

Fossilizing Democracy: The twin energy crises and the challenge to liberal democracy

by

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B.Sc. (Honours), Queen's University, 2007

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## **Supervisory Committee**

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Dr. Michael M'Gonigle (School of Environmental Studies and the Faculty of Law)  
**Supervisor**

Dr. Kara Shaw (School of Environmental Studies)  
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## Abstract

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This paper offers a critical framework for understanding how liberal democracies will be tested and constrained by the twin energy crises of climate change and energy scarcity. The analysis is developed in three distinct phases: the first phase pursues a critical understanding of the contemporary liberal democratic state as it relates to the fossil fuel dependent capitalist economy. I argue that the state’s dependence on economic growth prevents it from confronting the structural nature of the twin energy crises. In phase two I shift focus, engaging with the historically significant relationship between liberal democracy and market-capitalism. This argument is developed by exploring (1) the historical connection between democracy, liberalism and capitalism; (2) the permanent and dynamic tension that arises from these mutually dependent, yet conflicting ideologies and (3) the crucial role fossil energy has played, and continues to play, in masking and displacing the sources and the consequences of this tension. Finally, in phase three, I explore the divergent interests of the liberal and democratic traditions, suggesting this generates points of tension within liberal democracy that may be exacerbated as the twin crises worsens. I conclude by arguing that it is only through understanding how the twin energy crises will test and constrain liberal democracy that we will be able to defend, strengthen and deepen its core values.

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## Dedication

Dedicated to Penny and Geoff Anderson:

who taught me to cherish and explore the world around me. From all those Saturdays spent waist deep in the swamp to giving me the gift of canoe trips, you planted this seed in me early and have always nurtured its growth.

## Chapter 1: Introduction

As the direction of this thesis was first taking shape 162 national delegations were preparing to meet in Copenhagen at the 15<sup>th</sup> conference of parties (COP15) to the United Nations Framework Convention on Climate Change (December 2009). The purpose of COP15 was to enact a binding climate change agreement to replace the Kyoto Protocol, which is set to expire in 2012. Despite much fanfare and anticipation in the lead up to COP 15, the international community failed to deliver a meaningful agreement, instead producing the three page Copenhagen Accord, which reaffirms the goal of limiting warming to 2°C above pre-industrial levels, but offers little in the way of how this will be achieved. Perhaps it is needless to say, but COP 15 was widely deemed a failure.

Less than a year later, as this thesis was well underway, oil was pouring into the Gulf of Mexico (April-July 2010) from the deepest oil well ever drilled (more than ten kilometres below the ocean surface). By the time the leak was stopped roughly 4.9 million barrels had poured into the Gulf, creating what has been called both the worst oil spill and the worst ecological disaster in United States (U.S.) history (New York Times, 2010; Heinberg, 2010). Before the Deepwater Horizon oil rig malfunctioned, caught on fire, and eventually sank it was heralded as state of the art: the most expensive, technologically advanced, and safest oil rig ever built. Indeed, the chain of events that led to the spill appear to be as much the result of malfeasance as malfunction, but the spill in the Gulf of Mexico is indicative of a much deeper and problematic trend. In his article for the Post Carbon Institute, *Deepwater Horizon and the Technology, Economics and Environmental Impacts of Resource Depletion*, Richard Heinberg (July, 2010), argues that the Gulf oil spill was a predictable outcome in the cycles of resource depletion: (1) less affordable and more volatile commodity prices, like the 400 per cent increase in price of petroleum over the last decade; (2) worse environmental impacts—cumulative and mutually reinforcing impacts—as risky extraction processes are pursued to increase productions, like drilling ten kilometres below the ocean floor with little idea of how to respond should a problem occur; (3) declining resource quality as the most concentrated and highest grade deposits are used first; (4) declining energy return on investment

(EROI) as it takes more energy to get less energy out of the ground, and (5) the need for massive new investment both to expand production and minimize mounting environmental risk. Heinberg's point is that the Gulf Spill, and accidents like it, are increasingly the risk associated with doing business, as the world is seeking more and more of less and less readily available energy

Both the disaster in Copenhagen and the disaster in the Gulf come to a head in what can be seen as the increasingly intense political economy of petroleum (cf. Huber, 2008: 105). And each, in its own right and in relation to the other, serves as a potent example of what has been characterized as the twin energy crises. On the one side, humanity is increasingly facing the threat of not having adequate and secure supplies of its primary source of productive energy; while on the other, the consequences of over-consumption of this energy source are threatening the integrity of essential ecological systems (IEA 2006; Homer-Dixon and Garrison, 2009; Jackson 2009).<sup>1</sup> It does not take much searching to locate the supreme irony underpinning the twin crises, in that it is a crisis of not enough supply, while at the same time too much supply. As Thomas Homer-Dixon and Nick Garrison (2009) put it, “[t]he best we can hope for is that we don't run out of cheap oil, and the worst we have to fear is that we will continue to burn fossil fuels, including oil, as we've burned them in the past” (p. 20). Certainly, if unabated, both sides of the crises will be profoundly destabilizing to human life.

Despite most governments openly acknowledging the perils of the worsening twin crises there remains widespread paralysis at the state level. As the likelihood of a multilateral agreement on climate change looks ever more bleak, and as exceptional acts to secure dwindling fossil energy supplies become increasingly normal, the need for critical reflection that seeks to (1) understand why the twin crises pose such a difficult challenge for contemporary political institutions; (2) locate these institutions in relation to the creation of the twin crises; and (3) develop a robust understanding of how these institutions will be impacted has never been more urgent.

