and outside in terms of the “fold” and a Foucauldian diagram of power.

¹⁶ In this respect, there seems to me to be a correlation between a Marxian-Lacanian (e.g. Žižek) understanding of “the Real” and a Derridean/Levinasian (Blanchot?) idea of the incommensurable.

Thus an "immanent critique" of the Creative Industries would set out to prove that the Creative Industries are neither "creative", nor an "industry". Such an undertaking is not my interest in this chapter. Rather, I am interested in unpacking the articulation between Adorno's negative immanent critique and Deleuze's affirmative logic of immanence. Adorno's technique of immanent criticism seeks to uncover the contradictions inherent within the work of Hegel, Kant and Heidegger, among others. Orthodox Marxist thinking is also given a serve of Adorno's wrath. In his magnum opus, *Negative Dialectics*, Adorno's procedure is not to critique various trajectories within Western philosophy and political theory from a position outside their terms of reference and principles of deduction. Adorno is not interested in judgement from above or the safety net of an external anti-bourgeois position. That would be too easy to feign, and even easier to dismiss. Instead, he seeks to undertake a critique from within, an "immanent critique", that ascertains the failure of philosophical disciplines to think through questions of metaphysics and problems of ontology. Opening his immanent critique of ontology, Adorno writes: 'We have no power over the philosophy of Being if we reject it generally, from outside, instead of taking it on in its own structure – turning its force against it ...' (1990: 97). Adorno extended this method beyond the realm of philosophy, and into a critique of "mass culture". Susan Buck-Morss explains the operation of immanent critique with reference to Adorno's essay 'On the Fetish Character of Music and the Regression of Hearing':

... Adorno made the characteristics of fetishism, reification, and exchange visible "inside" the phenomenon of listening to music.... Adorno claimed that "serious" and popular music converged not simply because of the revolutions of technological reproduction, but because of the transformations in the relationship between the audience as subject and the music as object, which determined the form of the new technologies as well as being determined by them.... Adorno claimed that the "positive", that is, technological progress in the mass production of music, was in fact "negative", the development of regression in listening: the mass audience, instead of experiencing music, consumed it as a fetishized object, the value of which was determined by exchange. (Buck-Morss, 1977: 154)

Interestingly, Adorno was not *ipso facto* against taking a position of critique from outside, but only if it served the purpose of immanent critique. In his rejection of the "identity principle" underpinning the Hegelian concept of history, which contrives a coincidence of subject and object, Adorno reserves a

space for the outside: 'Pure identity is that which the subject posits and thus brings up from the outside. Therefore, paradoxically enough, to criticize it immanently means to criticize it from outside as well' (Adorno, 1990: 145). Perhaps in response to the elevated status Benjamin grants to the modern experience of shock, Adorno retains the possibility of an outside, so long as it holds the potential for disruption and the attainment of truth: 'No immanent critique can serve its purpose wholly without outside knowledge, of course – without a moment of immediacy, if you will, a bonus from the subjective thought that looks beyond the dialectical structure. That moment is the moment of spontaneity...' (1990: 182).

It is this suggestion of an outside that functions as a constitutive force that I wish to retrieve from Adorno's method of immanent critique. Rather than a negativity comprised of contradictions or antinomies whose tensions structurally determine the discontinuity of history and disintegration in Western culture, how might negativity be thought in terms of a diagrammatics of tensions that traverse and constitute overlapping fields of networks – and clusters of Creative Industries – as an affirmative force? Walter Benjamin understood this process in his diagrammatic taxonomies of modern life. Benjamin's analytical method consisted of identifying tensions located at the intersection between the 'axis of transcendence' (theology) and the 'the axis of empirical history' (Marxism) (see Buck-Morss, 1977: 249; Osborne, 1995: 133–159). Thus while he also worked with a model of negative dialectics (a theological, historical materialism of the "dialectical image"¹⁷), Benjamin was more open than Adorno to the possibility of different arrangements of collision, of splintering, of resonance. His technics of "profane illumination" carried the possibility of mobile, though not arbitrary, combinations and ethico-aesthetic renewal or redemption (see Buck-Morss, 1989: 218, 246). In this respect, one can detect an affirmative, as distinct from wholly negative, reworking of historical materialism.

Post-negativity is a mode of critique that thinks beyond the dualisms of subject/object, culture/nature, friend/enemy, us/them, life/death: and so forth. Post-negativity defines not just a mode of thought, but thought that

¹⁷ Or what Adorno called Benjamin's radical "negative theology". See Buck-Morss (1989: 244).

emerges from and permeates socio-technical and historical conditions of the present. Post-negativity retains the concept of a constitutive outside. This is an outside that is configured not according to dualisms, but rather to patterns of distribution, series of encounters, rhythms of tension, spaces of dispute. Negativity persists within informational societies since the informational society is a continuum of the capitalist trajectory in which Negativity, in its modern incarnation, emerged as a concept to address problems as they were perceived (see Buck-Morss, 1977). The correspondence between negativity and emergent problems figures as an elective affinity within the work of Marx and Deleuze and Guattari. As Deleuze and Guattari write, 'All concepts are connected to problems without which they would have no meaning and which can themselves only be isolated or understood as their solution emerges' (1994: 16). In a similar vein, Marx writes:

... mankind always takes up only such problems as it can solve, since, looking at the matter more closely, we will always find that the problem itself arises only when the material conditions necessary for its solution already exist or are at least in the process of formation. (1959: 44)

Today, the technique of negativity as a mode of critique is articulated with, but not reducible to, emergent problematics such as access to ICTs, ecological transmutation, the uneven development of informational economies, and so on. To be sure, these are problems associated with the myriad ways in which new ICTs play an ever-increasing role in the mediation of socio-technical relations. To this end, negativity has not so much disappeared or been made redundant; rather, it operates within a different socio-technical historical constellation. The condition of post-negativity is one in which socio-technical and ethico-aesthetic tensions are no longer articulated through the logic or episteme of dialectical negation, but instead through a multiplicity of differences that are immanent to the scalar dimensions and temporal modalities of states, networks and socio-political formations.

The problem of conceiving informational technologies and network societies in terms of a supposed erasure of the outside can be usefully addressed through the logic of immanence. A notion of the outside plays an important role in

Deleuze's understanding of immanence. This is a point frequently overlooked in recent work by Hardt and Negri, Lash, Buck-Morss, and Wark, among others. Contrary to these thinkers, I would maintain that a notion of the outside plays a central role in any political theory of network societies and informationalism. Combining a notion of the outside with that of immanence introduces a basis upon which to begin understanding the complexity of politics within informationalism, network societies and the Internet. Such a theoretical correspondence invokes the uneven, differentiated and pluralistic nature of socio-technical systems. One is then able to combat the still very much pervasive sense of a "global village" that is so often attributed to the Net, most particularly within popular, business and scientific discourses.

Essentially, Lash deploys the concept of immanence as a metaphor to loosely reinforce his claim that informationalism has no outside. At a conceptual level, we will see that this is plainly wrong. This is also the case at a material level. The brutal phenomenon of "illegal immigrants" again is a good case in point: at a certain moment in time (the media-political event of an election and beyond¹⁸) "they" at once condition the possibility of what it means to be an Australian citizen, what it means to maintain national sovereignty and so forth, while at the very same time precarious refugees are excluded from the rights and ways of life that are associated with existing within the rule of the sovereign power as a citizen-subject, or, for the "legitimate" immigrant, as a global cosmopolitan subject. In this sense, "we" do not so much cling to the outside in order to reject it, but are intimately bound with the outside as it is constituted - for the most part - within the spectral dimensions (the media imaginary) of our everyday life.

The phenomenon of flexible production by transnational corporations and the exploitation of sweatshop labour in both developing and developed countries

¹⁸ Here, I am referring to the 2001 federal election in Australia, which was notable for the conspicuous and cynical campaign of fear run by the incumbent government, John Howard's conservative coalition party. Howard played a central role in exploiting a media generated fear that fed upon the events of September 11 and "illegal" refugees, many of whom were Afghani asylum seekers arriving in Australian territorial waters, fleeing the ravages of war and political persecution. Many have put Howard's success in gaining a third term in office down to his ability to construct a media-facilitated discourse in which the "security" of an Australian way of life depended on the capacity of a powerful state to determine which "outsiders" would be allowed to become "one of us". Articulating terrorists with asylum seekers worked as a key strategy in constructing this discourse of fear of the "outside".

are surely material and symbolic instances of an incommensurable, constitutive outside that conditions the possibility of high living standards, practices of consumption and material wealth within advanced economies that adopt a neo-liberal mode of governance. While labour within the "invisible" zones of production is not directly part of informational economies in terms of belonging to those sectors identified as part of the Creative Industries, it is nevertheless a condition of possibility for social relations, consumer dispositions and labour practices within advanced economies. Even those workers located within informationalism are positioned in relation to IPRs in such a manner as to be "outside" processes of power, authority and decision making, and hence occupy an illegitimate and structurally disabled position vis-à-vis a sovereignty of the self and social networks. Paradoxical as it may seem, outsides of this sort play a constitutive role in terms of what it means to be within the immanent relations of informationalism.

Drawing primarily on Nietzsche, Bergson, Hume and Spinoza, Deleuze maintains that life can be practiced as an experiment, experience and thought process in radical empiricism. In dialogue with Guattari, Parnet, Foucault and 'an image of thought' that subsists within the present as 'coordinates, dynamics, orientations' for philosophy (1995: 148-14; see also 1994: 37), Deleuze invents a 'prephilosophical' plan – a chaosmosis of virtuality, a plane of immanence, a force of potentiality – in which 'relations are external to their terms' and from which transcendent organisation is possible (1991; Deleuze and Parnet: 2002: 133).¹⁹ The 'instituted' plane of immanence constructs a network of relations of force that condition the possibility of concepts (1994: 40-41; 1995: 146). Yet concepts are not 'deduced from the plane' (1994: 40). Concepts subsist within or 'populate' the plane of immanence as 'virtualities, events, singularities' (2001: 31). As Deleuze and Guattari write, 'Concepts pave, occupy, or populate the plane bit by bit, whereas the plane itself is the indivisible milieu in which concepts are distributed without breaking up its continuity or integrity...' (1994: 36). Concepts are created in response to specific problems; the relationship between the two is one of immanence. The

¹⁹ A helpful elaboration of immanent and transcendent traditions in the history of philosophy – with a specific focus on contemporary French philosophy – can be found in Smith (2003).

force of a constitutive outside, a univocity, makes possible the singular relationship between problems and concepts.

Deleuze and Guattari provide two conceptions of the plan(e),²⁰ one in opposition to the other: a plan(e) of organisation and development as distinct from a plane of consistency or of composition or of immanence. The former comprises a structural and genetic order, the latter consists of rhythms and resonances in which 'there are only relations of movement and rest, speed and slowness between unformed elements.... There are only haecceities, affects, subjectless individuations that constitute collective assemblages' (1987: 266). The plane of organisation, on the other hand, is engaged in capturing and momentarily containing the pure potential of the plane of immanence. The plane of organisation consists of 'rigid segmentarity, all the lines of rigid segmentarity, [that] enclose a certain plane, which concerns both forms and their development, subjects and their formation. A plane of organization which always has at its disposal a supplementary dimension (overcoding)' (2002: 130). Moreover,

²⁰ It is ugly, for sure, to adopt parentheses within a word to signal the dual meaning of a term. Here I am following Massumi's technique of translation in *A Thousand Plateaus* for signalling the both words, 'plan' and 'plane'. In a translator's note to Deleuze's *Spinoza: Practical Philosophy*, Robert Hurley makes the following useful clarification: 'The French word *plan* ... covers virtually all the meanings of the English "plan" and "plane". To preserve the major contrast that Deleuze sets up here, between *plan d'immanence ou de consistance* and *plan de transcendance ou d'organisation*, I have used "plane" for the first term, where the meaning is, roughly, a conceptual-affective continuum, and "plan" for the second term. The reader should also keep in mind that "plan" has the meaning of "map" in English as well'. See Hurley, translator's note in Deleuze (1988b: 199).

In light of this distinction, it might seem more appropriate to adopt Hurley's strategy and use the word 'plane' where referring 'to the plane of immanence', and the word plan, where referring to 'the plan of organisation'. However, I will make occasional use of the combinatory form of the two words – plan(e) – rather than deploy them separately, since one does not necessarily preclude the operation of the other; rather, there are complex interleavings, overlaps, and foldings between the plane and the plan. And as Deleuze and Guattari note, there is a 'hidden principle' and 'hidden structure' within the plan(e) that 'exists only in a supplementary dimension to that to which it gives rise ($n + 1$).... It is a plan(e) of transcendence. It is a plan(e) of analogy.... It is always inferred. Even if it is said to be immanent, it is so only by the absence, analogically (metaphorically, metonymically, etc.)'. See Deleuze and Guattari (1987: 265-266). Emphasis in original.

It is in this sense in which the plane of immanence subsists, albeit as a supplementary dimension, within that which has emerged as the plan or grid of organisation that it remains useful to retain the double sense of the French word *plan*. I will detail this complex relation by way of example below, when I return to the operation of an outside within the discourse of creative industry, as espoused by the CITF and others that adopt their terms of reference.

Organization and development concern form and substance: at once the development of form and the formation of substance or a subject. But the plane of consistency knows nothing of substance and form: haecceities [singularities], which are inscribed on this plane, are precisely modes of individuation proceeding neither by form nor by the subject. (1987: 507)

As I discussed in chapter 1, the plane of immanence and the plane of transcendent organisation are coextensive with the relational force of movement between the conditions of possibility and the grid of meanings, codes, signs. A processual force subsists in the movement between these two planes. This model may seem to be nothing more than a crude attempt to cunningly reappropriate the classical Marxist notions of base and super-structure. The differences with that model, however, are considerable. First, the base/superstructure consists of a dialectical relationship in which the social relations that define the economic base and mode of production determine the super-structure. As Massumi writes, 'When everything is served up in founding terms of determination – "of" or "by" – by design or by default – change can only be understood as a negation of determination: as the simply indeterminate' (2002a: 69). The logic of immanence is not one of determination or the indeterminate: it is not One or the Other. Neither total order, nor absolute chaos. Immanence communicates the force of movement that subsists within relations between determination and indeterminacy. Second, the plane of immanence, unlike the Marxian notion of the base, does not privilege the category of "class" as the transcendent principle or motivation for political change; indeed, the category of class subsists in the plane of organisation – or that which has emerged from and is in a mobile relationship with the plane of immanence. Moreover, the relation between the two planes is a multiplicity of 'interleaved' planes. Think of a cross-section diagram of a geological formation – there is no single layer, but rather a complex distribution and interpenetration of layers that in themselves are composed of a complex interleaving of materials, properties, qualities. 'Every plane of immanence is a One-All', write Deleuze and Guattari, 'it is not partial like a scientific system, or fragmentary like concepts, but distributive – it is in "each"'. The plane of immanence is *interleaved*' (1994: 50). In other words, the plane of immanence does not function as a foundation or determining instance; it functions as a pure potential of virtuality. Agamben describes this process as one of 'virtual indetermination' (1993: 233). Massumi elaborates the operation of the virtuality

of the field of immanence in terms of super-empiricism: 'Although inseparable from the empirical elements of whose contingent mixing it is an effect, the field of inmanence is superempirical – in excess over the substantiality of already-constituted terms' (2002a: 76).

Deleuze most clearly establishes the operation of the outside within the plane of immanence in his book on Foucault. Due to constraints of space and in the interest of clarity, I wish to focus briefly on this work. Deleuze reads Foucault as a cartographer of relations comprised of forces, strategies, foldings, forms of expression and forms of content that constitute the social field. Deleuze's Foucault offers a diagram of sociality, an abstract machine, with which to think the act of mapping projects as a multiplicity of relations. Such an approach holds a radical difference to the numerous mapping projects undertaken within the Creative Industries that seek to delimit the field of creativity and at the same time ignore the policy, theoretical, political and practical implications of intellectual property regimes. This is paradoxical to say the least, since it is supposedly the generation and exploitation of IP that distinguishes the Creative Industries from others. Danny Butt elaborates on this problematic within Creative Industries' mapping projects as follows:

They basically work on aggregating output in unreconstructed industry sector definitions ("Publishing" + "TV" + "..." = "Creative Industries") that they acknowledge are inadequate in their own footnotes! My view is that most "mapping" is a political exercise to secure resources from governments, and impressive-sounding figures go down better than "We still don't know how IP generates macroeconomic wealth, but we know your existing classifications will need to be changed". There's a huge, relatively untheorised disjuncture between the attempt to theoretically delimit the "creative industries" through their special relationship to IP (which has merit), the practical problems of capitalist accumulation within these industries (which are characterised by IP struggles), and the regional mapping projects which basically ignore this process of IP-intensive accumulation. (Butt, 2004a)

Registering the complex of relations between different actants, forces, discourses and practices that constitute the transformative potential of creative labour is a process, I am suggesting, that can benefit from a Deleuzo-Foucauldian cartography of immanence. Deleuze distinguishes between a notion of "the exterior" and that of "the outside". The latter 'exists as an unformed element of forces' (1988a: 43). Force is a relation: 'it is never singular

but essentially exists with other forces' (1988a: 70). Force subsists, then, within the plane of immanence. Force is a potential; it is a multiplicity of relations that possess the power to affect, to shape, to create. Force thus functions as a constitutive outside. The exterior, by contrast, is 'the area of concrete assemblages, where relations between forces are realized' (1988a: 43). The actualisation of forces takes on what Deleuze terms 'forms of exteriority' – these may share the same concrete assemblage, but will differ from one another (1988a: 43).²¹

Drawing on Foucault's *Archaeology of Knowledge* (1972), Deleuze gives the example of the keyboard and its letters and their relationship to a statement. The keyboard and the letters are a 'visibility', yet they are not a statement: 'they are external to the statement but do not constitute its outside' (1988a: 79). The keyboard is a 'concrete assemblage' which realises 'relations between forces'. The keyboard, in a sense, awaits the force of the outside. The keyboard, as we know, is a component within various communications media – typically the typewriter or computer. Statements that may emerge from the typewriter are conditioned by an articulation with other forms of exteriority, both human and

²¹ Within systems theory and cybernetics, "noise" functions as a constitutive outside of the system. However, there is a significant difference in the terms of reference between systems theory and a Deleuzian logic of immanence that are worth briefly noting. Luhmann does not speak exactly of the outside, of the external, whereas Deleuze distinguishes between externality and the outside, as discussed above. For Luhmann, if something that is external to the system can be described and thus observed, then it is part of the system. Luhmann calls this kind of process 'paradoxical circularity', as William Rasch explains:

... paradoxical circularity cannot be avoided by appeals to the outside; what escapes the system can be observed, and therefore communicated, only from within the system, and what can be communicated is, by definition, part of the system. (2000: 106)

Well, politics isn't that straightforward. One can describe the condition of exploitation for creative workers. In so doing, a description is being made of activities that are located "outside" the discourse of Creative Industries. But such an observation in itself doesn't change the system, at least not in terribly meaningful ways. In the case of the Creative Industries, the outside understood in terms of a logic of immanence functions in different ways than if it were understood in terms of systems theory. On the one hand, this chapter is attempting to do exactly what systems theory does: map the network of relations that constitute the system of "creative labour" within the Creative Industries. But in thinking of the outside as a force that is 'a difference that can make a difference' (Bateson), the composition of the Creative Industries is opened to the potential of what Deleuze and Guattari term "deterritorialisation", "reterritorialising" or recomposing as differently situated arrangement of forces, interests, possibilities. The process of immanent critique probably doesn't mean changing the way Creative Industries goes about its empire building; it may slightly change the terms of reference within the Creative Industries, but probably not. In my view the best thing such a difference (of critical creative labour) could do is make new institutions. The fibreculture network of critical Internet research and culture is an emergent institution. The Delhi-based new media lab, Sarai (www.sarai.net), is an example of the kind of organised network that I'm imagining. I discuss both of these networks in more detail in chapter 6.

non-human: a desk, a chair, a human, a burning cigarette, an empty cup of coffee, etc. The articulation between these singular entities holds no essential relationship. Rather, the concrete assemblage – the articulation of parts – is an actualisation of ‘relations that are external to their terms’.

The articulation between the human and the machine – what Jünger termed an ‘organic construction’, Benjamin a ‘mimetic correspondence’, and McLuhan ‘the extensions of man’ – also holds the potential to create, to compose. The force of the outside creates what Deleuze calls a ‘diagram’ of ‘topological’ relations in which ‘the inside is constituted by the folding of the outside’ (1988a: 119). The fold consists of a ‘doubling’ of relations of force between inside and outside (1995: 98; 1988: 119). The fold constitutes a zone of life (‘subjectivation’), ‘inventing new “possibilities of life”’ and new capacities of expression (1995: 98; see also Angus, 1998: 26-27). Media and cultural theorists who speak of ‘global capital, global production, global labor migrations, and global penetration by technologies of communications’ in terms of a ‘global immanence’ that has ‘no outside’ (Buck-Morss, 2003: 93) are taking, at best, a lazy shortcut to a mode of critique that dispenses of the ethico-political diagram of power and reflexivity that makes possible the very objects of study they wish to critique.

Comparative Media Theory and the Constitutive Outside

Just as language has an outside – the limit of language, as noted in the epigraph by Deleuze – so too does the Creative Industries have an outside. To paraphrase Deleuze: Creative Industries’ outside is not *outside* the Creative Industries, it is the *outside of* Creative Industries. The outside of the Creative Industries is the limit of critique from within. The limit of Creative Industries is defined by critique of the outside, which is at once a part of the constitutive dimension of the Creative Industries. The kind of critique I am proposing is one that addresses the multiplicity of outsides of the Creative Industries: these include the situation of creative labour in new media industries. This is living labour whose function, at least within the discourse of the Creative Industries, is to generate IP in order that it can be exploited. It is labour’s internal outsides that operate on lines of class, ethnicity, age and gender (see Gill, 2002). Each of

the components that constitute the plane of Creative Industries – academics, students, government, local business, service staff, new media workers, along with various media of communication and techniques of expression – has its own plane or logic of operation. Each of these components populates the plane of Creative Industries, and the relations between them are external to their terms. That is, each component or element functions within its own universe of sensibility, its own horizon of reference, its own system of communication.

It is useful to think of the operation of these components in terms of paradigms that are located on a larger plane of organisation. While each paradigm has its own distinctive features, they hold the potential to interleave with each other. Within Marxian negativity, the potential for correspondence is predicated on an underlying socio-aesthetic antagonism. Within the Deleuzian logic of immanence, the inter-relationship between component parts can be understood as the affirmation of difference. And within comparative media theory, the communication or articulation between different actors is constituted through an 'internally generative' process that is situated within an external context (Angus, 1992: 536). In each case, the point of intersection is a combination of antagonism, affirmation and constitution. What brings these three processes together is a notion of the outside. Such an assemblage signals the limits of critique from within.

In order to illustrate these points, I detour through the work of Canadian political economist and communications theorist, Harold A. Innis.²² In his essay 'Orality in the Twilight of Humanism', Ian Angus describes Innis' method as one of "micrology": 'He focuses on characteristic events within a society. He doesn't begin by characterising the whole but from specific events, giving us a plurality of glimpses of these specific events, creating a montage effect that implies the nature of the whole' (1993: 31). Explaining the relation between institutions, knowledge monopolies and communications media in Innis'

²² The Innis centenary in 1994 was cause for a revival of interest in the wide-ranging work of Innis, although this was largely a Canadian phenomenon as far as the field of media and communications goes. A special issue of *Continuum* on Innis and dependency theory edited by Angus and Shoemith (1993b) is one of the few attempts, to my knowledge, to situate the relevance of Innis' work beyond an exclusively Canadian focus. Other notable works include Stamps (1995), Acland and Buxton (1999), Drache (1995), Carey (1989) and Berland (1997b). For an interesting example of the migration of Innis into the field of international relations, see Deibert (1999).

interpretation of society, Angus writes: 'Institutions are based on a medium of communication that is the most significant within that institution, which "monopolises" knowledge through monopolising access to, and use of, that medium of communication' (1993: 28-29). Clearly, the Creative Industries are not a communications medium *per se*; they are, nevertheless, a cluster of institutional forms and discursive practices articulated with various media of communication (film and TV, digital technologies, architecture, photography, the arts and crafts, etc.). Thus the Creative Industries do not utilise any single medium, but a combination of media forms, each with its own rules and capacities of expression. What bridges these communications media and their attendant practices is a combination of the juridical and economic architecture of intellectual property (primarily copyright) and labour-power, which it subsumes. As long as media corporations, government departments and university programs see the exploitation of intellectual property as the means of wealth creation, the institutional effect is a monopoly of knowledge and a disregard of the desires of creative labour for self-sustaining work practices – technics of labour that are not subject to the vagaries of the politically motivated inequality of free trade agreements or fluctuating currency rates that determine the transnational movement of film and TV drama production, for example.

What Innis calls the "bias" of communication can be understood in terms of a constitutive outside. Innis' central thesis is encapsulated in his book, *The Bias of Communication* (1951): the duration and expansion of empires can be understood in terms of communications media and transport technologies peculiar to any culture, location, and epoch, and the attendant "bias" towards either time or space that such media and technologies invariably have. In his survey of the rise and fall of the city-states of ancient civilisations and the economies of modern nation-states, Innis considers a bias toward space or time as a defining feature of 'the monopoly of knowledge', and hence control, by the hegemon. At the end of his book *Empire and Communications*, Innis summarises the operation and characteristics of communications media in terms of the monopoly of knowledge, or bias, they enable:

Monopolies of knowledge had developed and declined partly in relation to the medium of communication on which they were built, and tended to

alternate as they emphasized religion, decentralization, and time; or force, centralization, and space. (1986: 166)

Innis also charts the ways in which colonial empires and nation-states in the industrial era were defined by the dependency of the metropole on the capacity of the colonies to supply staple products that can then be processed into commodity objects and energy resources in the metropole, distributed back out to the colonies, and traded across empires. This relationship created its own peculiar structural dynamic of power. As Ian Angus and Brian Shoesmith put it, 'These conditions of production meant, in fact, that the margins continually subsidised the centre' (1993a: 7). Dependency theory is based on the logic, then, of a core/periphery model of geopolitics and political economy.

Despite the extensive critique dependency theory has attracted, particularly by postcolonial theorists preoccupied with identifying instances of liminality, hybridity and ambivalence, and hence resistance within colonial discourse, Innisian dependency theory continues to hold importance with regard to issues of power and politics as they relate to communications media and the organisation of social relations. Unlike dependency models developed in world-systems theory and area studies, within Innis' framework a dependency relationship is not automatically a unilinear one where the ruling colonial power exerts unmitigated control over its colonial territories. Such a relationship assumes that the margins of empire are always subject to the economic, political and cultural influences, authority and support of the centre. Moreover, it overlooks the ways in which 'centres are as much dependent on their margins as margins are on the centres' (Angus and Shoesmith, 1993a: 13). Innis paid attention to the multi-layered dynamic and the inter-relationships between centres and margins, and his concepts of space, time and technological bias provided the basis upon which to locate the pivotal role played by communications media in the constitution of social relations. As Angus has noted, it is a mistake to see such a 'method of investigation' as one of technological determination:

It is not the claim that the media of communication determine the form of the society, but rather the suggestion that investigation of the constitutive elements of a society as media of communication, shows that the

micrological organisation prefigures and articulates the macrological structure. (1993: 31)

At first glance, the spatial or temporal 'bias' of different media, the relationship between 'centres' and 'margins', and the 'efficiency' or 'inefficiency' of communication in conditioning the success of empires are characteristics that can be explicated through the logic of negative dialectics. As Judith Stamps has argued, Innis' method of analysis proceeds by a series of juxtapositions 'in a manner comparable to the constellations created by Adorno, Benjamin, and McLuhan' (1995: 85). Innis' approach departed, however, from his Frankfurt School counterparts in ways that signalled his attention to the problems of his own geopolitical and cultural situation. 'Unlike them', writes Jody Berland, 'Innis found himself poised between two conflicting dispositions: the bleak, post-totalitarian, anti-scientistic and post-enlightenment vision exemplified by Adorno's "negative dialectics" versus the more pragmatic nation-building culturalist modernity of his own milieu' (1997a: 31).

In foregrounding the "positive" and "negative" attributes of different communications media and their capacity to engender time or space-binding societies, Innis read the sensory imbalance of Western civilisation against those premodern civilisations that had flourished due to a 'balance' between oral and aural media and visual media of print and the written word. A balance or 'efficiency' in communication determined the efficacy and longevity of an empire. Innis was especially attentive to the spatial bias of Western modernity, which, since the invention of the printing press, had consolidated a monopoly of 'sensory life', resulting in a visual bias that corresponded 'with the hegemony of modern science' (Stamps, 1995: 80). In the event of one medium of communication dominating over others, a stasis will prevail that prevents an 'openness' to creativity and thought. Print media, for example, have a spatial bias that emphasises a preoccupation with administration, law and immediacy, neglecting aspects of continuity, tradition and systems of belief – features of media that are durable over time (Innis, 1951: 33-34). Innis' interest, then, was to study the material characteristics of different media of communication in order to 'appraise its influence in its cultural setting' (1951: 33). His concern was for a 'co-existence of different media of communication', so that the bias of

one may be 'checked' against the bias of another, creating 'conditions favourable to an interest in cultural activity' (1951: 90).

Innis' insight was to point to the ways in which a technological bias towards time, for instance, results in a weakness or vulnerability with respect to the capacity to effectively control space. In one example, Innis describes how the art of horsemanship, the cross-breeding of horses, and the technology of the stirrup and chariot made successful invasion possible by the Hittites, and later the Assyrians, of ancient Babylonia, whose primary technology was the clay tablet: a medium of writing made possible by the discovery of rich deposits of alluvial clay (Innis, 1986: 27-31, 36-39; 1951: 38, 98). The stirrup and chariot are technologies of space and speed, since they enable the rapid transport of cavalry and fighting units across territories. The clay tablet, on the other hand, is a technology of time, and played a key role in establishing the durability of the city-state of Babylon as one characterised by a centralised system of religious governance whose monopoly of knowledge extended over time (1986: 34-5, 41). Irrespective of whether the resulting bias of a medium of communication is a temporal or spatial one, certain monopolies of knowledge constituted in institutional form will follow in its wake. This is precisely what happened in the case of the Hittite and Assyrian invaders, whose initial successes were conditioned by the weakness in the Babylonian's attention to space and its attendant military problems as a result of their monopoly of knowledge over time. Interestingly, the Hittite and Assyrian empires were to prove relatively short lived due to their inefficient means of communication: 'Their attempts to build up new organizations of space in relation to an organization of time were defeated by the entrenched organizations of time in Babylon and Thebes' (1951: 104). That is, the Hittite and Assyrian periods of rule were ultimately unstable since they were unable to achieve an effective balance in communication. This was matched by insufficient institutional infrastructures that facilitate the organisation and control of social relations. In this sense, the Hittites and Assyrians do not qualify as proper empires in Innis' terms.

Within Innis' notions of "bias" and "dependency", one can detect the operation of a constitutive outside. To go back to the example of the Hittites with their

innovations in iron and use of horsedrawn chariots, and the Babylonians and their clay tablets: the bias toward time of the Babylonian city-state is only made apparent when it is 'checked' against the bias toward space of the Hittites. The communicative bias articulated by each of these cultures is a virtual one of pure potential, subsisting within a plane of immanence until it is actualised through a plane of organisation. 'The plane is not a principle of organization', write Deleuze and Guattari, 'but a means of transportation' (1987: 268). The relations between these two planes are variously antagonistic, affirmative and constitutive. The 'external form' of one communicative arrangement 'interleaves' with another, and in so doing their respective bias toward time or space is expressed in material ways via the constitutive force of the outside. As Innis writes: 'Without a consistently efficient system of writing and the stabilizing conservative influence of religion, the Hittite Empire was exposed to difficulties from within and without' (1986: 36). Angus explains how a comparative media theory is derived from the inter-relationships between immanence, outside, inside and the expressive capacities of communications media as follows:

... while there is an immanent history of media forms, there is also a transcendental history of the constitution of media forms themselves.... Through this doubling, immanent history is turned "outside" toward a wonder at the phenomenon of expression itself. (1988: 26)

Through the force of the outside, we can see how the transformation of the city-state of Babylon is conditioned by a plurality of 'relations [that] are external and irreducible to their terms', as Deleuze deduces in his study of Hume's empiricism. Radical empiricism, as a diagrammatic philosophy of relations, tells us something about the potential habitus of a communications medium: it too 'defines itself through the position of a precise problem, and through the presentation of the conditions of this problem' (Deleuze, 1991: 107). There is nothing intrinsic about the medium of the clay tablet that predisposes it toward a temporal bias. Certainly, as far as its material properties go, clay was heavier and less transportable than the substance of papyrus, as used by the ancient Egyptians. The reproduction of clay tablets is also less efficient than a substance like paper, especially once paper became articulated with the printing press and the political-economic need to administer mobile populations within the external form of the nation-state at the onset of

modernity in the West. But there is nothing inherent about the material properties and expressive capacities of alluvial clay deposits that determines its transformation into the communications medium of the clay writing tablet. Such a development is contingent upon the alignment of political, economic and cultural forces that coalesce to address the problem at hand.

Conclusion

In this chapter I have sought to derive an understanding of the constitutive force of the outside as it figures in relation to the Creative Industries, cultural criticism and comparative media theory. I have argued that the force of the constitutive outside is what links these three approaches as socio-technical idioms. Moreover, the constitutive outside manifests in material ways and holds expressive capacities. In this sense, the outside is not an impossibility, but a condition of possibility. Furthermore, the outside is not a position, but rather a force of distributed power within social relations. This chapter has not been so interested in the ontological question of the outside (how can one be outside?), but rather the political question (how can change be made within the dominant order?). In the case of the Creative Industries, the constitutive outside is a force of relations characterised by two key features: antagonism in the form of the exploitation of creative labour as it is subsists within a juridico-political architecture of intellectual property regimes; and the affirmation of creative labour that holds the potential for self-organisation in the form of networks.

As far as negative critique goes, the lineage between Adorno and Deleuze stems from the notion of 'immanent critique'. In a moment of seeming optimism, Adorno considers the limit of immanent critique as that which is embodied in the instant of the Kierkegaardian "leap", though according to Adorno, this is only made possible by the undertaking of negative dialectics (1990: 182). Following Deleuze, my interest has been in how immanent critique can be read as an affirmative force that retains the act of critique. The limit of critique from within is not a closure or negation, but rather an opening of possibilities. As Deleuze writes, 'the outside is always an opening on to a future...' (1988a: 89).

It is in this sense that the affirmation of living labour, for instance, conditions the possibility of Creative Industries. But this transformative force of the outside is one that institutes a substantially different form of Creative Industries to the kind that passes as dominant culture today.

Communications media play a vital role in securing the creative potential of labour-power as a transformative force. As Angus reminds us: 'Communication media thus constitute, through human labour, the limits of what is experienceable and the *manner* in which it is experienced in a social formation' (1998: 19). The spatial bias of the Creative Industries as they currently stand is clearly apparent in their cartography of power that seeks to exploit the IP generated by creative labour. Such empire building is done at the expense of nurturing creative development over time.

Creative Labour and the Role of Intellectual Property

This chapter reports on the survey I conducted for the fibrepower panel initiated by Kate Crawford and Esther Milne – ‘Intellectual Property-Intellectual Possibilities’ (Brisbane, July 2003).¹ I wanted to explore in some empirical fashion the relationship between intellectual property and creative labour. Such a relationship is the basis for defining what is meant by creative industries, according to the seminal and much cited mapping document produced by Blair’s Creative Industries Task Force (CITF). Despite the role IP plays in defining and providing a financial and regulatory architecture for the creative and other informational or knowledge industries, there is remarkably little attention given by researchers and commentators to the implications of IP in further elaborating conceptual, political and economic models for the Creative Industries. There is even greater indifference towards addressing the impact of exploiting the IP of those whose labour power has been captured: young people, for the most part, working in the creative and culture industries. Angela McRobbie’s work is one of the few exceptions (see also Gill, 2002).

At a different level, I was curious to see how a mailing list might contribute in a collaborative fashion to the formation of a research inquiry in which the object of study – creative labour and IP – is partially determined by the list itself. Finally, after levelling critiques at various times and occasions against what Terry Flew (2001) identifies as the “new media empirics”, I thought it necessary to engage in a more direct way with this nemesis-object: what, after all, can a new media empirics do and become when it is driven through a processual model of media and communications? I will address this question in the concluding section of this chapter.

As I noted in the previous chapter: The list of sectors identified as holding creative capacities in the CITF Mapping Document include: film, music,

television and radio, publishing, software, interactive leisure software, design, designer fashion, architecture, performing arts, crafts, arts and antique markets, architecture and advertising. The Mapping Document seeks to demonstrate how these sectors consist of '... activities which have their origin in individual creativity, skill and talent and which have the potential for wealth and job creation through generation and exploitation of intellectual property' (CITF: 1998/2001). The CITF's identification of intellectual property as central to the creation of jobs and wealth firmly places the Creative Industries within informational and knowledge economies.

