TOPOLOGICAL PROSPERITY:
Tracing the Security and Prosperity Partnership of North America

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Abstract

This thesis synthesizes theoretical and methodological insights of actor-network theory with the political economy of communication in order to trace the history of the Security and Prosperity Partnership of North America, 2005-2009. The purpose is to demonstrate how a power elite of transnational corporate actants are increasingly structuring transnational border policy, encouraging the deployment of ubiquitous surveillance technology and the liberalization of transborder data flows and markets, primarily for the purposes of maximizing capital accumulation, ideological legitimation and the suppression of resistance. This hybridization of state and corporate actants exemplifies how prosperity partnerships and other similar informal working groups are increasingly being used as powerful vehicles for mobilizing the private sector into influencing border policies throughout North America, effectively creating powerful socio-technical scenarios for influencing global markets. The argument advanced is that borders are increasingly becoming topological spaces which unevenly distributed objects and people across various networks and flows, in turn re-shaping urban landscapes towards private interests. As such, topological prosperity entails configuring networked infrastructures and spaces such as borders and airports in ways which favour particular socio-economic groups, primarily an ascending global economic elite.
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Robertson Davies once said that the university is not a river to be fished, it’s an ocean in which the young should bathe, and give themselves up to the tides and the currents. Throughout the course of this degree, the university has most definitely felt like an ocean of tides and currents, of avenues and possibilities to explore or abandon. I have lost, found, then lost myself again innumerable times now. But it was, of course, those close to me whom I wish to thank as they were, sometimes without knowing it, my compass through this ocean. Here are a few people I wish to thank for their support.

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CHAPTER 1: Introduction

“Sovereignty is enhanced when prosperity is enhanced.”

(John Manley, President of Canadian Council of Chief Executives, former Liberal Deputy Prime Minister. Sourced in Ivison, 2011: A4)

1.1 - PROSPERITY PARTNERSHIPS AND THE POWER ELITE

Prosperity partnerships have become instrumental networks for mobilizing the power elite's influence on transnational policy. Recently, this has been most evident in border harmonization discussions as borders continue to play an important role in determining transnational flows of capital, labour and information, effectively making them crucial targets for corporate influence. In February 2011, the United States and Canadian governments announced the creation of the Beyond the Borders Working Group, a bi-prosperity partnership which intends to address a host of regulatory differences to streamline the flow of humans and non-humans such as commodities and information across the 49th parallel. While little is known about this organization, save that it intends to co-operate fully with the business community to change border regulations in the name of economic competitiveness, what can be said with certainty is that it is a progeny of the recently dismantled Security and Prosperity Partnership of North America, a hybrid organization of high ranking public and private sector actants who, from 2005 to 2009, sought to harmonize North American borders through the development of an assemblage of information technology, particularly surveillance and screening technology to streamline the flow of ‘legitimate’ low-risk, pre-approved goods and peoples across North America.
One of the most prominent yet seldom noticed prosperity partnerships of the past decade, the SPP began as a tri-national partnership between Canada, the United States and Mexico. However, the SPP quickly turned into an outlet to mobilize what Domhoff (1979) calls the “power elite” into developing a series of policy-formation recommendations, transforming the border into a socio-technical network for capital accumulation, ideological legitimation and the suppression of resistance in a global economy. The SPP existed during a time of profound uncertainty in market relations, exemplifying what Callon (2009) calls “hybrid forums:” situations in which there is a lack of consensus surrounding specialized knowledge, mobilizing a heterogeneity of actants around a particular set of market practices to shape their vision of the future.

The SPP arguably constitutes a mobilization of the power elite in society seeking to advance their interests and power through the maximization of information and communication technology, most notably the increased surveillance of people and goods, and the continued development of transborder data flows to facilitate liberal markets and post-9/11 securitization policies. This in turn means first that the border can be understood as a socio-technical network which influences the functioning of markets. Second, it also means that information and communication technology are distinctly social in that they ascribe and embody particular political and economic relations. In this case, they ascribe relations which seek to maximize the liberalization of markets and the concentration of capital into the hands of a large transnational corporations.
Scholarship into the SPP is relatively scant; a handful of previous studies (explored further in chapter six) have tended towards emphasizing the transnational biopolitical dimensions of the SPP. As such there is no doubt a strong reason to suggest an exploration into biopower is in order. The second chapter begins by considering the intersection of knowledge and power in sovereign rule by exploring Michel Foucault’s thesis of biopower and governmentality. This enables an understanding of the theoretical and methodological complexities which arise in tracing the discursive and material relationships of power, and helps ground an analysis of power and authority based on the particular practices of actants, in other words, not grounded on a priori assumptions of the nature of the social. Foucault is useful for this analysis because he sought to provide a very broad overview of how power ‘works’ over the course of the history of modern social life, and payed close attention to the way in which social institutions were oriented around specific types of knowledge and practice. His emphasis on the intersection of power and space in the form of territory presents a fascinating starting point for theorizing the nature of sovereign control over space, effectively allowing a deeper understanding of the complexities which might arise in international forms of biopower. However, this analysis will differ from more traditional analysis of power (and also the aforementioned studies of the SPP) in that it considers the development of heterogenous and topological understandings of governance, effectively presenting a much more sophisticated diagnostic of Foucault’s thesis of power/knowledge. As such, this also facilitates a conceptual shift away from previous theories of the SPP in terms of strictly a biopolitical analysis.
This distinction is further strengthened in chapter three, by refining notions of topology and heterogeneity through a development of state-corporate networks. The third chapter begins by providing first an exploration into Actor-Network Theory followed by its synthesis with the power structure research and the political economy of communication. The Actor-Network portion begins by providing a brief survey of some salient studies of ANT in practice in order to develop a sufficient repertoire of epistemological concepts and methodological premises for developing an understanding of ANT. From here, the focus shifts the study of markets as socio-technical networks, paying close attention to the heterogeneity of actants involved in market practices; an approach which differs significantly from traditional liberal economics which treats the market as an autonomous social force in its own right. Instead, the ANT approach sees markets as shaped by specific actors through various practices of calculation, in short, from power and influence of the framing of market relations and from the distribution of socio-technical artifacts throughout the market.

The second portion of chapter three shifts its attention to developing an understanding of power structure research and the political economy of communication, touching upon Domhoff’s thesis of the power elite, then paying close attention to Schiller’s thesis of the role of information and communication technology in the crisis economy, and Mosco’s structuralist take on the political economy of communication; both of which provide a solid theoretical and historical dimension to understanding the intersection of state-corporate power in information technology. In doing so, the chapter produces a highly detailed, but non-reductionist account of power which grasps
the complexities of state-corporate networks and the powerful role played by organizations such as the SPP in shaping the overall political, economic, cultural and social landscape.

Chapter four provides a brief exegesis on the study’s methods and data analysis. The overall purpose is to show how ANT can be understood as an overall method for doing social science research.

Chapter five presents a tracing of the SPP as an empirical focus, examining its structure, logic, and practice to demonstrate the existence of the power elite in society and the mobilization of information technology at the border. This chapter seeks to develop an understanding of the complexities of prosperity partnerships; how a heterogeneity of actants tried to mobilize themselves towards framing and problematizing the border in order to legitimate new market practices, and moreover it seeks to explore the complexities of organizing stable networks in times of market uncertainties. This portion, following an actor-network approach, considers the complexities which emerge from the assembling of socio-technical artifacts, and demonstrates how such artifacts in turn ascribe particular social relations by re-arranging various actants within the network.

Furthermore, in terms of providing a clear understanding of power and the power elite, this chapter will trace the private sector’s role in the SPP to demonstrate how the SPP was an organization devoted to fostering capital accumulation, ideological legitimation and the suppression of resistance in North America. Such processes of control are demonstrably
accomplished through the skilled development of information technology and transborder data flows. The chapter is divided into four main sections. First, it traces the formative years of the SPP as it tried to stabilize itself into a coherent socio-technical network. The second portion traces a series of key documents, known as frameworks, for developing their security and prosperity agenda. The third portion traces the SPP’s mobilization of the power elite, paying close attention to their endeavors to form a powerful corporate lobby, the North American Competitiveness Council, to mobilize the business interests of North America. The final portion briefly explores the dismantling of the SPP in favor of the newly created BBWG.

Chapter six presents an analysis of the SPP by first exploring previous studies of the SPP which emphasized a Foucauldian take on transnational biopolitics. From there, an exploration into key private sector developments, emphasizing the political economy of the borders in terms of the commodification, spatialization and structuration of borders as an emerging market for large aerospace and defense firms, effectively demonstrating how the corporate sector is increasingly holding a powerful influence in determining the routine operation of border management, and how such socio-technical networks ascribe relations of power, particularly the concentration of power into the hands of large transnational corporations and the continued need for hybrid forums such as prosperity partnerships to address regulatory differences and market failures. The final section contextualizes the analysis within larger trends of urban geography, particularly the thesis of ‘splintering urbanism’ which seeks to understand the proliferation of topological systems for managing urban networks and flows. The implication is that we can observe large scale shifts in the everyday functioning of networks which will continue to play a significant role
in determining access to mobility and social resources based primarily on socio-economic status. In short, it is how emerging socio-technical infrastructure ascribes and intensifies liberal market relations which favour an ascending global economic elite.

The ultimate aim is to demonstrate the increasing importance of prosperity partnerships in mobilizing a power elite of state-corporate actants in shaping transnational policy frameworks. The SPP is arguably a clear example of such networks in action, who have sought to advance their interests and power through the maximization of information and communication technology, most notably the increased surveillance of people and goods, and the continued development of transborder data flows to facilitate liberal markets and post-9/11 securitization policies. In addition, prosperity partnerships are state-corporate networks which demonstrate how the state works in conjunction with the private sector to advance private interests. This in turn means that the border can be understood as a socio-technical network which influences the functioning of markets, particularly in favour of a transnational power elite. As such, power clearly intersects throughout the border, ascribing and reinforcing socio-economic distinctions across transnational states.
CHAPTER 2: Biopower and Reason of State

2.1 - ORDERING SOVEREIGN POWER

The ‘reason of state’ is not the imperative in the name of which one can or must upset all the other rules; it is the new matrix of rationality according to which the prince must exercise his sovereignty in governing men. One is far from the virtue of the sovereign of justice—far, too, from that virtue which is proper the Machiavelli’s hero (Foucault, 2003a: 260).

Power is inextricable from the border not only as it represents a socio-technical network, but more importantly for its ability to inscribe distinctions. It is a device which occupies and delineates a political and economic ordering of space, transforming it into the politicized concept of territory. In turn, this ordering holds vast consequences for controlling the way in which particular objects—people, commodities, energy and information—all sorts of human and non-human objects travel across space and time. In other words, while a border inscribes and maintains politico-economic distinctions of territory and population, so too does its administration determine how and when things pass through it, effectively requiring an array of supporting social institutions, technologies, and practices. A political economy thus underpins its administration, transforming the border into a market device. In addition to controlling the flows of objects across time, borders inscribe notions of identity and collective belonging and are invoked to create distinctions between peoples, contributing to the social ordering of population. Thus, from this view, borders intersect with a heterogeneity of social institutions and as a socio-technical device; they inscribe social relations, particularly the ordering territory and population, in turn requiring a multi-dimensional approach for understanding sovereign power.
A multi-dimensional approach to studying borders begins from the philosophical position of non-reductionism and relational materialism. This is because it is a fair to say that the border is a contested subject laden with contradictory meanings and changing significance throughout space and time, and as such it would be dubious to ascribe an essentialist definition to borders. This is particularly true as globalization studies and mobility studies continue to proliferate across the social sciences (Anderson and O’Dowd, 1999). For such studies, a crucial argument calls for new ways of thinking about space, spatialities, borders and mobilities, effectively requiring the de-bunking of space as a unified social framework similar to Euclidian space (Urry, 2000). This position becomes even more important (although equally complex some may lament) as space is extended into a non-material stratum, particularly important as information technology and ‘network‘ societies emerge, demonstrating how space injects an economy of distribution and complexity (Castells, 1996; Thrift, 1999). Such positions of non-reductionism and relational materialism are cherished by actor-network theories, but they are in many ways indebted to post-structuralist thought—especially the work of Michel Foucault who, for our purposes, represents an ideal starting point for setting the scene for a number of reasons—three to be precise. First, Foucault’s overall method was non-reductionist in that he sought to provide a genealogical analysis, tracing the complex discursive and material relations between power and knowledge from the eighteenth century onto the present. This method demanded an approach to the study of what can be called practices of subjectification, or the way in which power/knowledge produced and inscribed itself upon the body and soul. In other words, Foucault was interested in studying how power produced subjects. Second, Foucault was particularly interested in tracing the history of modern institutions of governance, particularly those which addressed the management (the
disciplining) of populations; institutions which played an instrumental role in giving birth to modern systems of governance and the accompanying techniques by which the state sought to discipline the subject. It was here that Foucault played close attention to the development of liberal political economy, both in terms of its origins and the necessary institutional supports, particularly the institutions of biopower as they underscore collective notions of the state and the market. Third, Foucault’s analysis of politico-economic processes as they pertain to the genealogy of the liberal state does not follow an understanding of the state as a matter of ideology, but as a complex historical trajectory, taking place away from an analysis grounded in totalizing claims about the nature of power in modernity. This can be extended even further to argue that Foucault’s thesis of the disciplinary society was never as totalizing as popular interpretation would otherwise suggest (Terranova, 2009). More importantly, it is this key epistemological considerations which enables, as some have argued, a topological approach to the study of power that examines “how existing techniques and technologies of power are re-deployed and recombined in diverse assemblies of biopolitical government” (Collier, 2009: 79). Thus, as spatialities are concerned, topology represents a key intersecting thread between Foucault and actor-network approaches, effectively paving the road for understanding how the border can be seen as a market device for inscribing political, economic and social relations.

Foucault’s method followed a genealogy for tracing the history of ideas, sometimes called the history of consciousness, in order to understand how it is that various social institutions, particularly ‘disciplinary’ institutions (given his interest in delinquency), have constructed regimes of truth and to be exercised over a subject. Of interest pertains to the emergence of the
various economic processes and institutions which constituted a natural principle of limitation to absolute sovereign power; it is the study of the systems of internal limitation which have opposed unlimited sovereign power (a police state) over the population, giving rise to a number of ontological entities such as the market and the state. Foucault calls this principle of internal limitation to sovereign power the reason of state. The reason of state shall be returned to later, but for now it is important to grasp his overall approach to genealogy and how he applied this to understanding sovereign power. In Society Must be Defended, Foucault presents his overall method for analyzing sovereign power arguing that if one seeks to understand power, one must abandon juridical notions of sovereignty for they ascribe an ideal genesis of the state, and with that pre-suppose the individual as the subject of natural rights or original powers. Similarly:

rather than looking for a single form, the central point from which all the forms of power would be derived by way of consequence or development, one must first let them stand forth in their multiplicity, their differences, their specificity, their reversibility: study them therefore as relations of force that intersect, interrelate, converge, or, on the contrary, oppose one another or tend to cancel each other out (Foucault, 2003b: 294).

Foucault undertakes an analysis on the morphology of power within particular disciplinary institutions such as the prison, and took particular attention to understanding how techniques for discipline shifted from despotic to liberal regimes of governance without ascribing an analysis based on an over-determination of power (Huxley, 2007: 187). It is a genealogy which seeks to ascertain how regimes of knowledge can modify the practices of a given institution, and the possibilities by which certain institutional practices or disciplinary techniques become legitimated at particular points in history.
2.2 - CONFINEMENT, DISCIPLINE AND REASON OF STATE

His analysis of confinement demonstrates how regimes of truth and the construction of space intersect and modulate over time, such that under the political governmentality of this new reason of state, “Rome finally disappears,” and a new historical perspective takes form, no longer polarized around the end of time and the consolidation of all empires (Foucault, 2003a: 260). Foucault argues that political rationality constitutes the kernel for modern forms of sovereign power over population and territory; a “matrix of rationality” as he would call it, presenting new knowledge and technologies for the development of the state’s forces.

Punishment serves as a perfect example and Foucault demonstrates a morphology of punishment across time and space. In the classical period for example, confinement into prisons was considered a last resort; the Greeks were more inclined to punish through the institution of banishment, expelling the criminal beyond its borders into another space. Germanic societies were inclined towards redemption, converting the damage caused into a debt to be repaid. By the end of the Middle Ages, Western societies were ‘marking’ societies in which punishment was ascribed upon the body such as through the institution of torture and branding, in short seizing hold of the body and inscribing upon it various marks of power (Foucault, 1997a: 23). The institution of confinement was unique to early modern societies, and moved from being a fringe practice in the seventeenth and eighteenth centuries to a normative form of discipline and punishment by the nineteenth and certainly well into the present. Foucault draws careful attention to the fact that confinement was not universally accepted as a legitimate punitive practice. Prison was in many ways marginalized in the early modern ages, and often criticized on a variety of fronts. Imprisonment, some argued, gave criminals a space to coalesce around
and develop stronger social bonds—bonds which could persist once the prisoner was released, in essence creating an army of domestic criminals who were most certainly doomed by their habits into a life of crime. Further, in times of economic distress, a space which could offer full clothing, shelter, food (and in some cases work) could be a favourable option to traditional labour, and certainly unemployment (Foucault, 1997a: 25). It was not until the 1840s that one truly begins to see the emergence of the modern penal practice which co-habilitated the police and criminality together (Foucault, 1980: 45).

How then did the institution of the prison move from becoming a marginal practice to a core institution of punishment? Foucault argues that what we can observe was a profound redefinition of the relationship between the criminal and society, which would later go on to form the basis of his thesis of biopower. Reformers defined crime as an offense against society and redefine the role of the public and redefine the necessity of punishment solely on the basis of the interest of society, or the need to protect it (Foucault, 1997a: 27). The criminal injures society by breaking the social compact, attacking the sovereigns right to govern, setting him or herself as an enemy of the state, and therefore deserving of punishment which withdrew the enemy of society from the public gaze. Foucault argues that prison was not implied in penal theory, but emerged through the adjustment of the judicial system towards a mechanism of oversight and control of the population, integrated into a centralized apparatus of discipline, in other words suggesting how the prison itself had to be redefined, particularly as a technique for intervening at the level of the body, isolating the prisoner from the public whom they injured. The prison emerged as a centralized mechanism for controlling the body of the prisoner, both by isolating the body from
the rest of society and by controlling its particular actions, regulating the body into a specific schedule of disciplined behaviour. In this respect, Foucault argues that one sees the emphasis of prison was not grounded on morals but on the body (Foucault, 1997a: 30). The prison represents first a physics of power (a spatialization of power), separating the individual from society. Second, prison represents a new optics in which everything must be rendered visible to the state’s gaze, then transmitted, organized and recorded. A new mechanics of surveillance, in other words, for disciplining the life, time and energies of the body. Finally prison came to signify a new physiology concerning the establishment of certain standards of inclusion and rejection of the social, followed by the appropriate corrective interventions to regulate anything which does not meet the particular standards set forth by the state. In short, Foucault identifies the nineteenth century as the birth of the panoptic control; such a model which was to be found not only in the prison, but diffused towards all state institutions (Foucault, 1997a: 35).

This new physics and optics of power extended beyond the prison and could be deployed throughout the whole of society. In particular, to firmly attach workers to the production apparatus, resolving the aberrations of irregular labour which often plagued the production process. Under the panoptic regime, workers could be firmly entrenched into the production process via a complex of surveillance techniques, subjecting workers to the rhythm, constancy and regularity of production, thereby constituting them as a coherent labour force and social class. Hence a whole series of techniques emerged designed to distinguish "good" workers from "bad" ones. The savings bank encouraged long-term financial planning; housing projects centralized the working class into particular neighbourhoods; the encouragement of marriage to
create an ethical and moral framework which disciplined the worker into regular schedules of production and leisure—an entire campaign, in short, to moralize the workers within a particular ethic of disciplined, productive labour developed by problematizing the state of labour in the nineteenth century (Foucault, 1997a: 34).

Foucault argues that a shift in accent can be observed in governance during the eighteenth and nineteenth centuries and the appearance of new objectives, and in turn new problems and techniques in the management of populations (Foucault, 1997b: 67). There are numerous arguments which suggest that the development of modern liberal societies mark a shift in the overall objectives, problems and techniques of governance. First, while in Feudal societies the governance of souls was a privileged right of pastoral care, by the fifteenth and sixteenth centuries one finds the emergence of a crisis concerning the right way to govern these domains. The general questioning of "government and self-government, of guidance and self guidance" at the end of feudalism also presents the birth of new forms and structures of the administration of economic, social and political relations (Foucault, 1997b: 68). It is here that one can also observe the emergence of the reason of state in which the principles of governance shift from traditional virtues such as those held by the Church, to an "art of governing whose rationality has its principles and its specific domain of application in the state" (Foucault, 1997b: 68). In essence, one observes a shift in the proper domains and limitations of sovereign power, the reason of state becomes open to an indefinite period of time in which sovereign states must struggle against one another in order to ensure their own survival. Rather than emphasizing territory however, Foucault argues that power became focused on developing a matrix of
rationality which develops the sovereigns right to govern his subjects and to exercise power over the population in such a way that consists in ensuring the development of the forces of the state. This development was to be accomplished through the assembling of political knowledge and technology and Foucault identifies two primary manifestations of this technological assemblage: a diplomatico-military technology which consists in the development of an armed apparatus (a professional military) and the development of strategic alliances to ensure the survival of the state outside its borders. Second, the development of a police apparatus to control the population from within its borders was created under this reason of state. In other words, reason of state concerns the art of governing the internal and external relations of the state in which the state must continuously re-examine its own limitations. This emerging form of modern governance constitutes the kernel of liberal political economy:

At the junction point of these two great technologies, and as a shared instrument, one must place commerce and monetary circulation between the states: enrichment through commerce offers the possibility of increasing the population, the manpower, production, and export, and of endowing oneself with large, powerful armies (Foucault, 1997b:69).

Foucault also states that liberalism must be analyzed as a principle and a method of rationalizing the existence of government, and constitutes a central argument in his thesis of biopower. A rationalization which obeys the internal rule of maximum economy:

While any rationalization of the exercise of government aims at maximizing its effects while diminishing, as far as possible, its cost (understood in the political as well as the economic sense), liberal rationalization starts from the assumption that government (meaning not the institution "government," of course, but the activity that consists in governing human behaviour in the framework of, and by means of, state institutions) cannot be its own end. It does not have its reason for being in itself, and its maximization, even under the best possible conditions, should not be its regulative principle... Liberal thought starts not from the existence of the state, seeing in the government the means for attaining that end it would be for itself, but rather from society, which is in a complex relation of exteriority and interiority with respect to the state... The idea of society enables a technology of government to be developed based on the principle that it itself is already 'too much,' 'in excess' —or at least that it is added on as a supplement which can and must always be questioned as to its necessity and its usefulness (Foucault, 1997c: 74-5).
It is worth noting that coupled to this discourse of problematizing governmental excess, one sees the development of biopower, an understanding of proper governance which shifts its gaze towards redefining the sovereigns rights over the productive capacities of a subject. Normative frameworks of power shifted from its coercive aspects found in absolute states to ones which regulate the productive capacities of modern societies. Since the classical age, the West experienced a paradigm shift in the mechanisms of power which determine the productive capacities of society, specifically by directly addressing the relation between power and the sovereigns right over life and death. Never before, Foucault argues, has sovereign power become so focused in determining the individual's right over life and death. As a focus of juridical power, the sovereign’s right extends not just through space, but the biological existence of a population:

One might say that the ancient right to take life or let live was replaced by a power to foster life or disallow it to the point of death. This is perhaps what explains that disqualification of death which marks the recent wane of the rituals that accompanied it. That death is so carefully evaded is linked less to a new anxiety which makes death unbearable for our societies than to the fact that the procedures of power have not ceased to turn away from death (Foucault, 1984: 261).

This new right to foster or suppress life, starting from the seventeenth century onward, evolved into two basic forms. One of which centered on the body as a machine, focusing power on its disciplining and normalization; hence one finds the concurrent emergence of institutions such as the clinic designed towards the optimization of the bodies’ productive capacities, the extortion of its forces and the parallel increase in its usefulness and docility marked by the body's effective integration into systems of economic controls (Foucault, 1984: 261). Second, biopower was extended beyond the atomic body towards the social body, or the species body, at the level of the population. Here one finds the development of entire regimes of knowledge and control on the population based around institutions of surveillance and regulation such as the massive
development of the census, and increased concerns for life expectancy, longevity and supervision through an entire series of interventions:

> The setting up, in the course of the classical age, of this great bipolar technology—anatomic and biological, individualizing and specifying, directed toward the performances of the body, with attention to the processes of life—characterized a power whose highest function was perhaps no longer to kill, but to invest life through and through (Foucault, 1984: 262).

A liberal political order proceeds directly from the state constantly problematizing itself and reality, particularly by re-evaluating the productive capacities of its subjects. The state must have constant visibility and knowledge of society and its subjects, it must constantly re-evaluate its position viz. the citizenry and must constantly evaluate the relations between various social institutions and practices of discipline in order to maximize the effects of power. For Foucault then, power must be exercised ubiquitously across the population through a myriad of institutional orderings of subjectivities. Sovereign power must exercise an aim at the common welfare of all.

**2.3 - ECONOMY, THE STATE AND GOVERNMENTALITY**

The central issue in the art of government (the reason of state) which constitutes liberal politics is the introduction of *economy* into political practice (Foucault, 2000a: 206). In this understanding, economy derives from the patriarchal notion of household management, and pertains to the correct means of managing individual goods, wealth, the making of fortunes prosper and the management of relations of the father to his family. It is this model of economy which becomes appropriated as political practice, as art of governance:

> To govern a state will mean… to apply economy, to set up an economy at the level of the entire state, which means exercising toward its inhabitants, and the wealth and behaviour of each and all, a form of surveillance and control as attentive as that of the head of a family over his household and his goods (Foucault, 2000a: 207).
From the level of ontological reality (that which exists), the emergence of liberalism in the eighteenth century became a time when the economy itself became a level of reality, and therefore a field of intervention through a series of complex processes. Moreover, it is here which the art of governance concerning the management of things (wealth, resources, people, ways of acting and thinking, customs, and so forth) over territory becomes the essential kernel of governance. This shift constitutes the essence of Foucault's thesis of governmentality, which pertains to the way in which knowledge of the state can be used as a tactic of government. In other words, the eighteenth century saw the rise of a science of governance, centering the theme of the economy on a different plane from that of the family, and the management of the population in relation to this newly created field of reality (Foucault, 2000b: 215). In other words, it became not so much an issue of sovereignty based around a system of government designed to sustain the welfare of the population, and foster the longevity, health and wealth of the state (although this was nonetheless crucial for the reason of state); population became the ultimate end of government than the power of the sovereign. A population represents the subjects of needs and wants, in other words, the very consciousness of individuals became the subject of governmental concern; it became the target and fundamental instrument in the new art of governing populations (Foucault, 2000b: 217). The shift in governmentally placed importance on the role of discipline of populations:

Discipline was never more important or more valorized than at the moment when it became important to manage a population: the managing of a population not only concerns the collective mass of phenomena, the level of its aggregate effects, but it also implies the management of population in its depths and its details... Accordingly, we need to see things no in terms of the replacement of a society of sovereignty by a disciplinary society and the subsequent replacement of a disciplinary society by a society of government; in reality one has a triangle, sovereignty-discipline-government, which has as its primary target the population and as its essential mechanism the apparatuses of security... Three movements—government, population, political economy—that constitute from the eighteenth century onward a solid series, one that even today has assuredly not been dissolved (Foucault, 2000b: 219).
Governmentality thus refers to a complex of institutions directly focused on the management of its population; the development of a whole complex of knowledges which forms the basis of governmental power, and the development of an administrative state (Foucault, 2000b: 220). There are a few things worth noting about this. First, discipline is not to be understood as an ideal type of governance which broadly characterized any state in the late eighteenth century onward, this would emphasize a reason of state centered fundamentally around the coercive mechanics of power. It was through particular practices which Foucault believed one could uncover sets of hidden rationalities and forms of knowledge which produced the subject in ways which were demonstrable of power. Moreover, the ‘disciplinary society’ as it is often called, is not for Foucault an end in itself. As such, it is more accurate to state that Foucault was arguing that although governmentality represents a science of governance to manage a population. It is not the same as arguing that there was a final cause or ideal type which underlay the entire project. While he is talking about a science of governance, it is not meant to be understood as a science in which there are underlying essential principles, or first causes, which are being developed through the institution of governance. The disciplinary society was not the final aim of governance. A careful reading of Foucault for example indicates that he believed that the shift towards a thorough disciplinary society was unique to France. The very concept of the "police," Foucault argued, signified a program of governmental rationality characterized as a project to create a system of regulation of the general conduct of individuals, "whereby everything would be controlled to the point of self-sustenance, without the need for intervention" (Foucault, 2000c: 351). For a number of reasons, this was unique to France and did not develop in England, as the English system of governance had a number of institutions such as the parliamentary tradition
and a tradition of local communal autonomy which could not produce a similar system of
discipline. What this means is that Foucault was far more sympathetic to understanding the
heterogeneity of elements which might comprise a system of governmentality. Expressed
differently, despite rigorous genealogical inquiry, he was not interested in essentializing power.
His overall method then was not particularly interested in developing massive generalizations on
the history of hitherto existing forms of governance, as if to disregard the particular details of
individual nation states.