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<sup>1</sup> For brevity's sake I will be using the term “twin crises” to refer to the twin crises of energy scarcity and climate change.

## 1.1 Framing the Argument

This thesis draws on the tradition of critical political ecology in order to provide a theoretical framework for understanding these issues. Critical political ecology is the product of critical theory and ecological political economy. It is relevant to the direction of this thesis because it melds critical theory's tradition of immanent critique—which seeks to locate the tensions and contradictions between and within existing political and economic arrangement in an effort to understand how they hinder emancipatory promises and opportunities (Eckersley, 2004; Harvey, 1990)—with ecological political economy's tradition of understanding the structure and nature of dominant economic and political institutions in relation to the environment (M'Gonigle, 1999; Robbins, 2004). Like other works of critical political ecology it relies heavily on the related fields of international political economy, ecological economics, democratic theory, historical materialism and ecological Marxism. My intention is not to provide a systematic critique of how each of these fields confront the causes and challenges of twin crises. Rather, it is to draw out the implications of their analyses so as to: (1) locate the liberal democratic state in relation to the creation and proliferation of the twin crises; (2) develop a critical framework for understanding the widespread paralysis of the liberal democratic state in the face of the twin crises; and (3) identify the dynamics and trajectories inherent to the liberal democratic state that are likely to be challenged and constrained as the crises worsen. Of particular interest to this exercise is the institution of liberal democracy because, as I argue below, it is an institution (at least in theory) that many believe needs to be defended and strengthened, while at the same time, it is one that will become increasingly problematic as the twin crises worsen.

The scope and timeline of this thesis, has required me to use a broad brush to paint what is, ultimately, a continuum of intricate and changing relationships both between and within political/economic structures and the environment. Like any endeavour that uses such a style, I must be careful not to overestimate or overstate the reach of my analysis. Thus, it is worth mentioning some areas in which the *focus* of the analysis acts as a *limit to* the analysis. *First*, although my intentions are to understand how the twin crises

interact with capitalist relations and liberal democratic politics, I must be cognizant of the fact that the subtle ecological, cultural, economic, and political differences between and within countries can open up or close down opportunities for agency. Thus, although the analysis presented in this thesis is centred on liberal democracies, which exist predominately in the “Western world”, it must be acknowledged that the primary frame of reference is North America. As such, examples used to strengthen this analysis are predominately drawn from the North America context. *Second*, using liberal democracy (and North American, specifically) as my starting and reference point, this analysis does not provide sufficient ground for imagining the alternatives that may emerge from outside this narrow context. Indeed, the types of struggles in other parts of the world may be legitimized in different ways and pursue entirely different ends—for example, well I suggest that in the struggle to resolve the twin crises liberal democracies should focus on emancipatory ends, a similar struggle in China may be focused on material ends. *Finally*, by focusing almost exclusively on the twin crises, I do not offer a complete treatment of their relationship to other crises and the subsequent struggles that may result. Arguments can, and have, been made that both the climate crisis and the energy crisis are just two of a myriad of crises that result from capitalism, or liberalism, or the centralizing state, or modernity. Although at points I do draw connections between, for example, the twin crises and the sovereign debt crisis I do not do so in a systematic fashion. My decision to not engage with each of these issues is a product of space, rather than a stance on their legitimacy. Certainly, each of the limits stated above deserves further exploration.

My argument proceeds in three parts: I begin by developing a critical framework for understanding the liberal democratic state’s dismal record in enacting meaningful climate change policy. This is developed, in Chapter Two, using Colin Hay’s theory of environmentally induced legitimation crisis. I argue that climate change policies are necessarily weak by virtue of the state’s commitment to, and naturalization of, the growth-based capitalist economy. I argue that market-capitalism is a fossil fuel dependent mode of production and circulation. And since no viable alternatives to fossil fuels are readily available, resolving the twin crises cannot be achieved without a willingness to confront the structures and dynamics of the global economy (Jackson,

2009: 57). Normative climate/energy discourse, however, has consistently failed to confront these structures, favouring instead the use of market mechanisms, marginal tinkering or outright denial.

Part two of the argument seeks to develop an understanding of the historical relationship between capitalism, liberalism, and democracy (Chapter Three). First I argue that liberal democracy has a historically significant relationship with market-capitalism, and this relationship is a source of permanent and dynamic tension that arises from these mutually dependent, yet conflicting ideologies. Next (in Chapter Four) I explore the crucial role fossil energy has played, and continues to play, in masking and displacing the source and the consequences of this tension. I suggest that the relationship between liberal democracy and market-capitalism will become increasingly problematic in the face of the twin crises because by preserving and prioritizing their material (or energetic) conditionality, liberal democracies are unwittingly sacrificing their ecological and social conditionality. Which is to say, the worsening twin crises stand to profoundly destabilize the ecological and social conditions that make liberal democracy possible. This arises from the tendency of liberal democracies to actively appropriate resources and displace social and ecological costs beyond their rigid spatial and temporal boundaries.

Finally, I consider the tensions embedded in liberal democracy itself (Chapter Five). These tensions emanate from the permanent conflict between liberalism (with its narrow conception of liberty) and democracy (with its requirement of equality). To illuminate these tensions I explore three characteristics of liberal democratic society—power relations, representation, and the liberal ontology of the self—and suggest how they may be exacerbated by/exacerbate the twin crises. Understanding the causes and dynamics of the tensions that exist both within liberal democracy, and between liberal democracy and market-capitalism is crucial for understanding how this fragile political order will be tested and constrained as the twin crises worsen. It is only by coming to terms with how and where the twin crises will impact liberal democracy that can we be in a position to defend and strengthen its ideals.