In posting the survey questionnaire to the list, I was interested in ascertaining the following:

1. The extent to which respondents perceived their primary activities (i.e. activities other than eating, sleeping, watching TV, having sex, substance abuse, etc. – though I guess many would argue that they are indeed primary activities, and perhaps also creative ones!) to correspond with "creativity", however that term might be understood (n.b. the survey synopsis clearly framed creativity in relation to the Creative Industries discourse, so the latitude for interpreting the term creativity was relatively circumscribed).
2. Whether a very partial mapping of the fibre culture network produced results similar to the sectors identified in the CITF Mapping Document. Whatever the results, I was interested in what they might then say about national, regional or State manifestations of the Creative Industries: are Australia's Creative Industries the same as the UK? Is there a temporal factor at work? That is, given the time of development, incubation, etc., would a mapping exercise produce different results depending of when and how it was conducted? In other words, how does the stability of the empirical object – creative labour – relate to the contingencies of time? This is as much a methodological question as it is a question of politics and ethics.
3. To establish whether respondents perceived or understood an extant relationship between their labour and intellectual property.

¹ See the appendix to this thesis for a copy of the questionnaire.

4. To find out whether IP in the workplace makes work a political issue.

At the time of the survey, the fibreculture mailing list had just over 700 subscribers (June, 2003). All responses came on the same day I posted the survey, most within a few hours of it appearing on list. This in itself perhaps says something interesting about the "attention economy" of email lists and the time in which any posting may receive a response – while the Stones could sing about the redundancy of newspapers after a day, do list postings have a life of three or so hours? Not so bad actually, though it's probably much less – more like seconds, depending on whether a post is read or not.

Of the 700 or so subscribers then, I received seven responses. That's 1 per cent of all list subscribers, a lovely sample to be sure. One of the respondents provided a follow-up response as well. There was one other query from someone asking whether they could do the survey even though they thought they weren't a creative worker; they were a copyright lawyer – a category Richard Florida assigns to "creative professionals" – 'business and finance, law, health care and related fields', as distinct from the core Creative Class: 'people in science and engineering, architecture and design, education, art, music and entertainment, whose economic function is to create new ideas, new technology and/or new creative content' (2002: 8). Curiously, there is no mention – at least in this initial definition – of the role intellectual property plays in constituting a "creative class".² No doubt there are national-cultural and socio-political explanations for the differences between how creative workers are perceived and constituted in the UK and North America. To my knowledge, there is yet to be a study that inquires into the different national and regional formations of creative industries, classes, economies and cultures. One could argue that OECD research papers and reports along with those by neo-conservative, libertarian think-tanks such as Demos and the Cato Institute do such work; however, while they certainly compile statistics and bring a dual mode of commentary and hyperbole to such figures, they do very little by way of historical, political, economic and cultural analysis of the variable conditions

² Florida does go on to discuss IP, but not in terms of how its exploitation defines creative industries, as the CITF Mapping Documents of 1998/2001 have it.

that have led to the emergence of creative labour and its attendant industries across these geopolitical regions.

Reflexivity and Empirical Research

While the sample I am drawing on is most certainly small, it is not insignificant. Indeed, I think its minutiae corresponds to larger patterns of creative labour in Australia, and most probably elsewhere, as I extrapolate below. Much of the current, more reflexive literature on quantitative, empirical research argues that the fuss over sample sizes (e.g. the need to have a large sample if the claims and results are to have any scholastic purchase on the phantasm of veridicality) is problematic in all sorts of ways (see Edwards, 1997; Silverman, 2001). For instance, at what point can one say a sample is representative of the community, user-consumers, demographic, socio-technical network, etc. under analysis? As Pierre Bourdieu (1979) argued so acutely and with such verve, public opinion does not exist. What exists, for Bourdieu, is the discursive form of the survey or opinion poll, the interests that drive it, and the ends to which it is put. Of course my own survey is not immune from the sort of critical, theoretical and political interests I bring to the analysis of responses.

Then there is the whole pseudo-scientific language of "observation", as though there might have ever been some sort of impartiality underpinning the process of enacting the survey. Scott Lash associates such a paradigm with "reflective modernisation" and the work of Giddens, Habermas and Parsonian structural functionalism and linear systems theory: "The idea of reflective belongs to the philosophy of consciousness of the first modernity.... To reflect is to somehow subsume the object under the subject of knowledge. Reflection presumes apodictic knowledge and certainty. It presumes a dualism, a scientific attitude in which the subject is in one realm, the object of knowledge in another" (2003: 51). In contrast to a reflective first modernity, Lash posits a reflexive second modernity and non-linear systems of communication and risk comprising of quasi-objects and quasi-subjects and their theorisation by the likes of Luhmann, Beck and Latour, along with Castells' network logic of flows:

Second modernity reflexivity is about the emergent demise of the distinction between structure and agency altogether.... Second-modernity reflexivity presumes a move towards immanence that breaks with the [ontological] dualisms of structure and agency.... The reflexivity of the second modernity presumes the existence of non-linear systems. Here system dis-equilibrium and change are produced internally to the system through feedback loops. These are open systems. Reflexivity now is at the same time system *de*-stabilization. (2003: 49-50)

The extent to which reflexive non-linear systems wholly dispense with or depart from a constitutive outside in favour of a logic of immanence is a problematic I have begun to question with other fibre/culture members in a posting to the list of an early version of this chapter.³ Like the question of and tension between new media empirics and processual media theory, it is a problematic I will return to in my concluding remarks.

I think one reason I received even seven responses had much to do with prior knowledge and trust established between myself as "observer" and the "participants" in this survey: that is, I had either met or knew very well six of the seven respondents. Here, it is worth turning again to Bourdieu, who frames the concept of reflexivity in particularly succinct terms: 'What distresses me when I read some works by sociologists is that people whose profession is to objectivize the social world prove so rarely able to objectivize themselves, and fail so often to realize that what their apparently scientific discourse talks about is not the object but their relation to the object' (1992: 68-69). Put in terms of non-linear systems theory, the on- and off-line relationships, trust and symbolic economy I had established largely through an online network operated as a feedback loop into the call for interest in and responses to this current survey. Obvious as it may sound, this very historical and social dimension to a communicative present actively destabilises any rhetorical claims that I might attempt in the name of conducting a survey that follows the scientific principles of objectivity and impartiality and methodologies befitting quantitative research. The only thing that is remotely impartial about this survey is the anonymity of the respondents as I present them here.

³ My quarrel here is not with Deleuze's concept of a logic of immanence but rather with Lash's (2002) shorthand version of it, which conveniently elides the conceptual - and ultimately political and ethical - nuisance of thinking through the operation of the constitutive outside *within* a logic of immanence.

Feedback loops further destabilise the very object-ness of this report as a discrete posting to a mailing list in so far as anyone who responded to this report breaks up components of the report by way of selective quoting or paraphrasing and interjecting their own critiques or comments.⁴ Many of us do this when we reply to an email, separating the sender's text from our own; in so doing, we are translating or mimicking the effect of dialogue. Such a process is also registered in a material, symbolic form in the partially dissipative, non-linear structure of discussion threads as the user recombines and shifts between postings, disrupting what otherwise appears as a condition of equilibrium within the linear organisation of the archive. Further registration of feedback loops are made in the "googlisation" of this combinatory knowledge and information formation, where any particular posting has the potential to move up the vertical scale of "hits" depending on the key words used in the user's search, the online links made to the posting, and the popularity of the posting; in short, the coding of the google software program plays a determining role in the hierarchisation of information that is then further shaped by the interests and habits of users. The economy and architecture of the google search engine has been subject to considerable debate and discussion in lists such as fibreculture and nettime, along with many other online fora, print and electronic media. If the posting of this report, for example, were made on any number of web conferencing systems, collaborative text filtering sites or blogs, such as slashdot.org, indymedia.org, makeworld.org or discordia.us, then a very different information architecture of feedback loops would prevail. I will now engage the findings of the survey.

Creativity – What's in a Name?

When I asked respondents what creative activities they engaged in, a list of 4-6 fields, practices or sectors of creativity by any one person was compiled. These included writing, performing and producing music; writing academic and policy papers (considered by one respondent and assumed by others as 'creative endeavours'); photography; design (interactive, information,

⁴ Of course other media do this as well – books, films, tv ads, oral histories, radio interviews – though in ways specific to their material forms, technical features, socio-cultural situations, etc.

education); publishing and editing; new media arts (dv, net.art, print, electronic music); painting; and creative writing. Three things stand out for me here:

1. Irrespective of whether or not respondents went on to identify themselves as part of the Creative Industries project, however that might be understood, the range of creative activities any single person might undertake suggests that diversity rather than specialisation is a defining feature of creative workers. This isn't to say that specialisation doesn't occur in any particular idiom of creativity – I think it's safe to assume that it would, but rather that respondents were not limited to one particular set of creative skills, trainings, or passions. Thus these respondents are clear exemplars of the so-called fragmented postmodern subject, traversing a range of institutional locations and socio-cultural dispositions.

2. Many of the respondents are engaged in academic work either on a full-time, continuing basis or as sessional, casual teachers. In both cases, university related activities and non-university related activities were understood as holding creative dimensions. If nothing else, the diversity of creative activities identified by respondents indicates the complexity of labour in the contemporary university, further suggesting that: (a) the university cannot accommodate the diverse interests and economic necessities of its constituent labour power, and/or (b) that individuals wish to distinguish between the kind of work they do at university and its concomitant values and the kind of work they do outside the university, or (c) that there is zone of indistinction, if you will, between the university and its so-called outside, given that all sectors of cultural production and intellectual labour are today subject to market economies. The extent to which tensions exist between these realms, or whether they are better characterised as a sort of zone of indistinction that cannot be reduced in such a manner, varies, I suspect, according to the contingencies of time, interests, values, labour conditions, age, class, gender, etc. of individuals as they are located in different institutional settings. Each of the above possibilities corresponds with the economic and labour conditions peculiar to the Creative Industries operating in the UK, as McRobbie explains:

Those working in the creative sector cannot simply rely on old working patterns associated with art worlds, they have to find new ways of

"working" the new cultural economy, which increasingly means holding down three or even four "projects" at once. In addition, since these projects are usually short term, there have to be other jobs to cover the short-fall when the project ends. The individual becomes his or her own enterprise, sometimes presiding over two separate companies at the same time. (2002: 519; see also Beck, 1992: 127-150; Bauman, 2001: 17-30)

3. There is much overlap between this list of creative activities and the CITF's list of creative sectors, with the exception that traditional arts and crafts and antiques do not figure in the former; this comes as no surprise, given that the survey was conducted on a listserve for critical Internet research and culture. As for how this list relates to Richard Florida's composition of the Creative Class in the US, there is an obvious absence in my survey of engineers and scientists. Again, you might say this should come as no surprise; one could, however, describe software programmers, "codeworkers" and game designers as computer scientists or information engineers – though no doubt there would be some disciplinary and perhaps ontological dispute over this.

Having established that they all are engaged in creative activities of one kind or another, there were then considerable differences amongst respondents as to whether they perceived themselves as engaged in the Creative Industries. Two respondents said they didn't – one being a bit hesitant as to whether they did or not, the other indifferent, implying the term was no more than a 'tag' associated with 'official places' and 'certain faculties'. Four respondents stated that they did associate their activities with the Creative Industries, some more emphatically so than others. One of those responded by writing that 'Yeah, but I'm a special case :)', indicating that creativity, at least for this person, comes with a sense of individuality, difference and exception. Yet such subjectivities carry more baggage than this. As Angela McRobbie notes, 'Individualization is not about individuals *per se*, as about new, more fluid, less permanent social relations seemingly marked by choice or options. However, this convergence has to be understood as one of contestation and antagonism' (2002: 518). Much of this chapter seeks to unravel various tensions that underpin labour practices within the Creative Industries.

A seventh respondent took a more reflexive, Marxian and historically informed position, choosing to problematise and open up the question in the following

way: 'All industry is creative; all human activity creates something; and nearly all human activity is subsumed under industrial imperatives (including the consumption of media and other products). Therefore I think this is probably a question whose answer is presupposed in the historical facts of its own terms'. On these grounds, then, irrespective of whether respondents did or didn't identify their creative activities with the Creative Industries, there is a sense amongst these respondents – perhaps unconscious – that there is an "idea" of what constitutes the Creative Industries, and any particular respondent's identification with those industries is based, perhaps, on whether one meets the criteria or fits into the discursive boundaries, categories, or ethos of the Creative Industries, as established in part in the survey's preamble.⁵

Intellectual Property and Creativity

The importance of intellectual property (copyrights, patents, trademarks) as a source of income was met with a mixed response. For one person it was important, for the rest it wasn't, at least in an exclusive sense: labour was paid for on an hourly basis or IP was assigned to the company or publisher commissioning the work; in other instances remuneration from IP contributed to a respondent's income, but wasn't relied upon as a primary source of income. Creative workers were thus primarily alienated from their intellectual property in one form or another. Such responses clearly signal a tension and power relationship between creative workers and their employers with regard to the CITF definition of Creative Industries as those activities that have 'the potential for wealth and job creation through generation and exploitation of intellectual property'. Thus despite all the rhetoric around informational and creative labour consisting of "horizontal" and "fluid" modes of production, distribution and exchange, clearly there remains vertical, hierarchical dimensions within the "New Economy". If IP is to function as the mainstay of capital accumulation within informational economies, it doesn't take much imagination to foresee industrial, legal and political dispute focussing on the juridico-political architecture of IP. The extent to which workers are able to mobilise their potential power in an effective manner (i.e. in a way that protects

⁵ See the appendix to this thesis.

and secures their interests whilst inventing new political information architectures) depends, I would suggest, on their capacity to organise themselves as a socio-political force. I will address this issue in relation to the problem of immaterial labour in more detail below.

Respondents found IP a source of tension not only at the level of financial remuneration; a tension prevailed around the concept of IP as well. In response to the question of whether intellectual property is important as a principle – that is, as a system or framework consisting of rules and beliefs that enables the transformation of labour into legal, moral and potentially economic values – one person stated that they found it of no importance at all. All others found it was, though the response, as expected, was mixed: ‘Yes, but in a negative sense. The whole structure of IP has turned into a perversion of its intended principles: namely, that alienation rather than one’s inalienable rights in one’s own work is the guiding principle of IP law. Put differently, rights are seen to exist only so that they can be sold. That is a function of capital, long since dead. I would prefer a rights structure that existed to ensure the free flow of ideas’. In a similar vein, though without the libertarian overtone, another respondent writes: ‘It is important to me as a principle to be critiqued, developed and (in some cases) rejected. The arm of IP is extending in several directions and in many industries – and it’s that reach that needs to be reviewed with some urgency’.

A third respondent strongly rejected the idea that IP might be understood in terms of principles: ‘No’, they write, ‘It’s important to me as a discursive field!’ By my reading, such a statement suggests that the respondent understands principles as holding some kind of unchanging, transcendental and universal status, while a discursive field is historically and culturally mutable and holds the potential for local intervention by actors endowed with such capacities. (A similar distinction is often made in philosophy between the universality of morals and the contingencies of ethics.) The idea of IP as a discursive field rather than a principle is also interesting in relation to the second response tabled above, which implies that limits need to be established with regard to IP and the extent to which it governs areas of life previously outside a market economy. Current debates around patenting the human genome, database

access to DNA information on sperm and embryo composition and their relationship to insurance premiums and future employment possibilities (see *Gattica* for the filmic version of this scenario), and the pressure on developing countries to import GM food coupled with uneven, neo-colonial trade agreements along with clientelistic conditions imposed by the World Bank and IMF's structural adjustment and debt management policies are the most obvious examples that come to mind here (see Hoogvelt, 2001). These are issues I discuss further in chapter 5.

Intellectual Property and the Labour Contract

The tension associated with IP was further extended to the workplace, with all but one of the respondents noting that they had heard of and in some instances personally experienced conflicts over IP issues. If such accounts are the norm rather than the exception, this clearly signals a need for much greater attention to be given to the role of IP in the workplace, and the status it holds as a legal and social architecture governing the conditions of creative production, job satisfaction, employer-employee relations and thus life in general. While only two respondents reported of losing a job or contract for refusing to assign IP to their employer, many commented on the problems of such a condition – as one person noted: 'This is common in film music now; if you don't sell your rights to the film maker, you are not given the contract'. Another highlighted the legal and institutional distinction between private and state sectors. Addressing the Australian situation, this respondent notes that government bodies such as councils and departments 'are exempt from recognising author rights under the current copyright act – therefore to refuse to hand over intellectual rights in these cases is to refuse to work'.

Here is a curious and paradoxical case in point in which the call to a 'refusal of work' – a political concept and strategy derived from radical workers' movements of the 1960s in Italy – is jerry-wired into the system itself, albeit with a significant proviso of political proportion. The Italian autonomists seek to liberate work from relations of waged labour and the capitalist State, to unleash 'a mass defection or exodus' and in so doing subtract the labour-power

which sustains the capitalist system, affirming the 'creative potential of our practical capacities' in the process (see Hardt, 1996: 6; see also Virno, 1996b: 196-197). There's a bit of a different rub, however, in a capitalist logic of post-Fordist flexible accumulation, whose modes of social and political regulation set the scene for our current informational paradigm. While the worker within Fordist systems of assembly-line mass production and mass consumption conditions the possibility of, to refer to the classic example, the assemblage of motor vehicles that, ideally, are then sold to the leisurely consumer who built the vehicle in their eight hour working day, the case of IP and creative labour operates in substantially different ways.

Within an informational paradigm, the appropriation of labour power by capitalists does not result in a product so much as a potential. This potential takes the "immaterial" form of intellectual property whose value is largely unquantifiable and is subject to the vagaries of speculative finance markets, "New Economy" style. Thus, in the case of government institutions that don't recognise an individual's IP rights, there is nothing to 'hand over' in the first instance. That is, the right to a refusal of work is not possible; or put differently, the creative potential of work, as registered in and transformed into the juridico-political form of IP, is undermined by the fact that such a social relation – the hegemonic form of legitimacy – is not recognised. As noted by another respondent: 'I don't think you "lose" a contract for refusing to sign IP over ... it's more like you never had it in the first place if you do work for hire'. Instead, one does not so much refuse to work as decline to provide a service, whose economic value as wage labour – that is, labour separated from its product (Marx in Harvey, 1990: 104) – bears no relationship to the potential economic value generated by the exploitation of IP. In effect, then, "creativity" goes right under the radar. Prostitution functions in a similar manner. One does not buy "love" from the prostitute, one acquires a "service" in the form of an orgasm, or "little death", with no value in and of itself. The prostitute's love does not figure in the relationship; love is off the radar. Like intellectual property, the expression of the orgasm in a given form – sperm, for the male who appropriates the labour power of the prostitute – nevertheless holds the potential to translate into economic, social, political and biological values if its

eruption is arranged under different conditions – the normative ones peculiar to heterosexual couplings living in advanced economies, for example.

A couple of respondents, both now working in the higher education sector, had mixed responses to the kind of conditions such a setting enabled vis-à-vis labour and IP. Respondent 1: 'I would always give in [and sign over IP] when I was self-employed, now I only take jobs where I'm happy with the IP arrangements'. Such a position is possible when, as noted earlier, producing IP for others (i.e. employers/clients) is not the primary source of income. Interestingly, the other respondent anticipates conflicts over the assignation of IP within university settings – Respondent 2: 'as i continue to collaborate in university settings, the problem will arise'. The problem of job security arises where IP policies can vary substantially from university to university and at an intra-university level depending on the kind of contract an individual is able to negotiate with management as universities undergo increasingly deregulation toward a system that destroys the legal concept fought for by unions of collective wage agreements. At my own university,⁶ to take a typical example of someone working in the higher education sector, the subject materials I produce are the intellectual property of the university. These educational materials will often incorporate parts of articles I have written or am in the process of writing. (They will also include lists of references to articles and debates located in open-access online repositories, as found in the fibreculture and nettime archives, for example.) And here, a curious institutional tension over IP emerges: depending on the publisher, the IP of articles and books I write belongs to the publisher. One of the respondents noted how this problem of proprietary rights of academic IP has been dealt with in recent legislation in Australia: 'the new IP rules (e.g. the one which came into effect on 14th March [2003]) gives the university ownership of all IP created by staff (with a "scholarly work" exception). This creates major problems – for example, academics moving to different universities who intend to use educational materials they have developed previously'. Thus the extent to which IP functions as an architecture of control is and has always been dubious at the level of the everyday. Just think of what happened with the appearance of the xerox machine in university settings – in effect it became a free license to

⁶ Monash University, Melbourne, at the time of writing.

appropriate the property of writers, with myriad staff and students reproducing the pages of otherwise copyright protected materials.

Even if the legal aspects of IP are frequently difficult if not impossible to regulate, there are important symbolic dimensions to IP that have implications and impacts at the level of subjectivities and their degree of legitimacy within institutional and national settings. Here I am thinking – yet again – of that rather chilling line in the CITF's definition of the Creative Industries in which IP is not only generated, but more significantly, it is *exploited*. The exploitation of IP is not simply a matter of extracting the potential economic value from some inanimate thing; the exploitation of IP, let us never forget, is always already an exploitation of people, of the producers of that which is transformed from practice into property, which in its abstraction is then alienated from those who have produced it. While there are clear problems with such a system, IPRs are not necessarily a bad thing. As I argue in chapter 4, to simply oppose IPRs is not a political option. Individuals and communities must look for ways in which IPRs can be exploited for strategic ends. Such a political manoeuvre is possible, for instance, in efforts to advance Indigenous sovereignty. To return to the relationship between the exploitation of IP and the political status of subjectivity, it should be noted that QUT holds a policy in which students retain control of all IP they produce, with some exceptions.⁷ Such a policy initiative seems to be the exception within an environment of "enterprise universities" (Marginson and Considine, 2000) whose economic viability depends upon obtaining the maximum leverage possible within a political economy of partial deregulation.

Intellectual Property and (Dis)Organised Labour

Most of the respondents corrected the assumption in my question on the relationship between collaborative production and the difficulty of assigning IP

⁷ As QUT's 'Intellectual Property Policy' document states: 'In the absence of any agreement or assignment varying this position, QUT is not entitled to the ownership of intellectual property created by a student in the course of study at QUT. However, QUT may place conditions on student enrolment or participation in courses, subjects or projects, so that a student assigns to QUT ownership of intellectual property created, either generally or by reference to specified criteria. In such cases, students must be fully informed in relation to any potential restrictions on publication in accordance with QUT's *Code of Good Practice for Postgraduate Research Studies and Supervision*'. See <http://www.qut.edu.au/admin/mopp/Appendix/appendix22.html>.

rights to individuals or joint-authorship. Respondents noted that corporations own the creative efforts of both individuals and collaborations, since the corporation has paid for that work. This brings me to the final component of the survey – the relationship between IP and the problem of disorganised labour. It seems to me that unions are among the best placed actors to contest the seemingly foregone conclusion that corporations have an a priori hold on the appropriation of labour power. As Castells has noted in a recent interview:

... with the acceleration of the work process [enabled by new ICTs], worker's defense continues to be a fundamental issue: they cannot count on their employers. The problem is that the individualization of management/worker relationships makes the use of traditional forms of defense, in terms of collective bargaining and trade union-led struggles, very difficult except in the public sector. Unions are realizing this and finding new forms of pressure, sometimes in the form of consumer boycotts to press for social justice and human rights. Also, individual explosions of violence by defenseless workers could be considered forms of resistance. (Castells and Ince, 2003: 29)

However, there is an impasse of paradigmatic proportion to the potential for unions to assist workers – particularly younger workers – within Creative Industries or knowledge and information economies. The so-called strategy of consumer sovereignty is a relatively weak one, and only further entrenches the problem of individualisation in as much as the potential for a coalition amongst workers is only further sidelined in favour of that mantra urged on by our politicians who are so keen to protect “the national interest” – yes, the national economy is fragile, so enjoy yourself and go out and shop! There is a general perception that unions and their capacity to organise labour in politically effective and socially appealing ways are a thing of the past. To address this issue I will first table comments from respondents. I will then move on to the thesis of “immaterial labour”, as presented by Lazzarato, Hardt and Negri, and argue why the condition of “disorganised labour” more accurately describes the circumstances in which labour finds itself within an informational paradigm.

Three of the respondents stated they did not belong to a union, one with perhaps a degree of ironic self-affirmation characteristic of what Lash and Urry (1994) term ‘reflexive individualization’: ‘Nope’, writes one person, ‘I’m a manager and self-employed :?’. In his book on globalisation, Ulrich Beck

identifies a nexus between those who work for themselves – a mode of coordination he attributes to “life-aesthetes” in particular – and their desire for ‘self-development’. He goes on to suggest that such dispositions lend themselves to ‘self-exploitation’: ‘People are prepared to do a great deal for very little money, precisely because economic advantage is individualistically refracted and even assigned an opposite value. If an activity has greater value in terms of identity and self-fulfilment, this makes up for and even exalts a lower level of income’ (Beck, 2000: 150). Voluntary and service labour by many artists within the cultural sector would also fit this condition of self-exploitation.

Richard Caves prefers to explain the condition of non-union labour in more economic terms. Citing the example of independent filmmaking, Caves notes that ‘30 to 35 per cent of production costs [can be saved] by operating a nonunion project’ (2000: 133). In productions involving union labour, most of these additional costs are a result, so Caves claims, of inefficient and interventionist management practices and regulations by unions, which sees workers being paid for standing around doing nothing. Caves casts unions as manipulative entities who have a propensity to “hold-up” production unless their wage demands are met (2000: 132). Certainly, the militancy of unions has long been a staple of news narratives structured around a binary logic that has little time for articulating larger contextual forces and values that give rise to particular actions. Irrespective of whether the political form is union or non-union, issues of creative governance are always going to have local or national peculiarities, and will vary from industry to industry. In every case, however, the challenge for creative workers is, it seems to me, to create work that holds not only the maximum potential for self-fulfilment and group cooperation on a project, but just as importantly, creative workers need to situate themselves in ways that close down the possibility of exploitation.

The other respondents belonged to various unions or professional organisations: National Tertiary Education Union (NTEU) [2], Media, Entertainment and Arts Alliance (MEAA)/Australian Journalists’ Association (AJA) [2], the College Arts Association (USA) and Australasian Performing Rights Association (APRA), ‘which is not really a union, but it primarily

concerned with IP'. All these respondents were aware of their union's policy on IP issues, though one respondent held a high level of cynicism: 'I've never heard a union take a credible position on IP'. The follow-up question on the efficacy of unions in instances of dispute with management over IP elicited further cynicism from another respondent: 'Unions are too stupid to do this properly. They are as much a part of the problem since they agree to perverse work relations. Unions are corporations'. Others noted that disputes of this nature were 'an ongoing battle on many fronts' and that 'the MEAA/AJA newsletter often has such stories. Most of it is so thoroughly covered in case law that the major players don't bother to buck the system. The case of US freelance journo seeking payment for new media republication of their stories is seminal'. The *Tasini et al. vs. The New York Times et al.* case which this second respondent refers to is notable for the successful class action filed in 1993 by the National Writers Union (NWU) on behalf of freelance journalists against *The New York Times*, which had resold and republished articles electronically from their print archive and were refusing to pay freelance journalists for republication on the grounds that there was no difference in form between a print, microfilm or microfiche archive and new archival and storage media such as online newspapers or magazines, electronic databases such as LexisNexis or CD-ROMs.⁶ Despite the US Supreme Court ruling in favour of *Tasini* in 2001, *The New York Times* refused to compensate journalists and decided instead to delete all freelance written articles from their electronic archival media.

The *Tasini vs. The New York Times* case prompts two key issues that I will only flag here: firstly, material previously part of common repositories of knowledge such as public libraries becomes subject to litigious society within the political economy of a digital age, resulting in the erasure of what would otherwise be a digital commons (see Frow, 1996); and secondly, while freelance journalists – i.e., those who belong to the class of creative labourers – obtained some success in this instance, the *Tasini vs. The New York Times* case foregrounds the continued importance the nation-state and its domestic legal regimes hold for any analysis of information societies. While digitally encoded information has the capacity to transcend borders of the nation-state, we are again reminded of

⁶ Thanks to Hugh Brown for bringing the details of this case to my attention. A comprehensive account and documentation of this case can be found at National Writer's Union (NWU), *Tasini v. The New York Times*, 2000. <http://www.nwu.org/tvt/tvthome.htm>.

the socio-political forces which shape our understanding of and relationship to media technologies. Further, the socio-technical condition of all communications media is always already situated within specific discourse-networks; the media situation in turn gives rise to the problematic of translation for media-culture and its attendant labour practices and modes of creation. To put it simply, while the *Tasini vs. The New York Times* case set a legal precedent for how media corporations are to go about republishing the work of commissioned freelance journalists, such a ruling has no legal bearing outside the US in terms of how some of the very same transnational media conglomerates conduct their business practices in other countries.

To summarise: while the majority of respondents did belong to one or more unions, a good proportion of these respondents did not seem satisfied with or have any great faith in the efforts of unions to negotiate disputes over IP in the workplace.

Multitudes and the Exploitation of Network Sociality

The final question in the survey asked respondents if they thought there was a need for workers in their field to become more organised, particularly around the impact that IP has on their potential income. One person said 'yes', and two others didn't know or weren't sure. The remaining four respondents took the opportunity to register more developed responses. One person stated that 'Musicians need a militant union. That said, the old divisions of labour in what are generally considered "the creative industries" (really the cultural industries) have broken down because of technological changes'. Interestingly, this respondent correlates the convergence of different media technologies with the demise of the previous markers of class distinction premised on the vertical organisation of labour within the culture industries. It has been commonplace since the late nineties to hear stories of musical entrepreneurs who simultaneously engage in the previously separated activities of production, distribution and consumption. Yet such horizontal organisation isn't without its own class distinctions that continue to operate in symbolic, economic and political dimensions.

While the old divisions of labour may have been cast away, at least within the advanced economies, this isn't to say that new divisions of labour haven't taken their place. Indeed, the task of identifying new divisions of labour within the Creative Industries and informational economies has been one of the key underlying interests and motivations behind this chapter. Such divisions are invoked by another respondent:

I think the issue is broader than the impact on our "potential income" as individual workers – perhaps this is already too close to the commodity rhetoric that has permeated the creative industries. Part of the problem is that we are taught to respond to our projects as personally-owned intellectual products that must be protected, so that we can drain the maximum profit from their use. This disguises several processes that go into creative work. Open source programming networks, for example, reveal other ways to interpret and develop our intellectual labours.

Here we have it then, the return to the classic debate over closed regulation vs. open flows within a field of new ICTs. But there is more to it in this instance. This respondent rightly observes that creativity is irreducible to the generation and exploitation of IP. Herein lies a key tension that proponents of the Creative Industries face with a potential constituency that in the majority of instances resides outside the institutional borders of the university or a government department of Creative Industries. This tension concerns the relationship between discourse and identity formation. Just as the success of governments operating within liberal democracies depends upon getting the right spin, so too does the capacity for the Creative Industries project to obtain a purchase with a variety of actors that include politicians and government departments, university officials, students, academics, industry managers and creative producers. In other words, within a discursive regime of neoliberalism that grants hegemony to those with greater institutional, political and economic purchase – e.g. industry managers, government departments, and university professors – there remains a constitutive outside of creative and service workers with little or no political representation.

Such a condition of "invisibility" is symptomatic of the dependency of capital on the commodity value of labour-power. It was on the basis of this relationship between capital and labour-power that Italian radical leftists in the

1960s and 1970s such as Mario Tronti would observe that '*Labour is the measure of value because the working class is the condition of capital*' (cited in Wright, 2002: 84). Within the workers' movements of the 1960s, the class function to supply capital with labour-power and produce surplus value was seen as the condition for dismantling and disarticulating the reproduction of capital (see Wright, 2002: 84-85; Moulier-Boutang, 2003). As noted earlier, the technique for undertaking this action was referred to as the 'refusal of work' – a radical intervention which unleashed the creative capacities of workers and affirmed their 'right to nonwork' (Virno, 1996a: 20; see also Tronti, 1980).

Recognising the political limitations of the unitary concept of class within a post-industrial, post-colonial era, Hardt and Negri (2000) have spearheaded the internationalisation of the Italian autonomist concept of "the multitude" – the movement of movements that goes beyond the traditional working classes who have established political representation within the institutional structures of trade unions and social-democratic parties. Developed out of the activities Negri and others have with *officine precarie* (non-unionised precarious, unpaid workers), the multitude is a political, "post-representational" and in some instances ethico-aesthetic expression of those seeking to actualise another possible world – ethnic and social minorities, women, exploited workers, activists, leftist intellectuals, etc. According to Paolo Virno, the multitude is opposed to the Hobbesian concept of "the people", which 'is tightly correlated to the existence of the State and is in fact a reverberation of it' (1996b: 200; see also 2004: 23). Against the political unity and will of the "the people", the multitude's 'virtuosic' heterogeneity – or 'ensemble of "acting minorities"' – 'obstructs and dismantles the mechanisms of political representation' (Virno, 1996b: 201). Redefining the position of the multitude, Negri's oral intervention at a meeting of *officine precarie* in Pisa, 2003, is apposite on the correlation between exploitation and creative labour, though in ways that contradict his earlier thesis with Hardt that Empire has no outside:

The concept of the multitude can only emerge when the key foundation of this process (i.e. the exploitation of labour and its maximal abstraction) becomes something else: when labour starts being regarded, by the subjects in this continuous exchange of exploitation, as something that can no longer enter the relation of exploitation. When labour starts being regarded as something that can no longer be directly exploited. What is

this labour that is no longer directly exploited? *Unexploited labour is creative labour*, immaterial, concrete labour that is expressed as such. Of course exploitation is still there, but exploitation is of the ensemble of this creation, it is exploitation that has broken the common [i.e. abstract labour in a wage relation] and no longer recognises the common as a substance that is divided, produced by abstract labour, and that is divided between capitalist and worker in the structures of command and exploitation. Today capital can no longer exploit the worker; it can only exploit cooperation amongst workers, amongst labourers. Today capital has no longer that internal function for which it became the soul of common labour, which produced that abstraction within which progress was made. *Today capital is parasitical because it is no longer inside; it is outside of the creative capacity of the multitude.* (Negri, 2003: 4; my emphasis)⁹

Now this a lengthy quotation to be sure, and I elect it at this particular moment for its immense richness. I will attend to Negri and Hardt's work on immaterial labour in more detail shortly. At this stage, however, it is worth spending a little time unpacking some of Negri's key points, since they are commensurate with my larger critique of Creative Industries and the role of intellectual property. It strikes me that Negri is decidedly dialectical in his thinking of the relationship between capital and the multitude. What we read here is not talk of indeterminacy, flows and zones of indistinction – the primary conceptual metaphors used to describe the biopolitical operation of Empire; rather, there is a return to the bad old language of dialectics, albeit without the full force of its logic. If capital is no longer inside but outside the creative capacity of the multitude, such a condition is made possible by the fact of its relation with the inside of the multitude. Capital, then, operates as the constitutive outside of the multitude, a socio-technical body that, according to Negri, has somehow escaped or transcended abstract labour in a wage relation yet at the same time continues to exist in an inmanent relation with capital: 'exploitation is of the ensemble of this creation'. So exploitation persists, but it is no longer the 'direct' exploitation of abstract labour. Rather, it is exploitation of 'cooperation amongst workers'; that is, it is an *indirect* exploitation of that which has become

⁹ Initially I read Negri's intervention as belonging to the genre of the manifesto. But as the transcriber and translator, Arianna Bove, informed me: 'maybe it sounds like a manifesto because it was an oral intervention, the context being one where in my view Negri was questioning the idea of a "public sphere" which Virno seems to hold onto, albeit in a modified form, in some of his writings'. Personal email, 29 September, 2003. Negri's intervention took place in a seminar called 'Public Sphere, labour, multitude: Strategies of resistance in Empire', organised by Officina Precario in Pisa, with Toni Negri and Paolo Virno, coordinated by Marco Bascetta, 5 February, 2003. The version that appeared in *MakeWorld* #3 is slightly edited, and the word-by-word transcript (with part of Virno's response) is translated here: <http://www.generation-online.org/t/common.htm>.

'creative labour'. What does Negri mean by this? As I read him, Negri is suggesting that capital – which supposedly is no longer inside – exploits creative labour inasmuch as creative labour constitutes (i.e. provides the enabling conditions for) capital's *new* location *outside* 'the creative capacity of the multitude'. What Negri is saying, then, is that nothing less than a revolution has taken place!