2.4 - HETEROTOPIA AND TOPOLOGY

It is possible to argue that Foucault saw the practices of disciplinary institutions of the prison, the
asylum, and the clinic as programs: sets of calculated and reasoned prescriptions in terms of
which institutions are to be recognized, which spaces were to be arranged, and behaviours
regulated (Foucault, 2000d: 231). Such programs did not take effect in a homogenous way
across all social institutions but instead comprise a heterogeneity of elements, making it a
science of governance based on the reflexive and efficient management of social resources
expressed as configurations of knowledge and power. Foucault rejects the thesis that one can
understand governmentality as an ideal type. As Collier (2009) argues, there has been an
overwhelming tendency to couch Foucault’s understanding of sovereign power and his
diagnostic style based primarily from Discipline and Punish, which has unfortunately ascribed a
unified analytical framework of the ‘disciplinary society’ or the ‘normalizing society’ as a
periodizing marker to modernity, effectively distorting our understanding of Foucault’s work. A
more careful reading of his other works, by contrast, suggests a diagnostic style of discipline
which employs a topological approach, providing a much more “supple analysis of the configurations in which forms of power take shape and function” (Collier, 2009: 80).

Governmentality is perhaps better understood as the matrices of power/knowledge which shape the conditions of possibility for thinking and acting; for governing oneself, of how to be governed, and how to govern others (Foucault, 2003c: 229). Governmentality, perhaps better read as govern-mentality distinctly follows a topological approach to understanding sovereign power, employing concepts such as problematizations. For Collier, governmentality designates a genus: diagrams of political rationality, of which specific political rationalities such as liberalism or neoliberalism are species within this genus (Collier, 2009: 99). In other words, governmentality brings to light a heterogenous space for power/knowledge, effectively providing an analysis of government based on the dynamic processes by which existing elements and techniques are taken up and redeployed through new combinations of elements. Such heterogeneity of government is further supported as Foucault did not believe that one could trace a uniform system of discipline throughout the history of disciplining institutions, and moreover there was a significant difference between the purity of the ideal and the impurity of the real:

I tried to show that the rationality envisaged in penal imprisonment wasn't the outcome of a straightforward calculation of immediate interest… but that it arose out of a whole technology of human training, surveillance of behaviour, individualization of the elements of a social body. 'Discipline' isn't the expression of an 'ideal type' (that of 'disciplined man'); it's the generalization and interconnection of different techniques themselves designed in response to localized requirements… in fact there are different strategies that are mutually opposed, composed, and superposed so as to produce permanent and solid effects that can perfectly well be understood in terms of their rationality, even though they don't conform to the initial programming: this is what gives the resulting apparatus its solidity and suppleness (Foucault, 2000d: 232).

In this respect, the question of liberalism becomes paramount in understanding Foucault, for liberalism places importance on the relationship between political institutions and population...
premised upon the maximum and efficient management of economy and society. The state must constantly re-examine itself and its population, and make the necessary adjustments of its disciplinary institutions to ensure maximum economy. In turn this has enabled the development of different sub-categories of liberalism to emerge within the genus of governmentality such as neo-liberalism or, as Nikolas Rose calls it, ‘advanced liberalism’ (sourced in Collier, 2009: 98).

Foucault argues that it was through the development of liberalism that not only does one see the emergence of the economy as occupying a distinct reality in its own right, but moreover one sees the emergence of "society" as an idea, a domain of governance. Government was thus the management of:

complex and independent reality that has its own laws and mechanisms of reaction, its regulations as well as its possibilities of disturbance. This new reality is society. From the moment that one is to manipulate a society, one cannot consider it completely penetrable by police. One must take into account what it is. It becomes necessary to reflect upon it, upon its specific characteristics, its constants and its variables (Foucault, 2000c: 352).

In other words the liberal project could perhaps best be understood as a system of rationality and accompanying practices which understood the idea of society as an outside entity to be managed, via a myriad of institutional orderings and practices. It was not a closed system, but acknowledges the reciprocal relationship between the art and science of governance and the object of governance. This careful distinction is vital to understanding Foucault as he insists upon developing a conceptualization of power based on the reciprocal relations and perpetual gaps between intentions and relations (Foucault, 2000c: 356).

Although Foucault's thesis of governmentality concerns the management of populations it is not to suggest that Foucault had no interested in the production of space for indeed he fully recognizes the inherent social dimensions in the construction of space, particularly in the
political notion of territory. Space can be understood as the connecting thread which binds Foucault's work to the ordering of society, as Foucault emphasized the political and economic dimensions in the production of space can be manipulated to discipline a population. Not to say that before the eighteenth century the configurations of space and time were devoid of political significance. An examination of the medieval clock tower, for example, demonstrates a political and economic ordering of monastic life which slowly diffused throughout the village (Mumford, 1963: 22; Postman, 1997: 15). However, Foucault argues that throughout the nineteenth century space increasingly became the subject of discipline, particularly as cities increasingly became models for governmental rationality (Foucault, 2000c: 351).

In this respect, although territory appears as a geographic notion, Foucault insists that is in fact a juridico-political one, a particular area of space controlled by a kind of power (Foucault, 1980: 68). Cities, and the problems they raised such as hygiene, disease, and revolts, became problematized along large scale projects of order; the notion of population which was the object of governance in early liberal societies was embodied in urban living. Not only does one also see the rise of entire series of utopias or projects for governing territory, but the model of the city became the "matrix for the regulations that apply to a whole state" (Foucault, 2000c: 351). The city became the object of intense political and economic planning in which:

one sees the development of reflection upon architecture as a function of the aims and techniques of the government of societies. One begins to see a form of political literature that addresses what the order of a society should be, what a city should be, given the requirements of the maintenance of order... from the eighteenth century on, every discussion of politics as the art of the government of men necessarily includes a chapter or a series of chapters on urbanism, on collective facilities, on hygiene, and on private architecture... This change is perhaps not in the reflections of architects upon architecture, but it is quite clearly seen in the reflections of political men (Foucault, 2000c: 349-50).
The increasing status of cities in the eighteenth and nineteenth century was coupled with the rise of communication technology such as the railroad, and in turn carried important political distinctions in governmental rationality. First, the rise of cities and communications networks placed significant emphasis on engineers and builders over architects—they became the principle actors who thought out space. This is not to say that questions of architecture simply disappeared outright, but rather it is to say that architecture itself became appropriated by technical concerns—three great variables, territory, communication and speed—became central in urban planning (Foucault 2000b: 354). One sees the emergence of a professionalization of the design of space based around a liberal political economy, an emerging discourse on the right way to design space based on appeals by a techno-scientific elite. Not surprisingly, such reflections upon architecture and design were often accompanied by utopian discourses in which a population was managed perfectly through the management of space. Foucault’s reflections on space were highly inspired by the phenomenology of Gaston Bachelard, who argued that space, be it material space or its utopian mirror, could not be essentialized as easily as utopian designers such as Le Corbussier might have envisioned. A genealogy of discourses on space must consider first that, from Galileo onwards the extension of space supplanted its localization. Localization of spaces can be understood as the medieval ontology of space and time in which things were found in their natural emplacement and their natural rest. This was a hierarchical ensemble of places, sacred places, profane places, terrestrial places and celestial ones. It was during the seventeenth century onwards that the medieval hierarchy of place shifted towards a new understanding of the relationship between space and time:

the real scandal of Galileo's work was not so much in having discovered, or rather rediscovered, that the earth revolves around the sun, but in having constituted a space that was infinite, and infinitely open—that the medieval place was dissolved in it, as it were. A thing's place was no longer anything but a point
in its motion… To put it differently, starting from Galileo, from the seventeenth century, extension supplanted localization (Foucault, 1998: 176).

The relationship between time and space was changing, topologically speaking, such that space was being conceived as immobile or something to be filled, whereas time was much more alive and effervescent. This relationship between time and space went even further such that *emplacement* is now supplanting extension, defining space in terms of relations of proximity between points or elements which can be described as series, trees, or lattices (Foucault, 1998: 176). This notion of emplacement, again following his genealogy, seems to arrive out of a contemporary problematization of space, particularly from the perspective of demography in knowing not just if there is enough space for the entire population, but moreover to understanding the relations of proximity, of storage, of circulation and of classification of human elements. This networked ontology of space/time seems to emerge, in other words, from contemporary problems of local/global governance. However, Foucault maintains that despite the increasing heterogeneity of relations and problematizations in space and time, particular spaces and boundaries are still maintained. The space between the private and the public, or the family and social space, or the space of work and the space of leisure—each of these boundaries are still controlled by "an unspoken sacralization" (Foucault, 1998: 177). While such spaces tend to define relations of interiority, that is relations amongst particular elements in networks of association, Foucault was interested in developing a thesis of space which understood the relations of exteriority, that is relations of the outside:

The space in which we are living, by which we are drawn outside ourselves, in which, as a matter of fact, the erosion of our life, our time, and our history takes place, this space that eats and scrapes away at us, is also heterogenous space in itself. In other words, we do not live in a kind of void, within which individuals and things might be located. We do not live in a void that would be tinged with shimmering colors, we live inside an ensemble of relations that define emplacements that are irreducible to each other and absolutely nonsuperposable (Foucault, 1998: 178).
Although one can then describe different emplacements by examining the sets of relations which constitute their existence, the primary emphasis Foucault wishes to make is to describe the particular emplacements which, although connected to all other emplacements, actually neutralize, suspend or reverse the relations that are designated by them. Such is precisely the importance of utopias for Foucault, as they can be understood as emplacements which have no real place. It is an emplacement which has a general but reverse analogy with the real space of society, they are "society perfected or the reverse of society, but in any case these utopias are spaces that are fundamentally and essentially unreal" (Foucault, 1998: 178).

Foucault also presents heterotopias, which can be understood as realized utopias. Such heterotopias exist in direct relation to utopias and emphasize a topological approach to spatialities. Heterotopias have existed in every society throughout time, and Foucault distinguishes between two major types. First, crisis heterotopias, most commonly found in so-called ‘primitive societies,’ existed as sacred or forbidden spaces reserved for individuals in a state of crisis, such as menstruating women, women in labour, old people, adolescents and so forth. In other words, heterotopias distribute elements, in this case particular types of people, in an uneven way across space. Foucault argues that in today's society such crisis heterotopias have vanished, and have been replaced by what he calls heterotopias of deviation; deviants from the norm or the social mean are placed into psychiatric hospitals, geriatric facilities, prisons and so forth. Heterotopias also contain a few other notable properties aside from a place for managing deviants. First, they must have the ability to juxtapose in a single place several emplacements that are incompatible in themselves. Hence the presence of doctors in psychiatric hospitals, or
other people who embody the opposite of madness. Second, heterotopias are more often than not connected with temporal discontinuities, open to breaking with traditional conceptions of time. A museum in this respect might be an example, presenting a heterotopia which accumulates elements and can project them into a kind of perpetual and indefinite accumulation of time and place that will not move (Foucault, 1998: 182). Third, in a similar vein, heterotopias must always presuppose a system of opening and closing "that isolates them and makes them penetrable at the same time," thus making entry subject to having particular characteristics such as permission to enter, or after certain gestures have been performed (Foucault, 1998: 183). Finally, heterotopias must either function to completely negate remaining space, or create different space. Hence the sailing vessel serves as an example par excellence of a heterotopia, existing in between to particular places, a floating space and placeless place that lives by its own devices, self-enclosed and at the same time yet delivered over the vast expanse of the ocean (Foucault, 1998: 185). As such, it is clearly evident, as Collier suggests, that it is possible to realize a more refined understanding of governmentality as a topological understanding to power/knowledge which specifically addresses the way power/knowledge unevenly distributes elements within a spatialized grid. Moreover, when cross-examining different societies, it is clear that there have been different ways in which space was manipulated in order to produce and assemble elements to accomplish particular forms of governance.

2.5 - CONCLUSION

Foucault’s overall project is not only vast but in some ways incomplete. The project can broadly be understood as an inquiry into how power ‘works’ in society. This produces a number of
interesting conclusions. First, it would be quite mistaken to assume that Foucault’s archeology of knowledge proceeds from a unified ontology, of the social or order of things. On the contrary, Foucault has in mind a project which examines the way in which power problematizes particular phenomena. He develops a semiotic approach, that is to say the study of social relations and discursive techniques, to the construction of power through various regimes of knowledge and is fundamentally concerned with understanding the effects of power/knowledge, meaning that his whole project is understood as on particular way for understanding truth, and Foucault is quite clear that it is by no means the only way in which truth can be understood (Foucault, 1980: 66).

Second, Foucault recognizes a dynamic and reciprocal processes going on between knowledge and power:

> I have been trying to make visible the constant articulation I think there is of power on knowledge and knowledge on power. We should not be content to say that power has a need for such-and-such a discovery, and such-and-such a form of knowledge, but we should add that the exercise of power itself creates and causes to emerge new objects of knowledge and accumulates new bodies of information. One can understand nothing about economic science if one does not know how power and economic power are exercised in everyday life. The exercise of power perpetually creates knowledge and, conversely, knowledge constantly induces effects of power (Foucault, 1980: 52).

Foucault’s emphasis on the exercise of power in everyday life represents an important break from traditional social theory which ascribed power as the subject of overarching structural inequalities or conversely relied on ideological frameworks. Foucault’s emphasis indeed presents a more nuanced and detailed account of how power might ‘work’ in everyday life.

Finally, his emphasis on space as both a homogenous and heterogenous, or networked, field for power contains a number of important implications for understanding the importance of borders in ordering modernity and social life. His emphasis on heterotopias, or placeless places, presents a fascinating interpretation for reading the topological elements of spatio-temporal relations, and have been taken up by numerous theorists following Foucault’s inquiry into the importance of
space. In many respects, Foucault was effective at laying out a history of governance, but in particular, his notions of biopower and governmentality are effective in demonstrating how practices and knowledges constitute the productive capacities of society as well as the processes by which certain forms of knowledge or practice are legitimated, or normalized, into a society.
CHAPTER 3: State-Corporate Power

The accretion of wealth and power in the concentrated corporate sphere in recent decades has been staggering (Schiller, 1984: 31).

3.1 - FROM FOCAULT TO NETWORK THEORY

Actor-Network Theory (ANT) can help reveal a more sophisticated analysis of Foucault’s ordering of society and power by empirically examining the particular practices and social relations of actor networks, and how such relations are conceptualized as complex socio-technical arrangements between humans and non-humans such as technological artifacts. ANT seeks to produce a detailed version of how Foucault understood the dynamic relationship between knowledge and power, to test his hypothesis by inquiring how power ‘works’ to produce order through practices. Thus, while Foucault’s genealogical method revealed an analysis of the morphology of power from a broad perspective, ANT maintains the Foucauldian belief that power develops through particular practices, but proceeds from the ground up to test his theories and also considers the important role played by non-humans in ascribing social relations. This chapter begins from afar then focuses its lens to provide an understanding of the mechanics of power, particularly its concentration, in socio-technical networks of information and communication—starting with a broad overview of ANT, culminating into ANT approaches to economic sociology in order to demonstrate how ANT can be applied to the study of market relations. From here, the focus is shifted, further refining the theoretical lens by demonstrating how the political economy of communication can serve as a complementary approach,
particularly in understanding transnational politics and power by developing the thesis of the power elite.

Bruno Latour once quipped that as a default, it is better to stay one reflexive loop behind those you study (Latour, 2005: 33). Like Foucault, ANT scholars share a particular frustration with endeavors which essentialize social relations into a priori truths, thereby pre-supposing the nature of a social group before studying it. Although some may argue that there is nothing at all wrong with this ontology of the social, and they may be quite right in some respects, at the same time, it is difficult to ascribe such meanings when one is faced with uncertain or unknown phenomena as it would likely yield a dissatisfactory result of overdetermination. In its broadest sense, ANT can be understood as a move away from two equal dissatisfactions in social theory: the agency/social structure divide, or the micro/macro distinction:

when social scientists concentrate on what could be called the micro level, that is face to face interactions, local sites, they quickly realize that many of the elements necessary to make sense of the situation are already in place or are coming from far away; hence, this urge to look for something else, some other level, and to concentrate on what is not directly visible in the situation but has made the situation what it is. This is why so much work has been dedicated to notions such as society, norms, values, culture, structure, social context, all terms that aim at designating what gives shape to micro interaction. But then, once this new level has been reached, a second type of dissatisfaction begins. Social scientists now feel that something is missing, that the abstraction of terms like culture and structure, norms and values, seems too great, and that one needs to reconnect, through an opposite move, back to the flesh-and-blood local situations from which they had started. Once back to the local sites, however, the same uneasiness that pushed them in the direction of a search for social structure quickly sets in. Social scientists soon realize that the local situation is exactly as abstract as the so called ‘macro’ one from which they came and they now want to leave it again for what holds the situation together. And so on ad infinitum (Latour, 1999a: 16-17).

Instead of appealing to social structure, order emerges out of practices, not principles—effectively moving towards an epistemology which places importance on understanding how social relations are created from practices. Moving away from epistemological reductionism
towards relativism, ANT begins from the actants\(^1\) themselves rather than assumptions of some ‘outside’ order the social. It is by starting from an analysis of what actors are actually doing, by actually describing social relations, can one begin to theorize how they are trying to order social relations. ANT does not privilege or essentialize the human in social relations, but recognize the diversity of objects, actants and networks in social relations, to the point even where one could assert that human beings are in fact networks of non-human actants.

Three primary points are advanced in this section to detail the intricacies of ANT for conceptualizing political economy, proceeding from the general to the specific. First, ANT is not a theory but an approach to the study of social relations, a series of methodological considerations for doing research, particularly research into the uncertain. One could say that ANT is a series of theoretical considerations which posit the heterogeneity of actants in the ordering of particular groups. ANT begins from the actants themselves, creating a bottom up ontology of networks which proceeds by the semiotic tracing of social relations to build an understanding of networks. In this respect then, it is perhaps better to say that ANT is about the study of social ordering, not order proper, therefore highly useful for studying the uncertain or the indefinite, and also useful as a groundwork for understanding how power intersects with the social (Law, 1994).

Second, ANT seeks to understand the complexity of heterogenous social networks, and pays special attention to the acknowledgement of social change and innovation within networks. As

\(^1\) Since in English “actor” is limited to human agents, “actant” borrowed from semiotics is best as it can include nonhumans and focuses on action. (see Latour, 1999b: 303)
such, ANT is a non-reductionist epistemology, meaning that it ascribes to epistemological relativism, a position which is particularly informed by the theory of paradigm shifts in the natural sciences (Kuhn, 1974). By relativism, ANT is not claiming absolute relativism, effectively dismissing epistemology; on the contrary, it is to say that the constitution of truth is contingent upon the material and discursive networks specific actors find themselves imbricated in.

Third, ANT is particularly interested in understanding the role of markets and power in shaping social relations. ANT insists that social relations, including power relations and political and economic organization are network effects which are materially heterogeneous (i.e., not reducible to strictly human actants but comprised of complex relations amongst non-human such as technological artifacts) and therefore should be analyzed as such (Law, 1992). In its most simple form, society is comprised of heterogenous networks, sometimes called *assemblages*: they are *effects* of networks of diverse materials and practices, sometimes by humans, other times not. Applied to the sociology of markets, markets too are networked effects of practices, and not autonomous social forces in and of themselves. This conception of markets fundamentally relies upon a different spatiality of political economy which does not see the economy as an absolute base upon which other social institutions rest, and further pays close attention to calculative forces.
3.2 - ANTS IN ACTION: ONTOLOGICAL POLITICS IN SCIENCE

ANT prompts a deep commitment to empirical case studies in order to develop an understanding of power and the social on a localized plane. Because it is quite easy to get overwhelmed by the scores of concepts and devices which have populated the ANT terrain, it is better to begin the exploration of ANT with the help of some major examples of ANT in action. ANT emerged primarily out of science and technology studies, particularly with Latour and Woolgar’s ethnographic studies in laboratory life which sought to describe science in action, how the laboratory represents a closed off space for doing science in a way which purifies nature from social forces, effectively ascribing clear boundaries between the two (Latour and Woolgar, 1979). The laboratory, like Foucault’s panopticon, becomes in a sense a spatial metaphor for the production of scientific knowledge in modern society. From this it follows that the first example should come from studies in the natural sciences—evolutionary biology is a case in point.

Invitations to consider the human-animal relationship quite often mistakenly privilege the ‘big like us’ approach to studying evolutionary biology; a certain myopia in science which approaches the study of living creatures in a way which privileges human ocular scrutiny, creatures which are visible to humans, unaided by technological devices (Hird, 2009: 21). In other words, humans are often arbitrarily assumed to be the most evolutionary advanced species on the planet, or at least the most important. However, when one considers biological makeup, the unseen majority of the planet throughout all of history has been bacteria, non-human actants. Such bacteria have been the primary inventors of many of the things and abilities we humans take for granted, such as locomotion, sexual reproduction and spatial navigation to the point where we humans exist symbiotically with bacteria all the way down to the last denominator of our
existence, effectively putting into question the entire scientific paradigm of competitive

A number of elements can be unpacked here from the ANT perspective, but it is best to begin

from the broadest claims first. The ‘big like us’ historiography of science indicates that there is

an ontological politics to the construction of actants and networks of association. By revealing

the complexity of interaction within the human body, i.e., the manifold of social relations

between bacteria and our internal organs, ANT suggests that humans do not create themselves

via the notion of an autonomous self. The ‘big like us’ approach rests upon an autopoiesis, a self

which creates itself. By reframing humans in terms of their material connection with non-
humans, one finds that human existence is contingent upon a symbiogenesis with other

biological organisms: non-human actants which play a causal role in maintaining our existence.

In other words, the ANT approach shifts the understanding of the human from a discrete being (a

being in the laboratory) into a network of complex relations with non-human (in this particular

example, bacteria) actants. Such an ontology of the human thus confers what Mol (1999) refers

to as ontological politics, the way in which the real is imbricated within the political, and vice

versa:

If the term 'ontology' is combined with that of 'politics' then this suggests that the conditions of

possibility are not given. That reality does not precede the mundane practices in which we interact with

it, but is rather shaped within these practices. So the term politics works to underline this active mode,

this process of shaping, and the fact that its character is both open and contested (Mol, 1999: 75).
For Hird, an ontological politics of big like us rests on the analogy of the biological self and the economic self. The human body, far from exemplifying individuality, represents instead an excellent example of the corporeal generosity of gifting. By gifting, Hird draws upon the social practices of giving gifts, a universal cultural phenomenon observed by Marcel Mauss in which the act of gifting must be understood as cyclical: gifts are given only upon the requirement of an obligatory return and is done to not only build particular social relations, but also to affirm one’s identity through gifting and subsequently receiving gifts from an other. With respect to bacteria, the corporeal gift represents the act of gifting ourselves in a literal and metaphorical way to microbes:

We are more materially immersed in the lived (and unlived in the case of DNA, bacteria, viruses, dust and so on) bodies of others’ identities than we typically think, and we are certainly more immersed than contemporary economic exchange theory allows. What we give we never entirely own; possession is only ever partial and temporary (Hird, 2009: 88)

This ontological politics of gifting questions neoliberal notions of a ‘closed economy’ precisely because such economic ideologies are fundamentally centered around the autopoietic autonomous individual in which conceptions of property and the self are hypostatized from social dynamics. Ontological politics of the corporeal body intersects with larger notions of society and economy precisely because they both revolve around larger issues of social theory: “whatever cultural notions of autonomy and free will to which we might aspire, we are all corporeally inter-dependent. The necessary symbiotic relationships and their constant gifting invites fundamental questions about the individual autonomy of all people specifically, and living and nonliving matter more generally” (Hird, 2009: 88). Hird is directly pointing out a ontological politics of nature which has privileged the human corporeal self and in turn worked
to legitimate (neo)liberal political and economic theories of governance. Thus, by questioning
the material and social assemblages of humans in a non-reductive manner, it can be turned into a
larger question of understanding the social makeup of socio-economic life, questioning in turn
what it means to be an **actor**, as something much more complex than simply the classical notion
of the actor as a rational autonomous individual who performs or acts depending on the network.
Thus, the commitment to trying to establish a pure conception of the human effectively points
out an ontological politics, a power dynamic, which masks the material constitution of life on
Earth. It is an ontological politics which, in short, favours the study of autonomous actants over
relational systems.

For Latour, this autopoiesis of humans is akin to treating nature as something **out there** to which
a mind-in-a-vat can objectively study (again, the laboratory metaphor is particularly effective
here), and reveals the complexities of maintaining a ‘big like us’ approach to science. An
unrealistic position for science which puts scientists in a rather precarious double bind of having
to be entirely cut off from society, psychology, ideology and people—scientists are at the same
time expected to be absolutely objective in formulating the laws of the outside world (Latour,
1999b: 113). Like Hird, Latour proposes that the only way to speak truthfully about the world is
to reconnect through as many relations as possible, such heterogeneity of elements is what really
makes science flow, meaning that truth becomes contingent upon the degree and intensity of the
networks it forms a part of. From the ANT perspective, the more relations a claim has, the more
it circulates through the many vessels of science, the more accurate a claim becomes. Latour’s
research into Pasteur’s discovery of yeast in lactic fermentation presents an interesting question
of how a nonhuman actant must move through a series of ontological stages with multiple social relations before becoming something like a well-recognized substance. How, in other words, does a scientist articulate the emergence of a new actant out of other entities which must either be destroyed, redistributed or reassembled into new networks.