## Chapter 2: Climate Change and the Politics of Growth

### 2.1 Introduction

In response to the collapse of COP15 French climate scientist Herve Le Treut declared, "strictly speaking, it is a disappointment. We expected more, what we have seen is the diverging interests of nation states and the planet" (World News Australia, 2009). Indeed it is a disappointment, climate change is arguably the most pressing challenge of the twenty first century (cf. Friedman, 2008; Giddens, 2009; Hansen, 2009; Stern 2007) and the Copenhagen boondoggle has further undermined hope that the international community will ever commit, in a relevant timeframe, to a meaningful and binding resolution.<sup>2</sup>

But should we have “expected more,” as Le Treut suggests? Indeed we might have *hoped* for more, but the history of climate politics indicates that the outcome at Copenhagen was very much to be *expected*. Despite increased political posturing, the record shows widespread state impotency, on both the national and international stage, in effectively responding to this challenge. Long-term trends indicate that carbon dioxide (CO<sup>2</sup>) emission rates continue to increase at an ever-increasing rate. Towards more emissions, and not less, has been the trajectory ever since the Industrial Revolution. Significant to the past twenty years, however, is that despite increasing amounts of political capital being directed towards climate change, efforts to curb emissions have proved widely inadequate. Since 1990, the Kyoto Protocol’s base line year, CO<sup>2</sup> emissions have increased forty per cent, and they are expected to surge further in coming years (Jackson, 2009; Green, *et al*, 2007). This comes despite the United Nations Framework Convention on Climate Change, which has been signed by 194 parties (193 States and 1 regional economic integration organization) and has met annually for the past 15 years (UNFCCC, 2010); the formation of an intergovernmental scientific body, the United Nations Intergovernmental Panel on Climate Change; tens of thousands of academic papers and

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<sup>2</sup> See for example: *The Wall Street Journal*, which wrote in “Copenhagen's Lesson in Limits”, “(t)he previous 12 days of frantic sound and pointless fury showed that there isn't anything approaching an international consensus on carbon control.”

books on the subject; and the acceptance of climate science in mainstream policy circles. In light of these past failures, the “diverging interests” of “nation states and the planet” should not come as a surprise. Copenhagen, like Kyoto before it, is just the latest example of the inability of the state to actively resolve deep-seated environmental problems.

The ability to resolve (or not to resolve) climate change could be the defining moment of this century. Indeed, if the worst-case climate modeling scenarios are correct it could be a defining moment for humanity. With more than 60 heads of state in attendance at the Copenhagen climate talks, this is clearly a point not missed by many world leaders. Yet contemporary state institutions remain paralyzed, pursuing policies that are woefully inadequate, pushing empty rhetoric or hiding behind various convenient economic canons. Overcoming this political paralysis is integral to climate change mitigation. But how should this paralysis be understood? Where and what are its roots? And, ultimately, how can it be vanquished?

The predominant—state-centric—approach to climate politics cannot be fully understood without a deeper understanding of the state itself. Dominant climate change discourse,<sup>3</sup> however, is entirely inadequate for informing such an understanding because it fails to consider climate change within prevailing economic and political paradigms. Climate change is most often framed as a technological problem: CO<sup>2</sup> is a greenhouse gas; the combustion of fossil fuels increases its atmospheric concentration, which in turn traps heat and raises mean temperature; the challenge then is to eliminate CO<sup>2</sup> emissions from anthropogenic sources. Although these statements are factually correct, they do not provide a complete picture of the challenge climate change presents. Missing is an acknowledgement and understanding of the role and inertia of existing socio-political structures; the systemic forces that drive ever-increasing CO<sup>2</sup> emissions; and the foundational role fossil fuels play in modern industrial and post-industrial economies.

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<sup>3</sup> By “dominant climate change discourse” I am referring to the mainstream objectives that seek to reduce greenhouse gas emissions, while increasing economic growth and accumulation through the so-called ‘clean’ technologies and carbon markets.

Alternatively, a political ecology analysis, rooted in historical materialism, provides a much clearer path for understanding, and indeed overcoming, the inadequacies of contemporary climate politics because it considers climate change in relation to existing economic and political structures. Inherent in such an analysis is a theory of the state, and the state's role in the global capitalist economy. It stands in stark contrast to the conventional understanding of climate change because it begins with the assumption that the state is not a rational, self-determining actor, but rather an active agent in the market economy that is increasingly subject to regional and global forces that are beyond its control (cf. Newell and Paterson, 2008; Eckersley 2004).

It is from this vantage point that this chapter seeks to develop a theory for understanding the state in relation to climate change. Similar endeavours have been undertaken in the past: Colin Hay (1994) developed a general theory of environmental crisis and state legitimacy; and, Matthew Paterson (1996) expanded on Hay's work by developing a "political economy approach to global warming." Both authors have been instrumental in this exercise. This chapter applies Hay's theory of the Environmentally Induced Legitimation Crisis and Paterson's Political Economy of Global Warming to contemporary climate politics. The purpose of this endeavour is to illuminate the structural constraints facing the capitalist, democratic state in responding to climate change. Thus, it seeks to provide a critical lens for understanding past state impotency, and for dissecting current state policies. Particular attention is paid to ecological modernization—the most widely shared climate change resolution ideology—which I argue is a restricted attempt to secure legitimacy, without acknowledging these broader structural constraints.