To speak of a revolution of our time – of a dramatic rupture from a prior order, a transformation that historically has been characterised by excessive violence and bloodshed – is a mistake. There has not been a revolution. Rather, capital has transmogrified into an informational mode of connections and relations, a mode that does not so much come *after* industrial and post-industrial modes of production as incorporate such modes within an ongoing logic of flexible accumulation. Within an informational mode of connection, the creative capacity of the multitude comprises a self-generating system in which abstract labour as a wage relation is not so much replaced – for such a socio-political relation is in fact very much a reality – as it is given a secondary role in favour of what Andreas Wittel terms a 'network sociality' consisting 'of fleeting and transient, yet iterative social relations; of ephemeral but intense encounters'. Further:

In network sociality the social bond at work is not bureaucratic but informational; it is created on a project-by-project basis, by the movement of ideas, the establishment of only ever temporary standards and protocols, and the creation and protection of proprietary information. Network sociality is not characterized by a separation but by a combination of both work and play. It is constructed on the grounds of communication and transport technology. (Wittel, 2001: 51)

The conditions of work described here by Wittel join the refrain of characteristics attributed to labour in the Creative Industries as seen in studies by leftists such as McRobbie, Andrew Ross, and Castells as well as their libertarian counterparts like Caves, Florida, Leadbeater, Howkins and Brooks. While these scholars and commentators do not all use the term "creative industries", they all describe similar patterns of labour. This isn't to say that creative labour is universally the same. Earlier I suggested that we are yet to see a study that comparatively maps the national characteristics of creative labour. Perhaps one reason such a study is yet to emerge has to do with the

mistaken view often propagated by Creative Industry commentators, policy makers, new media critics, and global theorists alike that the nation-state is obsolete. One thing a comparative study of creative labour in their national locales would reveal is the role IP law has at the level of the nation-state. In accordance with the TRIPS Agreement (1995), member states are responsible for administering and governing IP law within their respective territories. This is just one layer that distinguishes the manifestation of creative labour in one country from the next. Other layers, or rather systems of arrangements, are defined by the socio-political, cultural, institutional and economic peculiarities of locales, nation-states and regions and the multiple contingencies that articulate creative labour in singular ways.

As I have been arguing, there are two key issues at stake for workers undertaking creative labour within informational economies:

1. The mode and form of exploitation. For proponents of the Creative Industries, this consists of the exploitation of IP. Wittel also alludes to such a condition, noting that network sociality involves 'the creation and protection of proprietary information', but he refrains from engaging the political dimensions that underpin such activities. To the extent that the respondents to my survey provide an index of abstract labour in the Creative Industries, then one can contest Negri's claim that creative labour has transcended modern and postmodern forms of capitalism that function through the exploitation of labour as a wage relation.
2. However different the articulations of creative labour may be, they hold one thing in common: disorganisation. The history of workers' movements is a testament to the force of organisation in contesting the exploitation of labour by capital. The question is, can creative labour organise itself within an informational mode of connection?

In describing the circumstances from which the multitude emerges, Negri comes close to suggesting that creative labour is in fact organised: Capital 'can

only exploit *cooperation* amongst workers, amongst labourers'.¹⁰ Hardt strikes a similar tone in his earlier work on Deleuze: 'Spinozian democracy, the absolute rule of the multitude through the equality of its constituent members, is founded on the "art of organizing encounters"' (1993: 110). As I have suggested, Wittel's notion of 'network sociality' may be a more useful description of Hardt and Negri's multitude: such a socio-technical formation is not so much *directly* exploited, as it is *indirectly* exploited. 'Content is not king', as one Silicon Alley PR brochure in 1999 declared, '... the user is' (see Odlyzko, 2001). Capital thus continues to exploit creative labour, since its social mode is one of cooperation. If the various studies of Creative Industries have got it right, then such cooperation takes the form of ephemerality, fleeting, project-by-project engagements and value adding personal relationships designed to enhance network capital. The function of the creative worker is not to produce, but to set new trends in consumption (see Boris Groys, cited in EU, 2001: 36).

Such activities are depicted well in the documentary film *The Merchants of Cool* (2001), where Douglas Rushkoff narrates the busy lives of "trend-spoilers" and "cool-hunters" who track down youth whose vanguard sensibility for hip-consumerism is packaged and choreographed through symbolic affiliations with major brands and their vehicles: Sony, Pepsi-Cola, MTV, etc. "Cool" youth, with their predilection for creative-consumption, function as underpaid and exploited cultural intermediaries for their less imaginative compatriots in consumerism. As Tiziana Terranova notes, this kind of operation or process is not about capital 'incorporating' some authentic, subcultural form that somehow resides outside of capitalism's media-entertainment complex. Instead, it is a 'more immanent process of channeling [sic] collective labor (even as cultural labor) into monetary flows and its structuration within capitalist business practices' (2000: 39).

However, the socio-political organisation of creative labour requires a radically different impetus that is yet to emerge. As one respondent soberly puts it: 'that organisation is not going to take the role of unions as we currently know them,

¹⁰ The notion of cooperation is related to the other autonomist key concepts of the "general intellect" and "mass intellectuality". See Virno (1996c) and Lazzarato (n.d.). For a discussion of these terms, see Terranova (2000: 45-46). For a detailed history of the Italian autonomists, see Wright (2002).

who for the most part have no clue'. The respondent elaborates this observation, or perhaps it was a perception, with the following example: 'I do know a young woman trying to effect change in the union movement in nz [New Zealand] and organise cinema workers...but finds the entrenched movement incredibly uninterested in understanding the desires and motivations of the young people working in these fields...which is a prereq [sic] for representing them adequately'.

Immaterial or Disorganised Labour?

Maurizio Lazzarato defines the emergent and simultaneously hegemonic form of immaterial labour 'as the labour that produces the informational and cultural content of the commodity' (1996: 133). Lazzarato discerns 'two different aspects' within immaterial labour:

On the one hand, as regards the "informational content" of the commodity, it refers directly to the changes taking place in workers' labor processes in big companies in the industrial and tertiary sectors, where the skills involved in direct labor are increasingly skills involving cybernetics and computer control (and horizontal and vertical communication). On the other hand, as regards the activity that produces the "cultural content" of the commodity, immaterial labor involves a series of activities that are not normally recognized as "work" - in other words, the kinds of activities involved in defining and fixing cultural and artistic standards, fashions, tastes, consumer norms, and, more strategically, public opinion. (1996: 133; see also Terranova, 2000: 41-43)

It is this second aspect of immaterial labour that most readily corresponds with the types of work engaged by those in the Creative Industries. Note that the "content" of the commodity is not the sound of music, the image-repertoire of the screen, the flash of animation, etc. As with Wittel, the content for Lazzarato is a social relationship: 'Immaterial labor produces first and foremost a "social relationship" (a relationship of innovation, production, and consumption)' (1996: 138).

Hardt and Negri expand upon this definition to include affective forms of labour, as found in domestic and service work that involves the care of others (2000: 292-293). Importantly, the concept of immaterial labour is not to be

confused as labour that somehow has eclipsed its material dimension. Hardt and Negri note that affective labour, for instance, 'requires (virtual or actual) human contact, labor in the bodily mode' (2000: 293). However, 'the affects it produces are nonetheless immaterial. What affective labor produces are social networks, forms of community, biopower' (Hardt and Negri, 2000:293). I have no idea how such products are immaterial. Moreover, such an understanding of affect obviates an inquiry into the more nuanced concept of affect as found in the work of Deleuze and Guattari, as well as Massumi. For these thinkers, affect consists of the sensing of sensation. A material dimension is apparent here in so far as the sensing of sensation assumes that a process of corporeal transformation and de-subjectification is under way. Thus the "product" of immaterial labour in its affective mode is precisely this transformation, which is also a change in materiality and the relationship between various actants.

Lazzarato, Hardt and Negri are concerned, then, with defining immaterial labour in terms of the *product* of labour that is immaterial (knowledge, communication, affect-care, etc.) as distinct from its actual undertaking.¹¹ It is true that one does not sell care as a material product, but rather the image of care. One may also sell the memory of care, but this operation depends upon a medium which still, nonetheless, communicates such memories in the form of an image. Memory is thus predicated on an image. And images, as we know, saturate the marketplace. Or as Lefebvre once observed, 'We are surrounded by emptiness, but it is an emptiness filled with signs' (cited in Coombe, 1998: 133). All images are encoded by communications media, and as such they possess a material dimension. Palpable as an image may be, care, in its commercial form, is not something that one holds or drives down the street, but a service one acquires. Yet the immaterial labour that produces the service of care holds a material dimension. The material dimension of this operation of exchange-value tells us something of great significance vis-a-vis the commodity object. What, in fact, is occurring in this relation of exchange is nothing less than the de-ontologisation and deterritorialisation of the commodity object itself. I am speaking here of a question of boundaries and a question of time; in short, a question of the limits of capital. It is a category error to understand the

¹¹ This contrasts with Paolo Virno's notion of virtuosic labour, where there is "no end product" (2004: 52-53).

commodity object as a "thing in itself". When the commodity object is situated, as it is, within a system of social relations, the extent to which it becomes intelligible is only possible in terms of a social relation. That is, the commodity object is simultaneously constituted by and conditions the possibility of the contingencies of a social system. It is impossible, then, for the commodity object to be extricated from this system. To do so is to speak of a utopia, the utopia of post-capitalism. Were such world to actualise, it would not feature a role for the commodity object.

Because the concept of immaterial labour is open to various abuses, misunderstandings (my own included), and complex intellectual filiations, I suggest that it be dropped within critical Internet, cultural and information theory in favour of a concept of disorganised labour. Creative and informational modes of labour as they currently exist are better understood as disorganised; by conceiving work in this manner, the political dimension of labour is retained in so far as opposition and revolution have in modern times required workers to either self-organise or form a compact alliance with intellectuals, who have formed the symbolic spearhead of political change. Granted, our times consist of post-Fordist modes of production, exchange and accumulation integrated with informational modes of connection, all of which have seen the steady erosion of organised labour. Even so, there persists an ineradicable class dimension to labour and the uneven distribution of capital. From these conditions, the re-organisation of labour is possible. And while the failures of revolution are well documented and acutely experienced by many, and the problems of political and symbolic representation clearly theorised in the work of Baudrillard, Spivak, Balibar, Mouffe and others, there remains the need – perhaps greater than ever before – to retain a sense of the importance, a sense of the urgency, for labour to have the means and the potential to organise itself.

The distinction between conceiving labour as immaterial or disorganised has implications not only at the level of political theory. While Hardt and Negri's book *Empire* has without question captured a latent structure of feeling simmering within many leftist movements, it is now time to extend that political momentum in ways that go beyond the partisan interests of "the

multitude" and engage workers at the local level of their everyday institutional circumstances. The condition of disorganised labour corresponds, of course, with the disorganised technics of capitalism, as discussed by Lash and Urry (1987). However, these two arrangements are not equivalent. The disorganised technics of capital – flexible accumulation, transnational labour mobility, risk societies, etc. – are simply another mode by which capitalism is managed in a "postnational", globalised setting. Disorganised labour, on the other hand, is symptomatic of the demise of union power, the deinstitutionalisation of labour, and the consolidation of individualisation within a neoliberal paradigm.

Lash and Urry (1994: 10) suppose that the different temporal modes by which organisations and technologies operate conditions the possibility of disorganised capitalism. They associate a decline in national institutions and their capacity to regulate flows of subjects and objects within a national frame with the end of organised capitalism. While they seek to go beyond a dualistic mode of thinking, they in fact reproduce such a mode: 'Disorganized capitalism disorganizes everything' (1994: 10). As rhetorically appealing as this slogan may be, such a blanket approach to the complexity of contemporary capitalism precludes the possibility of labour organising itself in multi-temporal ways through various media of communication in conjunction with the cultural peculiarities of socio-institutional locations and networks. Crucially, the exploitation of creative labour continues as what the autonomists have called 'a theft of time'. The possession of time by any kind of worker is the condition of possibility for the organisation of labour.

The failure of Negri, Lazzarato and others who gather around the concept of immaterial labour is, quite remarkably given their respective intensely political life experiences, a failure to understand the nature of "the political". The concept of immaterial labour, in its refusal to locate itself in specific discourse-networks, communications media and material situations, refuses also to address the antagonistic underpinnings of social relations. As Marx so clearly understood, capital is first and foremost a social relation (this, the autonomists know well). This remains just as true today for those engaged in creative, intellectual and service industries – tiers of labour that, in their state of disorganisation, of course hold intimate connections with other sectors of work

no matter how abstracted they may be from one another in geographical, class, cultural, economic and communicative terms.

There is a remarkable correspondence between Hardt and Negri and other "radical" Italians on immaterial labour and the disorganised multitude, and the kinds of views put forward by many proponents of the Creative Industries such as Florida, Caves, Leadbeater, Brooks, Howkins, the National Research Council of the National Academies (US) and their Australian counterparts. If there is a perception that Hardt and Negri offer a structure of feeling for the renewal of left politics and activism and that Creative Industries is, broadly speaking, an extension of Third Way ideology and neoliberalism with a softer face, then the similarities between these two camps are in some respects greater than their differences. The variegated system of disorganised labour within Creative Industries and informational economies is homologous, I would suggest, with Hardt and Negri's multitude; organised labour is seen by Hardt and Negri as an obsolete, politically limited vestige of a socialism constituted by industrial capitalism.¹² The promotion by the Creative Industries of "individual creativity and skill" at the expense of the social relations that make both individual and collective activities possible corresponds at a discursive level with neoliberalism's "customisation" and atomisation of the subject, or what Brian Holmes (2002) cogently diagnoses as "the flexible personality". Furthermore, in isolating the networked individual as the unit of creative production there is an implicit hostility within Creative Industries to the concept of organised labour, the practice of which has historically placed demands on capitalists for fairer and more equitable working conditions. Creative Industries is far from alone here. As Justin Clemens argues, the affirmation of bricolage, mobility, and heterogeneous subcultural styles so typical within many Cultural Studies 'accounts unfold[s] on the basis of a prior covert *identification* of organization

¹² Here I am drawing on Timothy Brennan's (2003) critique of Hardt and Negri's *Empire*, though Brennan is making a comparison between immaterial labour and the multitude. As I have argued above, the term immaterial labour is one that I see as conceptually flawed, and is better described in terms of disorganised labour. For their part, Hardt and Negri (2003) are disappointing in their response to what they fairly address as Brennan's aggressive critique in as much as it is heavy on taking a point-by-point refutation of Hardt and Negri's thesis and some examples, yet offers little by way of an alternative.

with authority, and authority with oppression' (2003: 174).¹³ Surely it is time to get over such hostility toward the dark phantasm of organisation?

Unions today not only have increasingly limited purchase on governments with neoliberal dispositions, they also have limited appeal for younger workers whose political ideologies have emerged within a neoliberal paradigm and whose social experiences are not, for the most part, formed within the institutional cultures offered by union movements, as has been the case for older generations. Just as Hardt and Negri dismiss 80s and 90s postmodernism for its collusion with corporatist culture (and there is much merit in this thesis, as documented more succinctly by Thomas Frank), so too their own multitude is entwined within the arguably more accentuated managerialism of the Creative Industries, where labour continues its transformation into surplus value, only this time in the form of intellectual property – a socio-juridical form that lends itself more readily to the technical system of electronic stock markets and financial speculation than it does to a radical politics. Though here, of course, one finds the counter-forms of p2p file-sharing, tactical media and open source movements; digital piracy of software, music and new release cinema; clones of drug, technical and GM food patents, etc. The extent to which these counter-practices can be called a politics in the sense of an organised intervention into hegemonic regimes is, however, questionable and needs to be assessed on a case by case basis. Is digital piracy, for example, a political act or just a business strategy by less powerful economic actors in their efforts to circumvent transnational corporate monopolies and the legal regimes and trade agreements that advance corporate interests?

Conclusion

At the start of this chapter I sought to make a case for a processual media empirics as distinct from the new media empirics. The former is concerned with analysing and being a part of the movements and modulations between the conditions of possibility and that which has emerged as an object, code or

¹³ Many of the key proponents of the Creative Industries, at least in Australia, have had prior intellectual lives and academic careers studying precisely these sort of cultural phenomena.

meaning within the grid of the present. The latter is primarily interested in delimiting the field of movement, and stabilising the object of study as an end in itself. Processual media theory does not dispense with the empirical, rather it is super-empirical. But its mode of empiricism does not conform to the logic of immanence as expounded by Lash in his book *Critique of Information*: 'The global information society has an immanentist culture, fully a one and flat world culture. As such, its regime of culture is radically empiricist' (2002: 167). The world Lash describes is not one that contains the wonders, difficulties and complexities of life. Nor for that matter is the world Hardt and Negri call *Empire*: 'In this new historical formation it is thus no longer possible to identify a sign, a subject, a value, or a practice that is "outside"' (2000: 385). Today's media-information cultures – the situation of creative labour – are indeed characterised by reflexive non-linear systems; they do not, however, eschew their constitutive outsides.

In his essay on Blanchot, Foucault notes that 'Any reflexive discourse runs the risk of leading the experience of the outside back to the dimension of interiority; reflection tends irresistibly to repatriate it to the side of consciousness and to develop it into a description of living that depicts the "outside" as the experience of the body, space, the limits of the will, and ineffaceable presence of the other' (1990a: 21). Further: 'it risks setting down ready-made meanings that stitch the old fabric of interiority back together in the form of an imagined outside'. Such a mode of reflexivity is one that Lash and Beck attribute to "first modernity". It is a mode of reflexivity that is anterior to a processual understanding of communication, where transformation, agonism and change are integral to the operation of reflexivity.

Processual reflexivity is the operative mode peculiar to quasi-subjects and quasi-objects situated in socio-technical arrangements and conditioned by the accumulation of knowledge, experience and socio-political and economic forces. It is a reflexive mode that 'must not be directed toward any inner confirmation – not toward a kind of central, unshakable [sic] certitude – but toward an outer bound where it must continually contest itself' (Foucault, 1990a: 21-22). The non-discursive dimensions of creative labour operate as the constitutive outside of the Creative Industries; the invisible plurality of

creativity cannot be generated in order to be exploited in the form of IP, yet the lives in which creativity subsists certainly can be exploited. For this reason, the antagonism intrinsic to "the political" will persist as a socio-technical potential of labour-power. The trick is to work out ways in which the antagonisms underpinning creative labour within a system of intellectual property regimes might be translated otherwise.

So how, we might ask, can a para-radical, all-too-social politics be created as organised labour within informational media ecologies? Slavoj Žižek is only partly right when he declares with typical impudent brio that 'the key Leninist lesson today is that politics without the organizational form of the party is politics without politics' (2002: 558). The time for parties is over! Go to your next Creative Industries bonding session if you want to play with cherry-flavoured vodka. It is now time for modest, pragmatic engagements with localised networked politics. This amounts to finding a form or modality of political organisation that appeals to those working within the Creative Industries. In doing so, one is also attending to the question of how we think the relationship between communications media and the new institutional possibilities they enable.

Given the reluctance by unions to organise their constituencies within the logic of what Régis Debray (1996) terms 'mediology', and what we translated in the fibreculture reader as the mediation of politics within a digital present (Brown et al., 2001: v), it is unlikely that the organisational habitus of union culture will provide the institutional framework for creative labour. Or as Danny Butt (2003b) notes in his response to an earlier draft of this chapter, 'The union that should represent the interests of my colleagues remains monist, masculinist, and mired in a basic inability to simply listen and understand the motivations and experiences of its constituency'. This is but one instantiation of the antagonism of "the political" as it figures in the complex of relations between the institution of unions and the informational-material situation of creative labour. Tensions of this order do not, however, preclude the possibility of translating some of the fundamental values peculiar to union culture (collective bargaining, equality and democracy, safe and healthy working conditions, etc.) into the political form of *organised networks*: a conceptual technics in which

networks rather than the organisation or institution *per se* are the condition of possibility for labour articulated within new media terrains.¹⁴ Ultimately the challenge of political organisation is a challenge for all critical creative workers as they subsist in the form of networks, not the party. I develop this argument further in chapter 6.

¹⁴ Such a term perhaps best defines the activities of fibreculture, as discussed at the recent planning meeting in Sydney. In addition to the annual fibreculture meetings, this was the first face-to-face planning meeting of fibreculture facilitators and other participants (17-18 November, 2003). For a summary of the agenda, see the posting to the fibreculture list by Esther Milne, 13 November, 2003.

Interesting examples of union culture articulating itself in the form of organised networks can be found at the following sites: IT Workers Alliance (AU), <http://itworkers-alliance.org> and CyberLodge, taking the labor movement open source (US), <http://www.cyberlodge.org/>. For a brief discussion of the emergent political consciousness amongst IT workers – made possible, of course, by the crash in the IT sector which led to a radical change in the material and discursive conditions of programmers, web designers, etc. – see Burgmann (2003: 269).

Part Two

Scales

Modalities of Indigenous Sovereignty, Transformations of the Nation-State, and Intellectual Property Regimes

Rational consensus, deliberative models of democracy have failed in terms of accommodating the interests of those social bodies that challenge the interests of the region-state-corporate nexus. If one considers recent cases of Indigenous attempts at territorial recognition, such as George Speight's failed military coup in Fiji, the fight for sovereignty in East Timor, and the violent uprisings between ethnic Christians, Muslim immigrants and the military in the Indonesian territories of Aceh and Ambon, a geopolitical map begins to emerge of a regionalism vastly distinct from the closure of the social embodied by proponents of Third Way politics. A spatial imaginary that seeks to dissociate the social from the political is further adumbrated in much writing on new media and IT which persists in valorising insular virtual communities; in Bill Gates' fantasy of "friction-free capitalism"; and in supranational organisations and affiliations such as ASEAN, the G-8 nations, the EU, and so forth, which, despite their considerable differences, seek to instigate conditions enabling the smooth flow of capital.

When the problematic of territoriality is considered in relation to issues of sovereignty and the transformation of statehood, what emerges is a counter-form of regionalism, for example, defined by multiple, antagonistic tensions desperately in need of a political framework that enables expressions of what Chantal Mouffe (2000) terms 'agonistic democracy'. Failure by subnational actors to comply with national and supranational principles on what constitutes legitimate forms of democracy and sovereignty often leads to harsh economic sanctions imposed by the IMF, the World Bank and national authorities seeking to enforce a smooth regionalism that enables the advance of their own economic interests, or those that they represent, as in the case of the UN and the IMF. The relation between emerging denationalised political subjects, the interests of global capital, and the processes of renationalisation can be

understood in terms of a borderland that in turn is an instance of a networked figuration of the extra-territorial processes of statehood albeit at a regional level. Clearly, regionalism is defined here by conflicts over sovereignty that, in themselves, are symptomatic of network societies and globalising cultures and economies.

This chapter places Mouffe's notion of agonistic democracy as the conceptual backdrop to an investigation of Aboriginal sovereignty as it figures within postnational ideological and networked terrains. Mouffe understands *antagonism* as an essential condition of "the political" dimension of social relations and argues that rational consensus models characteristic of deliberative or Third Way rules of democracy elide 'the violence that is inherent in sociability' (2000: 134-135).¹ She seeks to reconstitute democratic forms in such a way that enables a "politics" of *agonism*, or 'the struggle between adversaries' (Mouffe: 2000: 103). For Mouffe, it is through agonistic legitimization of a multiplicity of allegiances to a plurality of institutional forms or communities that democratic politics takes place.

Mouffe's focus is on the democratic role of traditional institutions of the state, and herein lies its limited critical value as the welfare state undergoes continual attack and statehood seeks extra-territorial status. In examining the problematic of Aboriginal sovereignty, this chapter argues that Mouffe's thesis holds considerable value in making intelligible the democratic potential of new social forms constituted by and situated within new communications media and their attendant globalising political economies. My interest in Mouffe is mostly to do with how a notion like agonistic democracy enables a thinking of processes of legitimization within a terrain of structural disjunctures and re-scalings of the state.² What happens, for instance, when the supranational re-articulates with the national and/or the local? What is the role, if any, of new communications technologies and informationality in such processes? How is politics to be articulated across social and institutional realms with divergent

¹ Mouffe is developing a line of argument tabled in Ernesto Laclau and Chantal Mouffe, *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics* (1985). For a critique of that book, see Hinkson (1991).

² My use of the notion of 'state re-scaling' is drawn from Neil Brenner (1998), who interprets 'global city formation and state re-scaling as dialectically intertwined processes of

spatio-temporalities? Who or what comes to constitute the figure of agonism across or within these disjunctural spaces?

In short, this chapter considers the problematics of space or scale and the formation of actors, modalities of sovereignty, and intellectual property regimes as conditions of possibility for an agonistic democracy within territorial and extra-territorial articulations of statehood. The problematic of Indigenous claims for sovereignty serves as a useful case study in so far as the tension between the denationalised political subject of Aboriginality and processes of re-nationalisation is symptomatic of a structural tension between national and supranational modes of governance. However, while the structural relation between the two spatio-temporal domains of the nation-state and supranational entities may be agonising in regard to the nature of the flow of signs, all too often the disjuncture between territoriality and extra-territoriality can be cause for the emergence of antagonistic socio-political relations.

While supranational entities such as UNESCO have been able to confer a degree of political legitimacy upon Indigenous peoples as partially denationalised political subjects, I maintain that this has failed to articulate with the national form in the process of renationalisation. Intellectual property regimes offer an Aboriginal polity the opportunity to reassert claims for self-determination in the national form in as much as the political subject of Aboriginality is positioned in the first instance as a partially autonomous economic actor as distinct from a partially denationalised political subject. Such positionality then enables political and cultural issues to be fashioned within the realm of intellectual property law, as distinct from an exclusive focus on international human rights law. Following a discussion of the structural relations of Aboriginality at national and supranational scales of governance, I will go to outline in more detail the potential for Indigenous sovereignty within intellectual property regimes.

reterritorialization that have radically reconfigured the scalar organization of capitalism since the global economic crises of the early 1970s' (1998: 3).

The Agonising Problematic of Indigenous Rights in Australia

In recent years Indigenous sovereignty movements in Australia have achieved some degree of success in supranational fora such as UNESCO, who have recognised claims of human rights abuse and cultural heritage violations as legitimate. However, the legitimacy Indigenous people have obtained as partially denationalised political subjects has failed to articulate with the national form, particularly under the right-wing conservative administration of the Howard Government. Arguably, the possibility for Aboriginal sovereignty has reached an impasse within rational consensus models of democracy, since the claims made by the Aboriginal and Torres Strait Islander Commission (ATSIC)³ constitute an antagonistic field of practices with respect to the cultural, ideological and political economy of government and the business and electoral interests that it represents.

It is precisely this antagonistic dimension of political relations that constitutes the Aboriginal polity as an enemy of the state in so far as the contemporary liberal democratic form across Western nation-states is defined by Third Way politics, which seeks to obtain consensus beyond the traditional oppositions between the Left and the Right (see Mouffe, 2000: 134-135; Scanlon, 2000). Despite recent literature on globalisation that suggests the sovereignty of the nation-state is in decline, the current condition of an Aboriginal polity indicates that battles over sovereignty are considerably more complex, with the nation-state better understood as undergoing a process of transformation rather than obsolescence. As political philosopher Carl Schmitt (1985: 5) maintains, 'Sovereign is he who decides on the exception'. Within political discourse, claims by the Aboriginal polity for self-determination have in many respects come to occupy a state of exception, a space of exclusion.

In order to address in specific ways the multi-vocal problematic of agonistic politics – a polity that accommodates a plurality of differences – within postnational vis-à-vis networked realms, I consider the problematic of the production of political subjects with respect to territoriality, supranationalism,

³ ATSIC – a Commonwealth statutory authority established in 1990 – is the key political body representative of Indigenous interests in territories of Australia.

the nation-state and processes of legitimacy. Such an inquiry questions the extent to which the nation holds what Anna Leander (2002), after Weber, terms a 'state monopoly on legitimate violence'. The recent ATSIC submissions to the UN and UNESCO address mandatory sentencing laws and world heritage violations in Australia, providing a case that is conditioned by different actors, histories, discursive frameworks, and interests. The differentiated fields or planes of abstraction constituted by this network of social relations are played out on variable spatial scales with complex temporal rhythms. Spatial scales operate at local, national, supranational and global levels, interwoven by temporal rhythms that underscore the field of institutional practices, economic and cultural flows, and the heterogeneity of the everyday as it is mediated by socio-technical forms (see Brenner, 2001; Bunnell and Coe, 2001; Flint, 2002; Martson and Smith, 2001). The formation of a postnational plane of abstraction can be seen as an instantiation of a tension between what political economist and urban theorist Saskia Sassen terms 'denationalised institutional orders and corporations' and the 'production of denationalised political subjects' (see Sassen, 1996, 1999, 2000a). An agonistic tension emerges most acutely at the point of intersection between these two realms, and can unfold in antagonistic ways during the process of the renationalisation of partially denationalised entities.

The interaction between supranational organisations and national institutions of governance is one characterised in part by a contest over the conditions and processes by which emerging political subjects, such as "Aboriginality", seek legitimacy. The process of legitimation as a political subject within the realm of international law is a paradoxical one, to say the least. A double abstraction of the sign of Aboriginality can be seen in an historical sense and then a legal one.⁴ For example, while issues over sovereignty of land rights and instances of institutionalised human rights abuse are recognised within the supranational spaces of UN and UNESCO committees (recognised in so far as the claims made in ATSIC's submissions are seen to hold a legitimate – i.e. empirical and historical – basis in reality in addition to holding a discursive legitimacy at a

⁴ The body of literature that addresses the experiences and condition of Indigenous peoples within colonial and postcolonial Australia is considerable. See, for example, Carter (1987), Gelder and Jacobs (1998), Hachich (2000), Langton (2000/2001), Mickler (1998), Peterson and Sanders (1998) and Reynolds (1989).

universal level within the realm of international law on economic, social and cultural rights⁵), such recognition is then disavowed at a national level between and within political parties themselves. In other words, the understanding and practice of and relationship to Aboriginality is constituted through a process of abstraction in which third generation economic, social and cultural rights are transposed and reconfigured from one field of social relations to another. Each plane of abstraction is often incommensurate with the next in so far as different actors, discourses, rules and interests are set into play.⁶ Tension of this kind is symptomatic of a disjuncture or incommensurability between the universal and the particular as they figure at supranational and national levels. As Sassen writes:

Human rights are not dependent on nationality, unlike political, social, and civil rights, which are predicated on the distinction between national and alien. Human rights over-ride such distinctions and hence can be seen as potentially contesting state sovereignty and devaluing citizenship. (Sassen, 1996: 95)

While ATSIC's submissions are recognised by state and federal political apparatuses in the sense of conforming to the genre of and procedures for tabling a report, this is the limit to which Aboriginality is inculcated into the imaginary space of the nation.⁷ The nation is unable at the present socio-political conjuncture to grant legitimacy to Aboriginal sovereignty within its political and legal infrastructures. "Aboriginal sovereignty", despite the variety of possible models proposed to meet such a condition and the diverse meanings it attracts as a concept, is consistently assumed to entail a symbolic concession leading to inalienable economic and political rights, embodied in particular by the principle of self-determination. For the Aboriginal polity, the issue of human rights cannot be dissociated from other rights. Thus the political, social and civil rights – as distinct from human rights – that Sassen asserts as operative within the national frame are not, and possibly cannot be, conferred

⁵ I am referring for the most part to the report by Marks, *Aboriginal and Torres Strait Islander Peoples and Australia's Obligations under the United Nations International Covenant on Economic, Social and Cultural Rights* (2000).

⁶ I am drawing on both a Marxian notion of abstraction as outlined in James (1996) and a Marxian-Deleuzian notion of the term from Wark (2001b). See also Sharp (1985) and Wark (2001c).

⁷ Here, the term "the imaginary" is understood in an Althusserian sense whereby the subject is constituted within a logic of sensibility, a system of rules and codes that is sometimes associated

to all its citizens, since that would involve conceding to the political economy of human rights as well. Aboriginal sovereignty is generally perceived across the politicalscape and mediasphere (and no doubt within corporate boardrooms, shareholder meetings and domestic settings) to undermine the "national interest", corrupt as this rhetorical figure is in so far as neoliberal governments increasingly operate as stakeholders for national and transnational corporations at the expense of the "citizen" – a figure who has become structurally alienated from and apathetic to the political sphere due to the dismantling of unions, the erosion of job security, the fragmentation of communities attendant with the internationalisation of labour, the individualisation of workers through enterprise bargaining schemes and techniques of self-regulation, the constitution of citizen-subjects as consumers and as economic and political units, and so forth.⁸

The challenging of UN authority by Australia over issues of human rights is symptomatic of a crisis in legitimacy that confronts national sovereignty. The Howard Government's amendments to the *Native Title Act 1993* (Cth) in 1998 and emasculation of ATSIC's operating budget and powers takes place within a context that has seen the government withdraw its membership to the UN Commission of Human Rights in 1996, downsize its human rights sections in the Department of Foreign Affairs and Trade and in the Attorney-General's Department, and downgrade 'Australia's participation in the International Labour Organisation', managed by the Department of Industrial Relations (Kent, 2001: 6). In extracting itself as a political actor from global multilateralism and shifting instead to regional bilateralism, as Ann Kent points out, Australia undermines the strength of the UN human rights treaty system whose 'authority and legitimacy of international law derive in part from the number of states complying with it' (Kent, 2001: 6-7). These are just a few

with the realm of the unconscious, that is bound to a set of material relations. See the classic text by Althusser (1971).

⁸ John Frow goes even further, suggesting that 'the category of the *citizen* – the form of personhood most closely associated with it and currently fashionable in a number of post-leftist discourses – is in many ways a nostalgic concept, predicated on the recovery of a lost but once flourishing public sphere.... [M]any of the conditions for full and active citizenship are not present, not, at least, in traditional ways, in mass-mediated societies' (Frow, 1996: 106-107).

This problematisation of the category of the citizen overlaps, I think, with that of agonistic democracy, which also assumes an intact public sphere and would do better as a theoretical model if it were situated within the realm of technologically mediated social relations.

examples that are representative of the ways in which the concept of sovereignty as supreme authority can be seen as a discursive figure that undergoes constant change as its various modalities – state, juridical, economic, supranational – are distributed across competing scales of interest.

Furthermore, such a response to the crisis of national sovereignty can be understood in the terms Michael Hardt and Antonio Negri (2000) set out in their analysis of the new imperial paradigm of Empire: a postnational sovereign power that operates through a process of biopolitics that overdetermines, interpenetrates and infuses all boundaries. The UN arose as an international juridical structure in response to the crisis of modern sovereignty in which nation-states, following World War II, were regarded as entities in need of a transcendental ideal of humanity, which manifested in the form of a supreme juridical order (see Hardt and Negri, 2000: 3-21). The principle of universal human rights upheld the primacy of the individual over and above the rule of the state and served as a technique by which super powers could impose principles of liberal democracy upon emerging states, establishing structural conditions that favoured the economic interests of the West (see Mazower, 2002). Hence there is a distinct tension within the logic of human rights between the rights of the individual, which correspond to both the philosophical underpinning of liberal democracy and the sovereign consumer, and the rights of a collective, which is often at odds with both the sovereign state and contemporary corporate techniques of management, marketing and production.⁹

Even so, the United Nations Charter recognises the right of Indigenous peoples to 'a substantial degree of self-government and autonomy *within* states', as distinct from the autonomy of an independent state that threatens the "'territorial integrity" of existing states' (Mulgan, 1998: 202; see also Patton, 2000: 125-131). These principles for Indigenous sovereignty are predicated on a coextensive set of relationships between the nation, territory and the people. The extraction from UN institutions and agreements by Australia can be seen, in effect, as an unconscious admission to Empire. Paradoxically, such a

⁹ Later, we will see how this tension between the individual and collective is reproduced in the realm of intellectual property regimes.

manoeuvre evidences the abolition of territory which separates that nation-state from the supranational order of the UN, since the rejection of Aboriginal self-determination is done in part in the name of protecting the interests and identity of "the people", an entity which in itself is 'intimately tied to the bounded national space' (Hardt and Negri, 2001), all of which abscond representation within the political institutions of the state. Thus the Australian state exonerates itself from its own constitutive dimension when predicated on the figure of the people.¹⁰ Following Hardt and Negri's thesis, this leaves Australia open to the sovereignty of Empire, which also succeeds the juridical rule of the UN. In the last section of this chapter I will go on to outline ways of conceiving the possibility of Aboriginal sovereignty within a state system, but one that is not dependent on national, territorial organisations of statehood.