Pasteur had to move through a variety of strategies to enable a reader to see the yeast, which he realized nobody else would immediately detect unless he took the appropriate steps to train the reader’s perception towards the nonhuman actant. As an ontological politics, it is a question of how it is that a particular actor such as Pasteur was able to take something of which nothing was really known, an uncertain nonhuman actant with uncertain boundaries, and turn it into something with a fixed ontological status. That is, the process by which a simple grey dot, hardly visible to the naked eye, was transformed into a fully fledged actor. Latour’s answer is that something more must be added to the equation, another network or relation must be posited. Pasteur looks towards everything, drawing upon as many resources as possible to stabilize the actant. He appeals to a previously known substance (brewer’s yeast) to posit a similarity. Through a number of careful experiments in cultivating more yeast in sugar, Pasteur describes the growing of yeast as akin to growing plants, all of which serves to give shape to this new actor (Latour, 1999b: 120). For Latour, Pasteur had to subject this newly discovered yeast to a series of experiments and trials because the only thing Pasteur could use to transform the yeast into an independent entity is its action:

there is no other way to define an actor but through its action, and there is no other way to define an action but by asking what other actors are modified, transformed, perturbed, or created by the character that is the focus of attention (Latour, 1999b: 122).
The yeast passes through and circulates around numerous states of being because Pasteur had to move in between realist and constructivist epistemologies, sometimes including a human agent, such as in order to produce particular experimental results, and other times to deny human agency in forming the yeast as an agent in its own right such as asserting its ability to grow and take shape when fermented. Such a transition comes out of a shifting-out of the scientists frame of reference to the object’s plane of reference. It is only because Pasteur took great pains and labours in his own plane of reference that the ferment is able to live autonomously in its own plane, effectively black-boxing certain aspects of Pasteur’s experiments to create the yeast as a network effect of stabilized heterogenous relations:

At the very moment when the entity is at its weakest ontological status... shuffled among clouds of chaotic sense data, the experimental chemist is in full activity, extracting, treating, filtering, dissolving, adding, sprinkling, raising the temperature, introducing carbonic acid, fitting tubes, and so on. But then, shifting the attention of the reader, shifting out the autonomous actor, Pasteur says that “we have before our eyes a clearly characterized lactic fermentation.” The director withdraws from the scene, and the reader, merging her eyes with those of the stage manager, sees a fermentation that takes form at center stage independently of any work or construction (Latour, 1999b: 131-2).

While Hird demonstrates that an ontological politics of the corporeal self, revealing the body as a complex of symbiotic relations with nonhuman actants, comprised into networks of gifting, both in the physical and metaphorical sense, Latour demonstrates how it is that actants become articulated into an independent entity existing in physical reality through a series of processes and experiments in which the yeast acts to demonstrate its own existence. Such actions work to articulate and draw new social relations for the yeast, effectively ordering it into the realm of physical reality. Yeast had to be made to perform particular actions, such as growing itself in controlled circumstances ascribed by Pasteur, but also the yeast had to be given a particular shape, that is the creation of borders in order to define it as an autonomous entity. Overall, Latour’s analysis points to a method of science which sought to control the actions of actants, a
process which he refers to as modernity’s attempts to *purify* nature and the social via institutions such as the laboratory. Because such efforts of purification are in fact political moves in the production of a specific discourse of scientific knowledge and ontological politics, Latour takes this to infamously declare that since it is impossible to clearly distribute the social from the ‘non-social,’ from nature, it follows that *we have never been modern* (Latour, 1993).

3.3 - ANTS IN ACTION: HETEROGENOUS MATERIALITY

While the first example of ANT in action provided a primer on how one might conceptualize the importance of social relations in the constitution of actants such as humans or yeast, the second example of ANT in action shifts towards ANT perspectives on socio-technical design and contemplates the political importance of technology in ordering everyday life.² Law and Callon (1988; 1992; 2002) take great interest in the design of technical artifacts and have published numerous pieces on aircraft design. But it is the way they approach the process of design which invites the reader to consider design as more complex process than simply drawing up a schema or blueprint, then building it without problem. For Law and Callon, it is a mistake to simply assume that the design of technical artifacts is trivial and would again perpetuate a pure, ideal type of the process of design to construction absolved of any social complexity:

Imagine a technological project that lasts for a number of years, involves the mobilization of tens or hundreds of thousands of workers, designers, managers, and a plethora of heterogenous bits and pieces including designs, parts, machine tools, and all the rest. Imagine that this project is developed in a constantly changing environment—that requirements, interests, and even the actors themselves change in

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² See Winner (1986) on the political design of technology. Although an important difference remains in that ANT does not ascribe the same amount of political determination in design, but instead sees the design as a process of negotiation. See Callon and Law (1997: 172) for a discussion on ANT perspectives to Winner’s thesis.
the course of its lifetime. Imagine that not hundreds but hundreds of thousands of decisions are made (Law and Callon, 1992: 21).

Law and Callon are cautious against a fatalistic interpretation of the history of the design of a technological artifact. The study of technological design cannot assume that its fate was determined from the outset, nor can one risk assuming that its success or failure was preordained, ANT proposes instead to examine the complexities and contingencies of engineering projects (Law and Callon, 1988: 285). To take this one step further, this also entails that assumptions of engineers must be adjusted accordingly:

Engineers are not just people who sit in drawing offices and design machines; they are also, willy nilly, social activists who design societies or social institutions to fit those machines. Technical manuals or designs for nuclear power stations imply conclusions about the proper structure of society, the nature of social roles, and how these roles should be distributed... Engineers were practical sociologists long before the discipline of sociology was invented (Law and Callon, 1988: 284).

Law and Callon demonstrate the complexities and processes of socio-technical design, and the role of actants such as engineers, through a genealogical analysis of the British military aircraft, the TSR 2, in the late 1950s. As a light bomber and reconnaissance machine, the TSR 2 was conceived of by the Royal Air Force’s (RAF) Operational Requirement Branch (ORB), the institution responsible for anticipating the future needs of the RAF and to propose the appropriate specifications for possible machines such as aircrafts which might fulfill such anticipated needs. The Ministry of Defense perceived the political climate to be at a turning point in which, being in the age of missiles, the fate of manned fighter aircraft was in doubt. Given that the RAF’s entire operation rested on trained pilots and aircraft, the ORB had to negotiate this tension and propose a solution which would find a combat role for pilots, and an aircraft which was neither just a strategic bomber nor a fighter. Three potential aircraft possibilities emerged, each of which addressed particular problems being faced by the RAF and larger political problems with other states. However, the defense budget was also being
considerably restricted by the Treasury, and so the RAF had to compete with other branches such as the Navy for scarce resources. After tough negotiations in 1957, it was decided that an operation requirement for a versatile aircraft be issued to industry; a seven-page booklet called General Operation Requirement 339 (GOR 339), was published detailing the needs of the RAF in a new aircraft, and issued to nine manufacturers to produce ideas and designs within one year.

In this respect, it must first be noted that the process of deciding the priorities of a future machine are not set in stone but are often subject to intense negotiation based on the types of networks or social relations the machine happens to intersect with. From budgetary constraints to various institutional actors trying to perceive the future needs of military operations based largely upon speculating the future political relations with other states, one can immediately see the difficulty in trying to design an aircraft to meet such conditions.

Law and Callon argue that the GOR 339 represents a solution to the interconnection of political, bureaucratic and strategic problems facing the ORB, and a decision was made to specify the need for a large, two-engine aircraft with highly sophisticated terrain-following radar (for reconnaissance and radar aversion), as well as pin-point targeting systems for bombing. The ORB was in this respect operating within a network of other actors, actors who together posed various problems for the RAF. The GOR 339 was thus understood as a sociotechnical scenario:

A sociotechnical scenario is a plausible proposal for a revised network of both social and technical roles that does not rest on an a priori distinction between human beings and machines. GOR 339 was thus both a proposal for a machine or, more correctly, a weapons system that might be built and a theory about how the political, bureaucratic, and strategic world could be made to look five or ten years later. The proposed machine was part of the social theory of the ORB; thus its size, shape, and specification reflected ORB notions about the network of intentions, powers, and capabilities of relevant national and international actors. But the social theory was also part of the proposed technical solution of the ORB; plausible roles for the various bureaucratic and strategic actors were implied in the TSR proposal. In the sense discussed above, then, the ORB may be seen as an engineer-sociologist (Law and Callon, 1988: 287).
The problem however arises when trying to implement and design these sociotechnical networks—how it is that particular actors were mobilized to create such a machine. The RAF, recognizing an array of obstacles to such mobilization, including negotiating with opponents to the proposal, started by mobilizing the most immediate actors into the network, thus actors from the aircraft industry who were eager for contracts were quickly recruited. From there, the RAF would return to government with the necessary schematics and designs produced by the private sector in an attempt to persuade the defense chiefs and treasury to allocate funding. Furthermore, Law and Callon invite discussion in considering how the various firm proposals (three of nine proposals are discussed in their analysis) are in effect also sociotechnical networks in which the firms themselves were mobilizing particular elements of the proposal, discarding others, creating designs which either fully conformed to the GOR 339, or conversely, proposing an idea which was its opposite and based on the assumption that the RAF would never be able to procure the necessary funds from the Treasury for its initial project. Some firms also proposed forging alliances with other firms. One firm, English Electric, tried to counter the original sociotechnical network by arguing that certain components such as advanced avionics and short take-off and landing (STOL) capability were not initially needed and could be added later, effectively re-mobilizing and de-mobilizing particular aspects of the original sociotechnical network based on the problems faced with its design. Here we see how English Electric went about assessing the original requirements, then, as good engineers do, evaluate those requirements based on access to available resources. After negotiation amongst the various actors from the private sector and government ensued, the British Aircraft Corporation (BAC), a corporation formed from the merger of English Electric and Vickers, was formed to undertake
the construction of the TSR 2. Hostility between governmental agencies was checked and the
BAC was preparing itself, effectively creating a *global network* of actors which granted the
project managers a relative degree of autonomy, a negotiation space, to build the TSR 2 within a
*local network*, under the condition of providing progress reports to the appropriate actors in
government. To simplify the story, Callon and Law trace how an ideal sociotechnical network is
rendered into practice through the mobilization of particular actors into global and local
networks, and how a relatively autonomous negotiation space was created for the BAC to design
the TSR 2 by employing a manifold of techniques such as creating a division of labour for the
engineers from Vickers and English Electric in weapons and aerodynamic designs, respectively.
From here, the picture becomes even more complex as Law and Callon describe the complexities
of sub-contracting various parts such as digital navigation computers, or in other situations when
the RAF would rescind on their initial plans without reference to the BAC and produce
alternative idealization of the TSR 2’s performance. Problems continued in engine testing after a
prototype engine exploded due to unforeseen variables with the low pressure shaft, resulting in
more time and money spent on redesign and engine integration into the body. The TSR 2, which
ultimately resulted in failure, was due to what Law and Callon call the failure for any particular
actor to impose an *obligatory point of passage* between the global and local networks; no one
agency was able to impose itself in fully managing the aircraft design and construction. In other
words, the engineers of the TSR 2 were struggling to negotiate a heterogeneity of social,
political, economic and technical problems on a deadline and a budget. As the sociotechnical
network progressed, so too were there changes in a host of concerns underlying the TSR 2 such
as use and cost. This heterogeneity of elements produces, what Law and Callon describe as a
much more neutral, matter-of-fact and non-disciplinary vocabulary for describing the sociotechnical design of the TSR 2 (Law and Callon, 1988: 295).

Law and Callon’s analysis demonstrate a number of important insights into socio-technical design. First, the TSR 2 as a sociotechnical network demonstrates the heterogeneity of actants which are either connected in local or global networks. Law argues that heterogeneity produces an oscillation between absence and presence, or put another way, between that which ‘might happen’ and what ‘actually happens,’ thus placing significant emphasis on the heterogeneity and materiality:

The notion of “heterogenous engineering” may be understood in two ways. It may be treated as a way of thinking about oscillation, absence/presence, uncertainty, and the necessary Otherness that comes with the project of centering. In short, it may be treated as a feature or an aspect of complexity... Alternatively, it may be used to describe and perform an architecture of modernism. No doubt there are different versions of this “modern project.” No doubt they do different things. But, to put it too quickly, perhaps we might say of this that it is a way of being that seeks to improve the world, to engineer it, to build a better society by knowing, by gathering knowledge together, and then by deploying it in the attempt to order relations in the best possible way. This is an architecture that seeks to impose a specific and optimum distribution on its materials, human and otherwise (Law, 2002: 136-7)

Law refers to heterogeneity/materiality as the tensions which arise through the manipulation of systems, materials, actors and elements in socio-technical design, painting a far more complex understanding of engineering than what might otherwise be assumed. Moreover, in emphasizing a methodological principle of tracing the social relations which constitute socio-technical networks, Law is arguing for developing an *infra-language*, a set of tools which can be used to understand the constitution of any network. Therein lies a principle element of ANT, to develop a set of epistemic concepts which does not reduce the social into a well-ordered chain of causal relations. Instead ANT seeks to develop a set of tools which can be transferable across a myriad of networks. The ANT critique posits that sociology is, in essence, part of the modern project to
bring nomothetic order, to purify and control social life (Law, 1994: 7). As Latour explains elsewhere:

Sociologists of the social always have at their disposal a stable and absolute third term in which to translate all the vocabularies of the informants, a master vocabulary which acts as a sort of clearing house for instantaneous exchanges between goods that all share the same basic homogenous quality—namely, to be social. ANT-sociologists, on the other hand, possess no such common currency. The word social cannot replace anything, cannot express anything better, cannot be substituted—in any form or guise—or anything else. It is not the common measure of all things, like a credit card widely accepted everywhere (Latour, 2005: 36).

The credit card approach to social theory is described as the flattening of social relations which (deliberately) misses those places or instances where the complexities of heterogenous materiality do not fit so well with the control impulse of social theories of reductionism. This means that, for Law, the heterogeneities of social networks must also acknowledge a degree of non-coherence within organizational theory. It must recognize a degree of oscillation between presence and absence, shifting its focus away from what he calls a centered approach (an approach of essentializing social networks, typically into utopian idealizations of the social), towards an understanding that quite often sociotechnical networks in fact either fail at their original aim, or that their final purpose was not necessarily set in stone from its first design. The TSR 2 as a case in point provides an important insight precisely because Law and Callon are deliberately using an example of a failed socio-technical network to demonstrate the complexities of heterogenous materialities.

3.4 - ANTS IN ACTION: TRANSLATING SCALLOPS

If ANT can be understood as a methodological concern for developing an appropriate set of tools which can describe how various actants mobilize around particular things, then translation arguably becomes one of the most important tools for describing the social and material
processes which constitute reality. The third example explores the intersection of nature and society within the context of translation. The sociology of translation presents an analytical framework for the study of the role played by science and technology in structuring power relationships, and emerged out of asymmetric double standard within sociology of science studies. In a curious double standard, Callon (1986) argues that typically sociologists of science and technology studies accept the explanations and understandings presented by engineers or scientists, and fully acknowledge the right of such experts in their respective fields. Yet, paradoxically, extending this to allow such actors to discuss society and its constituents in an open manner is not permitted. Once the technical and scientific aspects were articulated, for the sociologist, this signaled the extent of the actor’s ability to grasp society:

For once they [sociologists] have taken the scientific and technical aspects of the controversies into account, the sociologists faithfully restore the existing points of view to their places and, in addition, the rightly abstain from taking sides... these social scientists act as if this agnosticism towards natural science and technology were not applicable towards society as well. For them Nature is uncertain but Society is not (Callon, 1986: 197).

This asymmetry first enables the sociologist to navigate the landscape of science and technology studies in order to draw out some degree of consensus on nature within a field of experts who might otherwise disagree, requiring a more constraining but equivocal language of science and technology. A number of conceptual, theoretical and methodological difficulties emerge from this, particularly pertaining to how it is that sociologists themselves come to consensus on evaluating the scientists’ or engineers’ claims (a scant occurrence nonetheless). Despite these difficulties, another strategy exists which begins first by assuming that society or the social is in itself uncertain and disputable, creating a methodological principle of agnosticism founded upon a general notion of symmetry (Callon, 1986: 200). It is here that Callon develops the thesis of translation, positing that the sociologists need not make a priori distinctions between the social
and the technical; it is to develop a repertoire, a vocabulary, chosen at the discretion of the observer which seeks to question society at the same time as the actors themselves try to, and define their respective identities, their mutual margins of maneuver and the range of choices which are open to them. Translation therefore pertains to the study of how particular actors reassemble the social into networks of consensus in which society and nature are intertwined (Callon, 1986: 201).

Callon’s sociology of translation examined the mobilization of scientific knowledge intended to increase the growth rate of scallops in France to satisfy growing consumer demand. In this case, there was not only the growing problematization of a declining population of scallops for consumption, but also how scientists could develop methods to help increase scallop stocks based on a Japanese technique of scallop harvesting, involving anchoring scallops to facilitate their growth. This technique of anchoring, well known in Japan was unknown to the French; nor for that matter was it entirely clear how scallops could be grown, yet their capacity to reproduce soon became essential knowledge according to the researchers. For Callon, the anchoring of the scallops necessary for its domestication represents an obligatory passage point, upon which everything hinges, determining the future life of the scallops, the potential knowledge the scientific community wishes to advance, and the economic interests of the fishermen. This meant that the problematization of the scallop’s reproduction created a system of alliances or associations amongst the actors, thereby defining the ‘want’ expressed as the anchoring of the scallops. Thus, the constitution of reality becomes a process irreducible to discursive analysis; the actual material anchoring of scallops represents a hinge upon which the constitution of social
networks could be determined. This constitution therefore depends on the actions of particular actants, the strength of the problematizations articulated by the network, but moreover Callon introduces the concept of *interessement*, to be interposed in between particular elements of the network. In other words, the identity of actants in many ways depends upon their relationship in between other points in the network, or conversely it can be determined by the lack of association (disassociation) amongst actants:

The domestication of scallops strikingly illustrates the general interessement mechanisms. The three researchers are inspired by a technique that had been invented by the Japanese. Towlines made up of collectors are immersed in the sea. Each collector carries a fine netted bag containing a support for the anchorage of the larvae. These bags make it possible to assure the free flow of water and larvae while preventing the young scallops from escaping. The device also prevents predators from attacking the larvae. In this way the larvae are protected during the period when they have no defence: that is, when they have no shell (Callon, 1986: 209).

Callon maps a network in which the scallops (particularly their larvae undergoing domestication through anchoring) represent an interessement between the scientists and starfish predators. During domestication, a host of new actants emerge during the process which can potentially disrupt the anchoring such as parasites, strong currents, displaced lines and entangled collectors; all of these elements alter the relationship between the scallops and other actors such as its predators or its cultivators. Thus, what started off as a well articulated problematization (the declining stocks of scallops and the need to domesticate them) soon turned into a more complex problem as the various actants formed into networks and processes of translation; the identity of the actants is therefore subject of multilateral negotiations during with the identity of the actors is determined and tested through a variety of actions and strategies. The sociology of translation is a process in which particular actors become spokespersons for others, a process in which they become capable of acting in their name. In this case, Callon is mapping out the process by which the researchers became spokespersons for both the scallops and the fishermen. They became
representatives, attending conferences, meeting with other specialists and professional groups, essentially translating the scallops and fishermen. While it may be easy to become spokespersons for other human actants such as fishermen, it is not so easy to speak for non-humans like scallops who do not possess an articulate language. For Callon, this supposes the need for continuous adjustments and devices of interessement that are infinitely more sophisticated (Callon, 1986: 216).

3.5 - OVERFLOWING SOCIOLOGY: CALCULATION, MARKETS AND EXTERNALITIES

From humans to scallops, the heterogenous constitution of actants is likewise applicable to markets, and Callon has been a major force in articulating a need to examine the constitution of markets. ANT approaches to economic sociology emphasize the processes and actants by which markets are rendered calculable, or put another way, ANT asks how it is that markets are stabilized into markets, and how calculation is distributed across a network of material and discursive actants. Actants, human or otherwise, involved in the constitution of markets are known as market devices and have been largely overlooked by economists and social scientists (Muniesa et al., 2007: 2). Moreover, ANT deliberately proposes the term calculation to re-examine the cognitive, material and discursive underpinnings of socio-economic theories of markets, and premises such re-evaluation on a number of claims, many of which deeply resonate with Mol’s thesis of ontological politics and Law’s thesis of heterogenous materiality. First, a frustration of micro/macro ontologies for explaining human agency and the necessary cognitive powers of calculation, particularly as it fails to adequately explain periods of economic transition
or uncertainty. Not surprisingly, existing literature tends to focus exclusively on two competing yet symmetrical theories of calculation which propose that calculation is either privy to autonomous human agents or conversely cultural frames of reference. To be concise: the ANT approach posits that human cognition does not, in and of itself, explain the calculation of economic markets (Callon, 1998: 4; Stark, 1998). ANT begins by problematizing who or what actually counts, and how calculation is distributed amongst those who count. This is premised on a skepticism of theories which essentialize human cognitive performance into universal principles of calculative rationality, as if to hypothesize that human calculation is no different from a mind in a vat. Again, recalling Hird’s thesis of gifting in symbiotic exchanges, ANT approaches are skeptic of ontological arguments centered around closed systems. ANT theorists of economics argue that cognitive psychology presumes far too much when stating that individual agents are capable of mental calculation (Callon, 1998: 4). ANT redefines calculation as a complex collective practice which involves far more than the mental capacities of autonomous individuals, transcending both views which stem from cognitive psychology and those of cultural anthropology. For Callon, calculation is at the heart of economic practices, but cannot be reduced to the individual mental labours of autonomous individuals nor is it sufficient to simply dismiss calculation into the realm of cultural institutions; instead, it is better understood as a process of social inclusion and exclusion which utilizes a heterogeneity of non-human actants—figures, writing mediums, reports and so forth—and subsequently play a decisive role in performing calculations. It is a process of calculating distinctions, unravelling the threads of social relations, and abstracting them into calculable markets. Thus, instead of suggesting that economists merely describe the currents and flows of the economy, effectively
black-boxing the economy as an object of study privy to the specialized knowledge of economists.\(^3\) ANT argues that the economy is not described by economics but instead the economy is shaped by economic practices: as Callon puts it, “economics... performs, shapes and formats the economy, rather than observing how it functions” (Callon, 1998: 2). Like technology, the economy has no explicit definition which can be rendered succinctly by any one particular discourse, one has to observe how markets are constructed.

How then can calculation be defined? Starting from the assumption that markets are social, ANT perspectives to markets seeks to understand the material and discursive practices of calculation, effectively moving away from economic sociology which studies the institutions in which economic activity is embedded, towards analyzing the actual calculative practices of actors at work (Beunza and Stark, 2004: 370). For Callon and Muniesa (2005), calculation oversteps qualitative and quantitative divides and shifts towards focusing on calculation as distributed across goods, products, agencies and exchanges, enabling a definition of markets as organized collective devices of calculation across both human actors and material devices:

Whereas economics maintains the idea of a reality of ‘pure’ calculation, the other social sciences try, by contrast, to show that real practices are infinitely more complex and leave little room for calculative practices per se... Calculating does not necessarily mean performing mathematical or even numerical operations... Calculation starts by establishing distinctions between things or states of the world, and by imagining and estimating courses of action associated with those things or with those states as well as their consequences (Callon and Muniesa, 2005: 1231).

A number of processes are involved by actors in order to calculate, and for Callon, calculation is distinctly performative (MacKenzie et. al., 2007). First, and reminiscent of Law’s thesis of ordering, a number of entities must become detached, moved, arranged and ordered within a unified field of vision, a space conceived of in which entities can be conceived of and compared

\(^3\) See Pinch and Bijker, 1984 on social construction and the black-boxing of socio-technical networks.
on a common operating principle. While at first glance, this presents a particularly benign social process, in reality classification systems are often sites of political and social struggles, but they are difficult to approach, particularly because such agendas are often presented as purely technical matters (Star and Bowker, 1999: 196). The first step is therefore the process of detachment, of ascribing ontological status to a particular entity, effectively spatializing the entity into a unifying space.

Second, once a number of entities have been isolated into unifying space, they must be associated with one another or subject to some kind of material transformation, an economy of movement occurs as the entities are transformed. For example, here entities can be transformed materially, as in by rendering a set of calculations legible on a balance sheet or other economic device such as a stock ticker. Such transformation can be understood as the incorporation of tools such as writing devices to manage the complexities of economic markets (Callon, 2002). This is a particularly important step in which complex entities such as markets can be stabilized through market devices, as well as problematizing or evaluating the types of practices necessary or desired to calculate markets, a process therefore in which a body of legitimate body of calculative practices is formed (Miller, 1998: 174-175). In terms of power relations, Callon believes power flows through the transformation of markets; rendered legible in the economy of movement, such as for example privileging the calculation of markets to the specialized knowledge of economists or investment bankers. In this case, the use of particular market devices recruits the calculative capacities of those with the right specialized knowledge, in turn excluding others. A particularly salient example of this most recently would be the collapse of
the U.S. housing market as a result of highly complex speculative financing schemes which only a handful of calculating actants actually understood.

A third step in calculation involves the extraction of a new result, the production of an entirely new entity must emerge from its antecedents and its manipulations by calculative agents, and moreover it must have the capacity to leave the calculative space and circulate into other networks of association in an acceptable way (Callon and Muniesa, 2005: 1231). Generally speaking, one can see this in the distinction and process by which a product becomes a good; an important distinction for Callon particularly because, as he puts it, we live in an economy of qualities marked by the ubiquitous distinction of consumer products into goods and the development of sophisticated consumer lifestyles and tastes (Callon et. al., 2001). This definition enables a consideration of the diversity of actants and devices, and therefore in turn the political dimensions of calculation and framing of objects into markets or groups. It invites an understanding of the constitution of markets which implies the intervention of actants, both human and non-human:

Calculative agencies are not human individuals but collective hybrids... knowledge and action are never individual; they mobilize entities, humans and non-humans, who participate in the enterprise of knowledge or in action. This participation is active and can only exceptionally be reduced to a purely instrumental dimension (Callon and Muniesa, 2005: 1236-1237).

Callon’s thesis of hybridity is essential for understanding a number of theoretical and spatial considerations of markets. As a collective hybrid of actants and practices, calculation is inherently a political act, meaning that it can be understood as a process of social inclusion and exclusion by ascribing boundaries in the relations which the agents take into account which will serve in their calculations, on the one hand, and the multitude of relations which will be ignored
by the calculation as such, on the other (Callon, 1999: 187). Of interest then, and as a necessary
corollary to calculation, the third step of calculation is understanding how particular results of
calculation actually ‘work’ in practice. Or put another way, how the calculations of certain
agents produce entirely new things, often things which were not anticipated in the original
calculations.

Callon argues that the processes of calculation inevitably result in market failures such as
externalities and overflows. Externalities denote all the connections, relations and effects which
agents do not take into account in their calculations when entering a market transaction, useful
for understanding the meaning of the expression 'constructing a market' (Callon, 1999: 187).
While the idea of a market failure has a certain negative connotation to it, for Callon, a market
failure is simply understood as inefficiencies in the market which were a result of mis-
calculation, and are in fact an inevitable component to the constitution of markets. Market
failures render the market inefficient, simply meaning that the best possible result was not
achieved in practice (Callon, 1998: 247). Beneath this, externalities and market failures
presuppose a fundamental concept of spatiality and framing in which a series of organizational
and market devices ascribe a set of boundaries within which interactions take place. This means
that framing defines the effectiveness of the market as it enables actors to take into account and
calculate the viewpoints of other actants when making a market decision. Thus, externalities
occur either when the process of framing is incomplete or when actors deliberately transgress
such boundaries. This produces overflows which allows these barriers to be permeable. Two
clear distinctions can be made from this. First, from the economists perspective, framing is
considered the norm whereas overflows are considered abnormal, or accidental results from inefficient calculation or from deliberate transgression. Conversely, the constructivist stance sees overflows as the norm and framing as a highly intensive effort. It requires mass sums of capital and organizational effort to establish market devices which organize market relations. The inevitability of externalities demonstrates how framing markets are in effect attempts to manage the complexities of socio-economic relations, especially true since one cannot, from the ANT perspective, provide a substantial definition of the economy and politics, let alone any clear distinction between the two:

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\text{on the basis of their constitution, functioning and dynamics, markets trigger the emergence of matters of concern to which they are not always able to provide satisfactory answers. These matters of concern then evolve into many (potentially) political issues whose solutions may, in turn, impact on the organization of economic activities (Callon, 2007: 139).}
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As collective hybrids, Callon further argues that markets can be understood as forums in which markets are continuously caught in a reflexive activity. Markets evolve and like species they become differentiated and diversified through time, such as the distinction of brands into consumer tastes (Lash and Lury, 2007). However, this transformation is not grounded in an essentialist notion of power or pre-established logic: “the actors concerned explicitly question their organization and, based on an analysis of their functioning, try to conceive and establish new rules for the game” (Callon et al., 2001: 194). This is most demonstrable again by turning to the example of brands and brand loyalty. Quite often, although consumers have stable socio-cognitive routines for choosing specific brands over others, such as one type of orange juice out of many others; at the same time, competing brands are constantly trying, through a variety of methods and marketing devices, to destabilize the consumer’s routine choices. Consumers then are constantly forced to interact with brands, re-evaluating them based on new destabilizing
knowledge forwarded by competing brands, ending up with new judgments and evaluations about their market choices. In the economy of qualities, this constant attachment and detachment of consumer tastes, the continuous re-calculation of products as goods, is at the heart of competition (Callon et al., 2001: 207).