## **2.2 The Politics of Carbon Emission**

The connection between economic growth and CO<sup>2</sup> emissions is well acknowledged (cf. Smil, 2004; McNeill, 2000), but what is rarely acknowledged is the *disconnect* between politics and CO<sup>2</sup> emissions. On the heels of Copenhagen's unravelling, 2009 was expected to close with the lowest global CO<sup>2</sup> emissions in 40 years (Mouawad, 2009). Before we begin congratulating ourselves it must be noted that the vast majority of the

reductions were the result of economic contraction, rather than political strength. The Energy Information Administration estimates that in 2009 US CO<sup>2</sup> emissions from fossil fuels would fall by six per cent, the largest annual drop since the government began recording emissions data (EIA, 2009). Even before the highly contested American Clean Energy and Security Act is debated in the US Senate, the US will be more than halfway to the bill's target of a 17 per cent emission reduction from 2005 levels by 2020.<sup>4</sup>

The experience in 2009 suggests that the rate of emissions is more accurately forecast through the economy rather than an analysis of state positions or policies. It is consistent with past trends. Take, for example, emission levels in the US: between 1970 and 1980, before climate change garnered mainstream credibility, emissions levels were flat. In contrast, between 1992 and 2001, Al Gore's tenure as Vice President, and a time when the international community was laying the framework for the Kyoto Protocol, annual CO<sup>2</sup> emission rose by 13 per cent. The success of stabilizing emissions during the 1970's had nothing to do with strong science, political will, or so-called 'green' investment; the difference was the (health of/growth of) economy (Kovel, 2000: 48). During Gore's tenure, the US economy boomed, and accordingly so too did CO<sup>2</sup> emissions. If one were to judge politicians by the percent increase in CO<sup>2</sup> emissions during their time in office, then the Bush-Cheney presidency was far better for the climate than the Clinton-Gore presidency. The 13 per cent increase in emissions between 1992 and 2000 dwarfs emissions during the Bush-Cheney presidency when emission actually decreased by 0.2 per cent.<sup>5</sup> This is despite the fact the Bush spent most of his presidency denying the existence of climate change, and the whole of his presidency opposing real climate policy both domestically and internationally (Grist, February 2007).

Mirroring many other environmental problems, there is little evidence of a correlation between a government's rhetorical position on climate change and the rate of CO<sup>2</sup>

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<sup>4</sup> According to *Climate Progress* (September 15, 2009), total emissions reductions between the second half of 2008, and all of 2009 equal are 8.5 per cent below than 2005 levels.

<sup>5</sup> Per cent increases were taken from the EPA's 2009 Greenhouse Gas Inventory Report, which provides values from 1991 to 2007. The 2008 figure was taken from Energy Information Agency's "U.S. Carbon Dioxide Emissions from Energy Sources 2008 *Flash Estimate*."

emissions. Granted, there are differences across countries, but this has more to do with how fossil fuels fit into a state's economy (Paterson, 1996), rather than political leadership. What appears to dictate emission rates is the economy. When considered in relation to the state's ability to resolve climate change, the relationship between the economy and emissions presents an uncomfortable paradox: on the one hand, when the economy is strong, political will and public demand for effective climate policy is high, yet the booming economy outstretches both, and emissions increase. On the other hand, during an economic recession when will and demand for climate policy is almost non-existent, carbon emissions more often than not decline. In light of this paradox, and the historical failure to overcome it, it becomes increasingly clear that the politics of carbon emissions must be understood through, as Paterson (1996) has argued, "the state's relationship to capital accumulation" (p. 162). What is needed, then, is a deeper understanding of the points at which the state and economy intersect, and how this intersection shapes the state's response to climate change.

### **2.3 Towards A Critical Theory of State-Centric Climate Politics**

Since its emergence, the primary function of the modern state has been to maintain, protect, and promote the conditions for capital accumulation. Theoretically this is supposed to be achieved passively by providing the "necessary legal and social infrastructure for business to flourish," be it the enforcement of property rights or the undertaking of public works (Eckersley, 2004: 55). In practice, however, the state role is one of active responsibility (cf. Jessop, 1990), be it through subsidies and tariffs, political and military intervention, the creation of social safety net, or the 'bailing out' of private institutions. It is this active responsibility that led the US President, George W. Bush, in his first address after the September 11 attacks, to implore Americans for their "continued participation and confidence in the American economy"(Bush, 2001); and one that led world leaders to bail out the financial industry during the 2008 recession despite widespread public disapproval (CBS/New York Times, 2008).

The changing role of the state in the economy has transformed the state itself. The emergence of the welfare state after the Second World War solidified the state's

dependence on a burgeoning economy. The emergence of neo-liberalism in the 1970's, and its consolidation as thereafter, carried with it the ideology that "the ultimate interest of all citizens is economic growth, with all other interests secondary" (Volpe and Shaw, 2007: 150). Today, economic growth continues to be idolized as a panacea for all economic, political, and social ills. Hence, the strength of the economy is the common measuring stick used to judge political success. In his book *A Bridge at the Edge of the World*, James Speth (2008) argues that promoting economic growth "may be the most widely shared and robust cause in the world today" (p.47). Clive Hamilton (2004), author of *Growth Fetish*, takes it even further writing, "the more we examine the role of growth in modern society, the more our obsession with growth appears to be a fetish—that is, an inanimate object worshipped for its apparent magical power" (p. 3).