The Deregulation of Prisons

The tension between the national and the supranational is brought into further relief when one considers the ways in which the problematic of Aboriginal sovereignty is articulated with the corporatisation of prison systems in Australia. A relationship is established between State and Federal legislation on prison sentencing laws and the contractual conditions of agreement between governments and corporate providers of "corrective management services". The paradox of the deregulation of public utilities that underpins the economic rationalisation of "minimising" risk for the state is that whereas the state-civil society relationship was a mutual condition of existence, particularly under welfare states, now the state-corporate relationship requires the state to legislate on behalf of what up until recent times was its constitutive outside: that is, the state's role was to regulate industry for the purposes of nurturing and securing the interests of society to the extent that they intersected with the task of nation building. Political economist and international relations theorist Philip Cerny has noted the following political advantages of deregulation:

Firstly, on the domestic [level], it can appear to be virtually a non-policy, involving, ostensibly at least, the mere removal of regulations; therefore it

¹⁰ Such a process can be understood in terms of the operation of the constitutive outside, as discussed in chapter 2.

can attract a coalition of strange bedfellows. And secondly, on the international level, the decision to deregulate can be a unilateral one. Deregulation, then, is a policy option which it [the state] is possible to pursue in an anarchical international system when there exists what public choice theorists call an "empty core" – that is, where there is a lack of sufficient shared preferences for a collectively agreed outcome to emerge. It represents a so-called "non-cooperative equilibrium". (Cerny, 1996: 93)

Prisons, of course, are not the only sector of the state to have undergone a process of deregulation. However, the privatisation of prisons presents the case for Aboriginal sovereignty with an additional conundrum. Given the exorbitant over-representation of incarceration of the Aboriginal population in Australia coupled with disproportionate numbers of deaths in police custody,¹¹ then it follows, if Cerny is right, that the prison in effect is a non-place or heterotopia, as Foucault (1986) observed some years ago, in as much as it does not belong on the continuum of 'shared preferences' or interests for actors who might be sufficiently anchored at either national or supranational levels of governance. How can the nation-state attest to the rights of the incarcerated when such subjects no longer reside within institutional settings that belong to the state? With deregulation, the prisoner becomes an economic unit whose value accumulates with repeat offences. To be inscribed with this kind of exchange value that circulates within a corporate-state-civil society triangulation rather than state-civil society sphere thus diminishes the criminalised subject's representative purchase on the state. Moreover, the transformation of the citizen-subject into a criminal unit with exchange value protects the corporate-state nexus from perceived threats to its interests,

¹¹ 'Indigenous peoples remain over-represented at each stage of the criminal justice system which results in their being 12 times more likely to be incarcerated than non-Indigenous people within Australia. Further, the Indigenous population is a developing population as opposed to the "aging" non-Indigenous population. It is estimated that if nothing is done to stem present rates of incarceration, by 2011 there will be a 44% increase in the number of juveniles in detention. [...] In 1999, the Aboriginal and Torres Strait Islander people accounted for 22% of the deaths in prison custody' (Marks, 2000: 18).

Figures available from the Australian Bureau of Statistics show that the percentage of Indigenous peoples in prison have increased: 'At 30 June 2000 there were 4,095 Indigenous prisoners in Australia (19% of the Australian prisoner population) with a national rate of imprisonment for Indigenous persons of 1,727 per 100,000 adult Indigenous population. Western Australia recorded the highest imprisonment rate (2,909 Indigenous persons per 100,000 adult Indigenous population) followed by New South Wales (1,882). Nationally, the Indigenous rate of imprisonment was approximately 14 times that of the non-Indigenous population'. <http://www.abs.gov.au/>.

represented in one instance by the political subject of Aboriginality. As Zygmunt Bauman has written:

What the sharp acceleration of the punishment-by-incarceration suggests [...] is that there are some new and large sections of the population targeted for one reason or another as a threat to social order, and that their forcible eviction from social intercourse through imprisonment is seen as an effective method to neutralize the threat or calm the public anxiety which that threat evokes. (Bauman, 1998: 114-115)

As the civic role of the state has receded and systems of global finance and corporate management jostle towards an increasing approximation of capital integration or monopoly control, the dominant habitus of the state is now one that increasingly reproduces structures of organisation and patterns of interest characteristic of the corporate sector.¹² For instance, in the state's attempt to attract capital investment, not only do financial and tax relief incentives typically accompany the winning tender by private companies to take over the running of state services, but a set of regulatory protocols have to be agreed to and monitored in such a way that the state's function shifts from governance of the public institutions of civil society to facilitator of the private realm of corporate institutions, all in the hope of maintaining, if not rebuilding, the infrastructure of the state within the logic of a corporation.

The transnational corporatisation of national prison systems is predicated on a series of inter-relations that include the implementation of federal and state legislation on prison sentencing laws, restrictive confidentiality provisions in commercial contracts, the diminishing role of auditor-generals to scrutinise state finances, the de-unionisation of work forces and the hiring of lesser trained staff employed under enterprise bargaining schemes, and the denationalisation of legal and political rights as prisoners are constituted, similar to students at universities, as "clients" of transnational corporations. Furthermore, and of considerable concern, the legal infrastructure of the nation-state is shifted to

¹² Those working within the knowledge industry, particularly academics, should be well placed to observe such a shift, given their experiences of rapid structural reforms over the past 10 to 15 years. However, it comes as no surprise that academics have been some of the most passive and disorganised group of actors in militating against these reforms. While job insecurity, structural alienation and work conditions are real obstacles to political resistance, the logic of institutional and cultural transformation is such that subjects are constituted within pseudo-corporate universities as individualised, competitive entities, hence rendering academics virtually inoperative in terms of presenting a coherent political alternative.

meet the interests of corporate profits. As Martin Shaw notes: 'juridical sovereignty has itself become a commodity, as national entities become "competition states", compelling to offer favourable economic conditions to corporations and rich individuals utilizing a variety of "offshore" statuses' (Shaw, 2000: 186-187). Hence, the issue is whether mandatory sentencing is done in the name of "the people", supposing that a social body as abused as the Aboriginal one even fits into such a category (hence a distinct violence to the people precipitates), as distinct from sentencing done in the interests of correctional facilities seeking to increase the processing of incarcerated criminals or the rate of "turnover" (otherwise referred to as the "revolving door syndrome"). The success of invoking mandatory sentencing in the name of the national interest resides precisely in the ways a temporal conjuncture is established between modernist categories of the citizen and national law and order, and a postnational condition that seeks to make invisible the interests of transnational corporations by minimising or removing the scrutinising gaze of the state. In a relationship of co-dependency, the economic sovereignty of transnational corporations reinforces the juridical sovereignty of the nation-state, but in terms that represent the interests of the corporation and not those of civil society. This places Indigenous quests for sovereignty in yet another agonising position in as much as the juridical legitimacy Indigenous peoples have obtained resides within the supranational frame of international law.

In short, the invisible interests of global capital enable what Roland Barthes termed (1973: 143) the 'depoliticised myths' of the nation to resonate. Such a process entails the evacuation of antagonism that defines social relations, and enables the development of Third Way models of politics. Aboriginal lawyer Noel Pearson has in recent times been one of the strongest proponents of the Third Way, adopting a rational consensus approach to addressing Aboriginal social problems. Pearson is critical of the welfare state, which he sees as creating a dependency resulting in what he terms "passive welfare" – a permanent state of unemployment and marginalisation (cited in Stephens, 2001: 35).¹³ Instead, he is a strong advocate of notions of mutual obligation, social partnerships, a new emphasis on law and order, and the empowerment of communities, all of which are terms that provide the mainstay of Third Way

¹³ For an elaboration and qualification of Pearson's position, see Pearson (2001/2002).

rhetoric. In taking such a position, Pearson and his allies across the political and social spectrum implicitly lend support to mandatory sentencing laws, as the instantiation of mandatory sentencing is one that, rhetorically at least, secures national law and order. The ATSIC report to the UN Committee on Economic, Social and Cultural Rights (August, 2000) expresses strong reservation against government policy based on concepts of "empowerment" and "self-management": 'ATSIC regards the term "empowerment" as vague, without any meaning in international law, and providing no coherent basis for Indigenous policy' (see Marks, 2000: 8). In deferring to the authority of international law to grant legitimacy to the terms of reference by which a policy for Indigenous rights might proceed, ATSIC immediately undermines the particularities that define Aboriginality within the national form. A different language game is necessitated, and like all such games in which rules set limits to possibilities, varying degrees of concession and tactical manoeuvre are required. The particular is subsumed into the universal, and the conceptual – and subsequently legal – basis for claims of difference are relinquished as the dissociation of the situatedness of the social from the political is reproduced within a supranational frame.

There is undoubtedly a strategic underpinning to Pearson's adoption of Third Way rhetoric in so far as it is a representation of the capacity for Indigenous people to engage in rational consensus procedures of democracy. Perhaps the way is then opened up to reintroduce notions of self-determination, understood by ATSIC as the 'effective participation in public life ... [where] no decisions directly relating to their rights and interests are taken without their informed consent' (Marks, 2000: 8). Yet the concessions made to a Third Way ideology that seeks to remove the antagonisms inherent in sociability comes at a cost, a significant part of which has to do with an ontology of social and cultural identity defined by a bundle of differences that cannot so easily be incorporated into the politically devoid category of the Third Way citizen.

In concert, shifts such as these mark the gradual transformation from popular sovereignty to economic sovereignty. Put another way, with an increasing intensity since at least the collapse of the Soviet Union in 1989 (see Giddens and Hutton, 2001: 1-12), 'the will of the people ... [as] the basis of government ...

through elections', as stated in the Universal Declaration of Human Rights of 1948,¹⁴ is subsiding to the exigencies of global capital and international corporate law to pressure governments in order to set regulatory conditions that enable the opening of markets. Coextensive with a neoliberal mode of economic governance is the gradual transformation from popular sovereignty to economic sovereignty.

This series of paradoxes or disjunctures invites one to ask whether in fact an alternative instantiation of legitimacy for an Aboriginal polity occurs or is possible at the point of intersection between the production of denationalised political subjects and the consumption of commodity objects vis-à-vis denationalised corporations.¹⁵ Furthermore, the case of the partially denationalised political subject of Aboriginality and processes of legitimacy at the level of the national vis-à-vis denationalised corporations provides an empirical basis for an examination of the conditions of possibility for an agonistic democracy articulated in terms of segmentation and regionalism. This example is but one that enables a way of identifying better the uneven, differentiated, incommensurable terrain of globality. I would now like to turn to a brief discussion of the various modes of sovereignty in order to further map out the network of relations that constitute Aboriginality as a denationalised political subject in tension with the nation-state.

Modalities of Sovereignty and the Transformation of the Nation-State

Since legal and political institutions hold a hegemonic role in the organisation of the social, Aboriginality, as a sign of social practice, is also further undermined within the social sphere. The denationalised plane of abstraction does not inscribe the same legal, political and cultural values upon the sign of Aboriginality as the nation-state. Hence, the acceptance of the political subject of Aboriginality is refused in the process of articulating a denationalised space

¹⁴ Universal Declaration of Human Rights of 1948, UN Charter, Article 21 (3), cited in Sassen (1996: 2).

¹⁵ The media representations, and indeed the Indigenous management of such representations, at the 2000 Sydney Olympics would be one case to examine to test such a thesis. See, for example, the 'Olympic Moments' link to the ATSIC website, http://www.atsic.gov.au/olympic_moments/default.asp. See also Neilson (2002).

with a national one. At the same time, the authority of the nation-state to determine its own political and legal infrastructure is brought into question by both supranational bodies of governance and international law as well as by transnational corporations whose condition of existence and primary interest is based upon the return of profit and the accumulation of capital. As such, the continuity and legitimacy of the nation-state is challenged.

However, this is not the same as arguing the nation-state is in decline and will disappear. To the contrary, the nation-state as an imaginary and regulatory entity is better seen as undergoing a transformation, or what Neil Brenner (1998) terms a 'state re-scaling'. Part of this process sees the nation-state reconfigured in a field consisting of international economic actors operating more often than not in regional trade zones; an increasingly global networking of communications media, such as computers, mobile telephony and satellite, that are distinct from earlier international forms, such as submarine telegraph cable; and the regulation of intellectual property rights in such a manner that benefits the interests of monopoly capital, thus further eroding the public domain as a repository of knowledge, restricting the access individuals and social groupings have to such resources (see, for example, Sassen, 1996: 1-32, 107-114; Wang, 2001; Frow, 2000). The extent to which the nation-state undergoes extra-territorialisation is predicated nonetheless on what Brenner, drawing on Henri Lefebvre (1977, 1978, 1991), identifies as 'the territorial "fixity" of state territories [which] provides a stabilized geographical scaffolding for the increasing spatial "mobility" and "transience" of labor power, commodities and capital on both supra- and sub-state scales' (Brenner, 1998: 13).¹⁶ It is important not to make the mistake of seeing the transformation of nation-states in any totalising sense, as is often the case in both popular and academic discourses on globalisation. The national form has always been differentiated and uneven in its development and partial in its effects. Similarly, the modalities by which national sovereignty operates cannot be reduced to the simple equation of sovereignty=nation+state=territory=citizen.

Nevertheless, in terms of its articulation at a political level with its citizenry, the sovereignty of the nation-state can be seen to be losing purchase with civil

¹⁶ Brenner is drawing here on Lefebvre's *The Production of Space* (1991).

society, and it is precisely the formation of emerging denationalised political subjects – subjects whose recourse to legitimacy can only be found within a postnational frame – that instantiate this unravelling of the political sovereignty of the nation. Things of course don't have to be this way. In an essay that considers the legitimacy of the Australian state as based upon a recognition of Aboriginal rights, Richard Mulgan puts forward the following alternative: 'A state that denies these rights is no longer legitimate while acknowledgment of Aboriginal rights can become a means of confirming the legitimacy of the nation and all its citizens' (Mulgan, 1998: 187). While I think Mulgan is correct in recognising the basis of the state's legitimacy as corresponding with an acknowledgment of Aboriginal rights – and indeed, this would seem to be the desire of Indigenous polities – it is highly debatable whether the citizen-subject remains as a figure with any political purchase in a terrain that has seen popular sovereignty subordinated by economic sovereignty, among other modes.

Many of those from both the Left and Right who argue that the sovereignty of nation-states 'has progressively declined', as Hardt and Negri (2000: xi) do, place an emphasis on the intersection between sovereignty and territoriality that characterised the modern industrial age of state formation. Such arguments overlook the ways in which the nation-state is reconstituting itself at extra-territorial levels as the precondition for what has been variously referred to as the post-industrial age, disorganised capitalism, the world risk society, the network society, the control society, and so forth. Part of this process of state re-scaling also involves new operations of sovereignty, which Hardt and Negri consider in some detail. But it is premature to see the nation-state as having dispensed with its sovereign power. As such, their thesis on *Empire* as that which succeeds the sovereignty of nation-states needs to be recast in terms modalities of sovereignty that co-exist in tension. Increasingly, national sovereignty is registered in extra-territorial dimensions and is coupled with the management and organisation of intellectual property. It is within the realm of intellectual property that Indigenous sovereignty movements seem, I think, to hold the best chance of obtaining a degree of self-determination at local levels within the national form. Such a move ultimately bonds the denationalised political subject of Aboriginality with denationalised corporations, as distinct

from supranational institutions such as the UN and its affiliated organisations. Yet, at the same time, the relationship the denationalised political subject of Aboriginality has with the nation-state is reinforced precisely because the mode of articulation is through the commercial logic of intellectual property, a logic the post-Fordist nation-state has greater investment in than that of human rights. I will go on to discuss this peculiar coupling shortly.

So far I have discussed, albeit partially, three of the key modalities of sovereignty: state, juridical and economic. Popular sovereignty could be a fourth, but such a mode has always been dubious since it assumes "the people" to exist as a unity when in fact they cannot be reduced to an 'empirical entity' (Hardt and Negri, 2001; see also Mouffe, 2000; Bourdieu, 1979). Furthermore, as Hardt and Negri (2001) note, popular sovereignty is 'based on representational institutions and structures within the bounded national space and dependent on national sovereignty', all of which are facing a crisis in legitimacy. The processes by which nations with advanced economies undergo transformation at extra-territorial levels necessitates a rethinking of the ways in which the nation can still maintain hegemony, since this too is the operative dimension of the partially denationalised political subject of Aboriginality.

Intellectual Property Regimes vs. Sovereignty of the State?

As long as Indigenous sovereignty movements see land rights as adjacent to territoriality and the concomitant economic, social and cultural benefits which flow from this, the nation-state will also persist as a territorial entity in an imaginary if not a politico-juridical sense. Moreover, the UN only recognises territorial integrity as part of self-determination.¹⁷ However, this modern conjunction between territoriality and sovereignty may in all likelihood leave Indigenous peoples as stateless entities, residing in a sort of non-place as partially denationalised political subjects, as their appeal is to an older paradigm of statehood. The condition of an emerging reconfigured statehood is prefigured to a certain degree in a number of ATSIC documents, which seek to expand the basis for sovereignty by addressing the issue of "digital rights", and

¹⁷ Thanks to Mike Hayes for bringing this point to my attention.

the need to instigate intellectual and cultural property laws and structural reforms pertaining to a field of informational economism (see ATSC, 1999a, 1999b). Herein lies the possibility of relative sovereignty for Indigenous peoples in Australia within informational economies.

Intellectual property regimes, while dependent on the administrative capacity of the state, are nevertheless independent to a considerable degree of the political interests of the state. Furthermore, intellectual property regimes increasingly operate within extra-territorial dimensions as the staple of informational economies is manifest as digital code. Within such a network of relations, the political subject of Aboriginality holds greater purchase on the state, since Indigenous peoples are positioned as economic actors within the realm of intellectual property law as it figures across supranational to local and community scales, as distinct from positioning within the denationalised realm of international human rights law. Arguably, the potential for a process of renationalisation of the political subject of Aboriginality is greater within such a spatial and economic relation, since the moral, cultural and political values associated with international human rights law, and the threat they pose to the habitus of the state, do not prevail to any great extent within codes of intellectual property law. Furthermore, variants of intellectual property law exist in established forms within Indigenous cultural practices (see Morris and Meadows, 2000).¹⁸ As such, a precedent of sorts exists that may enable a relatively easier articulation between Indigenous sovereignty issues and legitimacy as an actor within intellectual property regimes, compared to the failed articulation between supranational entities such as UNESCO and the nation-state with respect to a coextensive legitimisation of the political subject of Aboriginality – a nexus that might otherwise enable claims for self-determination to proceed through negotiation. At the same time, the pursuit of legitimacy within intellectual property regimes presents a different challenge for an Aboriginal polity that seeks to maintain the specific material conditions of Aboriginal cultural life as that which also pertains to concepts of intellectual property.

¹⁸ A comprehensive report on Indigenous cultural heritage and intellectual property rights can be read in Janke (1998). For a discussion of the inter-relationships between intellectual property regimes, the state, labour and informational economies, see May (2002).

It is significant that for a long time Indigenous peoples were not protected by cultural heritage conventions, which, as Andrew Kenyon (2000: 306) notes, operate at the level of states. And with copyright law there is the problematic of authorship of creative works, which operates more at the level of individual authors and "originality" rather than communities and collective production. So, in an historical sense, Aboriginal sovereignty can be seen to have undergone a double displacement whereby the specificities of Indigenous cultural production are overlooked in both cultural heritage conventions and copyright law. Cultural heritage is an intrinsic part of advancing self-determination, and because the state has in many instances been remiss for discursive, political and economic reasons when it comes to attending to such needs, other avenues have had to be pursued. This is where intellectual property regimes come in. In an essay that examines case law, copyright, cultural heritage and Aboriginal art, Kenyon (2000: 319) suggests that despite various tensions, principles of self-determination articulate cultural heritage with copyright law in some instances. Where there is an absence of protection within international human rights law and state cultural heritage legislation, there may be an opening within copyright law, and vice-versa. In any event, the likelihood of some degree of compromise is something that comes with the advancement of Indigenous sovereignty within a hegemonic non-Indigenous legal system.

Indigenous cultural policy studies scholar Christine Morris reinforces this point in her essay on Indigenous intellectual property with Michael Meadows, claiming that 'the concept of intellectual property has been a defining characteristic of Indigenous culture from the beginning. It determines intellectual property rights and responsibilities, identity, and each person's place in society in relation to the [customary] law' (Morris and Meadows, 2000: 213). And: 'Indigenous intellectual property regimes (IPR) operate through sophisticated management systems which have survived for millennia' (Morris and Meadows, 2000: 213). In short, 'Indigenous laws view intellectual property issues as inseparable from questions of land ownership, and from other areas of political and cultural life' (Gray, 2000: 227). This seems to me to be indicative of a very strategic move: one that says there are no doubts within Aboriginal law as to the function of intellectual property; rather, there is a need for international intellectual property law to get up to speed with a complex

system that is already in place. This is one position in the debate on common law, customary law and Indigenous intellectual property regimes in Australia. And it is one that is the most contentious, since the concessions by all actors are considerable. Certainly, there is an idealistic dimension to such a notion of Indigenous intellectual property: why, one might ask, would international intellectual property regimes even bother to pay attention to an Indigenous intellectual property regime, especially if it impinges on the economic interests of transnational corporations and challenges the ideology of the state? And, at a practical and political level, to what extent can a non-Indigenous legal system on intellectual property accommodate the peculiarities of Indigenous customary law whereby the latter does not have to make excessive concessions to the former?

The cultural heritage-copyright law divide presents difficult challenges for Indigenous self-determination movements and the legal system. The law, it should always be remembered, is conditioned not only by economic interests, but by social relations as well, both of which are intertwined. As such, legal regimes are subject to change as different actors obtain symbolic, political and economic power. While there are numerous deficiencies in intellectual property law in regard to protecting Indigenous cultural production, this doesn't mean laws cannot be changed. The challenge is how less powerful actors might strategically position themselves in ways that shift intellectual property law so that it does provide protection to a broad spectrum of cultural production which is otherwise exploited for commercial ends that does not benefit Indigenous peoples in the maintenance and development of their culture.

I also think it is crucial to remember that Indigenous peoples are not trapped in some sort of timeless time – the sort of non-place that is represented in colonial and some contemporary Anglo-Euro-American discourses nostalgic for the "noble savage". To the contrary, many Indigenous Australians have no difficulty with maintaining ideas and protecting practices of cultural heritage alongside their participation as entities within market economies, be these in areas like cultural tourism and creative production in the culture industries, for instance, as they shift into informational economies.

Despite the delirious utopian proclamations of cyber-libertarians,¹⁹ a material substrate underpins the possibility of knowledge creation. Knowledge and the media of communication that enables the distribution of its abstracted forms are embedded in socio-political practices, cultural systems and institutional realities. Even when knowledge is produced in flexible, transnational modes, it still remains situated within media forms, material cultures and labour practices. The situatedness of knowledge and its distribution as information according to technical standards and symbolic regimes gives rise to the extra-territorialisation of state borders that come into tension with the politics of location (see May, 2002: 114-148).

'Because informationalism is based on the technology of knowledge and information', writes Manuel Castells (1996: 18), 'there is a specially close link between culture and productive forces, between spirit and matter, in the informational mode of development'. John Frow offers important qualifications to Castells' conceptualisation of informationalism, arguing that information is embodied as knowledge once it is articulated with social needs, and manifests in a variety of forms that are governed by regimes of value and techniques of control. Frow writes:

I understand information to be any organization of matter-energy, and I assume that it is not necessarily representational in form. Knowledge would then be a higher level of information 'that has been systematized and integrated, organized so that it is relevant to natural and social processes'. In the domain of production, it takes the form of embodied skills, of organization of the production process, of the design of tools or machinery, of scientific knowledge about materials, of software algorithms, of techniques of use of materials, and of reflexive control of processes and of agents. The attribution of value to knowledge, which underpins the changes that Castells, like many others, describes, is closely bound with its functions of control. (Frow, 2000: 177)

As Edward Herman and Robert McChesney note, 'Along with pharmaceuticals, media and computer software are the primary topics for global intellectual

¹⁹ For some of the classic proponents of cyber-libertarianism, see Gates (1995), Mitchell (1995, 2000) and Negroponte (1995).

property rights negotiations' (1997: 51).²⁰ Supranational entities such as the World Trade Organisation (WTO) and World Intellectual Property Organisation (WIPO) have been among the key players responsible for developing the political, economic and technical architecture for informational economies and network societies. The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) in 1995 sought to protect the commercial interests of Western pharmaceutical and media companies from countries, most notably China and African states, engaged in software piracy and abuse of copyright and patent law. The TRIPS Agreement sets out minimum standards for how member states engage with copyright, patents (including plant variety protection), trademarks, geographical indications, industrial designs, and undisclosed information such as trade secrets.²¹

The TRIPS Agreement can be understood as an attempt to establish a universal set of legal and technical standards administered by member states in order to control and regulate information flows according to the principle of intellectual property as distinct from material property. Intellectual property renders knowledge as a rivalrous resource that can be owned. Yet unlike material property, intellectual property such as artistic creations (films, music, books) and innovative technical processes (software, biotechnologies) are forms of knowledge that do not diminish when they are distributed. This is especially the case when information has been encoded in a digital form and distributed through technologies such as the Internet. In such instances, information is often attributed an "immaterial" and nonrivalrous quality, although this can be highly misleading for both the conceptualisation of information and the politics of knowledge production.

Essentially, the TRIPS Agreement can be seen to inscribe a regime of scarcity upon that which is otherwise undiminished through distribution in order to endow a digital product, for instance, with exchange value within informational economies. Critics of the TRIPS Agreement have pointed out

²⁰ For a history of intellectual property law, see Sell and May (2001). A particularly helpful resource on intellectual property law can be found on the Center for the Public Domain site, <http://www.centerforthepublicdomain.org/ip.htm>.

²¹ For an outline of intellectual property regimes as they figure within the TRIPS agreement, see the following WTO documents: 'Intellectual Property: Protection and Enforcement',

'that transnational corporations own approximately 90% of technology and product patents in the world, and up to 80% of technology and product patents in developing countries' (Dommen, 2002: 26). Thus it is fairly easy to anticipate the techno-civil libertarian response to proponents of intellectual property rights: within a commercial global media complex characterised by monopoly ownership and flexible production, intellectual property rights as manifest in copyright and patent law are seen as restricting access to cultural forms that had previously existed as part of the public commons. Furthermore, the notion of proprietary control of immaterial forms such as information and knowledge is considered to drastically diminish the potential for the reproduction of creativity and innovation. As Frow writes: 'a private property regime imposes potential limitations on the extent to which cultural material can be freely used and transformed' (2000: 183). All intellectual property has impacts on reproduction, and there are very long-standing treaties in the area of copyright like the *Berne Convention*, which has been through various revisions since the late 1800s. So, while the effect of the TRIPS Agreement is not new, it accentuates the restrictions on the use of cultural material into the realm of informational societies. The privatisation of the public commons also results in the removal of public accountability mechanisms, further alienating the democratic potential of the Internet, which is the primary medium for the distribution of digital products and cultural forms.

Intellectual property regimes have been contested by numerous entities, including "open source" movements, particularly those involved in software development, which depends on the collective intelligence of and labour upon a source distributed through computer networks in order to refine and improve upon the source code of a particular software program (see Stalder, 1999, 2000, 2001a, 2001b; Pfaffenberger, 2001).²² However, while these are arguments and practices that I would support, they are not principles that can be applied in universal terms. One key and surprising aspect often overlooked in techno-libertarian tracts on open source distribution concerns the way in which the cultural technology of the Net – its capacity to distribute and share information

http://www.wto.org/english/thewto_e/whatis_e/tif_e/agrm6_chtm and 'Overview: the TRIPS Agreement', http://www.wto.org/english/tratop_e/trips_e/intel2_e.htm.

²² See also the archive of postings to nettime mailing list, <http://www.nettime.org> and the Open Flows site, <http://www.openflows.org>.

within a gift economy – is assumed to correspond with universal access and the maintenance of a democratic civil society. That is, the problematic of cultural capital and the necessary institutional supports that endow actors with the requisite cultural knowledge and skills to access information is rarely, if ever, taken into consideration. As nice as it might sound, not all culture should be open. Nor is it. In times of crisis, some culture needs to be protected. And culture is not open, irrespective of open source principles, precisely because individuals and communities hold varying and often inalienable degrees of cultural capital. To unequivocally uphold all critical rebuttals of intellectual property regimes would overlook the ways in which intellectual property rights, when balanced between economic interests and public access, enable Indigenous peoples and people in developing countries the potential to secure their cultural and intellectual resources within network societies and informational economies. I should reiterate here that I am not advocating that Indigenous peoples give up on the pursuit of human rights issues within an international frame. That would be foolish. Rather, I am suggesting that a two-pronged approach be taken: maintain pressure within the realm of international human rights law, and also pursue intellectual property rights. It is naïve to assume that just because international legal conventions exist to deal with human rights abuse that they are then effective. Clearly, they haven't been as effective as they might be, despite the legitimization by supranational entities such as UNESCO of Aboriginality as a partially denationalised political subject.

As with all movements, the categories that contain them suggest a coherent, unified field. My use of the term "open source" is at once specific as a way of referring to the distribution and development of software, since that is what many of the commentators from Eric Raymond (2000) to Manuel Castells (2001) to Felix Stalder to those on the Open Flows site refer to when they invoke the term. But then I would not restrict it to software alone when I situate open source within informational economies in which a raft of cultural forms have been pushed into digital code for archival, production, commercial exchange and socially distributive purposes. Anthropological films, contemporary and traditional artworks, music, videos and published materials would fit into this category. However, there are considerable complexities within intellectual property law with respect to the distinction between the form of knowledge

and its expression. As Francis Hwang (2002) has noted, intellectual property law does not protect knowledge *per se*: 'Copyright, for example, does not protect *ideas*, it only protects the expression of those ideas in a given form'. Hwang also points out that a *technical process* can be patented, but this is different from the patenting of *knowledge*, although there is frequently a great lack of clarity in efforts to distinguish between the two.

My understanding of Indigenous cultural production, limited as it is, is that there is a processual dimension that figures in important ways – a concern with the process of production, for example, and the constitutive social relations, rather than the end product itself, as seen in the production of artworks. Here, the object as such is defined by its constitutive outside: that is, it is inscribed by various regimes of value – symbolic, aesthetic, political, legal and possibly more or less correspondence with economic values – and holds material and immaterial properties or attributes. Such instances could be considered as the operation of socio-technics. In addressing the problematic of Aboriginal content, the late Eric Michaels – an American ethnographer, media theorist and teacher, policy worker and gay activist – asks not what is it?, but rather who's got it, and who needs it? Michaels goes on to propose a 'processual definition' of Aboriginal media production 'based not on the properties of the text [the extent to which a particular text can be considered as "authentic" with regard to content, and thus hold greater purchase on the "real", as a documentary film might assume to hold, for example], but on the conditions of its production and use' (Michaels, 1991: 279; see also Michaels, 1986, 1989; Hinkson, 2002). This may seem an obvious point for any Marxian informed social analysis, or indeed any analysis that rightly pays attention to contextual conditions. Nevertheless, such attention to the processual dimension of cultural production within the realm of informational economies remains a useful one in so far as the focus becomes one of securing conditions that enable the protection and maintenance of Indigenous cultural production – something that is threatened by corporations who are in the business of maintaining hegemony within intellectual property regimes.

However, in the case of the Indigenous production of artworks, the final product can often be of considerable significance and in need of copyright

protection as it enters a market and cultural economy that exchanges and collects Indigenous art – another sort of process in which the culturally restricted economy of Indigenous dreaming (or law) is then subject to exposure to audiences (and markets) who would otherwise not have access to this law precisely because such access is considered a violation of customary law. The need to safeguard cultural heritage is seen as paramount by Indigenous peoples, and a *sui generis* approach has been put forward by ATSIC (1999b: 7) to establish an administrative process that manages Indigenous cultural and intellectual property rights through local and regional tribunals. These proposals have advocated a system of intellectual property law that does not insist on knowledge to be fixed in form, and enables Indigenous intellectual property to be protected in perpetuity. In this respect, the ambiguity surrounding the distinction between knowledge and its fixity is clearly addressed.

The term “open content” is perhaps a more correct one for the concerns of this chapter as it refers to a movement that seeks to maintain access to repositories of public knowledge as they undergo digitalisation and subsequent restriction as a result of copyright law that benefits corporate profit (see Pfaffenberger, 2001). Open content movements argue for the right to appropriate and reproduce entire copyrighted works as a condition for what is often loosely referred to as “democracy”, which is predominantly based upon a deliberative model of liberal democracy. Herein lies a fundamental contradiction with much of the self-anointed “radicalism” of open source and open content movements: that is, a failure to question the assumptions of what is argued by some radical democracy theorists as being a model that places severe restrictions on the possibility of a form of democracy that registers irreducible difference as its constitutive dimension.²³ So, while there are distinctions between the two movements, and considerable internal differences,²⁴ it does seem both “movements” share some underpinning philosophies.

The open source movement, if I can speak of it in general terms (which I acknowledge is as problematic as speaking of Aboriginality in unitary terms),

²³ See the collected essays, for example, in Mouffe (1999).

²⁴ I thank Francis Hwang for bringing this to my attention.

also shares some remarkable features with Cultural Studies in the very 'paradoxical' way in which it can work to reinforce the very neoliberal agendas that it supposedly opposes.²⁵ Thomas Frank, in his at times gross caricature of cultural studies in the US academy in his book *One Market Under God* (2000), and Brian Holmes, in his superb essay 'The Flexible Personality' (2002), are among many who give accounts of the ways in which Anglo-American cultural studies in the eighties and nineties overlooked its own modes of production – which saw an escalation in the casualisation of labour and the rise of professors to celebrity status with salaries to match, for instance, along with trends toward monopolisation and syndication in academic publishing – and advocated the nonsense of political resistance via consumer sovereignty and the consumption of popular culture, and displayed no capacity to act as an oppositional force against the deregulation and commercialisation of education.²⁶ In so doing, cultural studies lent implicit support to destructive neoliberal reforms. Similarly, the open source movement, in its insistence on universal "openness", shares a common ground with the likes of Bill Gates, hegemonic nation-states, and transnational corporations that spout rhetoric on "openness" via "friction-free capitalism" and "borderless economics" while doing their utmost to maintain hegemony in a political economic field of uneven development. Again, I will state my strong support of many of the practices of open source movements. But I would maintain that there is danger that comes with such a movement in its rhetoric and when it assumes to have universal application.

The sort of rights the Aboriginal polity seeks to obtain vis-à-vis self-determination and relative autonomy can, it would seem, operate to certain degrees within informational modes of production. Moreover, in pursuing intellectual property rights, an Aboriginal polity would, I think, be more strongly articulated with the nation-state as it too undergoes transformation at extra-territorial, immaterial levels via the discursive, legalistic, security and

²⁵ I'd like to thank Danny Butt for suggesting that I further explore the relationship between open source movements and neoliberalism.

²⁶ I am not denying the agency of audiences here in regard to the production of meaning and the multifaceted reading strategies audiences adopt. Rather, I am suggesting that for all its concern with reflexivity, cultural studies by and large failed to reflect upon the economic, institutional and government forces that shape intellectual modes of production. Two key texts that offer a critique of the university as it figures in deregulated, informational environments are Jean-François Lyotard's *The Postmodern Condition: A Report on Knowledge* (1984b) and Bill Readings' *The University in Ruins* (1996). See also Considine and Marginson (2000), Myoshi (2000), Delanty (2001) and Cooper (2002).

commercial regimes of intellectual property. Micro technologies of control, surveillance and regulation of the internet in the form of server protocols, cookies, authentication codes and software – what Lawrence Lessig (1999, 2001) calls the architecture of the Net – that monitor user practices have brought nation-states into partnerships with each other as they seek to maintain databases and information networks that store information on clients and “citizens” within their territories (see Castells, 2001: 168-187). This sort of sharing of power between states for security and economic purposes is an example of what Shaw (2000: 185-191) calls a “pooling” of sovereignty – a mode of economic as distinct from juridical sovereignty whereby states have adjusted to the new techniques of control within informational societies, operating through mutual affirmation and legitimacy conditioned by overlapping interests. Corporations in turn have depended on such pooled sovereignty by nation-states, and the regulatory practices of nation-states themselves, as a mechanism by which the protection of intellectual property rights can be enforced by way of accessing information regarding intellectual property violations. Current developments in encryption methods by corporations embed code with default boundaries, further ensuring the territorialisation and regionalisation of intellectual property with copy-protection code of CDs, DVDs and software, for example, that registers infringements to property ownership as it occurs within the space of that nation (see Stalder, 2001b; Sassen, 2000b). Hence offences can, in theory, be tracked and then prosecuted under national law as it corresponds to minimum standards of protection set out in the TRIPS Agreement. Examples such as these evidence the ways in which the sovereignty of the nation-state is undergoing reconfiguration within an informational plane of abstraction.

Within this strange context, I would suggest that claims for Aboriginal sovereignty hold greater potential since political legitimacy can be better obtained from the position of being an economic actor operating on the same plane of abstraction as the corporate-nation-state nexus. In this sort of arrangement, an Aboriginal polity is not in the first instance articulated with property ownership in the form of land and ocean rights; rather, the political subject of Aboriginality is situated as an actor with proprietary rights in the form of cultural heritage and its mediatization, ecological and biological

knowledge. Intellectual property translates into commodity objects whose form is decoupled from the moral, legal and proprietary discourses associated with the quest for Indigenous sovereignty in the denationalised realm of human rights law, which, for the most part, has failed to articulate with the liberal democratic frame of the nation-state precisely because rational consensus models of democracy have proven to be inadequate in accommodating a plurality of interests. I will go on to further problematise this prevailing idiom of democracy in the next chapter.