Because markets can be understood as spaces, a unifying field of vision for calculating and transforming difference, but also as a forum which involves a heterogeneity of actors from economic and political spheres, this means that markets effectively create powerful mechanisms for social inclusion and exclusion not just of groups but also of calculating actants and market devices. Externalities then become effects of market calculation which were not originally calculated which can be either positive or negative in its effects. It is how actants who were otherwise not involved in a particular economic transaction or market become necessarily affected by the calculations of an economic market (Callon, 1998: 247). Such externalities may either be positive, such as when a company files a patent to protect its investment, but subsequently divulges the process by which the patent was realized, effectively allowing competitors to benefit from another company’s investments. Alternatively, externalities could be negative as when an industrial plant pollutes the local groundwater, which may subsequently damage the health of nearby residents, or when a pharmaceutical company manufactures a drug which later turns out to be damaging to the body. Externalities demonstrate how the economic and the social are not discrete spheres or worlds but instead are enacted by the practices of particular actants, be it a financial investor who has invested capital into an emerging corporation or a governmental department which contracted out the services of a defense company.
The tension between framing and externalities constitutes the essence of the economy of qualities which Callon generally refers to as hybrid forums. That is, a general political and economic condition in which there are a myriad of distinctions in the market and no real consensus in specialized knowledge, particularly of market failures. Hybrid forums are ‘hot’ situations in which facts and values become entangled into complex webs such that it is no longer possible to distinguish between the stages of calculation, namely the first two stages in which agents calculate markets through drawing up a list of possible world states, and second its hierarchization:

In ‘hot’ situations, everything becomes controversial: the identification of intermediaries and overflows, the distribution of source and target agents, the way effects are measured. These controversies, which indicate the absence of a stabilized knowledge base, usually involve a wide variety of actors. The actual list of actors, as well as their identities, will fluctuate in the course of the controversy itself and they will put forward mutually incompatible descriptions of future world states (Callon, 2008: 260).

By contrast, the ‘cold’ scenario details market interactions with little overflows and agreement concerning such overflows is swiftly achieved. The actors in the network are clearly identified and stabilized into coherent social roles. As such the possibilities for establishing a consensus of world-views is easily accomplished. Callon argues that although hot and cold situations have existed throughout the history of market relations, the hot situation is increasingly invasive and omnipresent for two reasons. First, the growing complexity industrialized societies and the techno-sciences are creating the proliferation (both real and discursive) of connections and interdependencies. Hence one finds increasing difficulty in establishing consensus on social facts and how to invest social resources into regulatory devices.4 The second concerns the conditions for the production of knowledge. In cold situations, it is sufficient to rely on expert

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4 See Bauman, 2001; 2006 for example on the rise of ‘liquid’ societies based around the principle of uncertainty in hybrid forums. Beck (2009) is also a prominent for his thesis of the ‘risk society.’
advice, but in hot situations, experts cannot simply work on their own. Experts must also interact with non-specialists:

Society as a whole must agree to take action in order to produce an officially recognized body of knowledge and measurements—in the metrological sense—in the absence of which the existence and geography of the externalities cannot be regarded as defined; that is to say, without which measurements—in the political sense—cannot be taken with any legitimacy (Callon, 2008: 262).

It is precisely at this point at which ANT can be seen as a valuable tool for re-evaluating the relationship between the economist and the economy, and the ontological politics of markets and organizational devices of framing overflows. From here one can see the complexities of market relations and the organization of markets from a perspective which acknowledges the complex interactions and entanglements amongst actants, and moreover does not try to reduce the relations to a set of essential principles or a static ontology of power.

One final note on re-evaluating markets concerns spatiality. Typically, economics is conceived of in terms of its spatiality, meaning that the economy is on the ‘bottom,’ a foundation upon which rests the cultural, political and ethical spheres. Callon’s notion of frame and externality, on the other hand, paints a different spatial metaphor of the hybrid forum. For Callon, it is not just a question of what is determined and what does the determining, instead it is a matter of understanding what objects, peoples, ideas and practices are internal or external to the frame (Barry and Slater, 2005: 16). This explains why the classical tradition of economics places the political outside the frame of economic calculation. Callon has two interesting remarks to make on the spatialization of economics and politics. First, Callon holds a general thesis that calculation *cools* political relations, referred sometimes to his thesis of an anti-political economy, whereby calculation serves to neutralize political negotiations of markets and frames (Barry,
Second to this, and to complicate the matter a little, is that framing is essentially a political act subject to contestation. Thus, far from actually limiting the scope of the political, framing in many ways sums up and forms a surface upon which the contestation of markets, calculation and knowledge develops.

3.6 - CONCLUDING REMARKS ON ANT

ANT has made great efforts to argue that changes in the social and physical world are and need to be paralleled by changes in social inquiry, for the social sciences enact inasmuch as they describe the world (Law and Urry, 2004: 391). One manifestation of social inquiry which ANT has deemed unsatisfactory has been the distinction between the individual and the collective—a phenomenon unique to Euro-American Enlightenment theories of the social which has resulted into a sterile ad nauseum debate on micro/macro divides, flattening out debates into polemics of agency versus social structure. For decades disciplines such as sociology and economics have worked in a space which was created, and in turn perpetuated, the collective/individual divide, effectively displacing the problem into the analysis of epistemological constructs such as rules, conventions, tacit knowledges and institutions, and hence the same questions and in some ways answers are re-articulated (Callon and Law, 1997: 167).

From Foucault, it was established how power can be understood as embodied through a complex of material and discursive devices and led to the development of his thesis of biopower as a means of showing how it is possible to manage the conditions for controlling the productive capacities of society. This became clearly articulated through the ANT lens of emphasizing
organizational devices to enact relations of power. However, ANT tends to emphasize power as distinct from authority (Barnes, 1986), and moreover sees a number of important distinctions in the organizational structure of society, paying close attention to non-human entities as enacting social relations. Both Foucault and ANT theorists share similar concerns for ontological politics, specifically in that they share a belief in seeing discourse as performative, meaning that in describing reality, so too does one enact it, and in turn does one enact power relations. It is possible to therefore see Foucault as closely aligned with ANT, even in some respects a necessary post-structural precursor who was instrumental in developing critical reflection on science and society. Both Foucault and ANT conceive of the social as heterogenous, as Foucault argued that subjectivity is discursively produced. In a similar vein ANT emphasizes who entities are networks of heterogenous materials or similarly how entities are effects of networks. Thus entities are relational effects, their form and content is not fixed or pre-figured in the order of things. In turn, it follows that they do not necessarily have fixed boundaries, but instead such boundaries can be modulated. This theoretical model was in turn applied to the constitution of markets. For ANT perspectives on the economy, markets are not abstract entities, independent of human calculation. On the contrary, markets are relational actants subject to collective calculation. In terms of spatiality, markets are not foundational determinants of the political realm, they are topological systems of framing and calculation. That is, they are actants which bring various actants which affect the proximal relations of entities in a network. Calculation serves a dual purpose, both to cool political tensions in markets, but, at other times, can intensify such relations, culminating into scenarios of hybrid forums, whereby there is a lack of consensus in the market.
3.7 - THE STATE CORPORATE RELATION

If actants are relational, then this poses important questions for understanding power, especially if one considers the relational effects of the state and the corporate elite of society. Expressed differently, how the state can be viewed as an extension of the corporate sphere and the ruling elites who govern the processes of production, accumulation, legitimation and repression in society. Moreover, this becomes particularly important if, as Callon argues, we are in fact living in a time of dissensus in the market (the market as a hybrid forum). While ANT has made it clear that there must be a return to the actants themselves, a major question becomes, which actors? One possible strategy is to examine the ruling elites of society to see whether there are strong social bonds between the state and corporate sector. Domhoff (1979), a pioneer in the field of instrumental political economy and power structure research, argued that there are four general processes by which a power elite in the United States work with the aid of highly trained and carefully selected employees to dominate the state at all levels, primarily for the purposes of maintaining the collective interests of a system centered around the ideologies of free market capitalism. First, the special-interest process comprises the various means utilized by such actors to influence government in short-run needs, and includes for example the means by actants within the ruling class obtain favourable rulings such as tax breaks or policy programs which benefit their interests. This process thus encompasses a variety of practices oriented around the lobbying efforts of the corporate elite to encourage the state to enact measures which favour the interests of capital accumulation. Second, and of particular interest, is the policy-formation
process, the means by which general policies of interest are mobilized into specific actions. In this process, one sees the formation of state-corporate networks such as prosperity partnerships or similar networks of association in which the state acts as an arm for stimulating capital accumulation, effectively enabling the framing of markets to favour the interests of a minority elite. Third, the candidate-selection process concerns the ways in which the economic elite are kept in close proximity to politicians who are elected in office, further reinforcing the importance of lobbying efforts and memberships to exclusive clubs or schools. Here one would find close ties between high ranking politicians and the corporate sector, such as through corporate donations or by employing retired politicians in the private sphere as consultants or lobbyists for particular industries. Finally, and of deep significance for Domhoff concerns the ideology process, which, "involves the formation, dissemination and enforcement of the assumptions, beliefs and attitudes that permit the continued existence of policies and politicians favourable to the wealth, income, status and privileges of members of the ruling class" (Domhoff, 1979: 10). For Domhoff the ideology process is absolutely necessary to maintain the power elite, for otherwise without a system that accepts power elite policies, and a system which naturalizes the intense concentration of wealth and power into the hands of a minority elite, public opinion "might turn into a hardened class consciousness" which would oppose the ruling class viewpoint at every turn (Domhoff, 1979: 170). In short, Domhoff’s four processes illustrate how the state is intensely connected to the corporate powers of society, and how, despite the ideology of free market competition, the corporate elite skillfully manipulates the state to support the overall interests of capital accumulation and free market ideologies. The power elite represent thus the
abilities of corporate America to maintain its grip on the state and mitigate the potential for a coherent, antagonistic class consciousness to emerge.

Interestingly, Domhoff distinguishes an important conceptual and epistemic distinction between "ruling class" and "power elite." He does not assume a priori that any institutionally based group is by necessity part of the power elite, nor does he believe that the ruling class implies the general mechanics and processes of subordination (Domhoff, 1979: 13). Domhoff takes social class as the groundwork for the ruling class, and can be empirically ascertained from a number of social indicators such as disproportionate wealth compared to other social classes; a higher standing within the state on a variety of well-being statistics; control over major social and economic institutions; and finally domination over governmental processes of the country (Domhoff, 1979: 12-13). But, to empirically understand how the ruling class dominates society, Domhoff argues that it is necessary to introduce the concept of a "power elite" to understand the specific actors and processes involved in the elite control of governmental operations. Power elites are thus made up of the active members of the ruling class who dominate within each of the four processes Domhoff identifies. The concept of the power elite was first introduced by Mills (1956), but Domhoff modifies his definition, arguing that the ruling class members must be constantly rejuvenated by new members of the elite in the process of acquiring upper-class status. In other words, contrary to Mills, Domhoff does not believe it is possible to identify a priori that any institutionally based group is by definition part of the power elite; second, Domhoff argues that from the perspective of social class, it is possible to empirically ascertain which parts of the economy and government “can be considered direct outposts of the ruling
class by virtue of disproportionate participation by members of the power elite” (Domhoff, 1979: 14). Thus, although there are members of the ruling elite who do little to intervene in the field of politics, Domhoff can circumvent such arguments by introducing the concept of power elites, a heterogenous collection of specific economic and political actors, to denote the upwardly mobile leaders disproportionately engaged in shaping the political, economic and social landscape. Furthermore, and again to emphasize the importance of the processes of ideological legitimation, empirical evidence suggests that a power elite exists in order to maximize the overall interests of capital, not simply the entrepreneurial efforts of individuals or specific corporations. Social cohesion of the power elite is necessary to develop policy cohesion and a common ideology, evidenced by his understandings of the policy-formation process in which state-corporate working groups articulate the ideology of free market capitalism (Domhoff, 1979: 17).

It must be made clear that Domhoff rejects a pluralist conception of power. A pluralist ontology of power and governance suggests that the state in advanced industrial societies is an arena of bargaining amongst many interest groups, meaning that each group’s concerns are in some respects equally heard. Such groups constitute all segments of society "by crystallizing general public opinion about state policies into specific pressures on state agencies" (Mosco, 1982: 20). In terms of decision making processes one can chart a system of inputs (demands an supports) which are formulated into outputs (decisions), effectively arguing that power is distributed amounts various groups, and their participants each are limited in their access to resources and require the support of others to prevail in the decisions making processes of governance. For Domhoff, there are a number of empirical indicators which demonstrate how decisions making
processes of governance are concentrated to those who have greater access to resources
effectively enabling them to effect their will by, for example, creating or mobilizing lobby groups
to perpetuate their ideological interests such as free trade and market liberalization. In turn this
puts the pluralist ontology of power under scrutiny for the power elite demonstrate how certain
interest groups actually dominate decisions making processes by suppressing competing
interests. The power elite seek to maintain the overall functions of the system which primarily
concentrates decisions making processes and wealth into the hands of a minority elite, all whilst
maintaining the simulacra of a democratic sphere of governance. As he argues elsewhere, the
power elite differs significantly from mere corporate executives:

The power elite is the leadership group of a segmented capitalist class that is also a social upper class,
and the interests of that social class are both more general and more narrow than mere 'business' interests.
That is, the social class has a general interest in class and nation-state power, and there are specific
'business' interests for each class segment (Domhoff, 1990: 39).

The social cohesion of the ruling-class can be seen through a number of empirical indicators
such as private school attendance, overlapping club memberships that are nationwide in scope,
interlocking corporate directorships, and the interchange between corporate and public
appointees, sometimes referred to as the a revolving door trope by which individuals shift from
high office administrators to corporate lobbyists (Salzman and Domhoff, 1980). One need only
turn to the perpetuation of family estates, the enrollment of the power elite's children into the
best private schools and universities, retaining the best law firms in the country, the vast
interlocking of corporate executives into multiple board of directorships, horizontal and vertical

5 A particularly relevant example would be Michael Chertoff, former director of the U.S. Department of
Homeland Security, now directing security lobby and consultant firm ‘The Chertoff Group.’ Not only was
Chertoff instrumental in reconfiguring border security post-9/11, but a quick glimpse at his board of
directors indicates a complex interlocking with state agencies such as the CIA and all branches of the
military, coupled with major security firms such as L3 communications who have profited from the
commodification of border security.
integration of markets, and the active involvement of the power elite in social networks such as private country clubs and industry associations; these effectively demonstrate how the power elite are capable of forming close networks of social cohesion to mobilize their overall interests in both policy and ideology, particularly by showing the intense social relations between public and private spheres:

The overlaps and clique patterns found among organizations concerned with economic, social and policy matters suggest there is an institutional basis for the kind of generalized world view that is the very essence of class consciousness (Domhoff, 1979: 18).

One of the strongest indicators, one which in turn allows for an understanding of the ideological processes of the power elite, is through policy institutions and organizations such as the Council on Foreign Relations and other such business working groups and conference boards. This pertains to his thesis of the policy-formation process whereby various special interests join together and forge (however slowly) the general policies that will benefit the power elite as a whole. For Domhoff, the policy-formation process mobilizes the business heavyweights and experts in law and policy, the net result being the creation of hybrid organizations of business and policy experts where "national interest" is of concern—"non partisan" and "objective" are the passwords to maximize the interests of the capital (Domhoff, 1979: 62). The central units of this process are thus the official-sounding organizations such as the Council on Foreign Relations, the Committee for Economic Development, the Business Council and the American Assembly, "best categorized as the policy-planning and consensus-seeking organizations of the power elite… The policy-discussion organizations bring together, in groups large and small, members of the power elite from all over the country to discuss general problems… They provide an off-the-record, informal setting in which differences on various issues can be thrashed
out and the opinions of various experts can be heard" (Domhoff, 1979: 62). Through the skilled manipulation of democratic and free market ideology and discourse, the policy formation groups continue to advance the interests of the power elite, maintaining the concentration of wealth and power into the hands of a minority elite, and most importantly mitigating any potential threats, such as opposition from the working class. Here, national interest is synonymous with the interests of capital, effectively promulgating the ideology that the state and the corporation mutually benefit each other for the overall good of society, democracy, and freedom.

The role of policy-formation groups indicates a number of important considerations regarding the power elite and structure of power in society, indicating that such organizations are part of the routine functioning of state-corporate power. First, they provide evidence that many businesspeople, bankers and corporate lawyers—a corporate elite—are concerned with much more than their specific business interest but instead are concerned with areas of mutual interest such as the perpetuation of free trade ideologies and the annihilation of competing interests. Second, such groups demonstrate that leaders from various sectors of the economy and politics can coalesce to discuss systemic problems or crises of capital accumulation, effectively contradicting the assumption that the corporate elite is fragmented into discrete trade associations unable to unite except under highly unusual circumstances; such groups are thus not an aberration, but the norm. Networks of state-corporate power thus empirically demonstrate how power is concentrated in society and how the power elite can maintain their interests even in times of crises. Third, it suggests that members of the power elite appointed to government are equipped with "a general issue-orientation gained from power-elite organizations which are
explicitly policy oriented" (Domhoff, 1979: 122). In other words, how those appointed to
government are most sensitive to the concerns raised by big business over others. Fourth,
demonstrates the role of experts and expert knowledge in the organization of policy-formation
processes, particularly in mobilizing the calculative practices of specialized knowledge in
framing market failures. Through the skilled use of specialized knowledge and calculative
frameworks, markets and market forces such as supply and demand can be shaped and
controlled. Finally, it demonstrates how government, including its higher stratum, are
dependent upon the policy-planning organizations for new policy initiatives, meaning that the
state apparatus is not autonomous from the vested interests of the corporate sphere (Domhoff,
1979: 123).

In terms of methodology, power structure research (instrumental political economy) is distinctly
similar to ANT and proceeds by the tracing of individuals, a method which Domhoff notes
caused at first great discomfort amongst social scientists for, at the time, it did not fit into the
standard academic rubric, being more akin to investigative journalism than academic research.
Domhoff, who sought to synthesize an institutional analysis with that of class conflict (Domhoff,
1990), was influenced primarily by Michael Mann's theory of social power which does away
with notions of a bounded society or totality, instead favouring an understanding of social
organization in terms of four overlapping and intersecting socio-spatial networks of power, a
methodological strategy which encompasses ideological, economic, military and political
relationships. (Mann, 1986: 2; Domhoff, 1990: 3). In other words, Domhoff sought to establish
a network analysis as both a methodological strategy (a tracing of actants) and as a theoretical
stance which sought a non-reductionist account of socio-spatial networks of power, demonstrating the social cohesion of the power elite in influencing public policy through a variety of policy frameworks and processes. From there, Domhoff rejects liberal (pluralist) political philosophy found in neoclassical economic theory in that he does not black-box the market as an autonomous entity independent of state corporate influence. Domhoff takes the principle of market uncertainty and calculation sincerely when analyzing the organizational structure of the United States as existing within a deeply uncertain environment, thanks to the constant influence of external actants such as corporate leaders (Domhoff, 1980: 21).

The utility of the instrumental approach has been shared by political economists of communication, with a few modifications along the way. Mosco (1982) demonstrated the utility of an instrumental approach by specifically examining the telecommunications industry in the United States, but then expanded on Domhoff’s instrumental approach with a structuralist perspective of state-media relations, positing many similarities between the two:

Like the instrumental view, structuralism starts from the idea that the state serves capital. But a structuralist perspective on capitalist society focuses less on the process of class rule, on how the state works with a dominant class to advance its interests. Rather it emphasizes the why of class rule. Structuralism considers the vital functions that the capitalist state must satisfy in order to maintain the system on which the state depends for its survival (Mosco, 1982: 38).

Structuralism considers the vital functions and necessity to advance capital accumulation, legitimation and repression. The state, in other words, depends on facilitating capital accumulation, without which it would not have the material resources to survive. It must develop a system of legitimation, an ideological system of popular belief to maintain the emotional resources necessary to survive, and actively repress opposition from those perceived
as threats to the existing order. Structuralist political economy considers how various actants, particularly the state which it ascribes a certain degree of autonomy, are concerned with maintaining systemic functions broadly conceived of as the long-term interests of the capitalist system. The state must "avoid overidentification with the short-run interests of one particular sector of the dominant power bloc so that it can undermine opposition and advance the long-run interests of the capitalist system" (Mosco, 1982: 38). As such, although there may at times be disagreement or contradiction between the various actants involved in the processes of accumulation, legitimation and repression, nonetheless the structuralist approach maintains that such challenges take place within the context of fundamental agreement that the system of free market enterprise is the best and only realistic framework within which to operate (Mosco, 1982: 44). The state then can be understood as autonomous insofar as it serves the long term interests of capital accumulation, in other words the processes necessary to guarantee its survival. Contrary to the pluralist ontology of political economy, the structuralist approach recognizes how conflict and differences exist amongst competing market actors which make it especially important for the state to coordinate relationships amongst the dominant power bloc (Mosco, 1982: 45).

Attempts to fuse an instrumental approach to structuralist political economy have been noted elsewhere, and moreover point towards the increasing role of translational policy planning organizations as networked strategies for mobilizing the power elite. For Carroll and Sapinksi (2010), one can observe the rise of corporate interlocks among the world's largest 500 corporations since the mid 1990's, producing a transnational capitalist class that is regionally
uneven. In addition to such structural consolidation of capital, Carroll and Sapinski argue that the role of transnational policy-planning bodies has become more important in mobilizing the power elite in constructing consensus within business communities, "that enables corporate capital to project influence in political and cultural domains that transect national borders. Such groups comprise a multi-organizational field, within what has been called global civil society, from which have emanated visions and policy proposals of a broadly neoliberal character" (Carroll and Sapinski, 2010: 1). This rise of such policy forming organizations coincides with the increased corporate interlocking and overlapping memberships among directors of the world's leading corporations and transnational policy boards. In ideological terms, Carroll and Sapinski side with Domhoff, arguing that it integrates corporate elites into a common "culture" or shared world view anchored in the priorities of transnational capital. Thus, policy boards function as a strategic networking of power elites as they serve as venues for discussion, strategic planning, discourse production and consensus formation on specific issues; they are places by which the power elite can respond to various crises, including crises of legitimacy; they serve as advocates for "specific projects of integration" and finally they provide "bridges connecting business elites to political actors" and elites in other fields such as international organizations, military, media and academia (Carroll and Sapinski, 2010: 502-3).

Of all such special projects for integrating the state and capital accumulation, the deployment of information technology arguably trumps over all others in virtue of its unabated penetration into every layer of society. For Schiller (1984), the increasing penetration of information technology is juxtaposed by the increasing volatility of global markets. More importantly, this also
demonstrates a continued penetration of corporate power and corporate thinking in state governance, to the point even where it becomes difficult to suggest alternatives in matters concerning public policy. Schiller’s basic research question asks if information technologies provide a restoration of general systemic growth and stability, one which approximates the post-war period, or conversely, is it that developments in information generation, processing, storage and transmission will actually intensify strains in the system, creating new problems that make stabilization unrealizable for advanced market economies. In other words, to what extend does information technology mitigate global crises? Furthermore, Schiller considers how global communication has served to strengthen the private sector’s grip on society, from labour to culture, such that the corporate sphere now holds special dominance over the productive capacities of society, in short the production of life itself.

Schiller presents a complex argument which demonstrates the increasing penetration of information technology into global and national governance to advance an overall structural approach to the political economy of communication. This penetration of information technology has in turn reconfigured the productive capacities along the lines of a highly integrated but unevenly distributed global marketplace, reconfiguring the production of life and culture along the way. A growing trend has been observed since the 1980s which values the role of information technology at limiting crises and reducing the frictions in the market, effectively developing a global marketplace of seamless market integration across territory. More importantly, for Schiller, the rise of information technologies signals the increasing role of the private sector in government, marked by the rise of the transnational corporation (TNC). In this
relationship between nation-state governance and a handful of global players, the state acts as a guarantor and insurer for developing information technology, taking all risks and financing the outlays from public coffers to develop massive information infrastructures and global communications projects, then the TNCs take over when market uncertainty is controlled the profit picture brightens:

once the technology has been tested and is in place, capitalist decision-making at the level of the transnational or national enterprise, becomes the guiding feature of the new information sector. Production is geared to profitability, and market criteria override any other concerns. The world market cannot and does not concern itself with French unemployment, Canadian workers displaced by robots, or English plant closings (Schiller, 1984: 6).

Beyond the erosion of state government, the commercialization of information requires the commodification of information and further enhances the power of transnational firms and dividing society into “haves” and “have nots” of information. This proliferation and commodification of information across the world places a heavy emphasis on transborder data flows, constituting an indispensable part of the everyday maintenance of the global commerce and financing. By significantly reducing constraints such as time and space in market forces, transnational corporations can now calculate risks in real time and respond reflexively to market forces, overflows and externalities of calculation. In turn, this risk-centered form of calculation based on global markets has also penetrated into the public sphere where information technology is being hailed as a new evolution in promoting greater efficiency, productivity, and problem solving abilities of citizens. In short, it constitutes a highly effervescent discourse on the relationship between technology and society, hailing technology as the key to facilitating democracy and efficiency.

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6 This thesis of information creating a global division of labour centered around access to information has been taken up by numerous scholars, see Lash (2002).
Its social potential, however, must be contextualized. Schiller argues that information technology emerged within a framework of a military industrial complex, the primary actants who have encouraged the development of information technology and its primary benefactors. Virtually every advancement in information technology, from transmission, storage and processing has been made possible thanks to the generous funding given to transnational corporations by the (United States) military. Once the technology has been firmly entrenched into military use, it later penetrates into other facets of society and culture, but through its controlled release by the corporations, particularly corporations centered around marketing and media—corporations who serve to organize and commodify human beings into discrete markets to promote consumption. Thus, although there is an effervescent belief in the potential for information technology to promote the overall welfare of the population and manage or reduce the impacts of economic crises, in fact:

Surveillance, intervention, and marketing are the near-certain outcomes of the utilization of new communication technologies, domestically and globally. The American public, half of which does not bother to vote in national elections, hears the good news that electronic referendums are around the corner. Sitting at home, in front of a domestic information utility, so called, the happy citizen will be able to exercise innumerable inconsequential choices on an electronic console in the living room. This, we are told, constitutes the most advanced form of democracy (Schiller, 1984: 23).

The increasing surveillance and sorting of citizens, either for the purposes of control or marketing suggests, in other words, that those who have access and better still control over the flows of information in turn determine the biopolitical ordering of social life. The processes, structures and logic of social welfare has become informationalized, transnational corporations being the primary benefactors of this arrangement. Those who have a say in the production, dissemination and storage of information, in short those who have the capacity to access information also play a central role in determining the overall conditions for the production of life on Earth. Of equal importance, when one considers the overall concentration of information
and communication into a handful of extremely large and powerful transnational media
corporations, when information is a commodity used to organize people into markets, the
chances for democratic institutions becomes severe. Profit is the only certain interest of such
media conglomerates, and the production of information must necessarily follow along the lines
of market logics. In other words, those voices and idea deemed not-profitable or contrary to the
logic of the system are deliberately excluded. Only those who can afford the vast sums of money
required to either establish a communication outlet such as a newspaper or television station, or
conversely those with the capital to purchase space inside such outlets, usually in the form of an
advertisement, are allowed to participate in the forum of such “democratic” institutions of
communication.