The growth fetish Hamilton describes is not a "ruling class" conspiracy, but rather a function of the state's (primarily the democratic state's) structural dependence on ever increasing levels of accumulation (Eckersley, 2004: 55). Tax revenues from private accumulation allow the state to implement a wide variety of social welfare programs—from public education to unemployment insurance to health care programs. On one hand, a growing economy means more welfare, and thus higher public approval. On the other, a shrinking economy means deficits, high unemployment, public disapproval, and eventually expulsion from public office. Thus, the state's capacity to maintain its own legitimacy is typically dependent on the strength of the economy, and therefore, the boundaries of what is politically feasible "are invariably set by the buoyancy of the economy" (Ibid.). The promotion of capital accumulation is central to the state's identity, and it cannot maintain legitimacy, either domestically or internationally, without using the conditions of accumulation as the starting point for policy decision (Paterson, 1996)

The welfare state's structural dependence on a strong economy informed the work of neo-Marxists theorists in the 1970's (Eckersley, 2004: 55). These scholars argued that Marx's first contradiction of capitalism was no longer sufficient in understanding capitalism because the welfare state had intervened to mitigate its exploitative nature (cf.

Habermas, 1973; O'Connor 1973).<sup>6</sup> By doing so the inherent contradiction of capitalism was not resolved, but displaced onto the state. Capital accumulation, however, carries negative side effects. Thus, the welfare state was seen to always be in a 'fiscal crisis' because of its dependence on ever-increasing accumulation, and its need to relieve the negative social (and ecological) side effects of that accumulation. In order to fund welfare programs the state depends on tax revenues from private accumulation. At the same time, welfare programs such as minimum wage, workers rights, and pensions had negative impacts on the rate of accumulation. This subsequently limited tax revenues and the states ability to implement the welfare programs that were required to maintain its own legitimacy.

There are two key points to be taken from this discussion that aid one's understanding of contemporary climate politics. *First* is the notion that the welfare state is always in crisis because of the fundamental contradiction between the need to promote accumulation and its need to relieve the social (and ecological) side effects that accumulation generates (Eckersley, 2004; 56). This contradiction is what Habermas (1973) coined the *Legitimation Crisis*, because it put the state in a constant struggle to secure its own legitimacy. *Second* is that there is a functional interdependence between the "capitalist state" and the "capitalist economy" and therefore the state should not be seen as a unitary actor, but rather as a state-capitalist system (Eckersley, 2004: 56). As a system, capitalism and the state operate as codependents. The state helps spread capitalist relations of production through national integration and by extending markets, all the while becoming more powerful itself. The additional surplus increase from expanding markets helps to fund state programs and strengthen state institution, which results in further expansion. Globalization has further solidified the state-capitalist system by applying downward pressure on social and environmental standards as states actively compete to attract capital and improve the competitiveness of the national economy (Eckersley, 2004: 56). The emergence of the "competition state" has meant states must spend a higher proportion of their revenues attracting international capital, while at the

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<sup>6</sup> O'Connor (1998) characterizes Marx's 'first contradiction of capitalism' as a capital-labour conflict and one that inevitably leads to a crisis overproduction and underconsumption. The more capital exploits labour the faster the crisis will be realized.

same time keeping taxes and regulations low in order to prevent the capital it has secured from “fleeing” (Paterson, 1996: 168). All of which, as Eckersley and others have argued, has created a visible shift in the state’s “role and rationale in ways that appear to make it even more difficult to uphold the values of environmental protection and environmental justice through the state.” (cf. Eckersley, 2004: 68; Dryzek, 1997). The state, therefore, should be understood as an agent in the production of capital that is bounded by its position in the global capitalist economy, and influenced by internal and external pressures that are dictated by the capitalist growth imperative (cf. Hay, 1994; Paterson, 1996).

Although early critical theorists focused primarily on the contradictions between capital accumulation and the resulting social side effects, Colin Hay expanded on the Habermasian legitimation crisis to develop a critical state theory for environmental problems in general. It is worth quoting Hay at length. Hay (1994) argues:

It is not difficult to see how this analytical framework might be extended to include the state’s responsibility for environmental regulation... Similarly, it is not difficult to see the potential for tension that this problem generates for the state in seeking to reconcile the conflicting short-term interests of capitalist accumulation and long-term considerations of environmental preservation. (p. 219)

In other words, along with social side effects, capital accumulation produces ecological side effects. The overexploitation of “nature’s resource taps and waste sinks eventually produces the negative result of undermining both, first on a merely regional, but later on a world and even planetary basis (affecting the climate itself)” (Foster, *et al*, 2008: 6). From this angle, which has been argued extensively, and convincingly by ecological economists, the economy grows at the expense of nature (cf. Daly, 1996; Prugh, *et al*, 2002; Booth 2004). There is an inherent contradiction between capitalism’s growth imperative and the non-growing environment. Thus, the state is not only in constant ‘fiscal crisis’, but also ecological crisis as its legitimacy depends on cleaning up capitalism’s ever growing mess. Hay (1994) calls this the ‘environmental-economic contradiction’, and argues that the myriad environmental crises plaguing the planet

should be understood as symptoms of this contradiction. Although their origins arise from the environmental-economic contradiction, environmental crises become political crises because of the state's responsibility in promoting capital accumulation, while simultaneously needing to secure its own legitimacy. As such, what are "potentially fundamental" economic crises are displaced "to the realm of political responsibility" (Ibid.: 219). Environmental problems, therefore, are not discussed as the inevitable result of the capitalist growth imperative, but rather as a "crisis of politics within capitalism" (Ibid.). "This mode of displacement is functional for short-term social and system reproduction, since deep-seated structural crises become articulated as crises of a particular and transient political rationality as opposed to a crisis of capitalism" (Ibid.) Climate change is no exception, and therefore, cannot be fully *understood* until it is considered within the context of prevailing *economic* dynamics. And it cannot be *resolved* until it is considered within the context of prevailing *political* dynamics.