While such a potential for Aboriginal sovereignty may seem exclusively extra-territorial and hence politically ineffective, it still operates at a territorial level within the bounds of the national form since intellectual property regimes work to reinforce national borders by encoding the equivalent of scarcity into informational economies. Remuneration from the commercial use of Indigenous intellectual property could then be redirected to meet the social and economic needs of the communities that initiated that transferral of culture and knowledge into the electronic form of digitally encoded information, for instance. In so doing, an Aboriginal polity becomes articulated with modalities of economic sovereignty, as distinct from the mythic figure of popular sovereignty and the politically inoperative legitimacy granted by human rights law. However, there are considerable concessions that come with such an approach to the problematic of Indigenous sovereignty, and I will conclude by briefly addressing some of the issues.

Conclusion

This very rough sketch of how claims for Aboriginal sovereignty might proceed within an informational economy overlooks the many complexities that attend debates, policies, technological capacities and cultural practices within the field of intellectual property regimes. A primary issue within intellectual property rights that is immediately at odds with the principles of Indigenous sovereignty concerns the conceptual and legalistic limitations of Western models of intellectual property where primacy of the individual in the form of authorship

is granted over the collective (see Dommén, 2002: 38-39; Frow, 1997: 102-217). As stated in an ATSIC submission on intellectual property rights to UNESCO:

Intellectual property laws do not protect the communal rights of indigenous peoples, nor do they allow for protection in perpetuity. Intellectual property laws are based on individual rights, and emphasise economic over cultural rights. These laws focus on a single, identifiable creator or author, whereas in indigenous communities rights and interests in intellectual creations are more diffuse. They are distributed and managed throughout the community in complex ways according to ritual, socio-political, kinship and affinal relationships. (ATSIC, 1999b: 6)

This document, prepared by the Indigenous Cultural and Intellectual Property Task Force for ATSIC, can be seen here to essentialise that which constitutes an ontological condition of Aboriginality. While there is a well documented history of the experiences of alienation by Indigenous peoples from a Western metaphysics of individualism, contemporary Indigenous subjectivity nevertheless traverses both the specificity of Aboriginal cultural heritage as well as cultural paradigms and institutional settings of non-Indigenous society. Yet this sort of reduction of Aboriginality to a communal identity is precisely the sort of tactical move that needs to be made in the language game of supranational politics and international intellectual property law in so far as it preserves some of the key principles of Aboriginal sovereignty.

This ATSIC submission is notable for a number of other reasons, a key one being the recognition of the place of intellectual property issues within informational economics well before the popular uptake and commercialisation of the Internet. ATSIC very strategically seeks in that document to pursue customary law that maintains specific cultural practices at territorial levels, but it does so within an extra-territorial framework of economic sovereignty and intellectual property law. In so doing, an Aboriginal polity may, it seems, have stronger purchase on the state than it would if human rights law remained the exclusive avenue through which Indigenous sovereignty was pursued. The process for undertaking such a multilayered socio-political formation is outlined in the following way:

Since indigenous cultural and intellectual property is defined, managed and controlled in accordance with customary law, it may be argued that the development of effective standards should focus on protecting

customary laws *in the first instance* – on the assumption that recognition and protection of intangible heritage can then flow from that as a consequence of the recognition of customary law. (ATSIC, 1999b: 5-6; italics added)

Since the 1989 Recommendation to UNESCO on Indigenous intellectual property rights – the submission to which this ATSIC document refers – an Aboriginal polity has been legitimated within UNESCO fora. But the legitimacy granted within a denationalised realm of human rights law has failed to articulate with the national form. Hence, one potentially useful strategy for Aboriginal sovereignty would be to reverse this process, and seek recognition of customary law within the nation-state once intellectual and cultural property rights have been secured. In so doing, an Aboriginal polity is operating well and truly within the dominant neoliberal paradigm which sees the welfare state further eroded. Although this is not a foregone conclusion. Perhaps the relationship between the state and the social can be reconstituted in the process of negotiation that attends the status of becoming a legitimate political and economic actor within the supranational realms of both human rights fora such as UNESCO and entities such as the WTO that set the agendas for trade agreements in informational economies.

Democracy is not a condition or universal set of principles that can be imposed from above. As Mouffe argues, democracy is a condition that in the first instance acknowledges the antagonistic dimension of sociality. According to Mouffe, for a radical, pluralistic democratic form to emerge it is necessary to address the contingencies that condition the field of “the political”. It is within the encounter between denationalised corporations, extra-territorial dimensions of statehood and the partially denationalised political subject of Aboriginality, along with the manner in which this encounter is then materialised in the national form, that conditions for what Mouffe terms an agonistic democracy might then emerge. Such a political formation is one that challenges the assumptions of deliberative, rational consensus models of liberal democracy, which oddly enough still maintains hegemony even in its obsolescence (see Hirst, 1999). Liberal democratic theory of this kind privileges the figure of the rational individual, and operates by removing and making illegitimate what is ultimately the ineradicable antagonistic dimension of social relations and the political.

An agonistic politics, by contrast, seeks to create 'the conditions for possible conflicts to take the form of confrontations among adversaries (agonism), it attempts to avoid frontal struggle between enemies (antagonism)' (Mouffe, 1999: 4). Intellectual property regimes constitute a hegemonic field of articulation of "the political" in which the identities of states, peoples, corporations and supranational entities are contested and reconstituted in ways that challenge a neoliberal order as it currently stands. This chapter has suggested that it is precisely in the tension between international human rights law and intellectual property regimes that the conditions for Indigenous sovereignty may emerge. To avoid engaging with the problematic of IPRs is not a political alternative.

Whose Democracy? Information Flows, NGOs and the Predicament of Developing States

'Civil society is a process, not an end-point. Moreover, it is a contested process'.

Mary Kaldor, *Global Civil Society*, 2003.

There is no question that non-governmental organisations (NGOs) have more often than not played vital roles in fulfilling a range of humanitarian related tasks in numerous countries that have been subject to the ravages of colonialism, environmental disasters, agricultural failure, civil wars and genocide, internal political and social instability, currency crises, or a combination of all of these. In many instances, NGOs have filled a gap in the vacuum within developing, transitional or "quasi-states" (Jackson, 1990 cited in Knuth, 1999) who, for various reasons, do not have the capacity to provide political infrastructures and social services for their populations. As a result, NGOs entrench an extant condition whereby developing states may often not be equipped with the sort of institutional infrastructures and socio-political formations – namely, a domestic capitalist bourgeoisie and civil society traditions (Hoogvelt, 2001: 176) – that have enabled the formation of democracy within the project of nation building, as witnessed in the West. As such, many developing states do not have the sort of structural conditions in place to experience the unfolding of modernity. Or rather, in a dialectical sense, these states have indeed experienced forms of modernity that are radically dissimilar in spatio-temporal and ontological ways from that experienced by and within Western countries, many of which have adopted liberal democratic political cultures along with the political economies that attend such frameworks within a capitalist system.

In many respects, the material conditions of developing states have enabled the possibility of a range of conditions and experiences in advanced economies that

could be considered as privileges constituted by legitimately enacted violence. Mary Kaldor notes that war and violence are both primary conditions for sustaining a civil society (see Kaldor, 2003: 31-38). As she writes: 'What Norbert Elias called the "civilising process" – the removal of violence from everyday life within the boundaries of the state – was based on the establishment of monopolies of violence and taxation' (2003: 32). A monopoly of violence concentrates 'the means of violence in the hands of the state in order to remove violence from domestic relations' (Kaldor, 2003: 31-32).¹ The capture of violence by the state enables civil society to develop its key values of trust, civility, individual autonomy, and so forth, though within the framework of the rule of law as it is administered by the state. Moreover, the state's monopoly of violence minimises, though never completely eliminates, politically subversive elements and the possibility of civil war arising from within the territory of the nation. At a global level, the perversity of hegemonic states possessing a monopoly of violence operates as the basis upon which territorial sovereignty is maintained by way of subjecting violence upon alien states and their populations. A large part of this experience can be accounted for by referring to the histories of colonialism – a project whereby imperial states are able to secure the material resources and imaginary dimensions necessary for their own consolidation and prosperity. These histories have been well documented,² but it is worth keeping the spectre of colonialism in mind when discussing the situation of developing states, NGOs and informational economies.

Combining Hegel's thesis on the passage of nature/civil society/state with Foucault's notion of governmental power (i.e. the biopolitical, interpenetrative "conduct of conduct"), political philosopher and literary theorist Michael Hardt defines civil society in its modern incarnation in terms of its capacity to organise abstract labour through the governmental techniques of education, training and discipline:

¹ Similarly, this can be related back to Innis, where a monopoly of knowledge arguably deprives a community of the right to knowledge and information.

² The postcolonial literature analysing colonialism's discourses, histories and practices is substantial, particularly since the early 1990s when the field underwent a disciplinary, professional and institutional revival. For examples of some of the more influential and impressive works, see Memmi (1991), Fanon (1991), Smith (1990), Fabian (1983), Said (1991), Spivak (1988), Chatterjee (1993), Prakash (1990), Thomas (1994), McClintock (1995) and Hutnyk (2000).

Civil society... is central to a form of rule, or government, as Foucault says, that focuses, on the one hand, on the identity of the citizen and the process of civilization and, on the other hand, on the organization of abstract labor. These processes are variously conceived as education, training, or discipline, but what remains common is the active engagement with social forces (through either mediation or production) to order social identities within the context of institutions. (Hardt, 1995: 40)

With the governmentalisation of the field of the social a special relationship between civil society and the state is effected, one in which distinctions between institutions of the state and those of civil society are indiscernible, and where intersections and connections are diagrammatic. What, however, has happened to this constitutive relationship within our current era, one in which these sort of relationships have undergone a crisis as a result of socio-economic forces that go by the name of neoliberalism? What sort of new institutions are best suited to the organisation of social relations and creative labour within an informational paradigm? And what bearing, if any, do they have on inter-state and supranational regimes of governance and control? Within a neoliberal paradigm we have witnessed what Michael Hardt and Antonio Negri term 'a withering of civil society' in which the structures and institutions that played the role of mediation between capital and the state have been progressively undermined. This shift has been enabled by the logic of deregulation and privatisation, which has seen, in some respects, the socio-political power of both state and non-state institutions decline.³ These include institutions such as the university, health-care, unions and an independent mainstream media. For Hardt and Negri, the possibility of liberal democracy is seriously challenged by the hegemony of neoliberalism – or what they prefer to call the imperial, biopolitical and supranational power of "Empire"⁴ – since it threatens if not entirely eradicates traditional institutions of representation and mediation between citizens and the state. As Hardt and Negri write in their book *Empire*:

... this withering can be grasped clearly in terms of the decline of the dialectic between the capitalist state and labor, that is, in the decline of the effectiveness and role of unions, the decline of collective bargaining with

³ Although the so-called "decline" of state sovereignty and non-state institutions is peculiar to a modern era of sovereignty. As I have been arguing throughout this thesis, state sovereignty has transformed rather than disappeared. Similarly, the role of non-state institutions, as I argue over the next two chapters, can be considered in terms of emergent civil society movements.

⁴ In his biographical and biopolitical abecedary undertaken in collaboration with Anne Dufourmantelle, Negri defines "Empire" even more precisely as: 'the transfer of sovereignty of nation-states to a higher entity' (Negri, 2004: 59).

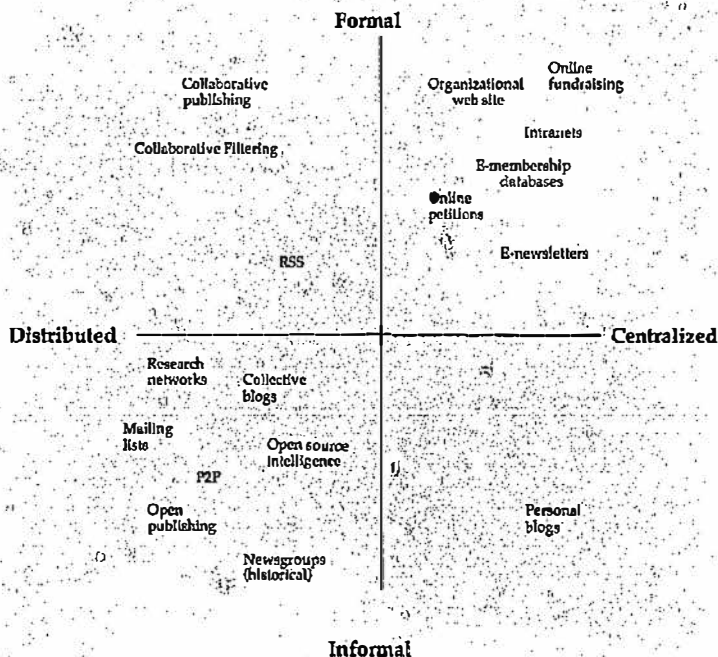
labor, and the decline of the representation of labor in the constitution. The withering of civil society might also be recognized as concomitant with the passage from disciplinary society to the society of control. (Hardt and Negri, 2000: 328-329)

The society of control is accompanied by techniques of data-surveillance such as cookies, authenticate passwords, data-mining of individuals and their informational traces, CCTVs that monitor the movement of bodies in public and private spaces, and so forth. Some of these mechanisms are related to the governance of intellectual property. New information and communication technologies (ICTs) thus play a key role in maintaining a control society. In an age of network societies and informational economies, civil society, or rather *civil societies*, have not so much disappeared as become reconfigured within this new socio-technical terrain in order to address problems immanent to the social, political and economic situation of mediated life. Civil society, as it resides within an informational plane of abstraction, continues to act as a key counter-force to and mediator between the state and capital. Thus, civil society does not entirely disappear or become destroyed with the onset of neoliberalism from around the 1970s-80s. Rather, there has been a maintenance of civil society within our current network societies precisely because there has been a social desire and need to do so.

The emergent civil society movements go beyond satisfying the collective self-interest of individuals, as represented in consumer lobby groups, for example. Instead, they derive their affective and political power from a combination of formal and informal networks of relations. Think, for instance, of the effect the no-border refugee advocacy groups have had as observers of human rights violations meted out by the state. Whether one is for or against the incorporation of "illegal immigrants" into the nation-state is secondary to the fact that civil society coalitions of activists, religious organisations and social justice advocates have played a primary role in constituting what Raymond Williams (1977) termed an emergent "structure of feeling" that counters the cynical opportunism of populist conservative governments.

Figure 3

Strategic uses spectrum



Source: Surman and Reilly (2003b: 3)

In an in-depth report entitled *Appropriating the Internet for Social Change* (2003a), Mark Surman and Katherine Reilly examine the strategic ways in which civil society movements are using networked technologies (Figure 3). They identify four major online activities: collaboration, publishing, mobilisation and observation. These activities are mapped along two axes: formal vs. informal and distributed vs. centralised. Collaborative filtering and collaborative publishing, for instance, fall within the formal/distributed quadrant. Open publishing, mailing lists, research networks and collective blogs are located within the distributed/informal quadrant; personal blogs within the centralised/informal quadrant; and organisational web site development, online petitions, online fundraising, e-membership databases and e-newsletters

fall within the formal/centralised quadrant (Surman and Reilly, 2003b: 3). Surman and Reilly consider the 'tools that fall in the formal/centralized quadrant to be used primarily by large NGOs, unions and political parties' (2003b: 3). The logic of organisation, production and distribution is, according to Surman and Reilly, 'based on a "broadcast" model' of communication (2003b: 3). The distributed/informal quadrant, on the other hand, is more typical of activities undertaken by 'informal social movements, research networks and "virtual organizations"' (2003b: 3). In the next chapter I will argue that it is time for "informal social movements" and "virtual organisations" – or what I prefer to call "organised networks" – to make a strategic turn and begin to scale up their operations in ways that would situate them within the formal/centralised quadrant, but in such a manner that retains their informal, distributed and tactical capacities. This chapter is concerned with NGOs, developing countries and the ways in which Intellectual Property Regimes present information as a paradoxical object: closing and restricting information flows on the one hand, yet also enabling the possibility of economic self-determination by peoples within developing countries.

My argument in this chapter is that in order for developing states to secure political sovereignty, it is first necessary to obtain a degree of economic power. In this sense my thesis here is fairly traditional or conservative, even crude. Building on the argument of the previous chapter, I suggest that a key way in which economic power can be obtained for Indigenous peoples and developing states is through intellectual property rights as they pertain to cultural production and biological knowledge. I maintain that the state form is an important one in the process of democracy formation, and that it is a mistake to see the state as obsolete within globalised informational economies. While the state frequently holds an antagonistic relationship vis-à-vis informational economies, it is not a priori a dysfunctional one. The hegemony of the state has not so much declined as become realigned. Within Western liberal democracies, the state-civil society nexus has been subordinated to a state-corporate nexus. As discussed in the previous chapter, the discursive figure of the state is built in to member obligations of the WTO's Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) in 1995 as a key

administrative, legal and political actor.⁵ This relationship is situated within a field of contestation – a plane of immanence – shared by open source movements, for example, that seek to hack IP architectures and enable an open flow of information. In broad terms, neither position is “right”. Again, in broad terms, the ethics of information is one that is necessarily defined according to the specific situation – the informational arrangement – in which a range of actors and their needs, interests and desires are negotiated. In the case of people situated within the economic and political outside of IPRs and the informational economy, the challenge is to reform IP laws in such a way that meets the needs and interests of Indigenous peoples and those in developing states.

To this end, my argument has attracted hostility from cyber-libertarians and individuals within open source movements who persist with the vapid mantra “information wants to be free”, as though there is some ontology to the technicity of the Net independent of the social relations which make the Net intelligible.⁶ Cyber-libertarians and IT open source movements overlook two key things when they advocate the free flow of information: firstly, the world is not a software program: other forms of knowledge also exist, and the extent to which information is accessible so that it might then be transformed into knowledge depends to a large extent on degrees of cultural capital, not only IT access. Secondly, to promote and argue for IP rights for Indigenous peoples and developing states does not preclude the ongoing circulation of information *within* those communities. Rather, it ensures that knowledge specific to those communities is not exploited by transnational corporations (TNCs), who, as noted in the previous chapter, ‘own approximately 90% of technology and product patents in the world, and up to 80% of technology and product patents in developing countries’ (Dommen, 2002: 26). Furthermore, such an interventionist IP position recognises that Indigenous peoples and social formations within developing states are quite adept at functioning both within customary law *as well as* international contract law as it pertains to proprietary rights over cultural production and biological knowledge. That is, we – as an

⁵ For a comprehensive overview of the TRIPS Agreement and its impact on developing states, see Correa (2000).

⁶ See debates on nettime mailing list on the Intellectual Property Regimes and Indigenous Sovereignty thread, March-April, 2002, <http://www.nettime.org>.

intellectual, largely White, Western elite – shouldn't overlook the ways Indigenous peoples engage in bi-modal regimes of practice. To do so is to relegate Indigenous peoples and those in developing countries to nostalgic and violent discourses of pre-modern timeless time.

To a large extent, the anti-IPR response by cyber-libertarians has been shaped by a North American political tradition that is hostile to and suspicious of government regulation and intervention. In many respects the cyber-libertarian position colludes with the ideology of liberalism, as it figures in mainstream US political traditions that place a primacy on the individual over and above the collective. And it smacks of hypocrisy and righteousness to hear such objections from cyber-libertarians when many occupy positions of privilege, frequently accompanied by salaried day jobs associated with computer programming, data surveillance, education or software development.

Finally, my argument with regard to NGOs is that while they occupy a significant structural relationship with supranational entities, state apparatuses and local communities – thus constituting what Manuel Castells (1998) terms the new form of a "network state" – they do not exploit their political leverage in any extensive sense by pursuing IP policy reforms and negotiating with government on behalf of securing intellectual property rights for local communities. In this chapter I argue that this is a key direction for NGOs to pursue if they are to maintain an advocacy role for civilian populations in developing states.

Democracy, Civil Society and the Nation-State

First, it is helpful to briefly outline some of the key themes of civil society and the nation-state since the relation between the two operated as a constitutive force in the development of modern forms of democracy. This section will provide a general historical and political context of civil society-state-democracy inter-relationships in order to locate the role played by NGOs as new civil society actors. By identifying some of the key features of the modern idiom of liberal democracy and its relationship to the state form, a point of

reference is established for the discussion in the next chapter on political organisation within an informational era of networks. A background discussion of civil society traditions also functions to highlight the strengths and limits of Chantal Mouffe's notion of 'agonistic democracy' as it figures within network societies.

The contribution I would like to make to Mouffe's argument on agonistic democracy involves problematising her underdeveloped notion of a public sphere, and in doing so, consider how socio-technical political movements might articulate an agonistic democracy in non-traditional – or more correctly, non-Western – institutional settings. In this chapter I problematise the notion of agonistic democracy with reference to NGOs and civil society movements as they are situated within informational economies associated with developing states. In the next chapter, I look at how organised networks are an emergent institutional form that condition the possibility of not so much an agonistic democracy, which is coextensive with state political institutions, but what I term a processual democracy, which is immanent to media-information systems.

To problematise notions of the public sphere is, in one instance, to ask the question of situatedness. In what space and time does the formation and performance of actors, as political agents, take place? Invariably this is also a question directed toward specific communications media and examines their capacity to at once constitute actors and enable expression. How and by what means might new ICTs be considered as enabling or assisting in the possibility of democratic polities? Given that a democratic politics consists of establishing the conditions under which the values of liberal democracy are reproduced, what are some of the conditions peculiar to the heterogeneity of Net cultures and information societies, and are they ones that enable the possibility of a democratic politics? In order to address these questions a bit more contextualising work is needed. And this involves mapping out some very general features that characterise modern political society in the West and the relationship such features held with the state.

In her book *The Democratic Paradox*, Mouffe recapitulates the key characteristics of modern democracy. The core values and ideas of democracy consist of 'equality, identity between governing and governed and popular sovereignty' (Mouffe, 2000: 3). Modern democracy incorporated features of the liberal tradition, which was characterised by 'the rule of law, the defence of human rights and the respect of individual liberty' (Mouffe, 2000: 3). Hence, the phrase "liberal democracy". Representational democracy in the form of democratically elected governments is the principal mode that democracy has taken across the West. Popular sovereignty grants authority to the discursive figure of "the people". It is a mode of rule that assumes a relationship rather than alienation between the people and the state. Indeed, it assumes the people as citizens are at once represented by the state and at the same time protected by the functioning of the state in so far as they constitute the very possibility of the state. Such a notion is one that has frequently been called into question, since it is predominantly a myth. Who, for example, constitutes the figure of "the people"? Women, children, minority peoples? Historically, the figure of the people has been predicated on a logic of exclusion, which in turn undermines the legitimacy of popular sovereignty. Exclusion conditioned the possibility of the bourgeois public sphere of civil society as it emerged 'from the traffic in commodities and news' between cities in sixteenth century Europe (Habermas, 1989: 14-76). The salons, coffee houses, table societies and literary societies of France, Great Britain and Germany were the typical institutional locations that enframed critical public debate during the eighteenth century. While the bourgeois public sphere gave expression to liberal values, it was a space that primarily legitimated the values and interests of a particular class and gender formation, namely the bourgeois, property owning white male. The principal members of this class comprised of government officials, most of whom were jurists, along with 'doctors, pastors, officers, professors, and "scholars", who were at the top of the hierarchy reaching down through schoolteachers and scribes of the "people"' (Habermas, 1989: 23).

In its modern form, civil society mediated between the interests of capital and the coercive powers of the state. The modern form of democracy is predicated on the notion and existence of a civil society. The two are mutually constitutive formations. Civil society functioned as a space of voluntary association and

open expression. The values of civil society – “civility”, respect for individual autonomy and privacy, trust amongst peoples, removal of fear and violence from everyday life, etc. – operated as a counterpoint to the rules and purposes of the state whose centralised political authority administered the lives of people within a given territory (see Kaldor, 2003: 15-49). The state played the role of ensuring those values were maintained through structures of governance and the law. Civil society was articulated to the state by the media – primarily newspapers – and as such, was able to play a role in regulating the conduct of the state. This was a hugely significant shift, at least while the distinctions between the state and the public sphere of civil society remained intact. Previously, the aristocracy had ruled; with the emergence of secular states across Europe during the seventeenth and eighteenth centuries, the bourgeoisie became in a position, as a literate public informed by the press, to openly challenge the authority of the state. This was a time of Gutenberg democracy, if you will. The experiences of these transformations can be attributed to the processes of modernity, as Mary Kaldor writes:

All modern theories of civil society derive from a notion of individual autonomy and human equality that emerged in the transition to modernity as ascribed social rankings were swept away. (Kaldor, 2003: 28)

Political philosopher Jürgen Habermas has been a strong advocate of the role of the bourgeois public sphere as a civic space of informed, rational debate that mediates disputes between the state and civil society. Habermas laments the structural transformation of the liberal public sphere during the late nineteenth and early twentieth centuries, which saw the intervention of government agencies and the commercial “mass media” take over the role of distributing information and shaping opinion, effectively excluding the “public” from decision making processes. He sees the great depression of 1873 as a decisive turning point that marked the end of the liberal era of free trade between industrially advanced capitalist countries (1989: 142-143). From that time on, protectionist trade and economic policies were adopted by states across Europe as well as the United States, leading to an increase in political and economic functions of the state as a restrictive entity (Habermas, 1989: 143).

Habermas extends this transformation to the private sphere of the patriarchal conjugal family and the decline in their capacity to self-govern the activities of care, education and protection as the welfare-state "intrudes" into a sphere of life previously kept separate from the activities of the state (1989: 155-159). By the end of the nineteenth century, the state had incorporated 'the interests of civil society as its own' (1989: 141), assuming the right to intervene in what had hitherto been a critical public sphere and a self-governing private domestic sphere. In short, institutions of the public sphere became synonymous with those of the state. Similarly, the private rights of the property or commodity owning individual became subject to the paternalistic and disciplinary regulation of the state coupled with increasingly oligopolistic tendencies by news and industry corporations. It was during this period (1830-1850) that major news agencies were also founded. They were responsible for the collection and dissemination of information to the world news system. As Armand Mattelart notes in his book *Networking the World, 1794-2000*:

Havas, the forerunner of Agence France-Presse (AFP), was founded in 1835, the German agency Wolff in 1849, and the British Reuters in 1851. While Havas combined news and advertising, Reuters focused primarily on economic information. The US agencies AP (Associated Press) and UP (United Press) were launched in 1848 and 1907 respectively, but only the three European agencies were international in scope. Through a treaty of alliance signed in 1870, this triad carved up the world into territories or spheres of influence, thus marking the birth of an information market conceptualized on global scale and based on geopolitical interests. Each party undertook not to distribute in the territories of the other two. Reuters laid claim to the entire British Empire, Holland and its colonies, Australia, the East Indies, and the Far East; Havas obtained France, Italy, Spain, Portugal, and Levant, Indochina, and Latin America; Wolff focused on central and northern Europe (markets that were taken from it at the end of World War I). By common consent some territories, such as the Ottoman Empire and Egypt, were covered by all three agencies, whereas others, such as the United States, were declared neutral. This oligopolistic organization strengthened the monopoly of each agency over its own national market. (Matterlart, 2000: 23-24)⁷

⁷ Today we frequently encounter the ongoing effects of this sort of monopoly control in the newspapers we read in Australia. I'm talking here about the syndication of content, whereby the news we read is increasingly provided by agencies like Reuters and AP, and also reprinted from newspapers and magazines that exist with the stable of monopoly proprietors. A glance at the source of any particular international news story or opinion piece in Australian newspapers will often indicate that it's been lifted from *The Guardian*, *The Statesman*, *The New York Times*, or any number of overseas newspapers.

The expansion of the state also took hold during a time in which electoral reforms and universal suffrage were being extended to the working classes in an effort to appease the revolutionary fervour that took grip across Europe. Authorities and capitalists became highly concerned about the revolutionary potential of the multitudes, or what was known as "the mob" or "the crowd". Electoral reform was an antidote to political and economic disturbances manifest in uprisings such as the Chartist movement in Great Britain (1848-9), the Paris Commune (1870-71), and the emergence of international political alliance and solidarity among workers in Marx's First International (1864-72) (see Hobsbawm, 1979). Reforms in the electoral system transformed the pure potential of the multitudes into the unitary figure of "the people" through which the citizen-subject became simultaneously "liberated" and able to participate in the process of representative democracy, as well as captured by social, political and cultural technologies of the state such as the museum, the school and the prison (see Balibar, 1999; Bennett, 1995; Foucault, 1991a). What had previously been economic antagonisms associated with conflicts surrounding the mode of production, now became political conflicts concerning the formation of legislation that sufficiently represented class interests (see Habermas, 1989: 146). The organisation of labour into a party-political system effected a hierarchisation of relations in institutional forms within different class and political factions. Such relations were largely confined to the territorial space of the nation-state. Political scientist Seyla Benhabib provides a useful summary of the passage of the modern state form as follows:

The modern nation-state in the West, in the course of its development from the sixteenth to the nineteenth centuries, struggled to attain four goals: territorial dominion; administrative control; consolidation of collective cultural identity; and the achievement of political legitimacy through increased democratic participation. There is widespread consensus that these four functions of the state are all undergoing profound transformations. The modern nation-state system, characterized by the "inner world" of territorially bounded politics and the "outer world" of foreign military and diplomatic relations – in short, the "state-centric" system of the nineteenth and early-twentieth centuries – is, if not at an end, at a minimum undergoing deep reconfiguration. (Benhabib, 2002: 179)

Habermas adopts a tone similar to the Frankfurt School – that the erosion of the distinction between public and private spheres results in an increased

alienation and sense of disempowerment of individuals. It is useful to remember that the basic liberal tenets of freedom and the right of privacy are ones that emerged in parallel with the secular era of *laissez-faire* capitalism during the eighteenth and nineteenth centuries. A process of mutual ascription was occurring in ways that hold great similarity with the kind of discourses prevailing during the "golden era" of the Net in the 1980s and 1990s. During the nineties in particular, flows of information became increasingly restricted, as the Net underwent commercialisation. This was partly a response by public institutions – particularly those engaged in the "provision" of education – who sought to extract an economic value from their available resources; and it was also a response by the private sector to deliver higher returns to shareholders and investors. Around this time it became increasingly common to hear cyber-libertarians insisting that "information wants to be free". Such a discourse – one that continues in a slightly more defensive and guarded manner in the new millennium – so often fails to recognise the exclusivity of such claims, as I argued in the case of Indigenous intellectual property in chapter 4.

Craig Calhoun, who has been one the greatest proponents of Habermas, makes the point that 'Civil society and public sphere are not precisely equivalent concepts' (Calhoun, 1993: 269). 'Indeed', he writes, 'the importance of the concept of public sphere is largely to go beyond general appeals to the nature of civil society in attempts to explain the social foundations of democracy and to introduce a discussion of the specific organization within civil society of social and cultural bases for the development of an effective rational-critical discourse aimed at the resolution of political disputes' (1993: 269). As far as a concept of communications media goes, Calhoun, like Habermas, equates "the media" with the public sphere. Like proponents of the theory – or what for many journalists is a sacred code of faith – of the media as a Fourth Estate, Calhoun and Habermas' notion of a public sphere depends upon "broadcast" models of "mass media" forms that prevailed during the era of Fordism and nation-building across the West – which means radio and newspapers for the most part. The idea of a public sphere as that which corresponds to the territorial space of the nation as it is reproduced in the imaginary of the "mass media" is thrown into disarray in a post-broadcast era in which a multiplicity of publics traverse the transnational flows of media-information systems. This

transformation is coextensive with the shift from linear to non-linear systems of communication: both the "audience-as-citizen" and the "audience-as-consumer" (Ang, 1991) give way to networks of individualised users engaged in the sampling, filtering and repurposing of information in ways that are both creative and profane.

Despite the shortcoming of how he conceives the public sphere as it relates to communications media, I agree with Calhoun that it is useful to distinguish the peculiarities and purposes of the public sphere from that of civil society. There is a relative autonomy between the two – a point, it should be said, that Adorno and Horkheimer had earlier observed of the relationship between the culture industry and the economic base. The idea that rational-critical discourse operates as the means to conflict resolution, is however, highly contentious. While Calhoun is alert to the differences between the public sphere and civil society formations, he is less so, it would seem, when it comes to recognising that language – or the mode of expression – is far from universal across social-political, ethnic and cultural formations, even during the period of modern nation-building when civil society organisations were relatively contained within the territorial space of the nation. And while Calhoun disputes the economistic, teleological dimension to civil society discourses that see the development of capitalist economies as providing 'the necessary basis for the transition from authoritarian to democratic rule' (1993: 268), he in turn adopts a teleological position in assuming that rational-critical discourse provides the rarefied conditions necessary for resolving conflicts. Calhoun inadvertently repeats the Habermasian error of believing that rational consensus can be established by recourse to universal principles.

A more realistic position, in my view, recognises the underlying antagonisms within social-political formations and their attendant modes of expression. Against the rational consensus model of "the political" adopted by Habermas, Ernesto Laclau and Chantal Mouffe (1985; 2001) argue that antagonism underpins social relations that constitute the field of "the political". Laclau and Mouffe understand a "radical democracy" as a plurality of differences that acknowledges the incommensurability of "the political". Such a position shares something with Jean-François Lyotard's (1984b; 1988) notion of 'the différend',

or 'phrases of dispute'. This does not mean abandoning notions of democracy and critical debate, but rather it means creating conditions within institutional settings that can deal with situations that frequently may remain suspended in a state of non-resolution. Process holds primacy over outcomes, since outcomes are that which unfold as 'differences that make a difference' (Bateson) within the process of addressing the situation of antagonism. It is worth quoting Laclau and Mouffe at some length on this point; their differences with Habermas provide an opportunity for them to spell out their thesis of a radical, pluralistic democracy:

The central role that the notion of antagonism plays in our work forecloses any possibility of a final reconciliation, of any kind of rational consensus, of a fully inclusive "we". For us, a non-exclusive public sphere of rational argument is a conceptual impossibility. Conflict and division, in our view, are neither disturbances that unfortunately cannot be eliminated nor empirical impediments that render impossible a full realization of a harmony that we cannot attain because we will never be able to leave our particularities completely aside in order to act in accordance with our rational self – a harmony which should nonetheless constitute the ideal towards which we strive. Indeed, we would maintain that without conflict and division, a pluralist democratic politics would be impossible. To believe that a final resolution of conflict is eventually possible – even if it is as an asymptotic approach to the regulative idea of rational consensus – far from providing the necessary horizon for the democratic project, is to put it at risk. Conceived in such a way, pluralist democracy becomes a "self-refuting ideal", because the very moment of its realization would coincide with its disintegration. This is why we stress that it is vital for democratic politics to acknowledge that any form of consensus is the result of a hegemonic articulation, and that it always has an "outside" that impedes its full realization. Unlike the Habermasians, we do not see this as something that undermines the democratic project, but as its very condition of possibility. (Laclau and Mouffe, 2001: xvii-xviii)

Importantly, the "outside" is not a negative operation. As I argued in chapter 2, the outside is a constitutive force that is immanent to the mediology of expression. Any inquiry into, and active engagement with, democratic politics as they emerge within informational, network societies necessitates an engagement with new socio-technical relations that condition the possibility of new institutional forms. This is a theme I develop in more detail in the next chapter. But for now, it is germane to foreground the limits of Laclau and Mouffe's project of radical democracy – one Mouffe develops in her thesis on agonistic democracy – in terms of their foreclosure of both an institutional imagination and modes of expression. Part of the difficulty of transposing

Laclau and Mouffe's project of radical democracy is one of translation. They focus almost exclusively on discursive conditions as the basis of political expression. Herein lies a substantive limit to the possibility of a radical democracy within media-information situations, where information is mobilised across a range of socio-technical institutional settings and user-networks, as distinct from discourse, which is frequently embedded in traditional institutional forms. If democratic politics is contingent upon a functional state infrastructure consisting of political institutions, does that mean that those countries without such infrastructures have abandoned the possibility of democracy? In other words, how else might democracy be thought in ways that do not conform to Western models of representative, liberal democracy? Moreover, what sort of purchase do new civil societies, as articulated by new social movements and NGOs, have in the formation of democratic polities? Is it even appropriate to continue speaking of political projects with reference to the role of civil society, which many commentators associate as a project peculiar to the modern era of democracy formation and the nation-state in the West? These are questions I address in the remainder of this chapter.

Scalar Tensions

In taking up roles traditionally the reserve of the state, NGOs condition the possibility of three key features, all of which undermine the economic and political sovereignty of emerging states. Firstly, the logic of flexible production, accumulation and consumption that has corresponded with the emergence of new ICTs and the capacity to organise social relations in the form of networks has resulted in an increasing liberalisation of the state and the market. And with this process liberalism is decoupled from democracy, where the latter ensured a degree of transparency and accountability from the former: this well and truly vanished with the onset of the "New Economy", as spectacularly demonstrated in the dubious accountancy methods of companies associated with the tech-wreck, Enron being the most obvious example (see Blackburn, 2002).