The importance of information technology cannot be underscored when attempting to understand
current logics and structures of the power elite, the constitution of markets and the biopolitical
arrangement of society. It is important to remember that information and communication
constitute the basic building blocks for the production of meaning in society, that is, the
production of consciousness itself is in some respects determined by the structures and
institutions which control the communicative capacities of a society. Communication is a social
process of exchange, whose product is the mark or embodiment of a social relationship. It is not
just the transmission of information but the constitution of meaning which concerns the political
economy of communication (Mosco, 2009: 67). As such, an approach to the political economy
of communication offers a perspective which is non-reductionist as communication itself is
situated within larger institutions of economics, politics and culture. In other words, “the
political economy approach to communication places its subject within a wider social totality and therefore tends to be especially concerned with avoiding essentialism” (Mosco, 2009: 67). This becomes even more so when one considers that communication today is global in its scope and is becoming evermore concentrated into the hands of a power elite. To further articulate the overall concerns of actor-network theory, the relationship between agency and social structure becomes paramount, and further demands a non-reductionist approach.

The overall summary can be stated as follows. First, Foucault’s thesis of biopower and governmentality was instrumental in beginning the post-structuralist tradition and helps consider how various actants are engaged in managing the productive capacities of life itself. Although Foucault was providing a historical account of the history of the present, his real strength resides in the synthetic concepts which he develops in his analysis, helping provide a stronger understanding of the relationship between ways of thinking and social action. Most importantly, Foucault’s thesis of topology provided a valuable way of understanding the uneven distribution of elements in space and spatial flows.

Second, the exploration of Actor-Network theory introduces important principles of science and technology studies to show the overlap between science, technology and society. This in other words helps demonstrate the mutual constitution of social life, knowledge and practice. ANT’s overall approach stems from semiotics, that is, how actors are constituted through and by the relationships they hold with others, human or non-human. Finally, this approach was then applied to the study of markets to demonstrate how markets themselves are not autonomous but
actually constituted by a heterogeneity of market practices, particularly those of calculation by economic actants such as economists or corporate players. This approach thus presents an entirely different spatiality of markets which seeks to understand how calculation frames entities into discrete markets, effectively placing certain actants in closer proximal relation to one another.

Third, the underlying issue of power, specifically its concentration in contemporary society and transnational politics, was introduced through an exploration of instrumental political economy. Here Domhoff’s concept of the power elite was introduced to demonstrate the organizational potential of a minority elite to influence, if not determine, transnational politics. From here, an approach to structural political economy was used to enhance the instrumental approach by exploring the political economy of communication and information technology. It was argued that such technologies, and more importantly those who develop such technologies, play an increasingly central role in determining the productive capacities of society. It is moreover the general logic of the transnational corporation, maintained by a power elite, which influences transnational governance. One sees this most persuasively in the development and push for transnational data flows. Such flows must be maintained if the power elite desire to maintain their grasp. Schiller brings awareness to the role of TNCs and transborder data flows, placing them in the context of a global marketplace which is continually being integrated via information technology. From here, Mosco’s summary of the importance of communication technology is one which demands a non-reductionist approach. For Mosco, it is possible to connect the political economy of communication into the production of meaning in society, effectively
demonstrating the power of communication in organizing the collective capacities (the biopolitical strategies) of society.
CHAPTER 4: Methods

4.1 - ANT AS METHOD

A major emphasis so far has been on returning to the actants themselves. Domhoff’s power structure research, for example, follows a sociological method which in many ways resembles investigative journalism. Domhoff turns to the subjects themselves, and produces inquiry which traces their relations with others, culminating into his thesis of the power elite. In a different vein, Foucault's overall method is by and large discourse analysis, and follows the way in which certain actants utilize specialized knowledge to legitimate certain practices such as disciplinary techniques. For Foucault, a return to the actants involves examining what specific actants said about a particular subject such as the criminal type, then plotting the way in which such discourse changed over time. Actor-network approaches have most certainly identified the return to actants as an important stream for sociologists, and a number of important methodological considerations have likewise emerged. In turn, these considerations have informed the bulk of this research. There are a number of debates within ANT concerning the relationship between method and theory and there are a variety of different flavours of ANT to sample.

On one end, ANT is not really a bonafide theory, but actually is better seen as a series of ethnomethodological considerations for the sociologist, considerations which in turn prescribe important ontological distinctions such as between distinctions between ‘nature’ and ‘the social.’ For Latour, it is not the sociologists job to speak for the actants themselves, his interest is not one which makes sociologists as legislators of the social. This, incidentally, means that ANT is in
some respects a misnomer as it is not a theory which tries to ascribe some definite substance to the social:

‘Actor’ is not here to play the role of agency and ‘network’ to play the role of society. Actor and network—if we want to still use those terms—designates two faces of the same phenomenon, like waves and particles, the slow realization that the social is a certain type of circulation that can travel endlessly without ever encountering either the micro-level—there is never an interaction that is not framed—or the macro-level—there are only local summing up which produce either local totalities (‘oligoptica’) or total localities (agencies) (Latour, 1999: 18-19).

The notion of the network then, which has become embraced in recent decades as a cultural form and general model of society (Castells, 1996), is simply not sufficient for Latour’s conception of networks. For Latour, networks as a spatial metaphor concern more an understanding of framing and summing, in turn forming the kernel for ANT’s ethnomethodology. This becomes particularly important, from an ontological and epistemological level, or concerning understandings about what exists and how we know what exists.

Latour’s interest in ANT is far more a methodological perspective for doing research which circumvents stale debates in social science concerning first the relationship between the social scientist and their object of inquiry, and second, concerning epistemological reliability. For Latour, it is absurd to reduce epistemology into a debate concerning the nature of knowledge, particularly if such a debate results in a stalemate between absolute and relativist epistemology. In other words, from an ontological perspective, it simply does not matter whether or not there is ‘one’ or ‘many’ realities, the job of ANT is to explore why or how the very possibility of such a question has itself become so important to social scientists. As Latour explains it, "ANT can gorge itself on realities without having to spend a single moment excusing itself for not believing
in an 'outside' reality. On the contrary, it is now able to explain why on earth the modernist had
the bizarre idea of making reality 'outside'" (Latour, 1999: 23).

If Latour represents one end of the ANT spectrum whereby we can understand ANT as a sort of
methodological ‘toolbox’ for doing social research, paying close attention to
ethnomethodological considerations between researcher and subject, then the question becomes
what sorts of tools exist in the ANT toolbox? Callon and Law are instrumental in providing the
tools for the ANT repertoire, shifting from methodology to method. Law’s exploration of the
TSR-2, for example, demonstrated a much more sophisticated analysis of studies in socio-
technical design by exploring the complexities of heterogenous materiality, sociotechnical
scenarios and obligatory points of passage in organizational studies. By allowing technical
objects to speak for themselves, Law was interested in showing how the artifacts themselves
create new ways of framing the design of an aircraft, and also how political imperatives intersect
within technical design, effectively demonstrating how the path of design to construction is
mired in human and non-human complexity irreducible to stale theories which hypostatize the
social. To probe Law’s perspective on ANT deeper, his emphasis on epistemological relativism
takes the stance that ANT is not exactly a theory in the traditional sense for it lacks the traditional
ontological boundaries which would ascribe distinctions between real and non-real:

...attempts to convert actor-network theory into a a fixed point, a specific series of claims, of rules, a
creed, or a territory with fixed attributes also strain to turn it into a single location. Into a strongpoint, a
fortress, which has achieved the double satisfactions of clarity and self-identity. But all of this is a
nonsense for, to the extent that it is actually alive, to the extent that it does work, to the extent to which it
is inserted in intellectual practice, this thing we call actor-network theory also transforms itself. This
means that there is no credo. Only dead theories and dead practices celebrate their self-identity. Only
dead theories and dead practices hang on to their names, insist upon their perfect reproduction. Only
dead theories and dead practices seek to reflect, in every detail, the practices which came before (Law,
1999: 10).
Thus, as a theory which is alive, ANT is much more topological. Law’s omnipresent theme in his works pertains to the semiotics of materiality, also known as relational materialism, the study of how objects become durable, how they obtain their form, as a result of their relation other entities. As such, Law’s emphasis becomes understanding how networks can form, and re-form actants, developing his thesis of topology:

Topology concerns itself with spatiality, and in particular with the attributes of the spatial which secure continuity for objects as they are displaced through a space. The important part here is that spatiality is not given. It is not fixed, a part of the order of things. Instead it comes in various forms... Indeed, the notion of 'network' is itself an alternative topological system. Thus in a network, elements retain their spatial integrity by virtue of their position in a set of links or relations. Object integrity, then, is not about a volume within a larger Euclidean volume. It is rather about holding patterns of links stable (Law, 1999: 6-7).

Topology, from a methodological perspective, means that Law is showing how ANT can be used as a historical tracing of actants and networks, meaning that ANT is not exclusively concerned with actants who exist ‘in the present.’ Quite the opposite, it can become a tool for understanding how a particular actant remains stable over time. This in many ways helps explain ANT’s fascination for understanding failures such as the TSR-2, or Callon’s exploration into the domestication of scallops. Second, like Latour’s ethnomethodological imperative, he is also equally concerned with abandoning the lines which separate social entities from ‘non-social’ ones, particularly technological artifacts, for, "[a]ny attempt to separate the social and the non-social not only breaks the original methodological principle of following the technologist. It is also, quite simply, impossible because the social runs throughout the technical and thus cannot be separated from it. We cannot, and should not wish to, avoid the technical" (Law and Callon, 1988: 285). Topology is therefore an instrumental consideration for understanding how ANT bridges theory and method together for understanding the constitution of actants specifically because it requires the researcher to play an active part in tracing or re-tracing the actants.
4.2 - DATA COLLECTION

A few remarks on data collection are in order to understand the tracing of actants. Data compilation began during the summer of 2010, while working as a research assistant for the Queen’s University Surveillance Studies Centre on a project examining the private sector's access to the personal information of traveler's across territory. This project, funded by the Office of the Privacy Commissioner of Canada, entailed a number of different points of entry to ascertaining the extent of the private sector's involvement. Overall, the goal of the project was to produce an overview of the corporate sector’s involvement in North American border control. Research began through news media and industry related publications; using the Proquest Newsstand database of major Canadian daily newspapers. News reports were compiled into an index of approximately 170 relevant articles, spanning a little over a decade from about January 1, 2000 to June 1, 2010. The compiled list of relevant news reports, the article index, took approximately one month of data collection and analysis. Like any online data query, hyperlinks were followed and key terminology was modified on an ad hoc basis. As such, the initial data collection was largely a semi-structured process which yielded an abundance of information and leads to follow.

At this point some analysis had to be done. Because the project was concerned with providing an overview of the private sector's involvement with passenger information, and by extension technologies concerning border management, the article index needed to be refined into a smaller data set. A new index was subsequently created, the firm index, which extrapolated any firms
mentioned in the news reports, or any firms which were discovered by following clues or hyperlinks. The firm index, comprised of 59 entries, by no means an exhaustive list of every corporation or firm involved in this market, comprised the second data-set used for the project to ascertain the corporate landscape. Nonetheless many of the key players in this market were discovered empirically. The firm index also included corporate information on: its country of origin; name of the CEO or other such figurehead; relevant products manufactured; any known contracts awarded to firms by either the Canadian or United States government for relevant border technology, particularly screening technology; and also corporate developments such as mergers, acquisitions, and even the rare accounts of corporate crime or scandal were included.

Being required to submit regular progress reports for the project, the data presented by both the article and firm indexes inevitably identified business organizations such as the Canadian International Council and the Canadian Council of Chief Executives as active players in the trend towards increasing corporate presence at borders. From here, it did not take long to identify the Security and Prosperity Partnership of North America as a connecting thread throughout various news articles, especially as the SPP was a focal point in the border harmonization debate from 2005 to 2009. It then became a matter of collecting all relevant reports published by the SPP. In terms of academic research, there has been little attention paid to the SPP by sociologists, and only a handful of relevant articles have been published within the broader context of social sciences, including geography and political studies (chapter 6 provides an overview of these studies). At this point it was becoming apparent that in addition to the SPP’s highly controversial status, a thoroughly sociological account had been in many respects neglected, effectively
identifying a gap in the research. Moreover, the previous research, although highly important
was nonetheless felt to be overly reductive in its analysis for a number of reasons. For example,
the articles were written or published whilst the SPP was still in operation and tended to reduce
its analysis into an oversimplification, relying on grand narratives for providing the bulk of the
explanation. Thus a more inclusive, non-reductionist account written after the SPP had been
dismantled could significantly improve the existing literature.

Data collection was drawn largely from the Government of Canada's website which contains
number of sections detailing the types of working groups which the SPP established, along with
any findings or reports the SPP published from 2005 to 2009. Interestingly, the United States’
SPP website has been inaccessible since the beginning of this project, or put another way,
shortly after the SPP was dismantled. This same case holds for the Government of Mexico,
whose SPP website was also found to be devoid of content. This is not to suggest some kind of
government ‘cover-up’ or other such conspiracy, but it is puzzling to note how quick the U.S.
and Mexican governments have been to wash their hands of the SPP. To date, it is still unclear
why this was the case, nor for that matter why the documents are still available on the Canadian
front. Nonetheless, despite that the reports were drawn exclusively from one government, there
has been no evidence to suggest that there are missing documents in virtue of the fact that some
of the sources no longer exist. For example, the previous studies on the SPP (see chapter 6),
though few, still used the same reports. Also, some of the documents are written in English,

7 http://www.spp-psp.gc.ca/eic/site/spp-psp.nsf/eng/home
8 http://www.spp.gov/
9 http://www.aspan.gob.mx/
French and Spanish giving reason to believe that the same documents were often published concurrently throughout the three states. As such, it is unlikely that there are any unaccounted for documents in lieu of the decreased availability of sources.

There are a few considerations worth mentioning on the SPP data collected from the Government of Canada. First, this research opted against conducting any face-to-face interviews of any kind with relevant subjects who were members of the SPP in one degree or another. Instead, the data was drawn exclusively from published reports made freely available by the SPP. There are a number of reasons for justifying this decision. The most immediate concern, of course, is pragmatic. From time constraints to a general lack of access to the key actors involved in the SPP, it was clear that for the purposes of this research it was going to be impossible to gain face time with any key actants involved in the SPP. During the SPP's operation, it was routinely criticized by public interest groups such as the Council of Canadians for a lack of transparency or a lack of public input into the decisions making process. As such, it was doubtful from the start that such actants would be willing to be interviewed for this research, particularly as this approach is informed largely by critical theory.

The decision to rely exclusively on published reports also follows a epistemological consideration established by Callon (2002) where he argues that collective and organizational studies have typically neglected studying the tools used by actors. Such tools can include published reports which, from the perspective of network theory, represent the combined,  

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10 For example, the CIC has a website *Integrate This!* which challenges the SPP and North American integration more broadly: [http://www.canadians.org/integratethis/](http://www.canadians.org/integratethis/)
calculative efforts of a heterogeneity of actants; meaning that such reports are usually written by several hands and require negotiation amongst the actants in the network. Like the TSR-2, the process of conceptualization to construction is not pre-determined; writing devices are mediating narratives, situated in between the actor and network. For Callon then: "…writing devices that put organization-in-action into words are the product of a collective effort that involves conflict and leads to intense negotiation; and such collective work is never concluded, for writing leads to endless rewriting" (Callon, 2002: 203). Put another way, "[t]he extraordinary effectiveness of writing devices derives from the fact that they solve a theoretical question--in practice" (Callon, 2002: 200). The emphasis then on hermeneutics thus represents a key method of this study in which the document itself is treated as a non-human actant; this analysis of the SPP thus allows the documents released to the public by the SPP to ‘speak for themselves.’ The document’s released by the SPP, in other words, show how the SPP was trying to mobilize the public into stable arrays which would favour the SPP’s political and economic agenda.

Data was also collected on the North American Competitiveness Council typically in the form of reports and membership lists. What is interesting about the NACC is that it does not have its own official, centralized website. Instead the NACC is articulated through its various secretariats (see §5.3) and it is on those websites where one can find relevant documents published by the NACC. Of which, there are only two known documents of substance, published in 2007 and 2008 in which they make recommendations to the SPP, but by and large the 2007 document was deemed far more important as there were little differences between the

11 See for example the NACC on the Council of the Americas: http://coa.counciloftheamericas.org/group.php?id=10
2007 and 2008 reports. Aside from this, there are a host of small press releases by the NACC which add little substance to the overall findings.

4.3 - DATA ANALYSIS

In a general sense, social science research is a process of creating representations of social life; descriptions that incorporate relevant ideas, analytical frameworks and evidence about social phenomena into coherent pictures of social life (Ragin, 1994: 6). Sometimes, this is done primarily through deductive techniques whereby the researcher paints a picture by starting first from general principles, usually a social theory, then proceeds to draw out an analytical frame in order to constitute a general way of seeing their subject matter. Other times, the opposite is done whereby the researcher begins from inductive principles: gathering evidence first in order to construct an image of their subject (Ragin, 1994: 61). In this research, data analysis followed an iterative method that emphasized a discourse analysis of the SPP documents: a dialectical process of data gathering and analysis in order to continuously refine an image of the SPP. Because the original intention of the research was to provide an overview, data collection and analysis continuously reinforced and re-examined one another. Data analysis had to move in and out from inductive and deductive principles. At times the analysis of the SPP was drawn out from the evidence collected (the SPP reports), other times the SPP was understood by testing it against particular theoretical and analytical frameworks, the deductive technique. Moreover, as a key method was discourse analysis, inspired largely by Foucault, it was deemed that this method was highly compatible with the key consideration of returning to the actants themselves, to understand how the SPP framed themselves and the key issues they sought to address.
The iterative method of continuously refining an image of the SPP made practical sense for a number of reasons, but most importantly, it was chosen because the SPP was clearly an example of a highly uncertain network, a hybrid forum as Callon would call it, and as such demanded a technique of data analysis which was non-reductionist. As Callon argues, in terms of data analysis one must follow the principle of ‘free association’ whereby instead of imposing a pre-established grid of analysis upon the entities and their relationships mobilized by the actors, the observer follows the actors in order to identify the manner in which these define and associate the different elements by they build and explain their world (Callon, 1986: 201, sourced in Law, 2004: 102). Moreover, the analysis of data was trying to paint a picture of the SPP as informed by both evidence and theory. This balance serves as a reminder that the act of doing social research proceeds from an artful science; one which realizes that any attempt to produce a fixed picture of the SPP will always be incomplete for it could not be a social science:

Human variation and the fluidity and open-endedness of social life require a science that is not static or fixed. These features of social life demand a science that can capture, with clarity, what is going on in the world and with people, while at the same time representing a good deal of its diversity -- a variety that is endless and ever changing. Of necessity, the social science must make room for imprecision and incompleteness in the study of human affairs (Ragin, 2004: 162).

This is not to suggest one must abandon ship. Instead, such hybrid forums not only enable the realization of the fluidity of social life, but in turn demand a return to the theoretical considerations of social analysis by emphasizing the importance of inter-disciplinary work. The SPP as an international and transnational network of both state, corporate and socio-technical actants, requires by necessity a non-reductionist theoretical framework.
Analysis of data benefits best from the iterative method as it allows the researcher to produce a refined image and set of epistemic concepts, effectively permitting an amenable understanding which values the diversity of theoretical frameworks by which a particular subject can be studied with. Iteration also follows a broader theoretical concern of political economy and international sociology which has sought to recognize the institutional constraints of discipline-centric epistemes, and how researchers might go about circumventing the problems of resolving particular frameworks into one another. Because social life is incredibly complex and cannot rely on a fixed science or method, the alternative approach is the careful synthesis of social analysis in order to resolve long standing antagonisms between various disciplines. Such distinctions among all fields of scholarship are becoming increasingly fluid and contested, especially as a result of broad historical dynamics that have made it more and more difficult to remain entrenched within assumptions about any socio-political order without considering its relations with other orders. An important push in international political sociology is thus the incorporation of multiple theoretical streams to synthesize a more encompassing form of data analysis. This has been accomplished perhaps best in political economy which, even from an international perspective, has been particularly successful at establishing a means of resolving the antagonisms between the state and the market (Bigo and Walker, 2007: 2-3).

The analysis was concerned with searching the SPP documents for specific issues and concepts pertaining primarily to border surveillance, border harmonization, and the mobilization of socio-technical artifacts in this strategy. In a general sense, because the SPP is both, yet neither, a wholly public or private network, it was also important to analyze the data in terms of how the
SPP presented itself in their documents. The continued insistence on the mutual inclusion of security and prosperity denotes a carefully thought out strategy which tried to convince the public of the SPP’s need and legitimacy within the purview of international relations. One of the SPP’s most immediate concerns was the establishment of legitimacy in the public eye, and required it mobilize itself in a carefully thought out approach so as to create the impression that it was in North America’s best interest. In turn, this required that it had to construct a specific idea of what North America is or ought to be in the global sphere. Thus, the iterative analysis of the SPP documents sought to ascertain how the SPP mobilized itself and the public, and moreover to see whether or not it changed over time. This mobilization constitutes a basic kernel of ANT as it recognizes that networks must continuously be re-articulated by actants in order to re-stabilize itself, particularly in the face of de-stabilizing actants. Hence, the analysis was interested in seeing whether or not the SPP itself changed over time, particularly as new actants from the private sphere became increasingly co-opted into the network.
CHAPTER 5: The Security and Prosperity Partnership

5.1 - OBLIGATORY POINTS OF PASSAGE

While free trade was said to make borders more fluid, especially by facilitating the flow of commodities, resources and labour across North America, since 9/11, securitization has proliferated immensely across borders marked by more scrutinizing security checks, surveillance and social sorting (Lyon, 2003). As the story unfolds, while free trade was supposed to “thin” the border, securitization in some respects “thickened” it, motivating a variety of concerned groups from various political and economic stripes to articulate a need to address this problem. Perhaps the most obvious point to note proceeds by drawing out the developments in the relationship between the public and private sectors. For some, this inevitably leads to a discussion of neo-liberalism, marked by the gradual erosion of social support mechanisms in favour of market based approaches to state administration, epitomized perhaps best by Bauman (2001) who argues that: "It is no longer true that the 'public' is set on colonizing the 'private'. The opposite is the case: it is the private that colonizes the public space, squeezing out and chasing away everything which cannot be fully, without residue, translated into the vocabulary of private interests and pursuits" (Bauman, 2001: 107). For Cameron (2007), the Canadian economy has usually been characterized as being made up of two sectors: the market sector under private ownership and the public sector financed by taxes and public borrowing. However, Cameron argues that there is in fact a third sector, or social economy, comprised of not-for-profit and non-governmental organizations (NGOs) of all sorts in which this third sector

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arises to meet needs that go unfulfilled in both the private and public realms (2007: 67). Thus, in a certain respect, considerations of the relationship between the public and private sectors, and in turn inviting discussion on the role of alternative actants such as NGOs, is also about rethinking the nature of the economy itself.

Contemporary discussions of the global integration of markets and Nation-states places such groups at the forefront of an emerging global Empire. Hardt and Negri (2000) ascribe particular importance to the emergence of NGO organizations, or quasi-state groups. Because the coercive mechanics of empire rely on both military force and moral right, NGOs function as a "parallel strategy" from below, presenting the community face of neo-liberalism, NGOs, characterized broadly as humanitarian organizations are in fact those who have come to be among the most powerful and prominent organizations in Empire; as their political action rests on a universal moral call, what is therefore at stake is life itself (Hardt and Negri, 2000: 313). As they argue further:

There is no single locus of control that dictates the spectacle. The spectacle, however, generally functions as if there were such a point of central control... The spectacle of politics functions as if the media, the military, the government, the transnational corporations, the global financial institutions, and so forth were all consciously and explicitly directed by a single power even though in reality they are not (Hardt and Negri, 2000: 323).

While Hardt and Negri focus on the role of NGOs with specific attention payed to those of the “humanitarian” variety, there are in fact other similar entities, neither wholly belonging to the public or private sector but, as Cameron argues, having the potential to reshape our understandings of political economy, particularly as they draw out the specific importance of borders and harmonization as a site of power struggle.
Such harmonization represents an example of collective calculation where a heterogeneity of actants calculate and frame the overflows of markets, and moreover represent an excellent example for demonstrating the role of the power elite in influencing public policy. The most salient and most clearly identifiable group which has pressed for border harmonization accords in North America has been the Security and Prosperity Partnership (SPP). Launched in 2005, the SPP is a trilateral initiative centered around maximizing the economic innovation and competitiveness of North America, while also safeguarding its borders from external threats.

The SPP builds upon a number of pre-existing elements, such as the Canada-U.S. Smart Border Declaration, the Canada-Mexico Partnership, and NAFTA, particularly Article 102, Section (f) which states that in addition to facilitating free trade and economic growth in North America, NAFTA’s general objective is to:

- establish a framework for further trilateral, regional and multilateral cooperation to expand and enhance the benefits of this Agreement (NAFTA, 1992).

There is evidence to suggest that the SPP is a descendant from earlier attempts of bi-national economic co-operation following 9/11, specifically, the North American Security and Prosperity Initiative (NASPI) launched in 2003 by the Canadian Council of Chief Executives (CCCE). NASPI sought to advance a five point agenda involving border harmonization to increase the efficient movement of people and goods between Canada and the U.S., the maximization of economic efficiencies through regulatory harmonization, the development of a comprehensive resource pact which would have effectively liberalized Canada’s natural resources to the open market and regulatory compatibility, the re-building of Canada’s military and the creation of a new institutional framework based around joint commission models for increased co-ordination and conflict resolution (CCCE, 2003). By 2004, NASPI had released a series of
recommendations from its working group on expanding Canada-U.S. relations in the 21st century, arguing that bilateral relations must not simply move beyond border management, but must reinvent North American borders. This idea of a “smarter border” is one which does not call for the elimination of borders entirely, but, insofar as the flow of “legitimate” peoples and goods are concerned, they ought not be bothered by border concerns in the first place. To accomplish this, it was identified that new surveillance technology and information sharing would be essential components in the new ‘war on terror’ (CCCE, 2004: 6). Moreover, a concise working group would be necessary to accomplish such objectives.

The SPP began as an initiative between Canada, the United States and Mexico, endorsed then by its leaders Paul Martin, George W. Bush and Vincente Fox, respectively; these three political leaders, each of whom represent different political and economic interests were the primary authors of the organization. Accordingly, the three architects of the SPP sought to redefine tri-national trade relations and security protocols, arguing for the mutual inclusion of economic prosperity and national security:

Our Partnership will accomplish these objectives through a trilateral effort to increase the security, prosperity, and quality of life of our citizens. This work will be based on the principle that our security and prosperity are mutually dependent and complementary, and will reflect our shared belief in freedom, economic opportunity, and strong democratic values and institutions. Also, it will help consolidate our action into a North American framework to confront security and economic challenges, and promote the full potential of our people, addressing disparities and increasing opportunities for all (SPP, 2005a).

But what exactly is the SPP and what does it mean to posit such a mutual inclusion? First, unlike NAFTA, the SPP is an informal partnership as it contains no legally binding commitments or obligations for any particular state, in turn raising important questions regarding the organizational nature and logic of the SPP, and the power it holds. As an informal partnership
the SPP constitutes an organization centered around framing market relations based around the overflows of not only NAFTA but also the overflows resulting from 9/11 securitization. In this respect, it can be understood as an organization which emerged around emerging market uncertainties, in turn suggesting that this principle of uncertainty tended to distribute itself throughout the fabric of the SPP’s organizational dynamic.