Two important conclusions must be drawn from Hay's analysis: *firstly*, environmental crises "must be located within the economic context of global capitalist accumulation" (Ibid.: 218). *Secondly*, due to the state's position as an active agent in the global capitalist economy, "regardless of how strong the state's environmental policy might appear to be, all states are fundamentally 'weak' by virtue of the capitalist growth imperative" (Ibid.: 223). Dryzek (1997) has supplemented Hay's theory by arguing that the state is not just weak in the face of environmental crisis, but rather is an accomplice in creating the crisis because the state-capitalist system imprisons the democratic process and limits its policy possibilities, this claim returned to in detail in later chapters (p. 50).

It is worth noting that Hay's theory, like the neo-Marxist theories that informed him, has been criticized on the grounds that it leads to an "overly deterministic understanding of the state/economy relations" (Eckersley, 2004: 61). Frederick Buttle (1998), for example, argues that, "the state of affairs appears dismal only if one is holding out for the development of a nomothetic theory of the state that posits that there is some fundamental logic of state actions generic to all states (or subcategories of them)" (p. 263). Indeed, this criticism has merit. No state is the same as any other and all states are subject to

different degrees of internal and external pressures. Perhaps most compelling in this regard is Proudhon's statement that "the fecundity of the unexpected far exceeds the statesman's prudence." (quoted in Arendt, 1979: 7). It is impossible to know for certain how state actors will respond in the future to the threat of climate change. As Hannah Arendt (1979), once wrote, "predictions of the future are never anything but projections of the present automatic processes and procedures" (p. 7). Indeed, history shows that processes and procedures often change rapidly. Despite these qualifications and limitations, one cannot easily dismiss the reality that there are material boundaries that have shaped and will continue to shape the contemporary state's response to climate change. These boundaries are arguably more rigid with climate change than any other environmental problem. This is not to understate the significance of other environmental crises. But, unique to climate change is an intractable connection between what causes the problem (the emission of CO<sup>2</sup> from the combustion of fossil fuels) and what drives the problem (the state-capitalist system's historically unquenchable thirst for fossil fuel energy). A solution to climate change, thus, lies in revolutionizing the fossil fuel dependent material flows of the global economy, which, due to the state's historical relationship to capitalism, would fundamentally reorganize the state itself. If past experiences are any indication, the state does not possess the will or ability to proactively accomplish such a feat. Thus, although Hay's theory should not be understood as infallible, it does provide a clear and critical lens for understanding the historical failures of and the contradictions within the state-capitalist system as it relates to climate change.

#### **2.4 Climate Change, Ecological Modernization, and the Structural Dynamics of Market-Capitalism**

Despite the clarity with which Hay's theory allows us to understand past failures in climate politics, it is largely ignored in the dominant climate change discourse. This is not surprising at the state level since it exposes a contradiction within the state itself. It is surprising, however, that it remains largely insignificant within the environmental movement. Despite its historical failures, the state remains posited as the only institution with the power and reach to effectively address climate change. In the face of ever-increasing CO<sup>2</sup> emissions, and a development trajectory that should see emissions

skyrocket, it is worth exploring how the state maintains, and continually re-earns this legitimacy.

Ecological modernization has emerged as an ideological panacea for overcoming the environmental-economic contradiction inherent in the state-capitalist system. Although a spectrum of definitions appears in the literature, in practice it most often refers to the use of markets and investment as sources of “innovation, efficiency, and incentives” to “combat environmental degradation.”(Newell, 2008: 79). Ecological modernization proponents oppose Hay, and his counterparts, by arguing that economic growth and environmental protection is not a zero sum game (Eckersley, 2004: 56). In other words, proponents claim that more economic growth does not necessarily equal more ecological decline, and more environmental protection does not necessarily equal less economic growth. Their argument is rooted in the belief that economies can gain a competitive advantage by “unilaterally increasing rather than decreasing the stringency of environmental regulation” (Ibid.: 69). Economic growth, therefore, can be maintained, and even enhanced, by tougher environmental standards (Weale, 1998). In this regard, proponents of ecological modernization can be viewed as ‘*techno-corporatists*’ (Dryzek, 1997), because they have an overriding faith that capitalist development will lead to technological and efficiency improvements that will decrease environmental degradation (Clark and York, 2008: 409). In their defense, techno-corporatists draw upon past successes with acid rain and ozone depletion as examples where markets and innovation have simultaneously led to environmental improvements and increased economic growth. The use of “market tools” and the reliance on “market actors” to develop new, more efficient means of production is now an entrenched characteristic of the “contemporary landscape of global environmental politics” (Newell, 2008: 79). The tenets of ecological modernization can be found in nearly all mainstream environmental initiatives, stretching back to the Brundtland Commission’s Report *Our Common Future* which launched the sustainable development debate in the 1980’s; And more recently in the, “make megabucks by reducing megatonnes” argument that is driving mainstream climate politics (Heaps, 2007). Connecting these examples is the belief that by decoupling material throughputs from economic growth the environmental-economic contradiction

can be overcome, and growth can remain the global priority. It is worth noting that the tenets of ecological modernization are far from revolutionary: developing new technologies and becoming more efficient are fundamental and necessary to capitalist development itself. Where ecological modernization differs, however, is that the state no longer plays just a reactive role in environmental problems, but emerges as proactive agent in environmental protection. This potentially positive transition for the state is compromised by the fact that economic growth still remains the state's primary focus, and ecological modernization can only be pursued in so far as it does not interrupt the conditions of accumulation.