Inflated economic returns in the form of debt management on the balance sheet has been the basis for neoliberal states to secure their ongoing pursuit of deregulation and privatisation. Furthermore, hegemonic states and the supranational organisations they are aligned with have been unrelenting in imposing this structural logic of neoliberalism upon developing states as a condition of receiving financial aid from the IMF, World Bank and private investors. In the case of developing states this has led to a range of structural conditions that emulate some of the structural arrangements peculiar to neoliberal modes of organising social relations, state bureaucracies and corporate practices. The overwhelming consensus amongst critical international studies scholars and political economists is that the IMF/World Bank structural adjustment programs introduced in Sub-Saharan African countries since the 1980s resulted in a 60 per cent decline in gross capital formation by the end of the decade (see Hoogvelt, 2001: 181-182). The unilinear flow of wealth from the "periphery" to the "centre" reproduces the patterns of growth that characterised the nineteenth century imperialist era of colonial economies. As Ankie Hoogvelt writes:

Structural adjustment has tied the physical resources of Africa more firmly into servicing the "old" segment of the global economy. At the same time, it has oiled the financial machinery by which wealth is being transported out of the region, thereby removing the very resources which are needed by the dynamic adjustment to the "new" global economy. (2001: 184)

Within this sort of economic climate, developing states frequently lack the financial resources necessary for establishing the institutional infrastructures and social services that are conducive to civil society formations which, in the European experience, revolved around the formation of a domestic bourgeoisie that was coextensive with the project of nation building. When the state has a limited structural relation to civilian populations, then the constitutive dimensions of modern liberal democracy become undermined. For example, the task of the modern university corresponded with the project of nation building of establishing what Benedict Anderson (1993) called an "imagined community". In modern times, the university has been a key actor in the process of democracy formation within the West (see Cooper, 2002; Readings, 1996). The university cultivated an informed and knowledgeable bourgeoisie and citizenry, trained with the capacity to deliberate over the political and

social life of the nation. The university also played a key role in the development of civil society in so far as it occupied a critical space independent of the state. Today, of course, this role has been seriously eroded as universities and academics working within them are constituted within a neoliberal paradigm as "pseudo-corporate" institutions and "post-intellectuals" (Considine and Marginson, 2000; Cooper, 2002; Holmes, 2002). Without these sort of experiences and histories, the project of democracy formation in developing states does not become irrelevant or impossible; rather, it becomes a question of how democracy might emerge with different properties and possibilities.

The sort of circumstances sketched above exacerbate the dependency relation developing states have with foreign actors, including new "global civil society" organisations such as NGOs (Kaldor, 2003). NGOs, for example, often find themselves involved in activities in the realm of education, providing training and literacy skills to local communities. Such activities may be secondary to the key mission of NGOs. As Rebecca Knuth notes with regard to information flows in "complex emergencies", 'There is an acute awareness among relief organizations that short-term intervention to save lives must be supplemented by long-term reconstruction initiatives that reconstitute local systems and prevent future crises' (Knuth, 1999: 15). However, there is a high risk that such long-term initiatives become fragmented and reproduced, at best, as a series of short-term interventions undertaken by an assortment of relief agencies in as much as there is no guarantee that NGOs have either the financial resources or enduring personnel to commit to long-term reconstruction projects (see Cooley and Ron, 2002).

When NGOs become responsible for educating civilian populations, an almost perverse correlation with the civilising mission of the coloniser kicks in. Indeed, at a structural level NGOs occupy a similar territory as TNCs, both of whom contribute to a process of recolonisation of postcolonial states. This can result in tensions between well-meaning NGOs and local populations over the kind of political, social and cultural values attached to the techniques of education. Moreover, the state foregoes the hegemonic process of negotiating socio-political values with civilian populations as they are articulated through

and within the educational apparatuses. As such, a key dimension of democracy formation is dispensed with.

Secondly, in adopting the task of educating civilian populations about procedures for clearing landmines – as in the case of the German Initiative to Ban Landmines, to take one example⁶ – a process is at work that is similar to the neoliberal technique of outsourcing. At a structural level, then, the state “leapfrogs” straight into a neoliberal frame, bypassing the temporal and spatial experiences of the modern welfare state. In other words, developing states are structurally positioned whether they like it or not in flexible modes of delivery, hence creating a dependency relation on external providers as distinct from domestically developed systems of learning and the social formations and cultural values that attend such a process.

In this sense, NGOs, when involved in auxiliary roles such as education, undermine one of the traditional roles of the state. As such, NGOs are assisting in the formation of conditions that also benefit the interests of TNCs, which seek to obtain by any means possible conditions that enable unilinear flows of capital, unrestricted by domestically determined regulatory interventions by the state. Furthermore, the presence of NGOs, as external providers of services traditionally the reserve of the state, reinforces the sort of conditions associated with IMF and World Bank monetary loans and their structural adjustment programs. This raises serious questions with regard to NGOs who claim to occupy an advocacy position on behalf of civilian interests. Indeed, I would suggest that the very notion of civil society as a partially autonomous space is brought into question as NGOs find themselves in a paradoxical field of tensions in which they are at once bound to local communities whilst assisting in direct and indirect ways the interests of TNCs and supranational governance.

A lively debate tracked this issue on the nettime mailing list in February 1997, with a number of postings critiquing the Soros network and the inter-

⁶ German Initiative to Ban Landmines, <http://www.landmine.de/>. In no way do I mean to single out this NGO, which seems to be doing very important work. I draw on this example simply because it was out of a conversation with Markus Haake one night in an old leftist bar in Berlin in January 2001 that I came to be aware of the auxiliary tasks NGOs undertake as part of their humanitarian endeavours. Despite the arbitrariness of this example, it holds nevertheless as an example of the paradox that many NGOs and relief agencies find themselves in.

relationships between NGOs, corporations and civil society.⁹ Some of the issues and critiques from that time were synthesised in an interview with Saskia Sassen by Geert Lovink in 1999. On the issue of accountability, Lovink (1999) noted that 'One of the problems of NGOs – especially if they are linked to large international organizations – is that for people on the ground, and even for governments, they are no longer accountable for what they do. They can move very quickly and in many ways can behave like finance capital'. In this sense, NGOs again can be seen to model some of the dynamics of TNCs and reproduce techniques of organisation peculiar to neoliberalism (see Cooley and Ron, 2002). Deconstructing the question of accountability, Sassen importantly notes:

... accountable to what and for what? In some cases, the fact that some of these organizations are not accountable is actually better, because it means that a different kind of political project can be enacted – whereas if an organization is accountable, it often means being accountable to existing value systems, which in some cases are the very ones best avoided. However, many of the big NGOs are profoundly accountable – by which I mean they are accountable in the kinds of ways and to the kinds of entities one might not want to demand accountability for or to.

Then, relating the question back to her own research on the architecture of global finance and the need to 'invent new systems for accountability and accountability for different kinds of aims in some of these systems', Sassen elaborates on the problematic of "transparency":

There is an architecture, there are certain standards the players adhere to; and there is transparency, the famous term "transparency", which implies something that's intrinsically good. But what is it? It is accountability to shareholders and their short-term profit. But do we always want this kind of accountability? No – including from global finance – so we're presented with the challenge of discovering new types of accountability, new ways of thinking the question of accountability – accountability to a larger public good, and so on.

For the purposes of this chapter, I want to highlight that while NGOs may procure tactical benefits from an absence of accountability, this has to be weighed against the correspondence such a system of organisation has with informational secrecy by corporations. The consequence of this is

⁹ This period is covered in Lovink (2002a: 115n41, 296-304). See also the nettime archives,

fundamentally antithetical to the "transparency" assumed of conventional notions of democracy.

Thirdly, the sidelining of the state is also significant at a political level, since there is no institutional residue or collective memory of things being otherwise, at least in terms of the presence of state political institutions. And at an imaginary level, the possibility of different forms of political organisation that correspond with the space of the nation is not there. While the neoliberal state has seen the erosion of traditional differences between the Left and the Right and the emergence of "Third Way" style politics, I think it is premature to overlook the political function of pseudo-corporate institutions such as the university and the persistence of trade unions: these are institutions that are part of what I'm calling a collective residual memory that contribute to what Ghassan Hage (2001) has called the possibility of spaces of hope.¹⁰ Having said this, I wouldn't want to rule out the potential for alternative political models emerging from indigenous modes of political organisation.

In short, I hope the above examples gesture towards the paradoxical role of NGOs within quasi-states: probably against their best wishes, NGOs are situated in such a way that assists in the imposition of neoliberal systems of organisation upon developing states. As such, these states are occluded from the sort of modernising experiences and processes – its times and its spaces – that have been fundamental to the constitution of liberal democracy in the West. I will return to the question of democracy in the final section of this chapter, once I establish the political role of intellectual property rights for developing states and their civilian populations.

Information Flows, Scale and Borders

With the advent of new ICTs, particularly the Internet, NGOs have been able to consolidate and expand themselves, creating new alliances by networking with each other through horizontally organised information flows. As I noted

<http://www.nettime.org>.

¹⁰ Also posted to nettime mailing list, 19 September, 2001, <http://www.nettime.org>, and reprinted in Hage (2003).

earlier, the rise of NGOs has coincided with the emergence of globalised economies. Similarly, the Net has enabled NGOs to interface with local, state, military and supranational entities. This might give the impression that distinctions in scale disappear, and that tensions between and within these sectors no longer prevail. Certainly this is not the case, since NGOs often enough contest the powers of the state in the interests of the "the people" (a politically dubious figure at best). With their enhanced capacity to gather and disseminate information, NGOs have obtained greater legitimacy as political actors, often challenging the sovereignty of authoritarian governments (see Knuth, 1999: 15-16). The horizontal expansion of informational flows has led a number of scholars to claim that a new state form has emerged – a form which Castells has termed the "network state", one that international relations theorist Martin Shaw (2000) calls the "global state", and a form that Hardt and Negri (2000) attribute to the "post-political" manifestation of "Empire".

The extent to which such a new state form can be called democratic is highly questionable, however. Moreover, such a form has not fared well for communicative relations for those civilian populations deprived of adequate IT infrastructures; nor should an intensification in informational flows be assumed to correspond with open systems of communication. The commercialisation of the Net and its regulation via domain names and intellectual property regimes functions to close information flows. But as I argue below, depending on the extent of reform, IPRs can be used as a strategic political architecture that at once maintains the flow of information within informal networks, while securing a closure against external exploitation.¹¹

The lack of any extensive IT infrastructure militates against the possibility of translocal networks within and across African states, though there are indications that this is changing. For the time being, a reproduction of dependency goes on in which the relatively few users connected to the few metropolitan Internet service providers (ISPs) within African states are dependent on the expansive networks in Europe and the US for their

¹¹ I say 'informal' networks here in the sense that such information flows are governed, for example, by customary law, which in itself is a highly 'formal' system, but it can be considered as informal in the sense that I invoke it here: i.e. at a discursive level such 'informal' systems are

information flows. It is for this reason that '133 developing countries have asked the United Nations to maintain radio stations and other traditional media as a means of disseminating information, because 'use of the internet alone would exclude many people from access to information flows' (David and Foray, 2002: 17).

This condition of a "digital divide" is illustrated well in Mathew Zook's Internet mapping projects. As his map of CONE and country code domains by city shows,¹² there is a vast concentration of domain names registered in Europe, North America and the Asia Pacific. This data reinforces the claim that advanced economies hold a geopolitical monopoly on informational flows, and it follows that the intensity of networks will be greater in those cities and regions with the highest concentration of domain names.¹³ Furthermore, the socio-technical infrastructure in the form of services and so forth that is necessary to support these informational nodes will also be greater in those areas with higher concentrations of domain names.

According to statistics from the Ireland based web publishing and software company NUA, there were approximately 580.78 million users connected to the Net in May 2002. Of this figure, 182.67 million and 167.86 million users are located in North America and the Asia/Pacific respectively. In stark contrast to this, Africa has 6.31 million users, and there are even less in the Middle East, which has 5.12 million users. In percentage terms, Mathew Zook's map of Internet Users Worldwide,¹⁴ which is based on NUA statistics,¹⁵ registers less

constituted as illegitimate in so far as they hold little political and legal purchase within systems of international and national law.

¹² See Total Number of CONE and Country Code Domains by City, January, 1999, Zooknic Internet Intelligence, http://www.zooknic.com/Domains/World_Domains.pdf.

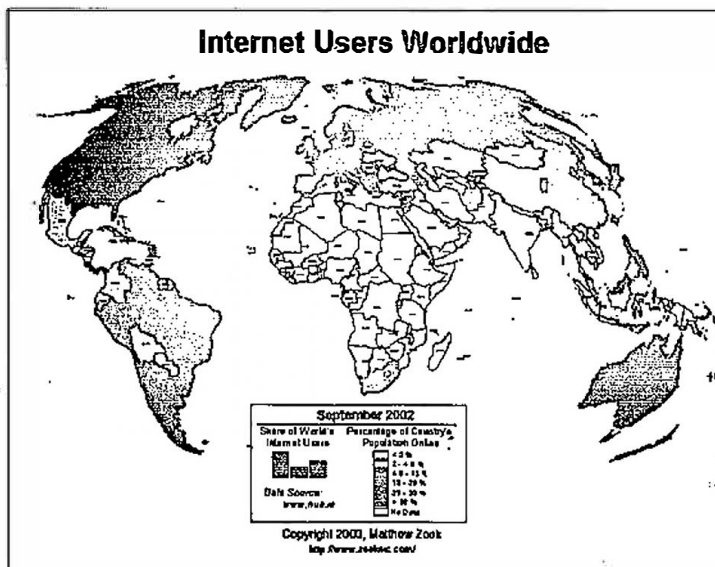
¹³ This is one of the many issues debated at the World Summit on the Information Society held in Geneva, 2003 and its lead-up preparatory meetings and conferences. For more details, see <http://www.wsis-cs.org>, <http://www.itu.int/wsis/>, <http://www.apc.org/english/wsis/>. Useful critical reports can be read in Peake (2004) and Padovani and Tuzzi (2004).

¹⁴ See Internet Users Worldwide, August 2001, Zooknic Internet Intelligence, http://www.zooknic.com/Users/global_2001_08.html.

¹⁵ The last statistics compiled by NUA date from the end of 2002. In April 2003 NUA was acquired by Jupitermedia, parent company of internetnews.com, who plan to incorporate NUA into its competitor, CyberAtlas.com – another trends, statistics and demographic tracking site (see 'Jupitermedia Weds Nua.com with CyberAtlas', internetnews.com Staff, 15 April, 2003, <http://www.clickz.com/news/article.php/2190801>). CyberAtlas itself has been subsumed into ClickZ Network Solutions for Marketers (<http://www.clickz.com/stats/>). One consequence of this takeover is that the last of Mathew Zook's Internet maps also date from 2002/2003.

Figure 4

Internet Users Worldwide, September, 2002.



Source: Zooknic Internet User Maps, www.zooknic.com

than 2 per cent of users in most African states, with the exception of South Africa (4.9 – 13%), compared to over 35 per cent connection rates for populations in North America and Scandinavian countries. A report published in August 2002 on NUA's site claims that in Africa there is 'roughly one internet use: for every 200 people, compared to a world average of one user for every 15 people, and a North American and European average of about one in every 2 people' ('Africa Online'). Interestingly (and not surprisingly), each connection in African countries supports 3-5 users. Connections are confined to major cities, with most capitals having more than one ISP. However, there are signs of a recovery of sorts, with a 20 per cent increase in the number of dial-up Internet subscribers over the year 2001-2002, according to this NUA report. This shift can be accounted for by the rapid privatisation and deregulation of state-owned telecommunications industries in many African countries over the

past few years (see "Telecommunications and Information Highways in Africa, 2002"). The uneven distribution of Internet users is illustrated clearly in the Zooknic map of Internet Users Worldwide, September, 2002 (Figure 4).¹⁶ By way of comparison, the map of bandwidth availability (Figure 5) in Africa in 2002 denotes quite different issues associated with access to the Net. As noted in a commentary accompanying the Bandwidth in Africa map (Figure 5):

International Internet bandwidth provides a measure of Internet activity because many people share accounts, or use corporate and academic networks along with cyber cafes and business centers. Outgoing bandwidth also takes better account of the wide range of possible use, from those who write a few emails each week, to users who spend many hours a day on the net browsing, transacting, streaming, and downloading. Because of this, the often used "Number of Internet Users" indicator may have less relevance in the developing world than in other places.¹⁷

The relatively dismal connection rate for African states has prompted Castells (1998) to make the pretty obvious point that 'Most of Africa is being left in a technological apartheid...'.¹⁸ Such a condition has been compounded by economic circumstances, with a steady decline in economic growth over the last decade in Africa accompanied by substantial drops in the levels of Foreign Direct Investment (FDI). As Hoogvelt notes, 'Africa's share of all FDI flows to developing countries has dropped from 13 per cent in 1980 to less than 5 per cent in the late 1990s' (2001: 173; see also Dieter, 2002: 69). Referring to the crises in Asian "tiger" economies in the late nineties, a report in the *International Herald Tribune* noted that high levels of foreign investment flows are no *a priori* guarantee to fast-tracking economic development: 'developing countries that allow an inflow of foreign money into their financial markets are vulnerable to disastrous, panicky withdrawals, especially if they have not developed sound banking systems first' (Blustein, 2002: 9).

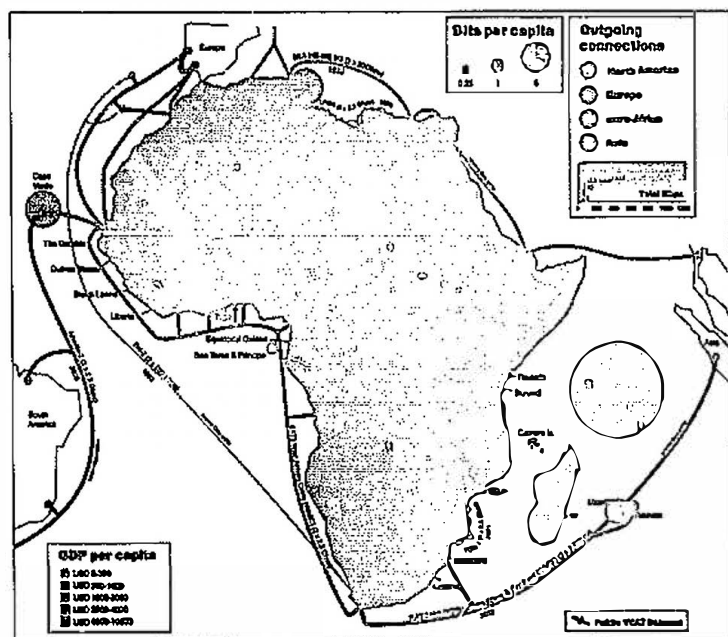
¹⁶ See http://www.zooknic.com/Users/global_2002_09.html.

¹⁷ See http://web.idrc.ca/ev_en.php?ID=6568_201&ID2=DO_TOPIC, which is part of the Acacia project associated with the International Development Research Centre -- a public corporation created by the Canadian government in 1970.

¹⁸ For a somewhat utopian exploration of the paradoxes of connectivity in Africa, see Hall (1998).

Figure 5

International bandwidth in bits per capita (BPC), Africa, mid 2002



'The coloured circle in each country on the map shows, to exact scale, the international bandwidth in bits per capita (BPC) available in Mid 2002 from publicly accessible IP networks.'¹⁹

Source: IDRC, www.idrc.ca

My point in detailing these vital statistics is not only to add some empirical weight to my argument. I also want to signal that with this seeming change to the telecommunications landscape in Africa, it is even more necessary for major inroads to be made into the management and reform of IP rights in African countries. As much as there might be a technological leap under way in Africa, this is no guarantee that individuals and communities possess the means to function within informational or knowledge economies in which knowledge and ideas are 'embodied in products, processes and organisations', which in

¹⁹ http://web.idrc.ca/ev_en.php?ID=6568_201&ID2=DO_TOPIC.

tum 'fuel development' (David and Foray, 2002: 9). Such a move requires a vast educational infrastructure and cultural apparatuses and industries if information is to be codified in symbolic forms as knowledge. It also requires investment in 'sustaining the physical state of human capital (health expenditure)' (David and Foray, 2002: 10). Furthermore, such investment and infrastructural needs has implications for democracy formation, since the figure of the politically enabled citizen presupposes an educated and healthy civilian; thus information flows depend upon a civic infrastructure that includes schools, technical colleges, universities, library resources, and so forth. One important precursor if not parallel to such infrastructure consists of ensuring that indigenous cultural production and biological knowledge is not alienated from local communities and individuals.

While intellectual property regimes can be understood as a form of abstraction that alienates labour from production, this is not necessarily a contradiction in terms when IPRs are considered as a strategy to ensure a degree of economic and political self-determination by Indigenous peoples and those living in developing or quasi-states. Intellectual property rights enable developing states to place an economic value and regime of scarcity on their cultural and biological resources. New ICTs are the mechanism for then distributing this property and extracting financial remuneration from its use by those participating in informational economics.

Furthermore, the codification of production as property reinforces the legal authority of the state, since property cannot exist independently of state recognition (see May, 2002: 130).²⁰ That is, IPRs can assist in the development of the state apparatuses, albeit ones that are circumscribed by economic interests, and reinstate their authority to legislate progressive policy related to privacy rights of their constituents (see May, 2002: 141). While intellectual property in and of itself does not alleviate poverty or misery, it does provide a crucial potential for leverage out of such conditions, certainly more so than if IP is

²⁰ Ted Byfield makes this point in quite different ways: '... systems of property are a by-product of the state, extending such a system necessarily involves extending and/or deepening the reach of the state'. Response to the Intellectual Property Regimes and Indigenous Sovereignty thread on nettime, 27 March, 2002, <http://www.nettime.org>. Byfield sees this as a negative development, though I think that depends entirely upon one's economic, socio-political and geographic situatedness.

handed over to TNCs who have a monopoly on ownership of both technology and product patents and copyright of cultural production.

Of course there are numerous issues and problems associated with intellectual property regimes as they currently figure. Intellectual property law reinforces what Castells (1998) identifies as a key characteristic of the 'information age as a result of its networking form of organization': namely, 'the growing individualization of labor', and this functions to undermine collective bargaining or the regulation of labour and wages by agreements between unions and the state. As discussed in the previous chapter, intellectual property regimes still attribute proprietary rights to an individual, rather than a collective. In this regard, IP does not favour the social form of production peculiar to many Indigenous peoples and people in the developing world, where production occurs through the form of the collective. Further reform needs to occur to current intellectual property law that legitimates ownership of knowledge that is not fixed in form, and enables Indigenous intellectual property to be protected in perpetuity. Herein lies a challenge for NGOs at policy and legal levels.

Conclusion

In conclusion, I would like to return to the title of my chapter, 'whose democracy?'. In this chapter I have questioned the extent to which Mouffe's concept of agonistic or pluralist democracy as a politics of legitimacy that enables 'the struggle between adversaries' rather than antagonistic struggles between enemies was relevant in any pragmatic sense within an informational age of network societies. Certainly, Mouffe's identification of the antagonistic dimension of "the political" as that which is underscored by the ineradicability of violence, following the work of Schmitt and others, is insightful and timely as rational consensus models have gained even greater purchase as the only legitimate models of democracy in town. But how, I have wondered, is an agonistic politics to be conditioned within the logic of informationalism?

The "postnational" ideological terrain of network societies has seen the apparatuses of the state undergo deregulation and privatisation, or, in the case of developing states, simply bypassed altogether. Mouffe's model of agonistic democracy, which is predicated on traditional institutions of the state as the place in which a democratic polity unfolds, seems problematic and decidedly modern in light of the reconfiguration of statehood at extra-territorial and networked dimensions. However, in light of my argument in this chapter on NGOs, the state, civil society and intellectual property regimes, I would suggest that it is precisely through pursuing IP rights for Indigenous peoples and civilian populations in quasi-states that an agonistic politics might unfold. My reasoning behind this is that IPRs constitute a hegemonic field of articulation of "the political" in which the identities of states, peoples, NGOs, corporations and supranational entities are contested and reconstituted in ways that challenge a neoliberal order as it currently stands (e.g. the imposition of structural adjustment reforms on developing states by the IMF and World Bank as the condition for financial aid). To avoid engaging with the problematic of IPRs is not a political alternative.

The auxiliary task for NGOs is to ensure that the people they represent are able to be situated as political actors within this networked terrain. Such networks, as suggested by Florian Schneider, might be considered as 'packets in agony'.²¹ Political legitimacy, I would suggest, is conditioned in the first instance by indigenous peoples obtaining economic sovereignty which in turn positions them as political actors in as much as informational flows across scalar dimensions and the expansion of capital depends upon engaging with what is otherwise a community of others excluded from informational economies and network societies.

²¹ Comment made during a panel discussion at the *Dark Market: Infopolitics, Electronic Media and Democracy in Times of Crisis* conference held at Public Netbase in Vienna, 2002, <http://darkmarketets.td.or.at>.

Organised Networks

'Language presupposes and, at the same time, *institutes* once again the "publicly organized space".'

Paolo Virno, *The Grammar of the Multitudes*, 2004.

The primary question motivating this final chapter is this: what is the relationship between institutions, networks and the technics of organising social-political relations? Over the past few months I've been looking at what various research centres in the UK are up to in the areas of media studies, communications, sociology and cultural studies. I've been doing this because I've recently moved from Monash University in Melbourne to the University of Ulster, Northern Ireland, and I needed to get a sense of what's going on. The lasting impression I have after idling through a dozen or so websites is that everyone proudly claims to be pursuing activities that consist of building networks. Yet very few of these sites ever explain how their activities constitute a network formation, and I can't recall any that bother to define what a network might be. They must have done this at some stage, however, because many of these research centres and programs delight in informing the reader of how much money they've been able to attract in research funding. I get the strong impression that many of these programs are responding to the latest directive set forth by the command-economy of government funding agencies. One can only presume that somewhere along the line these projects made some attempt at defining their activities in terms of networks.

I would suggest that there is little about the activities of these various centres and programs that correspond with a logic of networks. And here, I am talking specifically about networks that are immanent to the Internet – the primary socio-technical architecture that enables the mobility of data within a logic of informationalism. Really, what the networked university offers all its believers is something akin to what Bourdieu calls 'circuits of legitimation' that enable

the reproduction of 'state nobility' (1996: 382-389). I wouldn't begin to deny that I'm also caught up in this process.

It almost goes without saying that the networked university is conditioned by the advent of new ICTs which enable connections between a range of institutional entities and individuals that are no longer bound by the contingencies of place. Equally, the effects of neoliberalism in terms of shrinking budgets for higher education and a gradual deregulation of education as a commercial service have played a strong conditioning force in decomposing the traditional university form. These days it is the norm rather than the exception to find that the "transfer" of knowledge and movement of information is restricted by authentication firewalls and IP policies underpinned by a hybrid paranoid-blue-sky discourse. Within such architectures, the networked university is hardly conducive to radical information critique or creative intellectual work (although there are of course cracks that do allow such practices). Moreover, there aren't too many projects being produced out of all this networking beyond the final report that's submitted to funding authorities who understand no other language than that of counting beans. As the state continues its process of de-institutionalisation, to what extent is a new institutional form emerging that does provide conditions for critical Internet research and culture? How is this form manifesting within on- and off-line practices associated with the Internet?

The previous chapters have been concerned with identifying various tensions that constitute a politics of information. Disciplinary and methodological tensions between new media empirics, processual media theory and reflexive critique were canvassed in chapters 1, 2 and 3. Socio-political antagonisms between creative labour and the legal architecture of IPRs as it figures within discourses of the Creative Industries were discussed in chapters 2 and 3. The conceptual and political distinctions between immaterial labour and disorganised labour were also critiqued in chapter 3. In chapter 4, I argued that the closure of information that is characteristic of IPRs has a strategic value for Indigenous sovereignty movements in as much as IPRs can potentially enable Indigenous peoples another means by which to assert their battle for economic, political and cultural self-determination. Such an argument rubs against the

grain of calls for information to be open or “free” – at least in any universal sense, as maintained in quite different ways by cyber-liberterians and advocates of open source movements. Chapter 4 also identified the ways in which a scalar tension exists between supranational and national layers of governance. I discussed this in relation to the constitution of Aboriginality as a denationalised political subject that undergoes an antagonistic process of re-nationalisation over the issue of Indigenous cultural and human rights. A focus on the juridico-political system of IPRs as they articulate with an Indigenous concept of IP brings this scalar tension into relief. Chapter 5 looked at the role of NGOs as political intermediaries within developing states seeking to obtain economic and political leverage at the expense of retaining control of their country’s intellectual property. Tensions are nothing short of abundant within this complex and immensely varied relationship between developing countries, hegemonic states and supranational corporations and government entities. In their different and at times overlapping ways, all of these chapters point to the condition of informationality as one of dissonance. Part of this tension arises out of the ‘abstract relation information has to materiality’, as McKenzie Wark (2004b) has recently noted.¹

This chapter contests those prevailing assumptions of new communications technologies that seem so oddly oblivious to the multiple antagonisms within the network of relations that underpin the formation of socio-technical systems. I’m speaking here of the sort of discourses one finds amongst techno-libertarians, neoliberal ideologues, Creative Industries proponents, and a raft of other individuals, movements and entities, as discussed at greater length in previous chapters. In order to further develop a political theory of informationalism, this chapter builds on the discussion of organised labour, as set out in chapter 3, recasting it in terms of organised networks – an emergent form that is usefully understood, I argue, as a new institutional form peculiar to the logic of networks within an information age.

¹ As Wark puts it: ‘I see information as having an abstract relation to materiality. Information does not exist without a material form, but it has no necessary relation to that form. For example, the cd in computer’s drive is a material object, but I can extract the information on it while leaving the material object intact. Thus, information, when it becomes digital, can “leak” from the bounds of the object’ (2004b). Or as Deleuze, with Hume, puts it, ‘relations are external to their terms’.

Following the thesis advanced by Paolo Virno (2004), I start with the premise that the decoupling of the state from civil society and the reassertion of the multitudes over the unitary figure of "the people" coincides with a vacuum in political institutions of the state. Against Chantal Mouffe's (2000) promotion of an 'agonistic democracy', as set out in the previous two chapters, I argue that the emergent idiom of democracy within networked, informational settings is a non- or post-representative one that can be understood in terms of processuality. I maintain that a non-representative, processual democracy corresponds with new institutional formations peculiar to organised networks that subsist within informationality. These are ideas I elaborate further in the coda to this thesis. Mouffe has a faith that is still too deeply invested in political institutions of the modern state form. Mouffe's agonistic democracy depends heavily on the institutional legitimacy of the state. As states across Western liberal democracies have increasingly disengaged from discourses of political and social citizenship in favour of the oxymoronic notion of individualised "shareholder-democracy", the legitimacy of the state as a complex of representative institutions is only brought into greater question.

More significant for this thesis, which seeks to advance a political and media philosophy of processuality, is Mouffe's failure to recognise how media forms and institutions and their attendant practices have interpenetrated the ordinary lives of people, most especially since the creeping departure from the early 1980s onwards of the welfare state and its social-political institutions. As I have argued in previous chapters, it is important not to confuse the transformation of the state with its disappearance. Rather, we are witnessing the ongoing structural transformation of state apparatuses in ways that reproduce the patterns of change seen in a plethora of corporate, cultural and not-for-profit institutions. The gestures and protocols of transparency once associated with and expected from public institutions have given way to a corporate culture of secrecy. The privacy that once, quite paradoxically, "deprived" individuals of a voice and public presence (see Virno, 2004: 24) has now become inverted: life within a reality-media complex voraciously extracts people from under the radar, extending the socio-technical capacities of the mediasphere as the definitive organ of social and cultural legitimation and value formation. Similarly, it has become routine practice for the state to tender its social services

and fiscal management to firms that provide the best post-political packages for career politicians while, more insidiously, retaining the right of privacy common to corporate law – the “confidentiality agreement” – that serves the interests of protecting corporate-state negotiations. Whereas privacy within an era of the bourgeois public sphere deprived the individual of a public presence, perversely, privacy in an epoch of neoliberalism functions to enhance the security of the corporate-state nexus.

Far from advancing toward some more enlightened, rational stage of social-political development, such changes in the way social relations are organised have, on the one hand, resulted in capital extending its destructive capacity with a massive intensification in environmental degradation associated with new techniques in agricultural and industrial production, the expansion of urban infrastructures and the demands by consumers for greater diversity of the same; generations of people have been left in the dustbin of history and live in poverty; and technological advancements in the military-entertainment complex have fuelled the political economy of corporate governments as they impose their domestic agendas on minor states. Yet, on the other hand, the transformation of social relations, and techniques of organisation more generally, have coincided in recent years with a re-emergence and reassertion of the multitudes – a mutable movement of movements whose tactics of social-political intervention and cultural production have been greatly facilitated by the widespread availability of relatively cheap new media technologies associated with the Internet. Mailing lists, web campaigns, real-time audio-streaming, the mobile phone and blogs have played particularly key roles in shaping the actions of tactical media. And, it should be said, such technologies have also benefited the interests of global capital. The difference between these two endeavours is one that runs along the lines of values, interests, constituencies and desires.² Hope is reasserting its force. The re-emergence of the multitudes as the inventors of another possible world, along with the gradual dissolution of supranational governing agencies such as the WTO and

² Virno also recognises the similarities between these two formations: ‘The notion of the multitude seems to share something with liberal thought because it values individuality but, at the same time, it distances itself from it radically because this individuality is the final product of a process of individuation which stems from the universal, the generic, the pre-individual’ (2004: 76). I unpack the distinctions between individuality, its attendant process of individualisation, and individuation below.

the increasing incapacity of powerful states such as the US and Britain to manage their pursuits of crisis, are all part of a proliferation of signals that indicate the hegemony of neoliberalism is on the wane.

Against this backdrop, this chapter seeks to resituate Mouffe's notion of agonistic democracy as a radical pluralism within networked media ecologies. Such a shift necessitates new models with which to think and enact the possibility of radical democracy within a digital terrain. I deploy the notion of media translation as the figurative passage that ushers in the conditions for a processual democracy within network societies. With reference to the limits of both tactical media and traditional institutional structures, the chapter argues how the persistence of organised networks as new institutional forms depends upon addressing two key problematics: sustainability and scale. In this regard, the chapter relates back to themes discussed in chapters 4 and 5, which were also concerned with issues of scale and sustainability as they relate to Indigenous sovereignty and NGOs. Like those chapters, this chapter advances an argument for political activists to make a strategic turn in order to raise the stakes of what it means to live – and indeed, how we live – within informational societies. In as much as processuality corresponds with socio-technical networks of media-in-translation, so too the multitudes – as a mutable, proliferating socio-technical expression of life – hold the potential to create polities that support the ongoing formation of life as an affirmative force.

The task of this final chapter is to identify how and why an institutional turn is now required amongst media activists. Of course there can be no definitive program for such a shift. Nevertheless, emergences can be detected. 'Movement', writes Deleuze, 'is translation in space. Now each time there is a translation of parts in space, there is also a qualitative change in the whole' (1986: 8). Transformations register on the radar of this media-informational present and hold the capacity to translate across socio-technical networks in unforeseen ways. Pure virtuality.

The Network Problematic

A spectre is haunting this age of informationality – the spectre of state sovereignty. As a modern technique of governance based on territorial control, a “monopoly of violence” and the capacity to regulate the flow of goods, services and people, the sovereign power of the nation-state is not yet ready to secede from the system of internationalism. The compact of alliances between nation-states over matters of trade, security, foreign aid, investment, and so forth, substantiates the ongoing relevance of the state form in shaping the mobile life of people and things. As the Internet gained purchase throughout the 1990s on the everyday experiences of those living within advanced economies in particular, the popular imagination became characterised by the notion of a “borderless” world of “frictionless capitalism”. Such a view is the doxa of many: political philosophers, economists, international relations scholars, politicians, CEOs, activists, cyber-libertarians, advertising agencies, political spin-doctors and ecologists all have their variation on the theme of a postnational, global world-system inter-linked by informational flows.

Just as the nation-state appears obsolete for many, so too the term “network” has become perhaps the most pervasive metaphor to describe a range of phenomena, desires and practices in contemporary information societies. The refrain one hears on networks in recent years goes something like this: fluidity, ephemerality, transitory, innovative, flows, non-linear, decentralised, value adding, creative, flexible, open, risk-taking, reflexive, informal, individualised, intense, transformative, and so on and so forth. Many of these words are used interchangeably as metaphors, concepts and descriptions. Increasingly, there is a desperation evident in research on new ICTs that manifests in the form of empirical research. Paradoxically, much of this research consists of methods and epistemological frameworks that render the mobility and abstraction of information in terms of stasis, as I discussed in chapters 1 and 3.