A survey of news articles, March 24, 2005, the day the SPP was announced to the press from the Bush ranch in Waco, Texas, contains a number of stories in which outside actants in the media were trying to stabilize a coherent meaning of the SPP, indicating that it was difficult to ascertain any clear understanding of the organization. For example, although the SPP was never a formally signed organization, as a treaty would be, the press was quick to say the contrary, often using verbs such as “penned” and “inked” to describe the agreement. Such verbs point towards an agenda of action, portraying the SPP (deliberately or otherwise) as a practical solution to the accretion of problems between securitization and free trade. One news article characterizes the SPP as both a joint-statement and an action plan, providing a fairly vague description which nonetheless asserts the SPP as ‘no nonsense’ plan for immediate action:

The joint statement signed by the three leaders is called the Security and Prosperity Partnership of North America. It's an action plan to advance common security between the three countries and includes initiatives such as improving the flow of goods, services and people across each border, cutting red tape, and better co-ordination of infectious disease control (Dawson, 2005: A3)

Other news reports also provide a fairly broad description, calling it an accord based around co-operation and co-ordination:

Yesterday's accord, which is an expansion of a deal made by the two leaders last November, calls on the three countries to co-operate closely in three separate areas: security, prosperity, and health and safety. Bureaucrats are expected to report back within the next 90 days.
On the security side, the three leaders have asked bureaucrats to work on a number of different initiatives, including compatible screening practices for incoming travellers and cargo, and more co-operation on intelligence. Trade initiatives will see the three sides try to enhance the competitiveness of industries such as auto production, relieve bottlenecks at borders and strengthen North American energy markets by increasing supplies. The countries also hope to reduce duties on certain goods.

Finally, they hope to better co-ordinate surveillance of infectious diseases, enhance water quality and share information on laboratory methods (Laghi, 2005: A1).

While some media outlets were offering support, not surprisingly, one also finds mixed reviews about the announcement. Of interest came a comment about its lack of substance. In one editorial, a senior fellow at the Fraser Institute described it as a last minute “hurry-up” piece of paper with no substance in the face of the complexities of Canada, U.S. relations (Moens, 2005: A11). Another editorial states that:

You would be hard pressed to come up with anything substantial out of this week's meeting in Texas between George Bush, Paul Martin and Mexican President Vicente Fox -- at least, not anything that can be understandably written in 50 words or less.

To give you an idea of the impact it had on the journalists covering the event, after the big joint announcement of something called the Security and Prosperity Partnership of North America, the first question asked of President Bush concerned Terry Schiavo's feeding tube.

In assessing the impact of the meeting, you have to look elsewhere for substance. You have to speculate: What could Paul Martin and Vicente Fox have been thinking while George Bush drove them around his ranch in a white pick-up truck? (Gordon, 2005: A14).

In other words, in terms of consensus, there was no clear definition of the SPP which the three leaders nor the press could articulate from the outset. However, there does appear to be some indication that various media and think tanks did not believe this to be a significant announcement. This lack of clarity in turn gave rise to a host of controversy and speculation amongst the press and other political actants. In addition, a number of pre-existing controversies over U.S. - Canada political and economic relations diffused in and around the SPP such as Martin’s decision not to work with the U.S. to establish a Ballistic Missile Defense plan; the approximately $11 billion in lost tariffs over of Canadian softwood lumber exports to the U.S.;
and halted exports of Canadian beef due to Bovine spongiform encephalopathy (BSE) disease. The BSE case in particular represents an excellent example of how actants were trying to frame and calculate the externalities of beef markets during a time of general uncertainty; a hybrid forum in which concerned industries were trying to regroup market practices. For instance, although the U.S. did close its borders to Canadian beef following the 2003 discovery of BSE in Canadian cattle, at the same time, when the U.S. discovered their first case of BSE, some began to speculate on the possibility of re-opening borders to Canadian beef exports; Saskatchewan Premier Lorne Calvert argued that BSE was a global phenomenon, and that only the calculative powers of science could resolve such important export decisions (Kyle, 2005: B5). Broadly speaking such externalities demonstrate how a host of proximal issues were mobilized as destabilizing actants for the SPP as the opposition was quick to articulate such issues in order to question the scope and significance of the SPP. Consensus, in other words, was not easy to achieve in the face of market uncertainties, effectively facilitating a vague and in many respects unstable definition of the SPP.

Still, the principle of market failure and uncertainty was central to the SPP’s formation. Actants from different geographical locales, political stripes, positions of power and authority negotiated and articulated a shared concern regarding an overflow of previous frames of reference. The primary actors of the SPP at the time: Martin, Bush and Fox, acknowledged the overflows created by the tension between free market forces and securitization, and sought to re-calculate and frame how externalities might play out in the future. Paul Martin articulates the rising
economic threat from emerging economies, framing them as a potential threat to North American economic prosperity:

"There is no doubt there is a recognition that the changes occurring in the global economy as a result of the rapid growth we're seeing in China, to be followed very quickly, in fact already by India, is going to change the nature of the world's economy... The desire to make North America as competitive as possible... is certainly an important force behind this" (Delacourt, 2005: A1).

Focusing on the official statements release by the SPP, the initial announcement of the SPP acknowledges its emergence from outside threats to the economic fitness of North American and outside threats to security:

Over the past decade, our three nations have taken important steps to expand economic opportunity for our people and to create the most vibrant and dynamic trade relationship in the world. Since September 11, 2001, we have also taken significant new steps to address the threat of terrorism and to enhance the security of our people.

But more needs to be done. In a rapidly changing world, we must develop new avenues of cooperation that will make our open societies safer and more secure, our businesses more competitive, and our economies more resilient.

Our Partnership will accomplish these objectives through a trilateral effort to increase the security, prosperity, and quality of life of our citizens. This work will be based on the principle that our security and prosperity are mutually dependent and complementary, and will reflect our shared belief in freedom, economic opportunity, and strong democratic values and institutions. Also, it will help consolidate our action into a North American framework to confront security and economic challenges, and promote the full potential of our people, addressing disparities and increasing opportunities for all (SPP, 2005a).

It is important to note the constant suggestion of threat and change as key actants in legitimizing the need for the SPP. The SPP was always quick to mobilize a general principle of uncertainty, particularly uncertainty of the global market and also the risk of terrorism as important reasons for legitimacy. Disagreements ensued immediately as to the scope of the SPP’s reach. While the business community was quick to praise the SPP, the Canadian Council of Chief Executives for example called it “a quantum leap for the continent,” at the same time, actants such as Canada’s former ambassador to Washington (1981-89) argued in a Globe and Mail signed editorial that:

In the central issue of border security and prosperity, the initiative falls well short of providing a political vision for guiding the work to be undertaken. Its agenda:
a) fails to call for a single economic and security space;
b) fails to embrace the concept of a security perimeter;
c) fails to call for the establishment of a common external tariff (a customs union);
d) fails to call for the termination of anti-dumping and countervail laws and other forms of procedural protectionism, and their replacement by a single competition policy and common rules about subsidy practice;
e) fails to treat defence as part of security (security being conceived essentially in terms of border issues, thus raising questions as to the future of the Canada-U.S. defence relationship);
f) fails to envisage new bilateral institutions to ensure the smooth functioning of the economic and security space, and
g) fails to call for an improved dispute-settlement mechanism (Gotlieb, 2005: A19).

Although the SPP identified a general objective of aligning economic prosperity with enhancing security, the SPP also understood this to be a complex task which would require immense organizational strength and co-ordination, particularly as they were dealing with a hybrid forum of market uncertainty and a lack of general consensus in specialized knowledge concerning the actual risk of things like terrorism and market failures. In other words, in spite of such uncertainty and lack of consensus, the SPP was attempting to articulate an obligatory point of passage to organize themselves, but it was still in its infancy because the SPP was trying to resolve economic issues with issues of securitization. The argument they are implicitly advancing here is that if North America wishes to “survive” or prosper by a number of social indicators, it is clear that they each state will have to somehow co-operate in such a way that posits a mutual relationship between security and economy. The SPP problematized the conflicting practices of free trade and 9/11 securitization, and acknowledged a shared interest in modifying particular market practices to enhance security and prosperity, a clear example of trying to assert an initial obligatory point of passage, but in the face of opposition from an array of human and non-human actants, from opposition members to ballistic missiles and BSE, much work was still needed.
The SPP would need help. Because the stabilization of networks requires a diversity of actants, proper articulation of the SPP had to extend beyond the initial three actors, Martin, Bush and Fox, requiring the development of sophisticated socio-technical scenarios. In addition to each of the leaders recruiting various ministers from their cabinets to work as aides for SPP working groups, the SPP had to organize themselves through non-human semiotic and market devices in order to legitimate the mutual inclusion of security and prosperity; it had to mobilize particular things to form an organizational structure for framing market practices. First, and most generally, the SPP began by using semiotic devices of social inclusion such as “our partnership” and appeals to democratic values and market imperatives shared amongst the three states, effectively to build a sense of cohesion which acknowledges yet attempts to transcend the identity politics of particular nation states. This is perhaps the most obvious point but carries important implications with respect to power and ordering the SPP. This is the act of translation in which the actants each recognize their mutual interest, a generalized symmetry amongst the actants, allowing them to forge social bonds in such a way which masks their presence, translating the SPP as an organization centered around particular discursive techniques, values and non-human artifacts. For example, the SPP was conceived of as a means to allow its actors to respond dynamically to changes in the market, whilst not necessarily requiring consensus amongst each member. The SPP was conceiving itself as an organizational network which can have the potential to transcend earlier frameworks such as sovereign rule because they are non-binding treaties:

Our Partnership is committed to reach the highest results to advance the security and well-being of our people. The Partnership is trilateral in concept; while allowing any two countries to move forward on an issue, it will create a path for the third to join later (SPP, 2005a, emphasis mine).
A strategy such as this can be understood as enabling the SPP to respond dynamically, at least in theory, to future externalities and overflows; irrespective of opposition, such a strategy can in the long term force the hand of a weaker member states. However, what is most important to read from this strategy is that framing the market irreducible of any particular state, this allows the SPP to black-box, or camouflage itself, as an organization which frames the economy in terms of market forces rather than practices, perpetuating the free market ideology of the market as autonomous entity. By building the SPP upon the premise that acknowledges that market failures will inevitably arise in the future, and moreover in such a way which frames market failures more as a result of outside influences, such as global markets or terrorists, the SPP seeks to effectively mask its own influence on market practices. For the SPP, they are simply concerned with being able to respond dynamically to that which happens outside North America. The discursive use of “our partnership” and “well-being of our people” denotes an attempt to ascribe boundaries on the organizational scope of the SPP, effectively positing a unity amongst the three states. By establishing semiotic devices centered around particular market and democratic interests, it enables the SPP to forge coherent meanings around notions of citizenship, thus employing semiotic devices such as “our people” in their reports. The SPP is enacting a perspective of the market which creates the impression that the SPP merely responds to its changing forces, particularly forces from outside the SPP such as external threats of terrorism or conversely threats from non-NAFTA actants such as emerging third world economies. By ascribing boundaries to the SPP, the SPP is in turn ascribing boundaries to the limits of their power, effectively enabling them to practice it by clearly identifying the scope of their reach. Power, in other words, must first be contained within boundaries in order for practices to emerge,
and here we see how discursive devices and problematization were techniques by which the actors could ascribe such boundaries.

A pre-existing order is being problematized in favour of a new one. The initial report emphasizes a discursive use of verbs which establishes a claim to envisioning a future state of affairs. Verbs such as “develop,” “enhance,” or “identify” are all action oriented words which typically reach out into the future perfect, again supporting the thesis that the SPP was engaged in developing a socio-technical scenario. For example, to secure North America from external threats, the SPP problematizes pre-existing security devices as insufficient and argues that it must:

- Develop and implement a North American traveler security strategy, to include consistent outcomes with compatible processes, for screening prior to departure from a foreign port and at the first port of entry to North America.
- Develop and implement a North American cargo security strategy to ensure compatible screening methods for goods and cargo prior to departure from a foreign port and at the first point of entry to North America.
- Develop and implement a North American bioprotection strategy to assess, prevent, protect, detect, and respond to intentional, as well as applicable naturally occurring threats to public health and the food and agriculture system (SPP, 2005a).

Here we begin to see the SPP mobilizing a series of material devices alongside discursive ones to create a vision of the future. In particular, it requires that all three states work towards standardizing particular objects and practices, such as standardized screening methods to enable consistent and compatible outcomes, creating a form of ordering social life based by mobilizing material objects, specifically ordering borders around security and screening devices, to filter the border not just from particular actants such as unwanted persons and non-humans, but also to filter out unwanted outcomes from non-harmonious technological practices. It is thus an attempt
to mobilize technology to prevent market failures: inefficiencies in border flows created by asynchronous regulatory and screening practices. Put another way, it is an attempt to mobilize heterogeneity to create homogeneity, or stabilized groups from networks of association. The beginning of the SPP demonstrates the complexities of organizational dynamics, particularly when new networks are formed out of market failures and the uncertainties of post-9/11 globalization.

5.2 - FRAMING SECURITY AND PROSPERITY

The most salient technology mobilized by the SPP was the actual frameworks for constructing a socio-technical scenario, and they can be understood as blueprints for guiding the deployment of technological artifacts. The SPP needed sets of coherent goals for future market practices and frameworks to further stabilize the network. Frameworks were being established by the SPP which drew upon objects to create a shared consensus out of the uncertainties of free market and securitization overflows. Three primary frameworks emerged from 2005-2006 addressing almost any and every actant which might be of concern to border flows. In 2005, the SPP authored a document which attempted to establish a regulatory framework for common principles of electronic commerce and the management of transborder data flows. Drawing upon the specialized knowledge of various branches of government such as Canada’s Department of Industry, Mexico’s Ministry of the Economy and the U.S. Department of Commerce, the framework sought to articulate how each of these actants recognize the central importance of electronic commerce, the flow of information, particularly transborder data flows, for stimulating economic growth. The framework presents a number of important insights into the
organizational structure and logic of the SPP. First, the framework mobilizes specialized knowledge of economic surveys and forecasting in order to establish the importance of electronic commerce in current and future market relations:

In 2004, Canada registered combined private and public sector total e-commerce sales of CDN$28.3 billion, representing an increase of 49.7 percent from 2003. Electronic sales from business to business (B2B) amounted to CDN$19.8 billion, which represents about 75 percent of total e-commerce by private firms in Canada. For the same year, the total retail e-commerce sales for the U.S. totaled US$69.2 billion, an increase of 23.5 percent from 2003. In Canada, Internet sales from business to consumer (B2C) were reported to be CDN$6.6 billion (SPP, 2005c: Annex A).

In doing so, the SPP can mobilize shared knowledge of market forecasting to demonstrate the importance of electronic networks in future commercial activity, and in turn to demonstrate the importance of the SPP’s framework and commitment to maximizing online commerce. In this respect, the suggestion is that the numbers speak for themselves. The framework posits a shared need to develop a North American regulatory strategy to facilitate the free flow of online commerce. Here a complex of regulatory standards and deregulatory devices are mobilized. First, the framework argues that domestic regulatory devices such as sufficient legal and policy frameworks are needed to facilitate agreements between jurisdictions on like approaches to electronic commerce. In order for online commerce to thrive, it must be stabilized into clearly articulated networks and institutions. Online commerce must be ‘made’ before it can be practiced as each state must create “an environment favorable to electronic commerce” by establishing a “modern, accessible and affordable information infrastructure including high-speed networks” (SPP, 2005c: 1-2). While the SPP is arguing that each state must mobilize particular actants such as regulatory devices, legal and heuristic approaches and high-speed broadband infrastructures to facilitate the flows of electronic commerce, in turn such frameworks are also deemed necessary to establish a clear distinction between what is to be considered
legitimate and illegitimate online interaction. Thus, by establishing strong legal codes, it can be possible to identify and control particular online practices, such as piracy or spamming.

This becomes particularly important when understanding the SPP’s desire firmly entrench the private sector in electronic frameworks, effectively ensuring an environment favorable to online profit. The framework explicitly argues that the private sector should be the primary benefactors of such regulatory adjustments, and moreover that the private sector should be self-regulating and self-sufficient under the proposed framework. The first general principle the framework calls for is:

> The effective participation of the private sector in developing and implementing codes of conduct, model contracts, guidelines, and enforcement mechanisms is also important in order to complement governments’ efforts in this area (SPP, 2005c: 2).

In other words, the private sector should, by necessity, be consulted in any future matters concerning the regulatory devices of e-commerce, and moreover they should be act as their own police. A specific example of this pertains to the framework’s section on recommendations to privacy policy in which they argue that:

> Governments should encourage the private sector to develop and implement self-regulatory mechanisms, including industry guidelines and effective verification and recourse methodologies.

> The private sector is also encouraged to develop and implement privacy practices appropriate to their business requirements and to the needs of their clients and the general public (SPP, 2005c: 4).

The inclusion of the private sector demonstrates the state’s willingness to bolster the institutional maxims of free market corporations, and the state’s willingness to act as an arm for facilitating capital accumulation through policy frameworks which emphasize a ‘free-market’ approach to regulating communications infrastructure. What room such a policy would leave for state privacy enforcement bodies such as the Canadian privacy commissioner is nil. In addition to self-regulating privacy accords, the SPP’s framework for e-commerce targets ‘deviant’ online
activity such as “illegal spam” and “threats to online e-commerce” which threaten the profitability of online activity:

In the past decade, the Internet has emerged as the predominant network platform for the conduct of electronic commerce and e-business across North America and around the world. Thus, industry, governments and consumers have increasingly come to rely on a reliable, safe, and secure Internet as a medium for conducting business and for general communications. Abuse and misuse of the marketplace, however, in the form of illegal spam and spyware, phishing and other wrongful practices can seriously undermine its value, both for consumers and for business. The continued growth of electronic commerce therefore depends on governments and the private sector taking effective measures to counter such threats to the effective operation of online markets by creating a stronger, safer Internet.

The seamless nature of the Internet means that the existence of vulnerabilities in one country affects stakeholders in all jurisdictions. International cooperation is therefore fundamental to deal effectively with threats to the viability of the Internet. Accordingly, the Participants intend to reinforce current initiatives to identify and take compatible technological steps to combat fraudulent and deceptive practices, illegal spam, spyware and other harmful behavior and to support measures that build consumer confidence in online markets, including through electronic authentication. The Participants also acknowledge the important work done by criminal and civil enforcement agencies in this domain and will urge the private sector to improve deterrence by reporting criminal and civil violations promptly to these agencies. (SPP, 2005c: 2).

Attempts to build confidence in the online marketplace and to remove potential threats to its privatization are further suggested by mobilizing devices such as identity authentication, consumer protection measures and cross-border logistical solutions for streamlining e-commerce transactions throughout North America. Finally, the report recommends continued discussion and policy co-ordination between the SPP states through a variety of trilateral discussions which mobilize expert knowledges, the continued engagement and leadership of the private sector and the close co-operation with international actants to support the development of “worldwide electronic commerce” (SPP, 2005c: 5). The framework recommends that such changes be done in a non-binding way, meaning that they should develop policies which fall outside the purview of international law and are non-obligatory.

In addition to the framework on electronic commerce, there are two other important frameworks which the SPP published in their first two years, each of them draw out a more explicit market
framework for how the state should be in the service of capital accumulation. In 2006, the SPP released a framework which articulated the key priorities and techniques for securing North America. The 33-page-report, ominously titled *Security*, is divided into three broad categories: (1) securing North America from external threats; (2) preventing and responding to threats within North America; and (3) further streamlining the secure movement of low-risk traffic across shared borders. Within each of these categories, a host of regulatory principles and technological imperatives are advocated, some of which were then under development, others under consideration for the future of North America. This report constitutes the kernel of the SPP’s goals for re-evaluating and enhancing North American security initiatives, and each of the goals either tacitly or explicitly serve the interests of securing North America for the purpose of facilitating capital accumulation and suppressing resistance. One more final note on this document concerns its overall presentation. Each page is a well-ordered table which outlines the initiatives, key milestones and status of the various projects. There is no actual explanation which details why the SPP believes such recommendations are essential, nor does the report offer any assessment which explains their effectiveness. The document in many ways demonstrates a long standing belief in the power of technology, particularly information and communication technology, to solve a host of social problems, effectively black-boxing social issues as manageable by developing technological imperatives.

A clear example is the use of information technology to ascertain the risk of human traffic across territory. The first objective of securing North America from external threats pertains to strategies for traveler security, cargo security and bioprotection. Strategies for traveler security
are centered around developing and implementing “consistent outcomes with compatible processes for screening prior to departure from a foreign port and at the first port of entry to North America” (SPP, 2006a: 50). There are three general initiatives for traveler security, each requiring the development of sophisticated surveillance assemblages in order to manage the flow of human traffic across territory. First, the development and implementation of “equivalent biometric standards and systems to enhance security for passports, visas, permanent resident cards, transportation credentials and other border documents” (SPP, 2006a: 49). A number of technologies are advocated to be mobilized in the future under this rubric, including standardizing transportation programs, developing a co-ordinated strategy to conduct background checks of travelers, credential recognition document security standards, and the development of a “single, integrated, global enrollment program for North American trusted travelers (e.g. NEXUS, FAST, SENTRI) for travel by air, land and sea” (SPP, 2006a: 49). In these series of recommendations, the emphasis is to develop a technological infrastructure which can assess the identity of humans, a euphemism for ascertaining the extent to which they pose a threat to the state, then determine their ability to cross territory, either with ease or with hassle. This recommendation clearly dates back to NASPI’s earlier suggestion where borders should not be annihilated, but re-invented to favor the flows of particular humans, especially of an ascending business class, over all others.

While the first initiative clearly targets domestic travelers, the second initiative targets foreigners in North American territory and intensifies the reliance on a surveillance assemblage centered around seamless information sharing amongst North American states. The second initiative
pertains to the development and implementation of “compatible immigration security measures to enhance North American security, including requirements for admission and length of stay; visa decision-making standards; lookout systems; and examining the feasibility of entry and exit procedures and systems” (SPP, 2006a: 50). Here again, the SPP recommends the mobilization of information benchmarks and standards, primarily centered around managing the supposed risks and uncertainties of foreign travelers and immigrants. Key milestones surveyed in the report include: (1) developing benchmarks related to procedures and policies for visitor visa processing, including security screening, visa validity, and length of stay within nine months; (2) “direct and institutionalized consultation among consular and visa security officials of Canada, the United States and Mexico within 9 months;” and (3) overseas deployment and co-ordination of Canadian and U.S. immigration officers to “enhance efforts to disrupt illegal migration trends destined to North America” (SPP, 2006a: 50). This section of the report distinctly associates immigrants and foreign travelers with high-risk assessment protocols, calling for a number of increased surveillance and screening procedures including the finalization and implementation of data exchanges on “high-risk travelers” through compatible advance passenger information systems; and further recommends exploring the feasibility of risk management systems designed to determine board/no board protocols for travelers destined to North American states, and “developing compatible criteria for the posting of lookouts of suspected terrorists and criminals” (SPP, 2006a: 50).

The SPP framework has thus far addressed human flows, but of equal importance concerns the management of non-human flows across territory. Strategies for cargo security generally fall
under two broad headings. First, the SPP recommends continuing to develop public/private initiatives, particularly the U.S. Customs and Border Protection (CBP), in order to continue developing pre-approved low risk programs. Second, recommendations include developing compatible standards, technologies and processes for intermodal supply chain security, emphasizing risk management, a layered approach to security and the expedited movement of low-risk commerce. The most salient example of such recommendations is the U.S. Customs-Trade Partnership Against Terrorism (C-TPAT). Launched in November, 2001, C-TPAT currently has over 8,000 business partners (Furia et. al., 2010: 12) and is a voluntary program designed to facilitate the mobility of logistics and carrier firms into the U.S. based on pre-approved risk management protocols. According to the CBP, C-TPAT is the largest and most successful government-private sector partnership to emerge from 9/11 whose goals orient around improving security to “a significant percentage of shipments to the United States;” providing benefits to private sector companies who conform to C-TPAT criteria; and targeting “higher risk shipments” (CBP, 2004: 3). By partnering with the private sector, the interests of business become assured through the development of “voluntary” programs by which the private sector becomes a partner in mitigating threats. However, from another perspective it is clear that such programs demonstrate how the state is an arm for capital accumulation, particularly by developing a heuristic, legal and technological framework for identifying illegitimate commerce and high-risk shipments in and out of the continent.

The framework’s bioprotection strategies are largely centered around securing borders from non-human threats, particularly threats which may damage the North American agricultural and food
supply systems, and also recommends information sharing agreements and co-ordinated regimes designed to identify and mitigate biological risks such as disease. Surveillance and information sharing programs are the most sought after recommendation and the SPP recommends enhancing surveillance of humans, animals and plants “by developing interoperable systems to rapidly detect and monitor infectious diseases in these populations,” and to “enhance public health surveillance research by linking public health laboratories within North America and with food and agriculture laboratory networks” (SPP, 2006a: 57). The SPP’s recommendation suggests establishing a North American infrastructure for ubiquitous surveillance of biological threats, and early warning systems for risk assessment. Here we see how the SPP was concerned with securing agricultural systems to ensure the smooth operation of society in the face of global crises concerning non-humans such as the global transmission of diseases like BSE, or future threats to food supplies demonstrated by continued food shortages. The belief argued is that it should be possible to continue the flow of commerce seamlessly despite the threat of crisis by developing a ubiquitous surveillance system capable of identifying biological threats to North America.

The second category in the security framework pertains to preventing and responding to threats within North America, and addresses aviation and maritime security, law enforcement and intelligence gathering co-operation and protection, prevention and response programs and infrastructure. Generally, each of these sections recommends the enhancement of surveillance and screening programs, risk-based management strategies and information sharing co-operation to address the uncertainties of global transportation. In terms of aviation security,
recommendations fall under enhancing screening measures for passengers, baggage and air cargo, and developing comparable standards and procedures for such screening. Moreover, the SPP also advocates that each country develops, or continues their development of passenger assessment no-fly programs to monitor and deny persons “who pose a threat to aviation” (SPP, 2006a: 60). Maritime initiatives include collaborating “in the enhancement of security of our ports and vessels through the conduct of equivalent threat vulnerability and risk assessments and mutually recognized audit programs,” and the development and implementation of “a plan to make compatible regulatory and operational maritime security regimes” (SPP, 2006a: 62).

Law enforcement and intelligence gathering co-operation is centered around identifying external and domestic threats to security. There are a number of important initiatives and milestones the SPP proposes. In terms of law enforcement initiatives, the SPP intends to (1) “improve information sharing and law enforcement cooperation among investigators and prosecutors to address illegal activities between ports of entry and cross-border organized crime, counterfeit goods, economic crimes and trafficking of alcohol, firearms, illegal drugs and explosives;” (2) to “review existing counter-terrorism efforts and coordination to maximize effectiveness, including analyzing past counter-terrorism investigations to identify best practices and lessons learned;” and (3) to “cooperate on issues of detention and removals to expedite the return of illegal migrants to their home countries” (SPP, 2006a: 65-66). Key milestones include identifying and addressing significant legal restrictions to information sharing of investigative information, the development of integrated border enforcement teams such as the Canada-U.S. Integrated Border Enforcement Team (IBET), the development of extradition protocols for fugitives sought in
North American states, the formation of task forces to target cross-border criminal organizations, traffickers and smuggling rings, expanding law enforcement mechanisms designed to lead to the “rapid identification and successful prosecution of cyber attackers” and the expansion of “Canada-U.S. joint removals operations” (SPP, 2006a: 65-66). The section on intelligence cooperation is relatively scant but nonetheless important; its initiative is to “enhance our capacity to combat terrorism through the appropriate sharing of terrorist watchlist data and the establishment of appropriate linkages between Canada, the United States and Mexico,” in which the three countries are recommended to negotiate bilateral terrorist screening information-sharing agreements, addressing gaps and obstacles to information sharing channels, and to “conduct joint analyses of the nature and scope of the terrorist threat to North America” (SPP, 2006a: 68).

Compared to the section on law-enforcement initiatives, intelligence initiatives are relatively ambiguous but nonetheless argue that information should be readily accessibly and interoperable amongst law enforcement and intelligence gathering institutions throughout North America for the purposes of identifying and controlling the movement of perceived high-risk groups through a variety of tactics such as no-fly lists. Groups, in other words, who pose a threat to legitimate commerce throughout the continent in virtue of their networks of association.