To date, there is a lack of credible evidence to suggest that ecological modernization can relieve the tension between general accumulation and the environment in the long term (Eckersley, 2004). Dematerialization appears to hold true only for specific environmental issues that tend to exist at the margins of the economy. This was a point not missed by Hay (1994). He argues that how a state responds to an environmental crisis falls within the spectrum of ignoring the problem to addressing its root cause. In reality, neither option is politically possible because each threatens to undermine state legitimacy (p.221). The former undermines legitimacy by creating ecological instability, which may be real or perceived; while the latter undermines legitimacy by restructuring the state's "decisive economic nucleus" (p. 221). This stands to be "equally destabilizing" as it would radically constrain the nation's economy, within an "unchanged global economic dynamic" (Ibid.). The state, therefore, faces a legitimation crisis in that *both* options are politically destabilizing. In order to maintain legitimacy the state is forced to take a middle-of-the-road approach doing just enough to appease the public through rhetorical gestures, the softening of ecological destruction, or the pursuit of technological breakthroughs. These tactics are undertaken only in so far as they do not undermine the interests of capital. A crucial point underlying Hay's critique is that "states that are reliant upon societal consent respond at a largely tactical or cosmetic level to threats to legitimacy, and thus respond to subjective perceptions of crisis rather than to the contradictions and discontinuities that precipitate such threats to legitimacy" (Ibid). Thus, there is a tendency for the state to restrict the response to the absolute minimum of what

is required for maintaining legitimacy in the short-term. One, therefore, cannot compare past successes in acid rain and ozone depletion with climate change because they are fundamentally different issues. Both acid rain and ozone depletion carried high ecological risk, but the mitigation costs were relatively low. In both cases there were readily available, relatively cheap technologies and alternatives, which allowed firms to maintain the same levels of overall production (cf. Hay, 1994: 225; Newell and Paterson, 1998). Climate change, however, as Hay noted sixteen years ago, represents an entirely different challenge because although the ecological risks are unprecedented, so too are the monetary costs of solving the problem. Although inaction creates a legitimization crisis for the state, real action would require economic and social reorganization that stands to be equally delegitimizing. Within this context, it is understandable why governments and business elites throughout the modern industrial world support ecological modernization despite its limitations: the prospects of technological breakthroughs provide liberating hope for climate change resolution, without calling into question the established economic order.

The modern state is caught in a progressive trap. Rather than explore the unknown of true ecological reform, the only politically viable option being pursued by states is to outgrow of the problem. Take for example the Stern Review, which is widely considered to be the most important and progressive mainstream treatment of climate change economics (Foster, *et al.*, 2008: 6). There is a noteworthy irony embedded in its analysis, in that it outlines the potentially cataclysmic effects of climate change, but then prescribes policies that fall woefully short of prevention. It calls for stabilization of atmospheric concentration of CO<sup>2</sup> at 550 parts per million (ppm), on the grounds that “it is difficult to secure emission cuts faster than about 1% per year except in instances of recession” (p. 204). 550 ppm, however, is 200 ppm above what the leading science suggest is necessary for climate stability (see: Hansen, *et al.*, 2008; Rockström, 2009). According to a report from the United Kingdom’s chief scientist, for example, in a 550 ppm world hundreds of millions would likely be without food, billions without water, and few ecosystems would be able to adapt (Jha, 2006). It is hard to know exactly since, as the Stern Review acknowledges, the human species has never lived in such a climate. The point being that

by prioritizing and universalizing the economic *status quo* the Stern Review is forced to betray the same climate science that insisted the Review be written in the first place. As Foster, Clark and York (2008) aptly put it their critique of the Stern Review, “in order to keep the treadmill of profit and production going, the world needs to risk environmental Armageddon” (p. 6).

The Stern Review is explicit in that it is virtually impossible to maintain strong economic growth with emissions cut beyond around one per cent per year. Before we explore the specific challenges to decarbonizing the capitalist economy, it is worth a brief discussion into the reasons why climate change is a fundamentally different challenge than acid rain or ozone depletion: these include (1) the central role fossil fuels play in the economy, what Huber (2008) refers to as capitalism’s fossil fuel mode of production and circulation; and (2) the inherently expansionary dynamics of the economy.

### **2.5 Fossil Energy’s Economic Centrality**

Fossil fuels are essential to the capitalist model of development. As of yet, no other energy source has provided power at similar densities and with such versatility (Smil, 2004). Thus, the techno-corporatist view that climate change can be avoided, without confronting the ever-increasing demand for high quality energy is, for the moment, unconvincing. Outgrowing climate change is predicated on the neoclassical economic assumptions that fossil fuels are just another resource, that all resources are infinitely substitutable, and that prices will dictate demand. Neoclassical economics assumes that “economic growth is achieved solely through technical innovation and capital investment” (Ayres, 2008: 3). There is, however, an emerging body of literature, which posits that neoclassical economics “badly underestimates the role of energy in fuelling economic growth” (Dixon and Garrison, 2009: 7). Increasingly, it is acknowledged that growth in energy consumption “is a precondition for general accumulation” (Newell and Paterson, 1998: 694). Supporting these claims is the well-established correlation between growth in Gross Domestic Product and energy input (cf. Smil, 2004; McNeill, 2000; Speth, 2008). For example, growth rates of the global commercial total primary energy supplies coincide almost perfectly with those of the Gross World Product. Each variable