Governments have found that the network refrain appeals to their neoliberal sensibilities, which search for new rhetorics to substitute the elimination of state infrastructures with the logic of individualised self-formation within Third Way

style networks of "social capital" (Latham, 2001: 62-100; Giddens, 1998).³ Research committees at university and national levels see networks as offering the latest promise of an economic utopia in which research practice synchronically models the dynamic movement of finance capital, yet so often the outcomes of research ventures are based upon the reproduction of pre-existing research clusters and the maintenance of their hegemony for institutions and individuals with ambitions of legitimacy within the prevailing doxas (Cooper, 2002; Marginson and Considine, 2000). Telcos and cable TV "providers" revel in their capacity to flaunt a communications system that is not so much a network but a heterogeneous mass of audiences-consumers-users connected by the content and services of private media oligopolies (Flew, 2002: 17-21; van Dijk, 1999: 62-70; Schiller, 1999: 37-88). Activists pursue techniques of simultaneous disaggregation and consolidation via online organisation in their efforts to mobilise opposition and actions in the form of mutable affinities against the corporatisation of everyday life (Juris, 2004; Lovink, 2003: 194-223; Lovink and Schneider, 2004; Meikle, 2002). The US military-entertainment complex enlists strategies of organised distribution of troops and weaponry on battlefields defined by unpredictability and chaos, while maintaining the spectacle of control across the vectors of news media (Der Derian, 2001; De Landa, 1991; Wark, 1994a: 1-46). The standing reserve of human misery sweeps up the remains of daily horror.

Theorists and artists of new media are not immune to these prevailing discourses, and reproduce similar network homologies in their valorisation of open, decentralised, distributed, egalitarian and emergent socio-technical forms. In so doing, the discursive and socio-technical form of networks is attributed an ontological status. The so-called openness, fluidity and contingency of networks is rendered in essentialist terms that function to elide the complexities and contradictions that comprise the uneven spatio-temporal dimensions and material practices of networks. Similarly, the force of the "constitutive outside" is frequently dismissed by media and cultural theorists in favour of delirious discourses of openness and horizontality. As I discussed in chapter 2, "immanence" has been a key metaphor to describe the logic of

³ See Agre (2003) for a brief genealogy of the term social capital. See Tronti (1973) for an autonomist deployment of the term.

informationalisation. Such a word can also be used to describe networks. To put it in a nutshell, the technics of networks can be described as thus: if you can sketch a diagram of relations in which connections are 'external to their terms' (Hume-Deleuze), then you get a picture of a network model. Whatever the peculiarities the network refrain may take, there is a predominant tendency to overlook the ways in which networks are produced by regimes of power, economies of desire and the restless rhythms of global capital.

What remains to be discussed within the constraints of this thesis is how the antagonisms peculiar to these varied and more often than not incommensurate political situations of informationality might be formulated in terms of a political theory of networks. As I outlined in chapter 1, a processual model of media theory inquires into the movement between the conditions of possibility and that which has emerged within the grid of signs, codes and meanings – or what Deleuze understands as the immanent relationship between the plane of consistency and the plane of organisation. How might the politics of networks as they operate within informationalised institutional settings be understood in terms of a *processual democracy*? This is the larger question I wish to set the ground for in this chapter, and is one that I address again in the coda to this thesis.

Conditions of possibility are different in kind from that which comes to be conditioned. There is no resemblance or homology between the two. External forces are not grids whose stabilising capacity assures the temporary intelligibility of a problematic as it coalesces within a specific situation. Yet despite these dissonances, networks are defined by – perhaps more than anything – their organisation of relations between actors, information, practices, interests and socio-technical systems. The relations between these terms may manifest at an entirely local level, or they may traverse a range of scales, from the local to the national to the regional to the global. Whatever the scale may be, these fields of association are the scene of politics and, once they are located within institutional settings, are the basis of democracy in all its variations. This isn't to say that in and of themselves these components of networks somehow automatically result in democracy. But it is to suggest that the relationship between institutions and the socio-political habitus of the state

continues to be a primary influence in conditioning the possibility of democratic polities.

The persistence of state sovereignty within the immanent logic of informationality presents an invitation to transdisciplinary theorists to invent new techniques of deduction, appraisal and critique. Indeed, the task of invention is an inevitable one for creative critical theorists inasmuch as they, as individuals within the singularities of the multitudes, subsist reflexively within the logic of informationalism. The relationship is a reflexive one because the theorist encounters problems that are presented by the tensions within the triad of networks, institutions, democracy. Problems emerge in the form of feedback or noise peculiar to the socio-technical system. Critical theorists are not, of course, alone in this engagement; it is one they share with many whose labour-power is subject to the constitutive force of networks-institutions-democracy.

My primary interest in bringing the terms networks-institutions-democracy together is to develop a conceptual assemblage with which to think the emergence of organised networks as new institutions of possibility. From a theoretical and practical point of view, how might organised networks be defined as new institutional forms of informationalism? Given that institutions throughout history function to organise social relations, what distinguishes the organised network as an institution from its modern counterparts? Obviously there are differences along lines of horizontal vs. vertical, distributed vs. contained, decentralised vs. centralised, bureaucratic reason vs. database processing, etc. But what else is there? These are questions I address below, particularly in the second half of this chapter.

Networks and Translation

Modernity ushered in experiences of mobility for people and things in ways hitherto unexperienced. With mobility came all sorts of connections. Railways moved people and merchandise from the country to the city, troops and armaments to the front (Schivelbusch, 1977). Telegraphy transmitted code from the metropole to the antipodes and back again (Wark, 1997a). The penny novel

accompanied workers on their journey to the office, the evening newspaper or racing guide on their trip back to the suburbs. People, ideas and things came to occupy a shared space and time of motion. In so doing, the experience of movement is at once made possible and defined by new combinations of elements. This is translation at work.

With the onset of the Enlightenment, industrial capitalism and modernity, new disciplines emerged in the hard and human sciences (see Foucault, 1970). The discipline of anthropology set itself the task of cataloguing human habits and attributes within a language system that translated in various ways into policy initiatives, geographic survey reports, academic monographs, economic prospectives, architectural forms, museological displays and cultural exchanges. This too is translation at work. Elements previously without relation are combined in such a manner that something new is invented (see Brown, 2002: 6).

In chapter one I indicated how a processual media theory is derived from research in cybernetics, biology and systems theory that is interested in information as it relates to the problem of calculation, control and determination in order to enhance efficiency. The primary question for first-order cybernetics was how to impose stability and order over the entropic tendencies of information, as witnessed, for example, within biological systems and their transmission of code or radio signals and their interference by "noise". The preoccupation with efficiency in first-order cybernetics denies the relational character of communication. Second-order cybernetics saw the necessity of not banishing noise from the system, but establishing a balance between order and disorder: noise or feedback was "rehabilitated" as a "virtue" of communication within a system (Matielart and Matterlart, 1992: 45).⁴

Within anthropology, for example, the observer impacts upon that which is observed and changes what might otherwise have transpired in the course of the event, had the observer not been a part of the system. Second-order

⁴ In the coda to this thesis, I relate the notion of transversality to this aspect of the "virtue" of communication as it figures within Virmo's (1996b, 2004: 52-66) notion of "virtuosity" – a performance without an end-product, and an expression that requires the "presence" of others.

cybernetics and systems theory thus adopts a reflexive understanding of the relationship between observer and observed. Feedback – what Bateson termed the ‘difference which makes a difference’ – is acknowledged as fundamental to the functioning of the system. Moreover, communication is more properly understood as not a unilinear channel of *transmission*, but rather a non-linear system of *relations*. Corresponding with this conceptual development is a shift from an instrumental view of communication to an understanding of communication as a social system.

Anthropologist and philosopher of the history of science, Bruno Latour, has made influential inroads into how translation operates in relations between human and non-human actors. I would like to detour through his work in order to suggest how the notion of translation is central to the argument I wish to advance concerning organised networks as emblematic of a processual democracy which constitutes a non-representational idiom of politics. Latour’s thesis in *We Have Never Been Modern* (1993) is presented in the form of a series of paradoxes. Just as the modern episteme predicates itself on universals of truth, law, and progress; humanism’s universality of reason, natural rights and moral and cultural values; and essentialist dichotomies between Nature and Society, Culture and Technology – what Latour terms processes of ‘purification’ – the modern also actively disavows or refuses the parallel processes of ‘translation’ or ‘mediation’, or formation and ‘multiplication’ of hybrid ‘quasi-objects’ (Latour, 1993). Upon multiplication, networks of human and non-human artefacts and actors have global reach that produce local ‘traces’ or threads, yet the modern disavows such peculiar mutations as the precondition for its principles of universality. That is, processes of purification are predicated by the modern as holding precedence over processes of translation. The figure of the human is granted the status of originary actant, abrogating the work of other agents. For these reasons, we have never been modern.

Similarly, and most simplistically, we have never been human since the complex array of forces that constitute the condition of life (be it organic or inorganic) cannot be reduced to any single figure, such as the human. I would

Interestingly, “noise” in the cybernetic system is, in this sense, so aptly cast as the virtuosity of communication.

like to extend this possibly absurdist form of argument to the figure of democracy. Can we become democratic? Since – following Virno, a Deleuzo-Foucauldian line, along with a strand within political philosophy and international relations – the activities of the multitudes are exterior to the idea of *representation*, which is the key procedure by which modern democracy figures itself, how might democracy constitute itself within contemporary socio-technical networks? To ask this question is also to ask whether the mobilisation of capacities within socio-technical networks – or processes of translation which might incorporate computer systems, software designers, cognitive workers, etc. – can produce political institutions, or arrangements of the social. Moreover, and following Chantal Mouffe, it is to ask whether the realm of networks consist of or are articulated with a material dimension, hence constituting a “politics”, which Mouffe defines in her book *The Democratic Paradox* as ‘the ensemble of practices, discourses and institutions that seek to establish a certain order and organize human coexistence in conditions that are always potentially conflictual because they are affected by the dimension of “the political”’ (2000: 103). In other words, to ask the question of democracy with respect to actors, networks, processes of translation and politics is, at a fundamental level, to inquire into the power relations that condition the formation of the social. If the modern is underpinned by processes of translation, which might also be understood as “border wars” (see Wise, 1997: 43), then it might be said that the multitudes, as ‘an infinity of singularities’ (Negri, 2004: 124) that brings boundaries into question, inhabits the abstracted spaces of the modern. As I discuss below, part of this “border-work” of the multitudes corresponds with what Virno identifies as the re-emergence of the multitudes as a force with presence in a post-Fordist era of capitalism.

Procedures of purification restrict ‘the dimension of antagonism’ that, for Mouffe, conditions the field of “the political” (2000: 101), whereas processes of translation ‘greatly broadens the scope of the political to include non-human actors’ (Wise, 1997: 30). In this sense, the multitudes can be read as a figure of translation, of mediation; a movement within movements whose condition of existence resides within an abstracted network of relations. Without the network, there is no translation. Without the network, there is no antagonism, and hence, no sociability. As noted in chapter 4, Mouffe argues that *agonistic*

democracy consists of that which acknowledges the power-legitimation processes of "politics" conditioned by the possibility of 'struggle between adversaries' as distinct from the illegitimacy within deliberative or Third Way rules of democracy that refuse the 'struggle between enemies' (102-103), which is special to *antagonism* and 'the violence that is inherent in sociability' (135).

If Mouffe's model of an agonistic democracy is to have any purchase within networked, informational societies, then it is essential to address the ways in which the organisation of social-political relations within such a terrain occurs within new institutional forms immanent to the media vectors of communication, and thus sociality. Let's be clear about this. Networked, informational societies – what McKenzie Wark (1994a, 1994b, 1997a, 1997b) calls "third nature" – are in no way autonomous in any absolute sense from the industrial organisation of labour-power, or what Wark calls "second nature". Wark summarises the key features of second nature and third nature, the role of media vectors, and the politics of the relationship between these spaces:

The virtual geography of the communication vector emerges as the promise of a space where the contradictions of second nature can be resolved. By second nature I mean the space of the material transformation of nature by collective labor. Second nature is a space of fragmentation, alienation, class struggle. In many ways, the space of the vector really is a third nature, from which the second nature of our built environments can be managed and organized, as a standing reserve, just as second nature treats nature as its standing reserve. However, this third nature does not emerge as a rational and transparent space, with a homogenous and continuous time. It emerges as a chaotic space, an event space....

The vector of communication makes of everything it touches a resource for displacement and transformation.... Power is in both cases vectoral. (Wark, 2002c)

Wark goes on to note that third nature holds two key distinctions: the game of the commodity in which the vector captures the object and encloses it as property relation, and the game of strategy in which 'the vector aggregates objects as territories in the emerging space of the world battlefield'. Both of these characteristics would seem to contradict Wark's claim that third nature is a 'chaotic space'. Third nature can, I think, only be seen as 'chaotic' in so far as it is a space of unforeseen possibilities. The dotcom era milked that vectoral

ontology for what is was worth. Crash! A more accurate description – and one I think corresponds with much of the Deleuzian underpinnings within Wark's work – is to see third nature as a relationship between the plane of immanence (potentiality) and the plane of organisation (the event), as I discussed in chapter 2. The relationship between these two planes accommodates Wark's correct analysis of third nature as a space of property relations and as a field of strategy, both of which emerge as events that populate the plane of immanence. Both are an expression of socio-technical capacities coupled with economic and political forces that gather around problems of control and order. The property component of third nature segues with arguments in the previous chapters. Chapters 4 and 5 both picked up on the notion of third nature as a game of strategy that can be turned back on the hegemon, playing the hegemon at their own game, turning the property question into a force that has the potential to advance the push for Indigenous sovereignty. This chapter continues to assert the need for a strategic turn if the multitudes are to address the problematics of scale and sustainability: *the situation of informational politics*. Wark further elaborates the characteristics of third nature that constitute it as a space of "the political":

There is a tension between these two dimensions of third nature. The vector does not just develop third nature as a commodity-space. It develops and extends third nature as a strategy-space at the same time. Third nature is a plane upon which both kinds of power develop and both become more concentrated. The vector heightens the significance of both the flows that cross boundaries and the boundaries themselves. The vector undermines state sovereignty and at the same time enhances it. What makes this era so unstable is not just these two phenomena acting alone, but also the conflicts and collusions between them. (Wark, 2002c)

As Wark observes, there is a partial autonomy of these spatio-temporal milieu, but not an absolute one. Adorno and Horkheimer can also be thanked for advancing Marxist theory on that score. There are overlaps, interleavings, conflicts and tensions between the two historical-communicational configurations of second and third nature. For this reason, the articulations between second nature and third nature constitute in a very precise way the field of the "the political". Unless Mouffe's thesis is recast in ways that address the political situation of informational networks in terms of emergent

institutions,⁵ her advancement of an agonistic democracy whose condition of existence is premised on the persistence of political institutional forms within the space of second nature is one that will remain fixed within an image of nostalgia.

When information is located within a capitalist economic system and its practices of production, circulation and exchange, one can speak of the logic of informationalism. The conceptual developments within cybernetics and systems theory correspond with shifts in the logic of informationalism. The logic of informationalism is characterised by various sociologists and political economists as heralding a shift from an industrial age of manufacturing, manual labour, Fordism, surveillance and internationalisation to an informational age of services, knowledge workers, post-Fordism, control and globalisation. Christopher May writes that a central assumption to this change is a belief that 'New ICTs will transform the relations of production of the economies in which they appear, promoting fluid networks rather than ossified hierarchies' (2002: 51).

My argument is that in order for networks to organise mobile information in strategic ways that address the issues of scale and sustainability, a degree of hierarchisation, if not centralisation, is required. Let's not forget that for all the anti-state rhetoric of anarchists, they, like many "radical" outfits, are renowned for being organised in highly hierarchical ways – typically around the cult of the alpha-male. The point is that such organisation occurs within the media of communication. Herein lies the difference between the organised network and the networked organisation.⁶ The latter consists, quite simply, of networking traditional institutional settings. The architectural configuration of the building provides the skeletal framework within which electronic and social networking is negotiated. Certainly, this is not as entirely straightforward as bringing in

⁵ Not even when she is participating with political activists addressing the theme of infopolitics does Mouffe rethink her argument on institutions, as on the occasion of the *Dark Market: Infopolitics, Electronic Media and Democracy in Times of Crisis* conference held at Public Netbase in Vienna, 2002. For full documentation, including Mouffe's (2002) paper 'Which Democracy in a Post-Political Age', see <http://darkmarkets.f0.or.at>.

⁶ This is a distinction Geert Lovink touches on in dialogue with Trebor Scholz (Lovink and Scholz, 2004) in the newspaper for the Free Cooperation conference that took place in Buffalo, New York in April 2004, <http://freecooperation.org>. Given his own connections with the Social Science Research Council, NYC, Lovink may well be referring to a response paper by Evan Henshaw-Plath (2003) entitled 'Networked Technology and Networked Organizations'.

the stooges to refit the shell, like we see in all those house renovation and lifestyle TV shows that appeal to our aspirational fantasies. No doubt many people have got stories of, if not directly experienced, the difficulties faced by many workers who over the past couple of decades had to adjust to the computerisation of work environments.⁷ Such changes require the acquisition of new skills and a transformation of habits. And this affects many, from the cognitariat to those engaged in more menial forms of labour. Nonetheless, the distinction remains: the techniques of governance within the networked organisation, unlike the organised network, do not place a primacy on the media of communication. Or rather, bricks and mortar prevail as the substrate within which communication and socio-technical relations are managed.

Organised networks, on the other hand, hold an entirely different range of potentialities with regard to the orchestration of socio-technical relations. While organised networks principally consist of online forms of communication such as mailing lists, IRCs or newsgroups, it would be a mistake to overlook the importance of face-to-face meetings – or “fleshmeets” or “meetspaces”, as the nineties style cyber-speak would have it. Such occasions are crucial if the network is to maintain momentum, revitalise energy, consolidate old friendships and discover new ones, recast ideas, undertake further planning activities, and so on and so forth. Different spaces, different temporalities, different media of communication, different mediations of sociality. This is mediology. Translation is the media logic that makes possible a continuum of relations between one socio-technical form of mediation and another. There is no *a priori* smoothness that defines a continuum of relations.⁸ Frequently enough tensions are going to prevail. Antagonisms may indeed be immanent to the process of translation. Any media translation involves an engagement with “the political”. Such is the relationship between the plane of consistency and the plane of organisation, as discussed in chapter 2. Both coexist within a field of sociality. It helps, then, to invent a media theory of these kind of

⁷ For an original study of the way in which the home computer has shaped domestic living, see Lally (2002).

⁸ This is the category error that so much digital architecture is prone to make. For all the rhetoric amongst contemporary architectural theorists and designers to escape the modernist iron-cage of “form follows function”, it’s more often the case that a sad extension of this modernist logic as “form follows form” occurs under the spectral wonders of digital pixels. The work of New York and Californian architects Greg Lynn and Marcos Novak are standout examples of this tendency.

relations as a way of making intelligible and actionable the politics of informationality.

The techniques of sampling and mixing within DJ culture and the practice by digital gamers of "modding" exemplify the art of media translation. Modding consists of the open source practice of modifying code within a game's system or design in order to create new capacities, new pleasures and new relations (see Huhtamo, 1999; Postigo, 2003; Schleiner, 1999). DJ culture holds some affinities with game modding – both idioms mess with code. In developing a processual media theory in chapter one, I suggested that code is a language whose precondition is the possibility for meaning to be produced. Similarly, and like the relationship between the plane of immanence and the plane of organisation, individuation consists of a process that Deleuze (2004), Virno (2004) and Mackenzie (2002) call a *pre-individual reality*: 'something common, universal and undifferentiated' (Virno, 2004: 76). Singularities emerge out of common capacities: of language, of perception, of production (see Virno, 2004: 80). Transduction is the complex of forces through which the process of individuation translates pre-individual realities – that which is common – into singularities. As Mackenzie explains:

The main point is that transduction aids in tracking processes that come into being at the intersection of diverse realities. These diverse realities include corporeal, geographical, economic, conceptual, biopolitical, geopolitical and affective dimensions. They entail a knotting together of commodities, signs, diagrams, stories, practices, concepts, human and non-human bodies, images and places. They entail new capacities, relations and practices whose advent is not always easy to recognise.... Every transduction is an individuation in process. (Mackenzie, 2002: 18)

Paul D. Miller a.k.a. DJ Spooky that Subliminal Kid has written eloquently on what he terms 'rhythm science'.⁹ This is a mode of invention that subsists within that which is common in order to create something new. 'Sampling is like sending a fax to yourself from the sonic debris of a possible future ...' (Miller, 2004: 77). Writing about his time growing up in Washington D.C., Miller-Spooky-Subliminal Kid (a distributed, three-fold conceptual persona) has the following to say about how he goes about the process of composition:

⁹ For an engaging review of Miller's *Rhythm Science*, see Wark (2004a).

... I always tried to check out whatever was around and I still do that. It's a matter of being open to a huge variety of sounds. If I get more into something, I'll just learn how to play it. I play many kinds of instruments on my albums, but then I sample them and combine them with scratchy record sounds and a couple of different sound filters to make them sound antique or estranged – you know how it goes – supersonic bionic, as Kool Keith says. The work and the style are hypertextual, one instrument leads to another, the sampler can be any instrument so the whole vibe is basically open to whatever WORKS. From frontier tales to the popular cinema to jazz and hip-hop, there are literary and artistic precedents that make me think that this is in fact the American *modus operandi*. Enfolded mediascapes become the stage on which I perform and the planet is my mixing board. I just don't have enough memory to hold it all in my brain, so I have to flip to the sampler. (Miller, 2004: 40)

Drawing on archives of sound, text and image, 'Rhythm science uses an endless recontextualizing as a core compositional strategy' (21). Irrespective of extra-institutional constraints such as the command-economy of government funding agencies, the academic has a similar experience as they engage in reading, writing and teaching. 'That's the logic', muses Miller, "'Press return'. Process' (12). The comparative media theory of Innis, McLuhan and their legacy – as seen, for instance in the work of Carolyn Marvin's (1988) old technologies that were once new, Joshua Meyrowitz's (1985) "para-sociality" of media audiences, Stephen Kern's (1983) culture of time and space, Lev Manovich's (2001) "transcoding" of database aesthetics, and Jay Bolter and Richard Grusin's (1999) "remediation" across media forms – and even Foucault's (1990b; 1991a) histories of the present are all instantiations of transductive forces at work, in which a "metastability" conditions the gathering of form and matter into a singular event.

Despite the correspondences these approaches have with the kind of social-political theory of media translation that I am setting out here, there has been a tendency within medium theory to place questions of form over socio-technical relations. While McLuhan's research was frequently attentive to the processual dimension of electronic media technologies and their capacity to translate and extend the human senses, his emphasis was on the resonance of formal properties between media technologies. As McLuhan expressed in his interview in 1969 with *Playboy Magazine*, 'my books constitute the *process* rather than the completed product of discovery; my purpose it to employ facts as

tentative probes, as means of insight of pattern recognition, rather than to use them in the traditional and sterile sense of classified data, categories, containers. I want to map new terrain rather than chart old landmarks' (McLuhan, 1995: 236). Such a methodological predisposition went back to McLuhan's early days as an undergraduate, with his interest in the English painter, novelist and critic, Wyndham Lewis, author of the polemical *Time and Western Man* (1927). In his excellent biography on McLuhan, Philip Marchand notes how that book 'upheld certain classical values of contemplation, of clear forms and precise definitions, and of the autonomy of the individual, which made it very congenial to Catholics [such as McLuhan] reared on Aristotle and Thomas Aquinas' (Marchand, 1998: 79). These sorts of values were also features of another significant formalist influence on McLuhan, the New Criticism of literary scholar F. R. Leavis, who he encountered during his studies at Cambridge in the mid-30s (see Marchand, 1998: 39-41).

In his landmark book *The Language of New Media* (2001), Lev Manovich carries on the tradition of media archaeology by ascertaining formal connections between cinema and digital technologies and software applications. In terms of a theory of media translation, Manovich's notion of "transcoding" is pertinent: 'In new media lingo, to "transcode" something is to translate it into another format' (Manovich, 2001: 47). Like McLuhan, such a notion of translation remains far too driven by a preoccupation with the formal aspects of new media technologies, eliding important socio-political and cultural forces that function through a feedback system to shape formal properties. As I will shortly discuss, the organised network as a new institutional formation is another example of the stabilising capacity of transductive forces. The primary difference, however, is that organised networks are shaped by the power of socio-technical needs, interests, affects and passions that hold the potential to translate into new institutional forms.

All communication is a process of translation. Networks are uneven, heterogeneous modulations and combinations of communication in and through which translation is intrinsic to the connectivity of information as it encounters technical, social, political, economic and cultural fields of articulation, negotiation and transference. Translation, then, is about making

connections between seemingly incommensurate things and objects. Translation conditions the possibility of communication, transversality, transduction, intensity and individuation between different systems (Mackenzie, 2002; Murphie, 2004). From the connection emerges a new logic, a new sensibility and new capacities. At a very basic level, the logic of networks is the process of connectivity.

Networks have the capacity of transduction, which Adrian Mackenzie, via Gilbert Simondon, describes as a process of ontogenesis 'in which a metastability emerges' within biological and socio-technical systems (2002: 16-19). Or as Andrew Murphie puts it, 'transduction translates intensities so that they can be brought into individuating systems' (2004: 120). The form of organised networks provides a mutable architecture in which matter is temporarily arrested within a continuum of differentiation and individuation. Transductive forces subsist within the relation between form and matter. The organised network can be considered as a new institutional actant whose political, economic and expressive capacities are shaped and governed by the metastability of the network system. The intelligibility of such arrangements, relations and informational flows is thus most accurately summarised by a theory of translation which incorporates processes of transduction. Translation is truly a concept of praxis. It is part and parcel of every network. Transduction conditions the possibility of organised networks as emergent institutional entities.

Individuation within the Multitudes

At the start of this chapter I made passing reference to the way in which the "citizen-subject" has been supplanted by the individual who engages not with a democratic state but a shareholder-democracy. It's important to carefully distinguish the sense of *individualisation* evoked here from the Simondonian idea of *individuation*. The former has been addressed by sociologists such as Beck, Lash and Bauman in terms of individual subjects engaged in the self-management of "risk" peculiar to the era of "second-modernity", while the later sense of the term, as discussed by Deleuze, Mackenzie and Virno, is understood

as a processual ethico-political cartography of potentiality. The organised network carries the potential for the individuation of subjectivities into new institutional forms. This process is one of political invention. Individuals become individuated, organising as multitudes, creating the potential for the emergence of instituted singularities. Beck and Lash, on the other hand, reduce and thus dismiss the possibility of institutional life as specific to an industrial era of risk society, or "first modernity", that has been surpassed by an era of "second modernity" characterised by disorganisation, informationisation and networks.

Beck initiates his book *What is Globalization?* with a rendition of the bleak outlook held by "postmodernists" and neoliberal ideologues alike, who, by Beck's reckoning, associate the crisis of democratic polities with the erosion of traditional institutional forms. This shift arises as a result of 'the secular trend of individualization', which effects a loosening of social bonds (Beck, 2000: 8). Accompanying this trend, according to Beck's summation of the general discourse on economic globalisation, is a society that has lost its 'collective self-consciousness and therefore its capacity for political action' (2000: 8). Beck dismisses this fatalistic scenario in which the totalising effects of economic globalisation debilitate political action, though he sees such a discourse as little more than the incapacity of people to advance out the imbroglio of some kind of false-consciousness (2000: 9). Beck's faith in the possibility of an alternative political culture is evidenced by the political actions undertaken by global civil society movements, which operate within a different dimension or layer of what he refers to as the experience of "globality" – or a 'world society' conceived of as a 'multiplicity without unity', as distinct from processes of economic "globalisation" and the neoliberal ideology of "globalism" (2000: 9-11).

Certainly, Beck is correct to observe that the remodelling of the state within a neoliberal ideology has seen a shift of the modern state form away from the social. Yet he is mistaken, I would maintain, to see the decoupling of sociality from politics as corresponding with a decline in institutional forms and their techniques of organising social relations within political frameworks. Not only does Beck overlook the continued purchase the state has on the management of

everyday lives – think, for example, of the legal authority institutions of the state have in both the movement of peoples and the flow of information (TRIPS Agreement and the bond with member states; enhanced national security measures with regard to the movement of individuals; free-trade agreements that determine the composition of cultural commodities, etc.) – but more significantly, he greatly underestimates the fundamental importance that institutions in a general sense play in the organisation of social relations. Moreover, in terms of how to begin both theorising and undertaking political action in a sustained manner within an informational society, the futility of Beck's position, by my reading, lies in its failure to recognise and imagine the ways in which the multitudes incorporate a strategic potential that can manifest in the creation of new institutional forms.

Lash arrives at a similar conclusion to Beck. Lash considers the shift from "first modernity" to "second modernity" as paralleling the decline of organisations (by which he seems to mean the firm, the institution, unions, the family, etc.) and the emergence of disorganisations (youth subcultures, criminal gangs, computer designers, the "neo-family", etc.) (Lash, 2002: 39-48). There is an implicit assumption here that, firstly, "disorganised capitalism" is indeed disorganised – capital, here, is much better understood in my view in terms of what David Harvey (1990) calls "flexible accumulation". The rise of transnational capital has not at all meant that the firm or institution loses its hegemony as an architectonic form involved in the management of social relations and economic production. Far from it. Disorganised capitalism simply means that capital is organised differently. The primary activity by capital of organising labour-power in order to effect production, distribution and exchange has not disappeared. Rather, it is dispersed and relocated on the basis of currency exchange rates, the cost of labour, taxation rates, government incentives (or, more properly, corporate welfare), levels of technical infrastructure and supporting service industries, etc. Herein lies the flexibility of capital. Secondly, Lash assumes precisely the linear model that he seeks to reject, claiming that disorganised capital results in disorganised sociality. Disorganised capital is capital organised by different means. Similarly, "disorganised sociality", consists, at least within the logic of informationality, of social relations organised in ways that are immanent to prevailing

communications media. This much Lash knows, albeit without comprehending the ways in which a constitutive outside operates within the plane of immanence, as I argued in chapter 2. The overdetermining binary system by which Lash secures his logic of disorganisations is worth quoting at length:

Organizations and the "power resources" that reside in organizations stand thus in no way in contradiction to the individualization process of high modernity. Indeed, individualization is the complement, the other side of this organizational power. Organizational power is the condition of existence of individualization, and individualization is the condition of existence of organizations.... What I want to argue, however, is that organizations and their accompanying power, and indeed individualization as we know it, are decaying social forms.... What is emergent is not so much organizations as *disorganization*, not so much individualization as *sociality*, and not so much power as *violence*.... Disorganizations are not the absence of organization, but the decline of organizations. The decline of organized capitalism does entail a decline in organization and a rise in individualism. But it also entails a rise in certain forms of sociation that are non-organizational, indeed often non-institutional. So disorganizations are not the absence of sociation, but particular forms of sociation. They are chaos, not chaotic.... Disorganizations presume a certain level and a particular mode – or should we say singular mode – of individualization, though they are somehow at the same time much more collective than are organizations. Disorganizations presume a different mode of individualization than organizations, they presume a non-utilitarian, non-strategic, non-identical mode of individualization.... Disorganizations are perhaps less hierarchical than horizontal. They are anti-system – they are too open to interference and invasion from the environment to be systems.... (Lash, 2002: 39-40)

To dismiss the technics of organisation enlisted by the new social movements is to rob them of vitality, and of the great urgency that now beckons the multitudes to register their political potential on another scale, and with a capacity for sustainability that has hitherto evaded this common plurality of living labour. Or as Miller puts it, 'What differentiates today from yesterday is the scale and scope of the paradigm' (2004: 72). Just as the pre-individual is common to the process of individuation, whereby capacities are that which are shared and coextensive, so too the organised network as a new institutional form corresponds with the pre-individual as that which is held in common. Let me unpack this. If political and corporate institutions within an industrial era of "first-modernity" typically functioned to de-individualise the worker in terms of a common unit to be managed, then such institutions reify the worker as a mass and incapacitate the individual through the conformist unity of

"effective labour", "the people" or "the citizen". In other words, the potential of labour-power as a common set of capacities – what Hardt and Negri (2000: 294) understand as 'linguistic, communicational and affective networks' – is subordinated to the mode of production. Virno explains: 'The capitalist production relation is based on the difference between labor-power and effective labor. Labor-power, I repeat, is pure *potential*, quite distinct from its correspondent acts' (2004: 81). Moreover, it is this potential of labour-power that is of primary value for the capitalist. Virno again:

Potential is something non-present, non-real; but in the case of labour-power, this non-present something is subject to the laws of supply and demand. Capitalists buy the *capacity* for producing as such ("the sum of all physical and intellectual aptitudes which exist in the material world"), and not simply one or more specific services. (Virno, 2004: 82)

Such a notion of labour-power suggests that the sixties and seventies autonomist mantra and radical worker movement's political strategy of a "refusal of work" is perhaps more clearly expressed in terms of "a refusal of potentiality" as it is subsumed by capital. Thus the key strategy for the multitudes is to secure their production of potentiality and direct it toward self-generating ends. The pure potential of labour-power turns on an important distinction that Virno reads into the "mode of production". Not only is "mode of production" to be understood as 'one particular economic configuration', writes Virno, 'but also [as] a composite unity of forms of life, a social, anthropological and ethical cluster' (2004: 49). The process of individuation subsists within and emerges from this commons as a plurality of differences. A mode of producing. The combinations, arrangements and expressions of these relations constitutes an 'ethical cluster'. An event. To be in relation is to become ethical. A productive force is at work. Individuation is a process of becoming individual within a multiplicity of relations. Thus, 'the individual is not just a result, but an *environment* of individuation' (Deleuze, 2004: 86). Within the socio-technical environment of informationality emerges the organised network as a potentiality coextensive with the process of becoming instituted.

The challenge for a politically active networked culture is to make strategic use of new communications media in order to create new institutions of possibility. Such socio-technical formations will take on the characteristics of organised networks – distributive, non-linear, situated, project-based – in order to create self-sustaining media-ecologies that are simply not on the map of established political and cultural institutions. As Gary Genosko writes, 'the real task is to find the institutional means to incarnate new modes of subjectification while simultaneously avoiding the slide into bureaucratic sclerosis' (2003a: 33). Such a view also augurs well for the life of networks as they subsist within the political logic of informationality that is constituted by the force of the outside.

The organised network that co-ordinates relations through the socio-technical form of the networked institution imbues information with a strategic potential. In this respect, the organised network can be distinguished from what David Garcia and Geert Lovink (1997), Josephine Berry (2000), the Critical Art Ensemble (2001), Joanne Richardson (2002), McKenzie Wark (2002d), Konrad Becker (2002), Lovink and Schneider (2002) and others on nettime have called "tactical media". Characterised by temporary political interventions, tactical media activism builds on the legacy of counter-cultures, protest movements, the Situationists, independent media activities and hacker culture.¹⁰ Lovink and Schneider (2002) provide the following short history of tactical media:

The term "tactical media" arose in the aftermath of the fall of the Berlin Wall as a renaissance of media activism, blending old school political work and artists' engagement with new technologies. The early nineties saw a growing awareness of gender issues, exponential growth of media industries and the increasing availability of cheap do-it-yourself equipment creating a new sense of self-awareness amongst activists, programmers, theorists, curators and artists. Media were no longer seen as merely tools for the struggle, but experienced as virtual environments whose parameters were permanently "under construction". This was the golden age of tactical media, open to issues of aesthetics and experimentation with alternative forms of story telling. However, these liberating techno practices did not immediately translate into visible social movements. Rather, they symbolized the celebration of media freedom, in itself a great political goal. The media used – from video, CD-ROM,

¹⁰ For a personal history of tactical media, see Geert Lovink's 'An Insider's Guide to Tactical Media', in *Dark Fiber* (2002: 254-274).

cassettes, zines and flyers to music styles such as rap and techno – varied widely, as did the content. A commonly shared feeling was that politically motivated activities, be they art or research or advocacy work, were no longer part of a politically correct ghetto and could intervene in “pop culture” without necessarily having to compromise with the “system”. With everything up for negotiation, new coalitions could be formed. The current movements worldwide cannot be understood outside of the diverse and often very personal [battles] for digital freedom of expression.

@TMark’s web co-ordinated campaigns against global corporate capitalism, the live webcasting and “Help B92” campaign of Belgrade independent radio station B92 following its banning by Serbian authorities during the Kosovo War of 1999, Adbusters’ culture jamming campaigns against media oligopolies, the electronic civil disturbance activities and “virtual sit-ins” undertaken by the likes of Critical Art Ensemble, the Electronic Disturbance Theater and the Mexican Zapatistas, and the Indymedia campaigns against the Woomera detention centre in South Australia are just a few of the many examples of tactical media.¹¹ Tactical media differ from alternative media, which is typically concerned about consolidating a “better” option for existing media forms (Lovink, 2002a: 258; Meikle, 2002: 119). Alternative media are frequently underpinned by moral and politico-aesthetic discourses of “quality culture”. The paradox of alternative media, when it assumes to embody such discourses, is that its “alternative” agenda is rendered in terms of stasis and conservatism rather than change and transformation. Whereas tactical media, as Graham Meikle notes, ‘is about mobility and flexibility, about diverse responses to changing contexts ... It’s about hit-and-run guerilla media campaigns ... It’s about working with, and working out, new and changing coalitions’ (119). Tactical media, then, are about rapidly organised, at times even spontaneous, short-term interventions. Certainly, such interventions may resonate over time – some even become mythical, as has been the case with the Zapatistas. Diverse skills accumulate and are shared across networks; in so doing, they hold the potential for deployment as techniques that address specific situations.