Third, the SPP recommends establishing common approaches to critical infrastructure protection from terrorism and natural disasters. The SPP recommends two initiatives, (1) developing and implementing “compatible protective and response strategies and programs for shared critical infrastructure in mutually agreed priority areas (i.e. electricity generation and distribution, oil and gas pipelines, dams, telecommunications, transportation, nuclear, radiological, defence
industrial base, and cyber systems),” and (2), to develop and implement “joint plans for cooperation on incident response, and conduct joint training and exercises in emergency response” (SPP, 2006a: 70-71). A survey of the milestones and goals proposed center largely on sustaining order in the event of emergency, similar to their response to biological risks, particularly on sustaining communication channels between the three states, joint-training exercises (for example, the report identifies a preparedness exercise to be conducted for the 2010 Winter Olympics in Vancouver), and joint co-ordination of cross-border incident management.

The final section of the SPP security framework details initiatives to further streamline the secure movement of low-risk traffic across North American borders, and emphasizes two sub-sections on border facilitation and science and technology co-operation. In terms of border facilitation, the framework emphasizes co-operation with the private sector in facilitating low-risk travel and reducing wait times. Here the report outlines a manifest of technological imperatives such as NEXUS, FAST and SENTRI to be developed at various border crossing sites in order to reduce wait times and meet long term demand. Such programs rely on individuals and corporations willingly surrendering all necessary personal information and biometric data to the state in order to be deemed a low-risk persons, effectively allowing them to cross borders with relative ease. Second, the report recommends working with the private sector and local governments to “construct new border infrastructure to meet long-term demand, to include building a low-risk port of entry to expedite the secure movement of cargo across the border” (SPP, 2006a: 75). In terms of science and technology co-operation, the SPP advocates that states “continue incorporating hi-tech equipment along the U.S.-Mexico border for the efficient and secure flow
of people and goods” and to “establish a joint research and development program for security-related science and technology based priorities established through a coordinated risk assessment” (SPP, 2006a: 77). Here again the SPP continues to push for the future development of advanced technologies to tighten borders and facilitate low-risk, pre-approved actants across borders, and to identify potential gaps in the securitization of borders and critical infrastructures which could can be remedied.

In addition to the security framework, the SPP (2006b) also released the prosperity framework simply entitled *Prosperity*, a 43-page-document which encompasses a heterogeneity of market devices designed to maximize the economic output, competitiveness and innovation of North America in the global marketplace. An entire document, similar in nature to the *Security* framework, but focused exclusively on techniques by which the state can facilitate capital accumulation and private interests. The document is divided into nine markets: (1) manufactured goods and sectoral and regional competitiveness, (2) the movement of goods, (3) e-commerce and information and communication technologies (ICT), (4) financial services, (5) transportation infrastructure, safety and efficiency, (6) energy, (7) environment, (8) food and agriculture, and (9) health. As the document is incredibly vast in its scope and a number of these elements also overlap in the security framework, a non-exhaustive survey of the prosperity framework is sufficient, and reveals an emphasis on developing appropriate standards and regulatory co-operation for the manufacture and distribution of goods across borders and the utilization of effective ICT infrastructures and information sharing procedures in the financial sector to maximize economic competitiveness based on market calculations. Quite often, this touches
upon the mundane aspects of standardization, including standards for shipping containers and textile labeling. In terms of important North American industries, the SPP recommends mobilizing the North American steel industry into a partnered strategic industry in the global marketplace (SPP, 2006b: 4); the mobilization and harmonization of the auto sector into a fully integrated North American Auto Sector which utilizes greater compatibility of auto parts, regulations and standards (SPP, 2006b: 5); and the maximization of economic production from oil sands and the increased collaboration of electricity, natural gas, nuclear power and hydrocarbons (SPP, 2006b: 25-26). Overall, it is evident that what the SPP is doing here is mobilizing a sociotechnical scenario, as Law and Callon might put it. A scenario involving the careful deployment of technological artifacts and social institutions to shape a course for the future of, in this case, routine transnational border flows.

5.3 - MOBILIZING THE POWER ELITE

Thus far the SPP can be summarized by numerous attempts at framing and calculating market failure to mitigate risk thereby increasing capital accumulation and management of potential deviants. Furthermore, the SPP’s overall framework indicates a free market ideology of maximizing trade and market liberalization, primarily by situating a imperative to develop and facilitate transborder data flows and electronic commerce. In terms of actual recommendations, both the *Security* and the *Prosperity* frameworks significantly emphasize the massive deployment of surveillance and screening technologies to mitigate market failures which have accrued at the border.
Second to the frameworks the SPP developed is the inclusion of actors, particularly from the private sector’s upper echelons, introducing the power elite in other words, to further mobilize the SPP as an organizational powerhouse to spearhead the increased surveillance of borders. The creation of strategic alliances with the private sector constitutes an important force in influencing relevant border policies to further legitimate their claims to border harmonization and free trade accords. One essential strategy which demonstrates the mobilization of the power elite was that the SPP created new calculating actants (other ‘prosperity partnerships’) comprised from the private sector to advise the SPP’s frameworks and provide overall advice on the private sector’s attitudes towards the SPP’s endeavours. At the 2006 SPP summit in Cancún, Mexico, the SPP recognized that they would benefit from direct advice from the private sector and announced the creation of the North American Competitiveness Council (NACC), a tri-national working group comprised of 30 representatives of North America’s heavy weight corporations. In addition to these 30 representatives of big business, the NACC was also to be under the secretariat of four major commerce associations in North America, the Instituto Mexicano para la Competitividad (IMCO), the Canadian Council of Chief Executives (CCCE), the Council of the Americas and the U.S. Chamber of Commerce. Thus, two major U.S. trade associations and one from Mexico and Canada headed the NACC not simply to advise the SPP on North American competitiveness, but as the Council of the America’s describes the NACC, it was also about how the private sector “might itself be part of the solution” (COA, 2011). As one press release issued by the U.S. Department of Commerce, quoting U.S. Commerce Secretary Carlos Gutierrez:

The private sector is the driving force behind innovation and growth, and the private sectors’s involvement in the SPP is key to enhancing North America’s competitive position in global markets (2006: 1)
Under these secretariats, the 30 corporate representatives would be capable of articulating the collective interests of the North American private sector, effectively creating a powerful corporate lobby which could direct the SPP. Here it is worthwhile to note that in terms of inputs to the SPP, there is no discussion of assessing the public’s views, nor did the SPP forge any working groups comprised of members from the public sector such as privacy advocates or civil liberties unions. Instead, the collective interests of the power elite were in many respects the primary concern of the SPP, exemplified by the statement that the private sector is the key to sustaining economic growth and innovation in North America. In other words, in terms of security and prosperity, the corporate sector was to enjoy a virtual monopoly on the matter.

As a corporate lobby, the NACC can be understood as being focused exclusively on bolstering capital accumulation, ideological legitimation and repressing resistance and moreover represents how the power elite can assemble to advance their overall interests. The power to which the NACC can hold is quite vast and a quick survey of the membership indicates their ability to connect with North American commerce. According to a 2007 description of the secretariats, the CCCE is described as:

Canada's premier business association, with an outstanding record of achievement in matching entrepreneurial initiative with sound public policy choices. Our member CEOs and entrepreneurs represent all sectors of the Canadian economy. The companies they lead collectively administer CAD $3.2 trillion in assets, have annual revenues in excess of CAD$750 billion, and are responsible for the vast majority of Canada's exports, investment, research and development, and training

IMCO describes itself as:

a private applied research center devoted to studying issues that affect Mexico’s competitiveness in a context of an open market economy. IMCO is a not-for-profit, independent, non-partisan institution which operates thanks to private sponsors grants. Founded in 2003, the Institute seeks to compete successfully in the “market of ideas” by preparing and issuing sound proposals for public policies based on objective approaches to systematically improve Mexico’s ability to attract and retain investments
The Council of the Americas:

is a business organization whose members share a commitment to democracy, open markets, and the rule of law throughout the Americas. The Council of the Americas’ programming and advocacy aim to inform, encourage, and promote free and integrated markets for the benefit of the companies that comprise our membership, as well as of the United States and all the people of the Americas. The Council supports these policies in the belief that they provide an effective means of achieving the economic growth and prosperity on which the business interests of its members depend.

Finally, the U.S. Chamber of Commerce:

is the world’s largest business federation representing more than 3 million businesses of all sizes, sectors, and regions. It includes hundreds of associations, thousands of local chambers, and more than 100 American Chambers of Commerce in 91 countries (NACC, 2007a: 56-57)

Such groups not only confirm Domhoff’s thesis of the importance of policy formation groups, particularly with its emphasis on key words such as ‘non-partisan,’ ‘independent’ and ‘democracy,’ but collectively, it is fair to say that these four secretariats maintain a strong representation of North America’s corporate power, constituting in short a power elite. For example, in terms of corporate representation, Canadian firms who have sat on the board of representatives include the heads of major corporations such as Manulife Financial, Power Corporation of Canada, Suncor Energy, the Royal Bank of Canada, The Home Depot, Canadian National Railway, Bell Canada, The Bank of Nova Scotia and Brookfield Asset Management. From the U.S., corporate representatives have been drawn from powerful corporations including Chevron, Chrysler LLC, FedEx, ExxonMobil, Lockheed Martin, General Motors, General Electric, Wal-Mart, Proctor & Gamble, Ford and the Campbell’s Soup Company.13 Interestingly, it is worth pointing out that overall each of these corporations represents a different industry or outlet within the marketplace. As such, despite the fact that they each occupy discrete markets, their inclusion into the NACC suggests the shared belief in common goals or institutions.

13 For a more exhaustive listing, see either NACC, 2007a: 58; or http://coa.counciloftheamericas.org/files/editor/image/03%20NACC%20Members.pdf
Each country determines its corporate membership and the member selection process, but it is often done by applying to the secretariats. In the U.S., for example, the NACC’s membership application clearly suggests that it is seeking the power elite who are not simply interested in bolstering their own particular business, but the interests of their respective industry and the ideologies of market liberalization and free trade. According to the Council of the America’s 2008 NACC membership application form (COA, 2007), membership requirements state that member companies must have “significant business operations in at least two of the three North American countries and should trade in all three;” that member companies, “are charged with representing the sectors in which their business operates, not simply the interests of their individual company.” Finally, that each executive committee member appoint at least one working-level contact (preferably a representative who is based in or frequently travels to Washington) who will work with the committee members of the U.S. Secretariat, meeting regularly with the Advisory Committee members, six times a year with U.S., Mexican and Canadian government officials, twice per year with trilateral secretariats and private sectors, debrief the public following Ministerial and Leaders’ meetings, and make their CEO or head of North American operations available to represent their industry at Ministerial meetings (COA, 2007).

The NACC has produced a number of reports pertaining to private sector priorities for enhancing the security and prosperity of North America. The NACC, after surveying the interests of corporate actors across North America, released a document in 2007, *Enhancing Competitiveness*
in Canada, Mexico and the United States: Private-Sector Priorities for the Security and Prosperity Partnership of North America. Arguably their most important report, a series of recommendations to be made in the short, medium and long-term, represents in many respects the co-ordinated calculative efforts of a heterogeneity of private sector actants responding to the uncertainties of the global marketplace, particularly as emerging powers such as China and India continue to apply pressure on North America to remain economically competitive, and as increasing security requirements in North America begin to create economic overflows on free trade (NACC, 2007a: 3). The report suggests three broad priorities for the SPP: continued cross-border facilitation; standards and regulatory harmonization; and finally, energy integration, each of which strongly adhere to the principles of market liberalization, risk-based securitization and the continued investment in information technology and transborder data flows. In an attempt to demonstrate the raw effectiveness of North America’s private sector in mobilizing market devices to frame and control the market failures created by global competition and securitization, the report outlines over 50 practical recommendations under the premise of bolstering free trade and North American competitiveness in the global marketplace:

The NAFTA made North America the most dynamic economic region in the world. Events of recent years have left our countries facing new challenges. By working together to make the most of the diverse strengths that Canada, Mexico, and the United States bring to the table, we can once again forge ahead of the pack and show the rest of the world how much can be accomplished by three great nations devoted to a common cause (NACC, 2007a: 9, emphasis original).

The NACC report argues that the first and most important priority is to facilitate the security and efficiency of cross-border flows in both the short and long term through the rapid deployment of information technology. Governments and the private sector should be encouraged to work together to develop critical-infrastructure programs and emergency disaster preparedness strategies which will ensure that cross border trade can resume as quickly as possible in the event
of an emergency. The NACC recommends that the CBP and the Canadian Border Services
Agency (CBSA) continue to ensure that low-risk pre-approved programs such as C-TPAT, FAST
and NEXUS:

receive priority treatment during post-incident resumption of trade. Governments should work with
companies that have invested in these low-risk programs to ensure that plans and protocols are in place to
facilitate border crossings under all security conditions (NACC, 2007a: 16).

Incidentally, in this particular context, the NACC is quite explicitly stating that “incidents” will
occur in the future, and thus governments should prepare themselves under the rubric of when,
ot if, providing a calamitous prediction of the shape of things to come. In addition to low-risk
teach programs, the NACC recommends that governments continue to expand border crossing
infrastructure inland to reduce bottlenecks and consider establishing “the development of
designated trade corridors and intermodal transportation infrastructure, as well as better
integration of short-sea shipping” (NACC, 2007a: 17). Interestingly, although the NACC argues
that companies which participate in low-risk pre-approved programs such as NEXUS, C-TPAT
and PIP should be rewarded accordingly and governments should ensure maximum benefits, at
the same time, the NACC argues that governments should “refrain from regulating C-TPAT/
FAST/PIP and maintain a flexible, voluntary approach to supply-chain security” and that they
should also collaborate with the private sector to incorporate a “GreenLane” concept which
continues to ensure that companies who participate in voluntary security programs are given
 quicker clearance of low-risk shipments and eliminate duplicate inspections (NACC, 2007a: 21).
Thus, such recommendations suggest that the private sector should be an active consultant in
developing pre-approved screening measures and should be consulted on its regulation. By
insisting that such programs be kept voluntary and “flexible” the NACC is in many ways trying
to maintain a vested interest in determining what types of companies and goods are deemed low-risk and therefore deserving greater access to mobility across territory. In other words, such programs are therefore far more complicated than simply a matter of high or low risk profiling, but are to function along the guidelines of market efficiencies and flexibility to respond to changes in the global political and economic climate. By avoiding regulating such programs, that is, by avoiding establishing a formal definition of such programs including their benefits, it becomes possible to modulate the programs as changes in the market develop, by for example, denying actants or organizations once deemed to be low-risk, making it possible to establish a system of regulating mobility centered around contingencies and a permanent state of exception. The overall picture then, is that is it not simply a matter of deeming particular actants to be high or low risk, it is also about maintaining influence and power in present and future border regulatory devices.

The NACC is keen on facilitating capital accumulation by mobilizing calculation to form a specialized knowledge on the importance of developing border harmonization accords and technological imperatives by demonstrating the calculated impact made by not having such accords or regulatory standards:

Between 2000 and 2004, the application of new layers of security and more complex rules and regulations has tripled the processing time to enter the United States from Mexico and Canada by truck. The costs of these efforts have been estimated at up to US$11.5 billion annually in Canada and the United States alone.

This can have a dramatic impact on the competitiveness of North American businesses. A typical shipload of 4,000 cars being imported into North America faces a single customs transaction, while an equivalent number of cars produced and sold within North America would face a staggering 28,200 customs transactions because of the frequency with which this highly integrated industry ships parts and subassemblies back and forth in the course of production. Each North American produced vehicle in effect crosses the border more than seven times during production. Each crossing results in additional costs from border delays, security, and customs processing. These additional costs, not faced by offshore manufacturers, contribute to a significant competitive disadvantage for manufacturers in North America and ultimately lead to higher prices for consumers (NACC, 2007a: 19).
The NACC problematizes the lack of technological and regulatory standardization amongst the three states and suggests that governments continue to move towards greater technological integration, such as eliminating paper data processing and moving towards electronic forms to facilitate greater advance notice of border clearance and risk-assessment initiatives. In addition to the continued development of voluntary screening measures, the NACC recommends the development of a “comprehensible North American customs clearance system or fully compatible national systems” to facilitate information exchange, such as the United States Automated Commercial Environment/International Trade Data System (ACE/ITDS), and recommends investment into “smart box” or “smart seal” shipping container technology throughout North America to facilitate and simplify customs processes, further demonstrating the private sector’s continued ideological investment in the role of information technology in facilitating free trade and security (NACC, 2007a: 23). Such international data systems and automated commercial environments, without even mentioning its potential impact on labour (namely, its efforts to render customs agents obsolete), point towards a system of ubiquitous transborder data flows in which customs and the state must have advance knowledge of any and all cargo manifests before its arrival at the border.

While the aforementioned generally applies to facilitating the movement of commodities, in terms of human flows, the NACC recommends the state continue, with haste, to develop sophisticated surveillance and screening procedures which also include the development of biometric data and harmonized information exchange throughout the continent:

A single joint trusted traveler program is needed as soon as possible. The three governments are currently working on developing standards for alternative forms of identification, including the introduction of
smart cards with embedded radio frequency identification (RFID) chips and biometrics, such as fingerprints and iris scans, to confirm an individual’s identity and citizenship. Agencies in many government departments from all three countries are developing their own forms of secure identification cards to serve specific purposes. The result could be a plethora of new identification cards that may complicate rather than simplify the secure movement of people (NACC, 2007a: 24).

The report references the Western Hemisphere Travel Initiative (WHTI) as a notable effort by the U.S. to bolster security. However, at the same time the NACC argues that the WHTI has the potential to do serious damage to the relationships between Canada, Mexico and the U.S. and to undermine the economic competitiveness of businesses in each country, because it may discourage people from traveling across borders, especially if they do not hold a passport. Here, the NACC problematizes the existing framework of the WHTI and argues for a more comprehensive and integrated system which focuses on a more integrated and joint trusted traveler system:

The WHTI requirements by themselves will not achieve the desired outcome of enhanced border security. What is needed is a comprehensive strategy that includes new document requirements, technology, infrastructure, procedures, and training as well as the active participation of all three countries.

Whatever they do, governments must not allow WHTI requirements to undermine other improvements to speed processing at land crossings. Governments have made and will continue to make physical and logistical improvements to major border points with the aim of speeding the secure passage of travelers. Abrupt imposition of WHTI requirements could sharply reduce these benefits, and gradual implementation should be considered when the land border requirements come into effect (NACC, 2007a: 25, emphasis original).

Further integration includes imbricating Radio Frequency Identification (RFID) chips into pre-existing documents such as drivers licenses and passports; the integration of “all NEXUS programs into a single program covering all transportation modes and employing multiple biometric identifiers,” and the integration and development of credentialing programs which can identify low-risk people before they arrive at the border to facilitate their movement with “minimal or no interference” (NACC, 2007a: 26). Again, such measures arguably constitute more than simple risk-based management techniques. The promulgation of data sharing by
which the state can ascertain those arriving at the border beforehand indicates more the desire to establish ubiquitous surveillance programs centered around topological systems of spatial control, systems in which new and hidden sets of geographies can be developed to control, in the most minute but invisible manner, the mobility of people and things (Murakami Wood, 2008).

The second portion of the document pertains to standards and regulatory cooperation, and the NACC report covers four primary sectors: food and agriculture, financial services, transportation, and intellectual property rights. It is redundant to provide a detailed analysis of this section, particularly because it tends to re-articulate many of the same positions of the SPP’s prosperity framework. However, across each of the regulatory sectors, the NACC recognizes that any effort to create harmonized standards will inevitably create externalities and overflows:

Despite the best efforts of regulators in all three countries to cooperate and exchange information, differences continue to arise. Furthermore, even if the three countries were to succeed in eliminating unnecessary differences between existing rules, there would be little to prevent new differences from arising. A new approach to North American regulation is required (NACC, 2007a: 28).

It is this new approach which is demonstrably more important than the individual details of each sector as it is particularly reminiscent of NASPI’s recommendation of reinventing borders entirely. The NACC recommends a two-fold strategy which is in many respects vague or contradictory, setting out to persuade governments to develop a trilateral regulatory cooperation framework as quickly as possible, but at the same time, the NACC argues that North American states should still have the sovereign right to determine or craft their own regulations. In principle then, anytime a country chooses to craft regulations, such “new rules should respect North American or international standards wherever they exist unless there are unique national circumstances or well-founded reasons to distrust the regulatory standards or practices of one of
the North American partners” (NACC, 2007a: 28). Moreover, the NACC problematizes non-private sector standards and recommends the continued development of private sector standards in virtue of the fact that such standards are developed by “technical experts” in their respective fields in which they continuously work to keep them up to date as technology evolves:

If the governments of the three NAFTA countries encouraged their regulators to reference compatible international private sector standards developed within each country, and if businesses invested to develop and keep these standards up to date with the latest technologies and market requirements, the result would be goods and services being delivered to market via the most efficient mechanisms possible. These goods and services would be guided by dynamic, market-relevant, internationally accepted, and compatible standards requirements that would ensure open trade, interoperability, and protection of health, safety, and the environment (NACC, 2007a: 30).

In other words, a North American regulatory body should be developed which prioritizes the standards set forth by private sector actants, but at the same time, states are encouraged to exercise their own autonomy in choosing their own standards, particularly if they distrust the regulatory practices of another North American partner. The net result appears to be that those with the most powerful corporate lobbyists will emerge triumphant in the struggle to influence regulatory standards. In terms of intellectual property rights, the NACC is keen on ensuring the continued advancement of transborder data flows and that appropriate mechanisms are installed to mitigate the risk of intellectual property theft, primarily fraud and piracy, through the increased co-operation of relevant authorities, including supporting Interpol’s efforts to develop a global IP database, and the:

development of a list of protected titles and target products so that law enforcement can easily identify prima facie pirated and counterfeit material, promotion of joint government and industry efforts to educate audiences about losses from DVD piracy, establishment of “fake-free zones” around theaters and malls, and licensing the importation of industrial-capacity DVD burners (NACC, 2007a: 41).

The NACC recommendations also extend beyond maintaining property rights towards critical infrastructure. The third section of the report emphasizes securing North America’s energy infrastructure by improving cross-border distribution systems, encouraging efforts at recruiting
skilled labour in the energy field, and developing energy efficient technology. Recognizing the already well-entrenched integration of the North American energy infrastructure, the NACC also understands this can lead to precarious situations. Referencing the August 2003 black-out, the NACC is quick to use market failures and overflows to demonstrate the risks which can flow from “insufficient attention to the compatibility and reliability of [energy] interconnectedness,” in turn requiring new efforts to protect such critical infrastructures and effective integration of cross-border energy distribution (NACC, 2007a: 44). In particular, the NACC targets Mexico’s state-owned energy sector for market reforms, arguing that if Mexico were to “liberalize” its energy sector it would attract significant investment and technology from foreign governments, particularly the U.S., and are confident that over time through gains from “intermediate initiatives” the logic of an integrated market will set the pace for a fundamental reform of Mexico’s energy sector (NACC, 2007a: 43). Arguing that Mexico will be unable to sustain long-term projections for energy demand, the NACC suggests that Mexico should not only explore privatized energy options, but also recommends that by 2010 Mexico should work towards integrating its power grid with the U.S. such that “independent” American power producers along the Gulf of Mexico could become contractors for Mexican corporations (NACC, 2007a: 45). Furthermore, the NACC, although acknowledging that such matters are beyond the scope of their organization, specifically targets the state-owned Mexican oil enterprise Petróleos Mexicanos (PEMEX) for trade liberalization and greater efficiency, problematizing PEMEX based on projections of increased demand in the future and its “operational gaps” to private oil companies, and problematizing the limited refining capacities of North America:

Under the current scenario of limited refining capacity in North America, and in anticipation of increased demand, a proper regulatory environment should be put in place to allow for an efficient flow of refined
products. This would allow for the countries to maximize the storage and distribution capacity of multinational oil companies with distribution capabilities in the United States (NACC, 2007a: 50).

Overall, the recommendations set forth by the NACC clearly indicate a call for continued reliance on the private sector to deliver resources such as energy, and that the private sector should continue to be active consultants in influencing public policy, particularly as it concerns property rights such as intellectual property and regulatory standards, both of which are significant rely on transborder data flows. Perhaps more importantly, the NACC’s general attitudes towards border harmonization indicates that a trilateral regime for regulating the flow of humans should be developed immediately, suggesting that future risks are a matter of when, not if, effectively trying to mobilize a sense of haste and urgency to their claims. By problematizing the state’s right to develop their own system of border regulation, including the mechanisms for surveillance and screening, it is possible to see how the private sector is seeking to have a say in border screening as a market to be exploited and commodified. The NACC represents a powerful corporate lobby comprising the collective interests of the power elite across North America who are keen on maximizing the state as an arm for capital accumulation.

5.4 - THE PERIMETER SHIFT

At the height of its operation, the SPP had successfully organized itself into a coherent action plan for border and regulatory harmonization. Moreover, it had also succeeded in mobilizing the power elite who became a powerful lobby for ensuring that the business elites continued to hold influence in public policy. However, in August, 2009, the SPP was quietly shelved. Shortly before this, it was becoming clear that despite all efforts, the SPP’s efforts were destabilizing as new arguments were favoring alternative strategies, particularly shifting towards bi-national
prosperity partnerships. Moreover, it was also becoming clear that the private sector was increasingly putting pressure on the SPP to move quickly. A year prior to the SPP’s dismantling, the Fraser Institute published a report arguing that the SPP should rebrand itself into a bilateral initiative between Canada and the US, excluding Mexico from talks. The SPP at this point was being criticized from numerous groups of all political spectrums and political support was in decline as the public, particularly the Council of Canadians, continued to voice concerns over the relatively secretive talks and summits the SPP hitherto enjoyed. But, the Fraser report argued, despite such concerns the SPP was fulfilling an important function. Rather than abandon the project, it simply needs to be tweaked. The report argues that:

the traditional “undefended border” is no longer an option. Several studies have pointed out that we need to over-come the traditional border… The fundamental problem with the Canada-US border is that it has become a convenient point for governments to administer a host of regulations and statutes. This is convenient for government, but costly to our economies. We need to rethink what economic and political benefits justify the traditional concept of a border… On top of that, the border has become a static line of defense in the war on terrorism, but not necessarily a net gain in security for either country. Security against modern threats requires a deeper level of cooperation than border controls. At this point, this deeper level can only be achieved between Canada and the United States (not Mexico). A new border concept should be part of a negotiating package on a Canadian-American regulatory and standards area (Moens and Cust, 2008: 24).

The “studies” Moens and Cust are working from, and their position in general, is informed by the economic elite of Canada, namely, the NACC’s Canadian secretariat, the Canadian Council of Chief Executives and also the Conference Board of Canada; both organizations demonstrably constitute powerful networks which serve to perpetuate the corporate ideologies of free market enterprise. It is perhaps no wonder that the CCCE and the Conference Board (and in turn Moens and Cust) each share common similarities in terms of unquestioned acceptance of the overall power structures of Canadian society, and an underlying research agenda which seeks to maintain the powers that be at all costs. This, all done using an ideological double think of serving the interests of the public good. Hence, while claiming to be non-profit, both the CCCE
and Conference Board serve to maximize the interests of corporate profit margins, especially so
given that their board of directors are pulled exclusively from Canada’s big business, their staff
from some of the best schools money can buy. While claiming to be objective, both
organizations exist exclusively to continue private sectoral involvement in public policy. Such
“objectivity” is true only insofar as an ideologically dubious claim that markets are politically
neutral. While claiming non-partisanship, in reality, such groups inevitably favour the politicians
who will best serve the interests of capital accumulation and free
market enterprise.

The final blow, however, came with a change of leadership as President Bush finished his term
and was succeeded by President Obama who hinted early on in his presidency that he was not
interested in supporting the SPP (Yaffe, 2009: B1). Instead, what has been observed has been a
shift towards bi-national talks between Canada and the U.S. which emphasize a discursive shift
away from borders to perimeter security. Perhaps taking the advice of Moens and Cust, indeed a
rebranding of the SPP is currently underway, under the benign heading of the Beyond the
Borders Working Group, a bi-national partnership which takes perimeter security as the kernel to
future security and prosperity discussions. Announced at the beginning of 2011, the BBWG is
currently in its infancy, calling for submissions from various groups to discuss plans for future
integration of regulatory standards, and most of all security practices. Currently it is too early to
tell exactly what the intentions of the BBWG will be, but it is certain that the SPP’s agendas and
market frameworks will no doubt penetrate into their plans for border and regulatory
harmonization. In May, the CCCE produced its submission to the BBWG entitled, From Vision
to Action: Advancing the Canada - US Partnership. The document makes numerous references to perimeter security, advocating the continued deployment of surveillance and screening measures, and the extension of cross-border enforcement teams and other collaborative efforts. There is no mention of the SPP.
CHAPTER 6: Analysis

6.1 - HOMO ECONOMICUS AND THE NEOLIBERAL MATRIX

It is fair to say that scant attention has been payed to the SPP, having only been taken up by a handful of scholars, each of whom argue that the SPP represents a prima facie example of neoliberal biopolitics. Gilbert (2005; 2007) argues that the SPP constitutes a form of biopolitical intervention at the trinational level centered around risk-based management techniques to regulate the productive capacities of society. Perhaps more importantly, the SPP’s border strategy can be understood as a series of practices designed around the normalization of a rational economical agent, *homo economicus*. This conception of what constitutes a normal human actant is also the type to benefit the most from border harmonization strategies, particularly pre-approved, low-risk travel programs such as NEXUS. Thus, in terms of biopolitics, Gilbert is arguing how the SPP is a biopolitical strategy designed to favour those calculated to be “low risk” humans. In effect, the goal is to create a formalized “hierarchical citizenry” capable of sorting citizens based on risk and socio-economic status. Social indicators such as access to mobility can be regulated through the skilled deployment of surveillance technology and low-risk trusted traveler programs, meaning that those of a preferred socio-economic status will have seamless access to mobility and space, whereas the marginalized, the dispossessed and the unemployed will be systematically restricted to particular territories.

Gilbert points out that the SPP’s strategy extends far beyond matters of security and economy, but extends into the domains of health, environment, education and science and technology. However, Gilbert argues this is being accomplished primarily through market-driven initiatives
rather than investment into political infrastructure. Thus, Gilbert concludes that while the SPP signals a new role and context for the state, the partnership model of the SPP is that of a “new regionalism” in which the state is conceived of as an “enterprise” competitive in a globalized economy but also working together with other signatory states within the region (Gilbert, 2007: 92). Effectively, this means that we can understand the constitution of the globalized state as partnered, but still autonomous. Further, this template for regional governance, coupled with Gilbert’s concerns for the reconfiguration of space and mobility, means that we are talking about a hierarchical space which does not offer a smooth and seamless economic and security space, but one fraught with lines of stratification associated with the lines of capital and labour flows which will play a significant part in determining one’s life chances and access to social resources, structuring life “according to one’s specific location in the new geographies of production... In the North American partnership that is unfolding, citizens are intended to be anything but equal partners” (Gilbert, 2007: 94).

This shift in human and spatial constitution was also explored previously within a broader context of citizenship in “Fortress North America” by Bhandar (2004), in that practices of social inclusion and exclusion are at the heart of neoliberal biopolitics, to the point now where the ubiquitous classification of peoples into categories of risk constitutes the “new normalcy” of neoliberal society. Bhandar argues that it is important to consider how biopolitical strategies are often sets of practices and systematic technologies whereby humans can be categorized and sorted through techniques such as biometric screening. Such information can thus be used to identify and determine risk:
The further techno-capitalist rationalization of the border and acts to secure the border has led to an ideological reconceptualization of being human. One of the more striking features of the 'new normal' is the careful amalgamation between techno-scientific capitalist progress, forms of patriarchal violence, and indeed the re-mapping of the human body through the expansion of biotechnologies (Bhandar, 2004: 271).

Even further into this vein of the new normal is that neoliberal biopolitics is nothing short of colonial and racist policies to control the mobility of racial minorities and those with little access to social resources or capital. For Oka and Ayers (2010), the SPP and the ‘new normal’ represents a clear example of hyper-exploitation of radicalized labour and "economic apartheid" meaning that the SPP is first and foremost a colonial endeavor of global proportions within the context of a neoliberal assemblages and rationales of governance. As such discussions such as national sovereignty effectively frustrate the debate into a discursive binary such as integration versus interdependence, continentalism versus nationalism, or neoliberalism versus welfarism; each of which reasserts the normative centrality of the state, but eluded by such debates is an understanding of the modern state as a constitutive feature of bourgeois society and of the nation state as a unique political form which regulates, controls and disciplines people to facilitate capitalist exploitation (Oka and Ayers, 2010: 26). In discussing the SPP in terms of a "neoliberal matrix" of biopower, Oka and Ayers are insisting that the SPP "relies on established and reconstituted statal practices to realize its objectives, especially as pertains to intensifying processes of colonialization and the production of hyperexploitable labour" (Oka and Ayers, 2010: 27). It is the racist and colonial underpinnings of capitalist exploitation which concern Oka and Ayers as they directly equate the SPP as a neoliberal, globalized extension of such processes of global domination. Neoliberalism is thus not to be understood as simply a set of market practices centered around free markets but a form of social regulation marked by the individualization and self-responsibilization of conduct, again taking the conception of the
efficient, self-serving and self-maximizing citizen, *homo economicus*, as the ideal type citizen in the neoliberal regime. By fusing neoliberal markets with Foucault's thesis of biopower, Oka and Ayers synthesize the SPP into an organization concerned with perpetuating racist colonial processes for the purposes of economic exploitation.

**6.2 - MARKET DEVELOPMENTS**

While the aforementioned studies no doubt offer some profound insights into the SPP, it must also be noted first that the SPP was in fact a failed organization in that it has been officially disbanded in favour of new developments. Moreover, it is also quite clear that to date, the only studies of the SPP are one’s framed within neoliberal biopolitics. Much as Collier remarked that to date Foucauldian studies have tended to overemphasize *Discipline and Punish* as the hallmark text for reading Foucault, so too does it appear that this particular reading of Foucault has transpired into previous studies of the SPP. As such a careful line must be drawn in order to not ascribe a degree of over determination into the SPP. There is an important distinction which this study would like to contribute over previous studies of the SPP. While the aforementioned studies are no doubt important and offer important insights, at the same time, there is a much larger picture which was in some respects ignored. The SPP and the NACC represent instances of a hybrid forum whereby the combined calculative efforts of a power elite are working towards the continued commodification and privatization of border controls. The NACC, while insisting that the SPP work towards developing low-risk traveler programs also made sure to argue that the SPP should not necessarily commit to developing any set of regulatory standards for its risk assessment. This presents a subtle but vital distinction with other studies of the SPP. Here, the
argument is that it is much more about establishing a corporate presence and power over the regulation of borders than it is about managing the flow of particular types of people. While low risk principles are a part of the picture, the heart of such socio-technical scenarios is power to use the border to influence the market. This analysis of the SPP has in many respects attempted to demonstrate how such processes of corporate power are currently penetrating into North American borders, and the SPP represents a *prima facie* example of a powerful corporate network with the private sector for accomplishing the political and economic interests of North America’s power elite.

As Mosco (2009) argues, *commodification, structuration and spatialization* constitute three essential kernels to the political economy of communication, and indeed such processes are evident here. Moreover, Schiller and Mosco’s insights also produce an understanding which also suggests that many of these developments of continental integration, including the massive reconfiguration of labour in ‘post-industrial society,’ follow a long history of the development of information technology, giving us reason to pause in simply saying that the SPP represents an exception to the rule. However, while the SPP no longer exists, their legacy remains not simply in the recently announced BBWG, and as such it is worth briefly examining some of the developments being observed in order to guide future research in this general area, culminating into what could be understood as emerging studies in the political economy of surveillance.

Market developments from North American states, and especially in the private sector, suggest the future commodification, spatialization and structuration of ubiquitous border surveillance and
screening programs which will, from a topological perspective, drastically alter the flow of humans and non-humans across territory. First, in addition to pre-approved, low-risk travel programs such as NEXUS which use a complex of surveillance, information sharing and risk-management techniques, the development of no-fly lists (in many respects the polar opposite of low-risk travel programs) such as Secure Flight by the Transportation Security Administration (TSA) continue to proliferate. Under Secure Flight airlines must submit the passenger manifest 72 hours prior to take off, the TSA then uses Infoglide’s Identity Resolution Engine (IRE), a package of 50 "identity resolution" algorithms to conduct risk assessment, matching each passengers information provided by the passenger name record (PNR) with information kept by state authorities. Secure Flight includes non-U.S. flights, and covers any plane which travels through U.S. airspace, irrespective of their destination. This means that a Canadian flight destined to the Caribbean, for example, must produce the PNR data of all its passengers, to be stored and analyzed by the TSA and Department of Homeland Security (DHS).

The IRE screening techniques used by Secure Flight were made possible through risk-based assessment of people, techniques which encompass a complex of algorithms to determine the identity, a euphemism for threat, of passengers. According to Infoglide’s IRE press release:

Infoglide's name/data matching technology is at the core of the Secure Flight program that TSA is beginning to launch. The company's Identity Resolution software is used to accurately and quickly compare passenger data against the government's No Fly and Selectee watch lists. The identity resolution and entity analytics software uses a library of over 50 Similarity Search algorithms to compare data attributes such as name, gender, and date of birth to determine likely identity/entity matches as well as non-obvious relationships between people, places, and things. TSA's Secure Flight Begins Vetting Passengers We're a small but leading-edge software company Some of the companies we competed with have more lobbyists than we have employees. But the government wanted the best technology and technology team available for this very important project and that was us (Infoglide, 2009).

Although Infoglide is a small firm, it is partnered with the security giant L-3 Communications, who resells Infoglide's Identity Resolution Engine to customers in the federal homeland security
market. Infoglide is also horizontally integrated in other markets, partnered for example with the
insurance industry, risk management consultants, and IT consultants; their overall origins being
in fraud detection and other "detective" types of tools which after 9/11 became a lucrative market
for Infoglide. Infoglide’s overall corporate ethos, in other words, defaults on the assumption of
deceit, that people may not be who they claim they are, or alternatively the assumption that
people are engaging in malicious behaviour. Major investors of Infoglide include Conning
Capital Partners LP, an insurance industry investor; and Intersouth Partners LP, a venture capital
firm which invests in software, communications and biotechnology firms. This default
assumption of deceit most recently has been marketed towards the surveillance of children. A
new product released by Infoglide, Minor Monitor,\textsuperscript{14} offers parents the ability to discretely
surveil their child’s facebook account in order to ascertain who the child associates with, a
measure easily justifiable in light of all the ‘sexual predators’ who prey on children; what types
of activities they engage in, particularly of the illicit ones such as drinking, drugs and sex. Such
key words are recorded and compiled into reports sent to the parent’s e-mail without the child’s
knowledge. The ends justifies the means, so Infoglide will claim, but in exchange for this free
service Infoglide is likewise given access to the child’s facebook information, effectively
allowing them to collect, assemble and commodify the personal information of children for sale
to whomever they wish. Such concerns for privacy, of course, are not mentioned in the news
media\textsuperscript{15} as it would seem an almost negligible concern given the absolute (yet manufactured)
threat of child predators.

\textsuperscript{14} http://www.minormonitor.com/
\textsuperscript{15} http://www.minormonitor.com/about/press/
The commodification, structuration and spatialization of borders has been taken up by a host of large aerospace and defense firms. The SITA corporation is currently developing ubiquitous border management solutions, a product known as iBorders BioThenticate, which is designed to allow governments, airlines and airports to automate identity management for passengers and airport workers. Using a combination of biometrics and e-documents, SITA is developing a seamless system to process passengers from port-to-port, beginning from check-in to arrival, covering any steps the passenger might take in-between. More importantly the system is designed to maximize the principle of self-service to not trouble the consumer, while ensuring integrated security, effectively requiring a ubiquitous surveillance apparatus based on massive information collection, storage, processing and exchange.16 As their website describes the technology:

iBorders BioThenticate functions as the brain of the identity management system. It facilitates a seamless passenger journey that maximizes process improvements through self-service while ensuring integrated security through identity checks (SITA, 2011).

While SITA is a major player in the aerospace and airport market, in terms of biometrics and machine readable travel documents (MRTDs, as they are known in the industry), one need only turn to the International Civil Aviation Organization (ICAO), which has played an instrumental role in setting global standards for MRTDs, including biometrics in such a way which guarantees the private sector continue to hold a stake, if not completely determine, the security and surveillance landscape at airports. In 2010, for example, the ICAO held their Regional Seminar on MRTDs, Biometrics and Security Standards, in Maputo, Mozambique, attended by government officials and industry representatives throughout the globe to discuss the shape of things to come. The ICAO, as a public/private hybrid organization, is all too happy to work with

16 See http://www.sita.aero/product/iborders-biothenticate for an overview of the iborders technology
the private sector to develop the airport security market, effectively making the well-being and security of travelers a profitable enterprise. Industry partners were invited to speak and present new ways of making security profitable. Defense contractor Safran, who recently secured themselves as the global leader in the biometrics and identity resolution market by acquiring L-1 Identity Solutions for $1 billion, introduced Safran Morpho’s new 3D Photo ID card, which produces a three-dimensional portrait of the passenger, to be implemented into existing identification cards such as passports or driver’s licenses. Another sponsor, vision-box, introduced their automated border management which uses biometrics and eDocument technology to reduce burdens such as cost and time on screening arriving passengers (vision-box, 2010). The increasing reliance on biometrics continues to drive up the market value; one estimate predicts the global market to reach $7.1 billion by 2012 (HSNW, 2008). As this industry becomes more profitable, it follows that such industry heavyweights like Safran will continue to lobby the ICAO and governments into further developing surveillance and screening measures, not just in the interest of security, but the lucrative call of unfettered profit.

Recognizing the profitability of border management technology, the 3M corporation has begun to play an increasingly prominent role in this market and has been working towards developing more regional initiatives to control the flow of humans across territory. To do this, 3M had to first secure its territory in the market by horizontally and vertically aligning itself with the necessary firms. In 2008, 3M announced a partnership with ePassport manufacturer Entrust to provide end-to-end secure ePassport readers to help governments ease the transition towards ePassport technology (Entrust, 2008). In 2010, an Entrust press release stated that Entrust was
working in consultation with the Government of Canada to advance Canada’s Digital Economy Strategy, including developing proper security and citizen privacy policies and ePassport initiatives (Entrust, 2010). 3M’s push towards commodifying the border has continued unabated when, in 2010, 3M acquired biometrics giant Cogent Systems for approximately US $943 million. The merger effectively enables 3M to gain a stronger foothold in vertical integration of ePassport technology. This position was most clearly emphasized in January 2011 when 3M debuted the world’s first Multilateral Border Crossing Program for participating nations of the Caribbean Community (CARICOM), called CARIPASS, a voluntary regional travel card program which provides “secure and simple border crossings for citizens and legal residents of ten CARICOM nations” (3M, 2011). Like SITA’s efforts, the CARIPASS system is designed to facilitate the movement of pre-approved, low-risk travelers by digitizing the necessary documents needed to travel throughout participating Caribbean states, allowing passholders to ‘swipe’ their way through security using an electronic ID no larger than a credit card. This system is being marketed to and designed specifically for frequent travelers, and “pressed for time travelers” and promises to end any hassle one typically finds at airport queues.17 More importantly however, as technological artifacts have the capacity to inscribe social relations, the development of such ubiquitous systems arguably guarantees 3M a seat at the table in terms of future border developments in the Caribbean. In short, while managing the flow of low-risk humans is one thing, 3M’s interests are also in long-term market penetration.

17 See http://www.caripass.org/ for a detailed overview of the CARIPASS system.
While all this addresses primarily the aerospace market, in the land borders market a number of interesting developments have been observed which point towards the automation and digitization of borders, invisible borders as they could perhaps be called. A recently disbanded project by the DHS was to implement Boeing’s SBI\textit{net}, a sophisticated ubiquitous border control system complete with sensors to discretely monitor all movement across U.S. borders through a series of towers holding cameras and other sensors. While the project has since been abandoned, other firms continue similar efforts. One example is UK homeland security and defense firm, Digital Barriers, who recently acquired Unattended Ground Sensor (UGS) firm, Zimiti Ltd., for £1.5 million for developing automated, unattended border surveillance and control systems, allowing topological systems of control which could potentially ease off on personnel requirements as many states, including the U.S. have been facing the threat of budget cuts and austerity measures. Assuming such technology continues to be developed, which a quick survey of the market suggests, then it is reasonable to conclude that such technology will begin to penetrate North American borders. Perhaps more importantly, as the private sector continues to structure and commodify security as a market no different than selling soap, it becomes possible to see how this will likewise perpetuate a constant, underlying sense of insecurity, as some possible threat must be exploited, be it terrorism or budget constraints, in order to justify private sector involvement, and in turn the massive profit margins of a handful of aeronautics and defense contractors. Most importantly then, one can see how emerging surveillance and social sorting technologies are not simply just biopolitical intervention strategies, they constitute corporate strategies for structuring, spatializing and commodifying borders as a profitable market well in to the foreseeable future.
6.3 - SPLINTERING URBANISM

Urban geographers have sought to re-conceptualize the important but often neglected role of infrastructure in everyday life, arguing that we can understand infrastructure as complex socio-technical networks which requires substantial social and technological investment in order to maintain them. Graham and Marvin (2001) have sought to understand this perspective by synthesizing actor network perspectives with cyborg theory and political economy. One important argument made is that advanced industrial societies are highly sophisticated networks of human and non-human (cybernetic) networks. More often than not, the sheer depth of cybernetic living in everyday life goes seldom noticed, effectively black-boxing most socio-technical processes of everyday life, lest of course such networks break down. However, Graham and Marvin argue that one can observe a paradigm shift in the political economy of such socio-technical networks such that while these networks were once thought of as single, coherent networks laid out during the modern period, hence unifying frameworks such as infrastructure as inherently public large technical systems; now, one can observe a period of destabilization within such networks as they become fragmented towards much more uneven systems of development. In this respect, the shift in the political economy of infrastructure, marked by the vast commodification of all things and uneven collapse or reduction of time and space barriers, has meant that one can observe a topological shift in infrastructure development. In their analysis, one can observe first at the general level a new time-space compression, the uneven collapse of spatio-temporal barriers to further allow capital to flow seamlessly across the globe. Second, one
sees a change in the structuration of infrastructural power, bound up with larger politico-economic processes of individualization, customation, privatization and the application of new information technologies; such transformations mean that “the modern nation state, in particular, is tending to leak its power to continuous and largely invisible circuits of fast or instantaneous financial and infrastructurally mediated flow” (Graham and Marvin, 2001: 197). Third, following Mosco (1989), one can see how new technology is enabling a ‘pay-per-use’ system which measures and monitors our use and consumption of infrastructure networks and services in real-time. This in turn means that in terms of network investment, pay-per-use systems perpetuate the uneven distribution of social resources by favouring more profitable markets; the ideal of infrastructure as a public good becomes subsumed under a market logic in which infrastructure can be made to favour those who pay (Graham and Marvin, 2001: 199; Mosco, 1989). Lastly, this unbundling and commodification of infrastructure means that new ‘glocal’ and ‘scalar’ strategies develop:

they increasingly become punctured and ruptured; in our language, they are unbundled and splintered, ushering in new geopolitical and geoeconomic logics based on the highly uneven warping of time and space in highly localised and valued places. Advanced telecommunications and fast transport, in particular, are being used to link producers, distributors and consumers across distance in radically new ways (Graham and Marvin, 2001: 200).

This marks the reconfiguration of infrastructure from a binding agent of social life towards a ‘tunneling’ model which connects particular actants with others in an uneven manner, particularly along market imperatives. Moreover, the tunneling of networks enables certain spaces to be bypassed by the network completely, not only cutting off certain spaces from infrastructure access, but further isolating those within the network from the intelligible world. In sum, the multidisciplinary approach of Graham and Marvin has arguably enabled a highly sophisticated analysis of the complexities of networked infrastructure, and moreover demonstrate
the complex dynamics of socio-technical networks. Urban infrastructures, which can arguably be extended to infrastructures which manage borders, are heterogenous assemblages of materialities, technologies, social institutions and cultural values that mutually construct one another.

While a political economy underpins the new splintering urbanism, at the same time, one can also observe a concurrent thread in the literature which argues that these new topological systems for reconfiguring and digitizing space also contain an substantial element of social control. Following Gilles Deleuze’s thesis of the societies of control (Deleuze, 1995), and more broadly Deleuze and Guattari’s thesis of rhizomatic maps (1987), many theorists have argued that the digitization of everyday life has enabled new dimensions for ubiquitous surveillance, control and categorization of citizens in highly flexible, yet invisible ways. Galloway (2004) examines this thread within the context of digital spaces such as the internet, arguing that there exists hidden sets of protocols, or decentralized mechanisms which create a highly flexible system for distributing (and in many respects controlling) information across a network. This particular model for understanding the internet is in turn becoming the dominant model for understanding the organization of contemporary social life. While splintering urbanism has already been discussed, it is important to consider the vast re-organization of social life through the introduction of software and networked information systems. For Dodge and Kitchin, software and its component part code is increasingly penetrating everyday life, having the capacity to monitor, survey, augment and control many aspects of our lives:

..code makes a difference to the constitution and material and discursive practices of everyday life. It is now almost impossible not to live within the orbit of code, anywhere on the planet... In short, code, to varying degrees, conditions existence (Dodge and Kitchin, 2005: 164).
This transduction of code into space effectively alters the proximal relations of various elements within the network closer or further away from one another. While this may at first appear benign, Graham and Wood (2003) have taken up a similar position to demonstrate how such transductions of code are effectively enabling the development of sophisticated yet invisible systems which can either be programmed to help overcome social barriers, or conversely, to enable vast systems for intensifying social exclusion. Ultimately it is the political intentions of the programming which will shape the outcome, and as such code is fundamentally a social issue. In each of these positions, one important theme which connects them is to demonstrate how digital networks and infrastructure are inherently social, comprised of socio-technical assemblages. In this respect, they are not simply privy to the domain of a technocratic elite such as computer programmers or engineers who ‘speak the language’ of machines. Such machines are inherently political, economic, cultural and social artifacts with a genealogy and a political agenda. As Graham (2004) succinctly argues:

...digital divides are not just about... uneven access to the Internet... just as important are... powerful and often invisible processes of prioritization and marginalization as software and code are used to judge people's worth, eligibility and levels of access to a whole range of essential... spaces and services (Graham, 2004: 324 sourced in Burrows and Gane, 2006: 802).
CHAPTER 7: Conclusion

“Just as we must continually work to ensure that inertia and bureaucratic sclerosis do not impair the legitimate flow of people, goods and services across our border, so too must we up our game to counter those seeking new ways to harm us” (Stephen Harper, speaking on the shared vision for perimeter security between the US and Canada, February, 2011).

7.1 - TOPOLOGICAL PROSPERITY

The Security and Prosperity Partnership, although a failed organization, no doubt left an important mark on contemporary political discussion surrounding North American border and perimeter harmonization discussions, particularly as the SPP has now morphed into its bi-national counterpart the Beyond the Borders Working Group. While a handful of scholars have sought to understand the SPP from an orthodox Foucauldian perspective, one particularly grounded in his thesis of panoptic control and biopower, the analysis here began first by considering a more subtle but complex reading of Foucault’s thesis, shifting more towards his thesis of topology and reason of state. This consideration was further refined through an analysis of actor-network perspectives of socio-technical networks and particularly Callon’s thesis of the sociology of markets, which argue how we can understand technological artifacts, including the border, as socio-technical processes capable of inscribing social relations, and in turn the calculative capacities of economic actors and the framing of markets. As such, the premise for this analysis was that we can understand the border as a device for framing the market, which is not conceptualized as an autonomous entity devoid of influence, but is actively shaped by calculating actants, be it human or otherwise. The border inscribes social relations, creates
distinctions and delineates a spatio-temporal ordering of territory and population and moreover requires a vast array of supporting institutions, particularly information and surveillance technology, to sustain and administer its routine functioning.

This premise was further reinforced by a tracing and analysis of the SPP itself, which was shown to be a complex organization for mobilizing what Domhoff calls the power elite. That is, the SPP and especially the NACC were found to be comprised of state-corporate elites concerned with maintaining the forces of capital accumulation, ideological legitimation and the suppression of resistance, through the skilled deployment of information technology to ensure the smooth flow of particular objects and humans across North America. From here, Domhoff’s instrumentalist approach to political economy was expanded and refined by synthesizing it with the political economy of communication which draws from structural accounts of political economy. This was done for a number of reasons. First, the SPP was demonstrably what Callon calls a hybrid forum comprised of a heterogeneity of actants from the public and private sectors, effectively blurring any real ontological distinction from such sectors. Second, the SPP demonstrates how the state can be understood as an extension of capital accumulation, meaning that the SPP is not a ‘conspiracy’ group which is threatening the sovereignty of nations. Rather the SPP is structural outcome of the current configuration of the border in light of large scale political and economic shifts in global market relations. Third, the SPP was a strong advocate of the increased use of information technology and surveillance systems at the border. This is in many ways consistent with Schiller and Mosco’s thesis of the political economy of information and communication which has sought to show how information technology is being used to
maximize market liberalization and the free flow of capital across borders, and demonstrates the increasing importance of transnational corporations as becoming powerful forces in the political sphere. This moreover supports the structuralist position which shows how the state acts as an extension for capital accumulation. As such, there are strong grounds to support the thesis that the SPP was an example of the mobilization of the power elite and information technology to maximize particular market imperatives of market liberalization and a variant of friction free capitalism centered around the free-flow of ‘legitimate’ actants across North America.

The analysis chapter began first by reviewing existing literature on the SPP, but more importantly, the chapter shifted towards examining current developments in the border market, particularly developments of commodification, spatialization and structuration. Here, it was shown that a handful of aerospace and defense firms are actively mobilizing themselves around the border, effectively reconfiguring the border to develop evermore sophisticated systems of topological surveillance and social control; systems which are characterized by ubiquitous information collection, storage and sharing for the purposes of facilitating the free-flow of ‘legitimate’ low-risk travelers and objects across the globe.

The final section considered such market developments within the larger context of the transduction of code into everyday life and space, drawing particular attention towards the thesis of ‘splintering urbanism’ and topological control. In doing so, it becomes possible to see how, and indeed future research will need to be done here, space is becoming increasingly surveilled and controlled in order to facilitate ubiquitous yet invisible systems of social exclusion centered
around market imperatives, effectively favoring an upwardly mobile socio-economic class whilst simultaneously ignoring those deemed to be market risks. Future research should thus orient itself towards examining how trends in the political economy of border surveillance in order to see whether or not spatial protocols are emerging which facilitate the ubiquitous movement of pre-approved, low-risk travelers and objects, whilst at the same time systematically preventing or limiting the mobility of other groups. The contention of this research suggests that one will continue to find prosperity partnerships emerge in the future to address the overflows, externalities and market failures which will emerge as global capital becomes evermore integrated and concentrated into the hands of large transnational corporations and economic elites. Moreover, one may expect to see policy recommendations geared towards the continued seamless integration of communication networks throughout everyday social life, effectively permitting certain social relations to flourish whilst simultaneously restricting others. This is particularly true with mobility where hidden sets of topological protocols will continue to play a role in determining one’s ability to move across territory and access social resources, centered around a complex of socio-technical algorithms which determine the identity and in turn risk of individuals throughout the globe. Prosperity, in short, will continue to move from being a collective good towards a topological contingency based on one’s position in the emerging global network.
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