¹¹ For developed accounts of these various tactical media campaigns, see Lovink (2002a) and Meikle (2002). See also Angela Mitropoulos’ documentation at <http://woomera2002.com> and <http://antimedia.net/xborder>.

Nevertheless, tactical media have frequently been unable to address the problematic of sustainability.¹²

A primary challenge for tactical media concerns the question of scale. With their focus on creating "temporary autonomous zones" (Bey, 1991), tactical media run the risk of fading out before their memes reach a global scale. And when they do reach a level of globality – as in the case of the B92 streaming media reports, and the refrain of "anti-globalisation" protests centred around WTO meetings – the question of scale becomes focussed around the challenge of sustainability. How are tactical media to create effects that have a purchase beyond the safe-haven of the activist ghetto? As Lovink writes: 'Grown out of despair rather than conviction, tactical media are forced to operate with the parameters of global capitalism, despite their radical agendas. Tactical media emerge out of the margins, yet never fully make it into the mainstream' (2002a: 257). This is a problematic clearly recognised by Lovink and Schneider (2002):

We face a scalability crisis. Most movements and initiatives find themselves in a trap. The strategy of becoming "minor" (Guattari) is no longer a positive choice but the default option. Designing a successful cultural virus and getting millions of hits on your weblog will not bring you beyond the level of a short-lived "spectacle". Culture jammers are no longer outlaws but should be seen as experts in guerrilla communication. Today's movements are in danger of getting stuck in self-satisfying protest mode. With access to the political process effectively blocked, further mediation seems the only available option.

Various treatises and commentaries on tactical media note the distinction Michel de Certeau (1984: 29-44) makes between tactics and strategies. Graham Meikle makes the important point that strategies, with their exploitation of place, are about permanency over time, whereas a tactic 'exploits *time* – the moments of opportunity and possibility made possible as cracks appear in the evolution of strategic place' (2002: 121). In one of the many essays associated with the fourth Next 5 Minutes festival of tactical media (2002-2003), Joanne Richardson suggests that tactical media departs company with Certeau over the production of meaning: 'Maybe the most interesting thing about the theory of tactical media is the extent to which it abandons rather than pays homage to de

¹² The Zapatistas, Critical Art Ensemble, @TMark and Indymedia networks are among the exceptions.

Certeau, making tactics not a silent production by reading signs without changing them, but outlining the way in which active production can become tactical in contrast to strategic, mainstream media' (2002).

It is time to make a return to and reinvestment in strategic concepts, practices and techniques of organisation. Let's stop the obsession with tactics as the *modus operandi* of radical critique, most particularly in the gross parodies of Certeau one finds in US-style cultural studies. Don't get me wrong – I'm not suggesting that the time of tactical media is over. Clearly, tactical media play a fundamental role in contributing to the formation of radical media cultures and new social relations. What I'm interested in addressing is the "scalability crisis" that Lovink and Schneider refer to. If one starts with the principle that concepts and practices are immanent to prevailing media forms, and not somehow separate from them, it follows that with the mainstream purchase of new media forms such as the Internet come new ways in which relations of production, distribution and consumption are organised. An equivalence can be found in the shift from centralised Fordist modes of production to de-centralised post-Fordist modes of flexible accumulation. Strategies within the spatio-temporal peculiarities of the Internet are different from strategies as they operate within broadcast communications media. The latter ultimately conceives the "audience-as-consumer" as the end point in the food-chain of media production, whereas the former enable the "user" to have the capacity to sample, modify, repurpose and redirect the social life of the semiotic object. Moreover, there are going to be new ways in which institutions develop in relation to Internet based media culture. How such institutions of organised networks actually develop in order to obtain a degree of sustainability and longevity that has typically escaped the endeavours of tactical media is something that is only beginning to become visible.

As Phil Agre (2002) has noted, 'Institutions persist in part because of the bodies of skill that have built up within them'. This idea of institutions as accumulations of skills strikes me as a perfect way of describing what goes on within organised networks such as *fibreculture* and *sarai*. Yet why do so many networks fail to persist? What does it take for a network to become sustainable as an organised form? What's the 5 year business plan going to look like? And

how might it do this without sliding in to 'bureaucratic sclerosis', as Genosko puts it. Lovink and Schneider (2004) suggest that a large reason for the transience of networks has to do with the factors of information overload, inadequate software and interface solutions, and socio-cultural impasses in online communication.

To this I would add the need for networks to address situated problems if they are to develop into an organised form. I am not speaking of flamewars on mailing lists or people who don't express themselves in the correct lingua franca of a particular list – these are features of pretty much every mailing list with a substantial number of subscribers who have a bit of life in them. Rather, I'm talking about problems associated with undertaking projects that require an organised response in order to realise on- and off-line activities such as conferences, publishing in different formats and platforms, educational workshops and training, accredited provision of educational packages to the traditional education sector, new media art exhibitions, software development and database research platforms, online translation of foreign language books, etc. Networks like nettime used to do some of these kind of things in the past, but it seems that eventually their size put an end to that. This doesn't mean individual subscribers to nettime don't get together and organise things (they frequently do this!), but it does mean that the "brand" of nettime is no longer a continuum of relations beyond list culture. Scale, in the case of nettime, has been the impasse to organisation.

The Delhi-based media centre Sarai is one exemplary model of an emergent institution designed along the lines of an organised network. Fibreculture – a network of critical Internet research and culture in Australasia that formed in early 2001 – is another. In their own ways, the conditions of possibility for the emergence of these organised networks can be understood in terms of the constitutive outside. Both networks address specific problems of sociality, politics, and intellectual transdisciplinarity filtered – at least in the case of fibreculture – through a void created by established institutions within the cultural industries and higher education sector. Lovink explains the institutional affiliation and status of Sarai: 'Sarai is a program of the Center for the Study of Developing Societies (CSDS), an independent research center

founded in 1994' (2002a: 205). In her report on Sarai's first anniversary posted to nettime mailing list, Monica Narula gives an overview of some of the key motivations, interests and ambitions the network:

We are keen to effect crossovers and transgressions that displace both old and new hierarchies, which privilege neither tradition nor novelty for their own sake, and give rise to a more layered and agile form of media practice that is more reflective of the contemporary in our spaces. This means being as invested in the making of print objects, visual works and soundscapes as in the creation of web content, and looking for ways in which practices and objects can straddle off-line and online trajectories.

We are also working on a number of new media projects which examine questions related to claims and contests around issues of space and access in the urban environment and explore the idea of a "digital commons".... A central thread running through our work is the politics of communication itself. Who can access which tools to say what to whom. Hence our engagement with technology as cultural form and as the crucible of a new contest of power.... We want to contribute to autonomous, collaborative energies in the field of software, culture and communication technology, which are conducive to conditions of diversity....

Sarai is interested especially in those media cultures that lie in the shadow of technological and social elites. We are interested in speaking to critical voices that produce and live the new media, which may exist in the street, the software factory, the worlds of the local videowalla, the neighbourhood Public Call Office/cybercafe, the gray markets in music, computers and other media-ware. This is the electronic everyday, which resides in the shadows of the spectacular media space conjured by the media empires in South Asia, and will be very much an area where Sarai's work is slated to grow in the near future. (Narula, 2002)¹³

The case of fibreculture reveals quite different characteristics in terms of the composition and activities of an organised network. In many ways the fibreculture network is quite centralised with list facilitators, journal editors, book series editors, website management, conference organisers, etc. Hierarchies prevail. The facilitator's group has endeavoured to make the structure of the network as transparent and public as possible. Even so, the list is not privy to most of what is discussed in these various "backrooms". And to a large extent, that has to be accepted – trust has to be assumed – if the network is to develop in the way that it has. So, a degree of centralisation and hierarchisation seems essential for a network to be characterised as organised.

Can the network thus be characterised as an "institution", or might it need to acquire additional qualities? Is institutional status even desirable for a network that aspires to intervene in debates on critical Internet research and culture? How does an organised network help us redefine our understanding of what an institution might become?

Many of these questions are motivated by the ongoing problematic of what sort of democracy is possible within a network like fibreculture. Indeed, the question of democracy has frequently been a key driver of many discussions amongst the fibreculture facilitators. Much of this debate seeks to engage the continuous queries and criticisms raised on the fibreculture mailing list about the role of facilitators and the symbolic, administrative and affective positions of power they assume. Frequently, the facilitators group or individuals within it are charged as being authoritarian, and thus antagonistic toward potential for networked democracy. Perceptions of this kind will often be expressed by "trolls" on the list, or people who roam from mailing list to mailing list, firing off missives into list communities for the purpose of derailing debate and satisfying their egos that feed off the delight acquired from seeing the impact of disruptive postings. But there are also more legitimate aspects to the charge of excessive control by list facilitators or moderators.

By June 2003, two and a half years into the life of the network, fibreculture facilitators decided there was too much centralisation. The facilitators group was increasingly bogged down by indecision and the impasse of unresolved disputes. Mind you, none of this was particularly aggressive, and no friendships were destroyed. That's not the fibreculture style. Even so, consensus over larger planning and list moderation issues were harder and harder to make, and there was a great tendency amongst the group toward repetition. As a facilitator I can say that as soon as I had the sense that we had made a decision, some missive would often filter into the "facs" (facilitators) mailbox and throw a spanner in the works. Geert Lovink was a frequent culprit! His capacity to contradict an earlier statement or disrupt a fragile equilibrium would unsettle various other facs members, who would sometimes

¹³ See also <http://www.sarai.net>. For more accounts of Sarai, see Sengupta (2003), Lovink (2002a: 204-216), Sundaram (2002) and Butt (2004c).

contact me privately and express their confusion or frustration. As someone who remains in awe and has great respect for Lovink, I would usually come up with a defence that ran something along the lines of 'well, you know, Geert is this roaming Dutchman who refuses his Dutchness for a Deutchness, and he really isn't that either so these are instances we can put down to the fibrous knots of media and cultural translation', or something like that. I've frequently thought that Geert inserts these little kernels of trouble for quite strategic reasons: to prompt a group to come around to rethinking an approach, decision, plan or issue in different ways. Emails of this sort function as "the Real" – inscriptions of antagonism within the symbolic cybernetic system of a facilitator's discussion list. Without them, the system would close in on itself, simply reproducing the same without imagining the possibilities that the force of difference presents.

A number of "taskforces" came into effect after the July fibreculture meeting in Brisbane, 2003.¹⁴ Project development became much more focussed, and the composition of the planning and management groups was scaled down. With twelve members from Perth, Melbourne, Sydney and Brisbane, the facilitators group probably had too many people on it to effectively make decisions.¹⁵ Other faces members would dispute this. But typically there would only be a few people ever responding to a particular issue at any one time. Separate taskforces for list administration, journal editorial work, fibreculture press development, website management and design, annual meeting/conference planning, new media education initiatives and a "fibrepedia" (new media dictionary) project were established by November, 2003, following a special open planning meeting in Sydney. The facilitator's group still exists, and other people have since joined, but it only recomposes over issues that none of the

¹⁴ See Butt (2003b, 2003c) for background information. The program of that event, and previous meetings, can be found at: <http://www.fibreculture.org/events.html>.

¹⁵ In July 2003 the facilitator's group consisted of Hugh Brown (Brisbane), Axel Bruns (Brisbane), Danny Butt (New Zealand), Chris Cheshier (Sydney), Lisa Gye (Melbourne), Molly Hankwitz (Brisbane), Geert Lovink (Brisbane), Esther Milne (Melbourne), Anna Munster (Sydney), Ingrid Richardson (Perth) Ned Rossiter (Melbourne), David Teh (Sydney). Molly left soon after the Brisbane meeting. By early 2004 Adrian Miles (Melbourne) had joined the group. Gillian Fuller (Sydney) and Gerard Goggin (Brisbane/Sydney) are set to join in mid 2004. Andrew Murphie came on board in mid-2003 as editor of the *Fibreculture Journal*. In early 2004 Lovink and Rossiter left Australia for Amsterdam and Northcote, Ireland respectively, but the group decided that these two members should continue to play a role in facilitation issues. But I'm overstating the composition of organisation and development here – the taskforces and not

above taskforces can address, such as the ongoing questions about fibre/culture's legal status (should the network become incorporated as an organisation?; how do we deal with taxation issues associated with the minimal amount of revenue raised?; do we want to participate in international new media arts events?; and so on and so forth). In many ways, some of these questions should really go back to the mailing list. There is a strong danger that the "brand" of fibre/culture becomes a vehicle for the self-promotion of individual members of the facilitators' group, or any of the taskforces for that matter. And this is an issue that periodically gets discussed within a reconvened facilitator's group as well, and typically slides into the obscurity of non-resolution.

This brief background to some of the machinations of fibre/culture's planning and development work associated with the defacto governing body of the facilitators and the various taskforces illustrates that, indeed, there is a strong organisational dimension that shapes the unfolding of socio-technical relations of fibre/culture. A network doesn't come out of nowhere. One of the key challenges that networks such as fibre/culture present is the possibility of new institutional formations that want to make a political, social and cultural difference within the socio-technical logic of networks. It's not clear what shape these institutions will take, but we get a sense of what they might be in cases like fibre/culture and sarai. To fall back into the crumbling security of traditional, established institutions is not an option. The network logic is increasingly the normative mode of organising socio-technical relations in advanced economies, and this impacts upon both the urban and rural poor within those countries as well as those in economically developing countries. So, the traditional institution is hardly a place of escape for those wishing to hide from the logic of networks.

It is important to distinguish the organised network as a new institutional form from traditional institutions that have become networked through their use of new ICTs. As Lovink and Schneider (2004) have recently noted, the maintenance of hierarchical forms of power within hegemonic networked

the facilitator's group are now the primary drivers of organisation and development. How long that continues will have to be seen.

institutions' is part of a larger process of "normalization" in which networks are integrated in existing management styles and institutional rituals'. Traditional institutional forms – corporations, cultural industries, and the higher education sector – are increasingly appropriating many of the technics of tactical media: you can have your p2p (peer-to-peer) experience, but at a price! And who isn't advocating the merits of open source? Think IBM and opensource.mit.edu. There's a distinct whiff of new age refashioning in many of these projects as they seek to recapture a "spirit" of sharing and experiences of collaboration – the kinds of things that were swept into the dustbin in the hard-nosed culture of unit-driven corporatism.

Ultimately, the networked organisation is distinguished by its standing reserve of capital and its exploitation of the potentiality of labour-power. Such institutions are motivated by the need to organise social relations in the hope of maximising "creativity" and regenerating the design of commodity forms that have long reached market saturation.¹⁶ Paolo Virno's observation that post-Fordist 'labor has acquired the traditional features of political action' (2004: 51), thus reversing the traditional thesis formulated by Hannah Arendt – that politics is subsumed into the experience of labour – is a forceful one evidenced within the informational industries by the migration of tactical media style practices into more traditional institutional settings of both capital and its substrate, the neoliberal state. Virno notes that the previously distinct and traditionally indisputable boundaries between Labour, Action and Intellect have now become indiscernible within post-Fordist modes of production (2004: 49-51). As Virno writes: 'the world of so-called post-Fordist labour has absorbed into itself many of the typical characteristics of political action ... this fusion between Politics and Labour constitutes a decisive physiognomic trait of the contemporary multitude' (2004: 50). This move of the multitudes into the sphere of post-Fordist production clearly signals the operation of the "constitutive outside", as developed in chapter 2 of this thesis. But there are vital issues at stake here; issues of how a life is to be constituted, how it is to be invented within the network of relations that populate the common of creative

¹⁶ It will be interesting to see the extent to which the Creative Commons license is adopted by big business – I'm guessing it'll create a suitable amount of havoc, enabling service variation and consolidate an even brighter future for the legal industry. For more information on

potentiality. The clear danger is that politics, as a difference which makes a difference, becomes nothing more than market strategies aimed at commodity differentiation.

By contrast, the kind of emergent organised networks that I'm referring to are notable for the ways in which information flows and socio-technical relations are organised around site specific projects that place an emphasis on process as the condition of outcomes. The needs, interests and problems of the organised network coincide with its emergence as a socio-technical form, whereas the traditional modern institution has become networked in an attempt to recast itself whilst retaining its basic infrastructure and work practices, clunky as they so often are. Strangely enough the culture of neoliberalism conditions the emergence of the organised network. The logic of outsourcing has demonstrated that the state still requires institutions to service society. Scale and cost were the two key objections "econocrats" and servants to neoliberalism responded to. Forget about ideology. These bureaucrats are highly neurotic, obsessive-compulsive types. They hate any trace of disorder and inefficiency, and the welfare state embodied such irritations. The organised network can take advantage of such instituted pathologies by becoming an educational "service provider", for instance. The key is to work out what values, resources and capacities distinguish your network from the MIT model of "free courseware".¹⁷ The other factor is to work out a plan for sustainability – a clear lesson from the dotcom era. With the multitudes situated in post-Fordist modes of production, an opportunity presents itself – the opportunity to mobilise what Virno calls the 'pure potential' of labour-power as an ethico-aesthetic force into the process of eradicating capital's predisposition to marshal the mode of production toward "effective labour" as a service provision.

Conclusion

While I have been arguing for the need for organised networks to create – or what the Italian political activist Franco "Bifo" Berardi calls the unforeseen

Creative Commons – an open source style set of standards whereby some rights of authorship and intellectual production are reserved, see <http://creativecommons.org>.

¹⁷ See <http://ocw.mit.edu/index.html>.

capacity to invent¹⁸ – new institutions, let me emphasise that such activity is not some kind of end in itself. ‘It is not a question of “seizing power”’, as Virmo writes of the force of the multitude, ‘of constructing a new State or a new monopoly of decision making; rather, it has to do with defending plural experiences, forms of non-representative democracy, of non-governmental usages and customs’ (Virmo, 2004: 43). The invention by the multitudes of new institutional forms, and the persistence of their attendant practices, is part of a process that exists within a larger and more complex field of critical Internet cultures. Such developments can only occur when the networks are attentive to the technological composition of communications media as that which consists of socio-technical relationships (see Williams, 1981; see also Neilson and Rossiter, 2004).

In order for tactical media and list cultures to organise as networks that have multiple institutional capacities, there has to be – first and foremost – an intellect, passion and commitment to invention. There has to be a desire for socio-technical change and transformation. And there needs to be a curiosity and instinct for survival to shift finance capital to places, people, networks and activities that hitherto have been invisible. The combination of these forces mobilises information in ways that hold an ethico-aesthetic capacity to create new institutional forms that persist over time and address the spectrum of socio-political antagonisms of information societies in a situated fashion.

The concept of the multitudes is a seductive one. It presents the “radical intellectual” with an image of passion, change and, yes, even unity that corresponds with an image of “radical politics” as seen in the news media. The terribly dull thing about the multitudes is that “they” – as a plurality of differences, a movement of movements, a performance ‘with no end-product’ – are not composed of “enlightened”, “ordinary” people who enact the fantasies of the radical intellectual. In many ways, the multitudes are a distribution of disorganised, individualised workers – in the sense that Beck and Lash mean by this term – who possess a potential to encounter the transductive force of individuation that shifts the individualisation of labour-power into a

¹⁸ A comment Bifo makes in the documentary *A World to Invent* (2002), by Florian Schneider. For more information on the *What is to be Done?* series and related media projects, see <http://keintv.org>. For a short review of this series, see Neilson and Rossiter (2004).

singularity with networked capacities. My argument throughout much of this thesis has been that such a transformation is conditioned by a capacity to become organised.

Transversality, Virtuosity, Processual Democracy and Organised Networks

If there is one thing this thesis has underplayed in its development of a processual media theory, it's the instructive and imaginative role the concept of transversality has had. The idea of transversal social relations has been the hum of this writing, this thinking. It is appropriate to invoke yet another concept at this late stage, since transversality not only describes relations within organised networks, it also conditions the possibility of social transformation and institutional invention. Transversality, as a process of producing desires, creativity and invention, redistributes social relations and subjectivities as they subsist within the sections and scales of institutional life.

Félix Guattari encountered the social-political potential of transversality during his work at La Borde, a private clinic he effectively co-founded at the age of 23 with psychiatrist Jean Oury in 1953 (Genosko 1996: 8, 10; 2002; Guattari, 1984b). This was an instance of concepts co-emerging with problems, as discussed in the first chapter of this thesis. Like their British colleagues in the "anti-psychiatry" movement headed by R. D. Laing, administrators and analysts at La Borde were interested in the relationship between material and structural conditions and subjectivity. From this ostensibly classical Marxist principle, an experiment was initiated at La Borde which sought to liberate both patients and, to a lesser extent, doctors from disabling power relations which determined their various social psychoses. In short, the experiment consisted of role interchange. While this sounds fairly straightforward, at the time it presented a radical reform in the emergent profession and practice of psychiatry and the treatment of psychotics. Patients would take on responsibilities otherwise assumed to be the territory of those in socially legitimated positions of authority – they would chair committees, for instance, and facilitate group therapy sessions or do book-keeping; and doctors would participate in "material" tasks normally assumed to be below their rank, doing chores in the gardens of the clinic, or cleaning,

cooking, undertaking maintenance, or being delegated duties by a patient administering a workshop (Guattari 1995a: 189-190). Service staff who left the clinic presented a greater difficulty. Their social coding managed to escape the experiment in decoding! A constitutive outside at work, if you will. The La Borde experiment aimed, in part, to contest the conventional treatment of behavioural dispositions with drugs and the use of electric shock therapy, although this practice did continue in lower frequencies.

By redistributing the roles people performed – by restructuring the society of the clinic – it was hoped patients would depart from their identity as psychotics, as their psychotic self was one reinforced by techniques of docility and illegitimacy, and that by occupying different subject positions the conditions articulating psychotic subjectivities would no longer be able to be sustained. Madness became separated ‘from its administration and evaluation by specialists and groups of experts’ (Genosko, 1996: 8). The premise that subjectivity is a singularity constituted by a multiplicity of differences was actively promoted in the operation of the clinic. This was schizoanalysis at work, or the deterritorialization of madness: everyone, at any one stage, performed actions that might usually be associated with the mentally ill. For participants like Guattari, these collective reforms, as a performance in machinic semiotics, also served as an alternative to both the reactionary social stance of Freudian psychoanalysis, with its ‘analyses of relations between the individual and the family’, and the inadequacies of Marxism ‘in its treatment of problems related to desire’ (Guattari, 1984a: 66). Freudianism reduces desire to that which is motivated by lack: it sees social repression through the figure of the Oedipus complex; while classical Marxism, which accords primacy to the mode of production as determining social relations, does not even recognise desire as a capacity of social force. For Guattari, the La Borde experiment constituted a multiplicity that sought not the redistribution of wealth, but the ‘transversality of desire’ within the group. Transversality, as Gary Genosko describes it,

is opposed to and attempts to overcome vertical hierarchies and horizontal intra-ward relations (the hospital is one fence, the ward another) by maximizing (that is, bringing to light through analysis the latent coefficients of transversality in the group, its desires) inter-level

communication, and enabling meanings to proliferate and pass between the levels, the personnel, and the patients. (1996: 16)

To some extent the La Borde experiment could be seen as failing its terms of reference: as the program at La Borde expanded, it did lead to the necessity of some doctors maintaining full administrative duties; and the distinction remained between those who could leave the clinic and return to their bourgeois domestic existence, and those whose lives remained confined to the clinic (see Guattari, 1995a: 190-191). Subjectivity, at the end of the day, remained spatially and temporally inscribed upon the body in routine ways.

However, one of the key outcomes of this experiment, and the relevance of this seeming digression, was the awareness in an historical present that new institutions were indeed possible, and that the transformation of social practices and sensibilities could to a large degree be related to, if not determined by, structural changes. With such a capacity for change in the 'fields of possibility' (Guattari, 1996b: 129) comes the virtuality of the singularity – the singularity being that which is constituted by the ensemble of relations of the event. The La Borde case can be seen as exemplary of, even analogous to, the paradox that bedevils cultural policy studies in general: while a multi-dimensional flow of governance is desired in principle, in practice it proves difficult not to reinstate hierarchical structures of governance. This, I think, is the ultimate problematic with which Tony Bennett's (1995, 1998) thesis of governmentality struggles to articulate.¹ Pierre Bourdieu has framed such a predicament in the following terms: "To endeavor to think the state is to take the risk of taking over (or being taken over by) a thought of the state..." (1994: 1). Foucault had similar a response to the futility of revolution in as much as it typically reproduces the oppressive structures it fought to overturn. Invention, not revolution, is the source of social renewal.

Guattari, like others before him, saw a direct relation between mental illness, social alienation and capitalism. Perhaps, in a paradox of a perverse kind, the

¹ For a critique of Bennett's understanding of Foucault's notion of governmentality it relates to the Australian cultural policy studies "moment" in the nineties, see Grace (1991), Morris (1992) and O'Regan (1993). The nineties produced an abundant industry of literature on Foucault. The best of that literature includes Barnett (1999), Burchell, Gordon and Miller (1991), Danaher, Schirato and Webb (2000), Dean (1999), Hindess (1999), Kendall and Wickham (1999) and Miller and Rose (1990).

reforms in health care at La Borde discursively anticipate the neoliberal economic reforms of the 1980s. Interestingly, corporate culture in the eighties in the US, and then flowing through to other neoliberal market economies, became obsessed, or so it seems, with the capacity for workers to flexibly engage in multi-task functioning as a way of enhancing profitability through workplace efficiency and worker satisfaction (or at least relieving some of the boredom that comes with performing repetitive tasks²). Even today, one has only to scan the weekend magazines for the ubiquitous representations of the mobile and multi-functionary information clerks. Such practices mark the consolidation of post-Fordism, or what Negri and Hardt identify as the 'postmodern State': 'The postmodern State ... presents itself as the horizon of the most perfect democracy in the circularity of the constitutive elements of its structure. These elements would be weak enough to be continually recomposed and re-formed in the circularity of the institutional functioning' (1994: 269).

Perhaps this relation, speculative as I've presented it here, between La Borde and techniques of workplace organisation in neoliberalist market economies also registers as an instance when radical practices of minoritarian social institutions and the avant-garde are gradually adopted and, in many instances, usurped by capital.³ With this, techniques of resistance lose the critical purchase afforded by distinctions, incommensurabilities even, in time and space. The signifier becomes coded by a different regime of value. Capital has always sourced the margins for its renewal. As John Hinkson remarks, one of the 'crucial characteristics' of what he terms the 'new power of the postmodern market' has been its capacity 'to assimilate spheres of activity that have always been in the realm of non-market relations' (1993: 30). In his critique of Ian Hunter's work on subject formation within the school, Tony Thwaites (1998) argues that the appropriation of subjectivity by apparatuses of capture cannot be explained simply in terms of a unilinear operation of instrumental reason. He suggests that the school, as a cultural technology of governance, is

² As Miller and Rose nicely put it, 'such attempts [at mechanisms of rule] are rarely implemented unscathed, and are seldom adjudged to have achieved what they are set out to do. Whilst "governmentality" is eternally optimistic, "government" is a congenitally failing operation' (1990: 10).

³ This, incidentally, would concur with Foucault's model of the 'governmentalisation of the state'. See Foucault (1991b: 103). See also Bennett (1998: 76).

characterised more by its resemblance 'to an accident, an interference pattern, or a many-voiced improvisation' than it is by 'the gradual manifestation and development of a logic which has from the very beginning been internal to the very idea of the school, and for which time has been the slow and patient support' (Thwaites, 1998: 188). The school, Thwaites continues, is

an apparatus which has emerged at the points of encounter of a number of disjunct series, themselves heterogeneous and without any necessary anterior governance by law. Because of this, it is marked by all sorts of borrowings, translations, metaphorizations and pilferings of technologies, architectures, programmes, ethics and aesthetics, from neighbouring and even quite distant fields. These are fitted together not because of their conceptual coherence but, far more simply, just because they are what is at hand for the job. (1998: 188)

Thwaites could easily be describing the sort of activities that I have attributed to organised networks. What is common to the school and the organised network is that both are institutional settings that govern sociality. It's important to remember that transversality was always a political concept for Guattari, and one that that informed his life of work. As Gary Genosko reminds us, 'the concept of transversality had for Guattari practical tasks to perform in a specific institutional setting' (2002: 67). Guattari recounts the project at La Borde as follows:

What we aimed for through our multiple activities, and above all through the assumption of responsibility with regard to oneself and to others, was to be disengaged from seriality and to make individuals and groups reappropriate the meaning of their existence in an ethical and no longer technocratic perspective. (1995a: 191)

Here, with the 'assumption of responsibility with regard to oneself' – what Guattari (1995b) elsewhere terms an 'ethico-aesthetic paradigm' – we see a striking resemblance to Foucault's (1981, 1988, 1991b) notion of governmentality, variously understood as the micropolitical art of the management of social organisation, 'the conduct of conduct', the care of the self. In short, governmentality comprises the assemblage of techniques enabling the self-regulation of behaviour and the dispersal of power throughout the social body. Transversality mobilises, creates and self-engenders "prepersonal" collective assemblages (Genosko, 2002: 55-56). Transversality, then, is a process of individuation and transduction. Subjectivities and technics of organisation.

Transversality institutes what Hélène Frichot calls 'the productive paradox of a whole that is not tempted to become totalizing, or a unity that is non-unifying' (2004: 28). Transversal forces are peculiar to life that is immanent to institutional settings. As life is reorganised, re-energised and renewed with new capacities that 'are external to their terms' (Deleuze), so too the institution is transformed and invested with new potentialities.

Through techniques of co-operation, collaboration and a distribution of capacities, the multitudes are showing signs of becoming organised. The problems of scale and sustainability are being addressed. The at times self-valorising movements of "tactical media" are beginning to adopt a strategic outlook on how to situate their activities within socio-technical systems in more secure ways. Indeed, the organised network is composing itself as a new institutional form. This transformation is not something to be suspicious of. There is no return here to institutions that subordinate what Paolo Virno (2004: 81-82) calls the "pure potential" of labour-power to the conformist unity of "effective labour", "the people" or "the citizen".

The organised network is a potentiality coextensive with the process of becoming instituted. Virtuosity, as the absence of an "extrinsic product" (Virno, 2004: 52), institutes the political potential of organised networks. Virno suggests that the communicative performance of the multitudes constitutes "the feasibility of a non-representational democracy" (2004: 79). This thesis has sought to recast that proposition in terms of organised networks as they reside within the material dimensions of new communications media such as the Internet. The thesis has been interested in how organised networks activate the possibility of a *processual democracy*. A processual democracy institutes a socio-technical network with the capacity to create conditions that sustain needs, interests and passions. Such a political formation de-ontologises the media of communication, creating media-information systems conditioned by the empirics, labour, concepts and affects of "trans-individual collectives" (Deleuze, 2004: 89). Ultimately, what is at stake is the ethico-aesthetic potential of the multitudes to engage with the antagonistic foundations of "the political".

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Appendix¹

Date: Mon, 30 Jun 2003 08:56:48 +1000

From: Ned Rossiter <Ned.Rossiter@arts.monash.edu.au>

Subject: ::fibreculture:: POS: intellectual property

Sender: fibreculture-admin@lists.myspinach.org

X-Sender: nrossite@mail1.monash.edu.au (Unvet.fied)

To: fibreculture@lists.myspinach.org

Delivered-to: mailman-fibreculture@lists.myspinach.org

X-Spam-Status: No, hits=1.3 required=5.0

X-BeenThere: fibreculture@lists.myspinach.org

X-Mailman-Version: 2.0.11

List-Post: <mailto:fibreculture@lists.myspinach.org>

List-Subscribe:

<<http://lists.myspinach.org/cgi-bin/mailman/listinfo/fibreculture>,
<<mailto:fibreculture-request@lists.myspinach.org?subject=subscribe>>

List-Unsubscribe:

<<http://lists.myspinach.org/cgi-bin/mailman/listinfo/fibreculture>,
<<mailto:fibreculture-request@lists.myspinach.org?subject=unsubscribe>>

List-Archive: <<http://lists.myspinach.org/archives/fibreculture/>>

List-Help: <<mailto:fibreculture-request@lists.myspinach.org?subject=help>>

List-Id: mailinglist about Australian Internet culture and research
<fibreculture.lists.myspinach.org>

"Creative Labour and the role of Intellectual Property"

The fibreculture mailing list now has a robust community of over 700 subscribers. For the purpose of this session and for my broader interests in creative and cultural industries and informational economies, I'm curious to know more about those on the list whose work is not exclusively within the university as a teacher, researcher or student. I'm interested in how the activities of artists, programmers, DJs & VJs and musos, information architects, game designers, digital animators, advertising creatives, etc relate to issues of intellectual property - both as a source of income and a legal architecture that may affect the conditions of employment.

To this end, I'd like to conduct a pilot survey to get some idea of how those who perceive themselves to be engaged in creative labour relate to issues of IP. I'll present the initial findings during the IP session.

As a starting point, it may be of some use to refer back to that definition of creative industries that appears in pretty much all writing on CI area from

¹ This questionnaire appears here as it was sent to the fibreculture mailing list - i.e. no corrections or changes have been made to that text. Prior to chapter 3 being written, a presentation based on responses to the questionnaire was prepared for *Fibrepower: Currents in Australasian New Media Research and Internet Culture*, 3rd Annual Fibreculture Meeting, Brisbane Powerhouse for the Arts, 11-13 July, 2003. <http://www.fibreculture.org>.

Britain and Australia (though not, interestingly, the US and other countries) -- namely the Blair government's Creative Industry Task Force Mapping Documents of 1998 and 2001. So, while you're all probably more than familiar with that definition by now, here it is again: Creative industries consist of those 'activities which have their origin in individual creativity, skill and talent and which have the potential for wealth and job creation through generation and exploitation of intellectual property'.

Ok, what I'd now like to do is cut straight to a short questionnaire. In many instances a simple yes/no response will do. Elsewhere, a more developed response may be appropriate. Some questions may not be relevant to you or you may not feel comfortable with them, so feel free to skip over them.

1. What sort of "creative" activity/activities do you do?
2. Do you perceive yourself as engaged in the creative industries?
3. Is intellectual property (copyrights, patents, trademarks) important to you as a source of income?
4. Is intellectual property important to you as a principle?
5. Have you ever experienced or heard of conflicts in the workplace over IP issues?
6. Have you ever lost a job or contract for refusing to assign IP to your employer?
7. Often the process of creating a commercial product involves collaboration amongst workers. Digital animators working on an advertisement, for example, will be throwing files back and forth, doing a bit of work, then passing it on for a colleague to clean up/develop a bit more. In such instances, it becomes near impossible to assign IP rights since there is no single author - the only mode of creation recognised in IP law. Can you give any insight into how such complexities are resolved in relation to assigning IP, or is this something that's just tossed in the too-hard basket?
8. Are you a member of a union? If so, what's its name?
9. Do you know if your union has a policy on how to negotiate IP issues?
10. Do you know of any instances when your union has entered into dispute with management over IP? Do you know how this was resolved?
11. If you're not a part of a union, do you think there's a need for workers in your field to become more organised, particularly around the impact that IP has on your potential income?

Ok, that's probably enough. I'm not sure what the best way of collecting responses is. My strong inclination is to say send all responses to me off-list -- I'm highly conscious of clogging the list, and of course you might not wish your

response to be public. On the other hand, you might wish to develop a particular question. I'll leave it up to you. If for some reason there is a remarkable influx of postings to the list, I'll request they be sent offlist to me, rather than clog the list during a busy lead in time to the Brisbane meeting.

Clearly, this form of survey would not be met with approval by a university ethics committee. If you respond to this questionnaire onlist, then you've made a decision to enter into a public discussion. If you respond off-list to me [the recommended mode], then of course I will treat your response with strict privacy. If you'd like to respond to this questionnaire but would prefer to remain anonymous, then you can always set up a hotmail account and send it to me from there. Either way, I'll be treating all responses with anonymity.

I'll send a report based on the survey to the list after the meeting. I may also refer to the findings in the essay on CI and info critique that I'm developing.

Hope to hear from you!

Ned

::posted on ::fibreculture:: mailinglist for australian
::critical internet theory, culture and research ::subscribe: fibreculture-
request@lists.myspinach.org
::with "subscribe" in the subject line
::unsubscribe: fibreculture-request@lists.myspinach.org
::with "unsubscribe" in the subject line
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:: <http://lists.myspinach.org/cgi-bin/mailman/listinfo/fibreculture-announce>