shows approximately a sixteen-fold increase in the past 100 years with energy consumption increasing from 22 to 355 EJ, and the total economic product increasing from roughly \$2 to 32 trillion (Smil, 2004: 65). Between 1890 and 1990 as the world economy grew 14 fold, energy use grew 16 fold, and with the majority of that new energy coming from fossil fuels CO<sup>2</sup> emissions grew 17 fold (Speth, 2008: 50). As can be expected, cheap and abundant energy is good for economic growth, while expensive or scarce energy is not. One of the most glaring examples of this are the 1973 and 1979 OPEC oil shocks, which sent the price of oil skyward, and the global economy into recession. In his book *Why Your World is About to Get a Whole Lot Smaller* Jeff Rubin (2009), argues that the 2008 global recession was not caused by the US housing bubble, but by unprecedented oil prices. He writes, “[W]hile the financial crisis from the imploding US sub-prime mortgage market gets top billing for the 2008 recession, the ascent of oil prices to record triple digits levels played a far more major role in derailing the North American and European economies.” (p.19). The purpose of these examples is to illustrate the flaws in neoclassical assumptions that help to inform ecological modernization. Fossil Fuels cannot be considered “just another resource.” Energy and raw material do not “perform similar functions in any production or consumption activities” (Alam, 2009: 173). Fossil energy is the lifeblood of the modern economy, and is as essential as capital or labour (Ayres, 2008: 9).

The economy, therefore, can be understood as an energy system: “a succession of energy conversions that start with nature and culminate in the production of goods and services” (Alam, 2009: 172). Prior to the industrial revolution the majority of the economy’s energy needs were supplied by humans and animals. The industrial revolution, however, was instigated by an energy revolution that unleashed the dense store energy of fossil fuels. The exploitation of the massively more productive fossil energy was essential for the Industrial Revolution (Huber, 2008: 109). To date, the vast majority of energy used in economic activity continues to be derived from fossil fuels. Fossil energy remains the primary driver of work that converts raw material into final products, and therefore it is vital at every stage of economic activity (Alam, 2009: 171). Thus, as the world recently experienced, contrary to the law of supply and demand, rising prices do not necessarily

dictate decreasing demand. The price of oil increased from \$20 per barrel in 2000 to \$147 per barrel in 2008, despite this astonishing increase, demand for oil in the early parts of 2008 grew “faster than it did at the turn of the millennium” (Rubin, 2009: 59). With no readily available substitute for fossil energy, climate change can be understood as an entirely more complicated challenge than acid rain and ozone depletion. Neither of which were essential to the basic functioning of the global economy, and in both instances substitutes were widely accessible, relatively easy to deploy, and crisis mitigation did not threaten general accumulation—indeed, in both cases it presented opportunities for new areas of accumulation to take place.

It would be hard to overstate the importance of fossil fuels in modern life: they are the backbone of the global economy, grow much of the world’s food, transport most of the world’s goods, shape foreign policy, and define social organization. It is not surprising, then, that economic, political and social institutions are organized around their extraction, distribution and consumption. Vaclav Smil estimates that the oil and gas infrastructure alone is worth well over \$5 trillion dollars (Smil, 2008: 5). The world’s oil industry handles 30 billion barrels a year, extraction take place in more than 100 countries, and the oil is transported by more than 3000 large tankers and 300,000 miles of pipeline (Ibid.). Additionally, “in the United States alone there are 150 oil refineries, 4,000 off-shore platforms, 16,000 miles of oil pipelines, facilities to handle 15 million barrels per day in imports and exports, 10,400 fossil-fuel consuming power plants, 1.4 million miles of natural gas pipelines and 180,000 gasoline service stations” (Williams, 2009). And this does not take into account the billions invested in roads, airports, transmission lines—all of which are directly related the fossil fuel infrastructure. Transitioning away from a fossil fuels economy would require the writing-off of “this colossal infrastructure, which took more than a century to build.” The power plants “alone have a replacement value of at least \$1.5 trillion,” and would require spending “at least \$2.5 trillion to build new capacity” (Smil, 2008: 3). Even with the technological challenges of such a transition put aside, it is staggering to think such monumental changes could occur on the decadal timescale that is relevant to avoiding climate change.

## 2.6 Structural Dynamics of Capitalism

The historical role fossil fuels have played in powering the capitalist economy is instructive of just how difficult it will be for society to shake this addiction, but the story of energy in the economy is not complete until it is considered within the dynamics of the economy itself. In 2009 humans burned roughly “eight billion metric tonnes of oil, natural gas and coal, and every year we burn more” (Homer-Dixon and Garrison, 2009: 4). The reality that each year more energy is required greatly compounds an already unprecedented challenge. Fossil fuels have fostered the conditions of accumulation under capitalism. The industrial economic machine that has brought unimagined economic growth, innovations, and arguably political stability, to modern economies is dependent on ever-increasing quantities of this energy (Homer-Dixon and Garrison, 2009: 4). This is of particular importance in the ecological modernization debate because while efficiency gains and the addition of alternatives can lower CO<sup>2</sup> emissions per unit of output, if the number of units is continually increasing, growth will eventually overrun these improvements.<sup>7</sup> Between 1980 and 2005, for example, the world’s GDP, propelled by a 23 per cent increase in energy input grew by 46 per cent. Over the same time CO<sup>2</sup> emissions increased by 16 per cent (Speth, 2008: 50). It is significant that energy inputs and CO<sup>2</sup> outputs are lower than the growth in GDP because it indicates improvements in efficiency (p. 50). But efficiency is not improving fast enough to prevent growing ecological destruction. The increasing percentage of energy consumed and carbon emitted is an indication that “environmental impacts are increasing, not declining”(p. 50). To date, the combination of renewables and efficiency have not been able to mitigate the additional emissions brought on by increased fossil fuel combustion.

Data from Vaclav Smil on coal consumption provides clear insight into the *climate-capitalism* contradiction: in 1900 coal represented 95 per cent of the industrial economy’s total energy supply. By 2000 less than 24 per cent of the total energy supply came from coal. Despite this relative decrease, coal’s importance in absolute terms

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<sup>7</sup> This widely noted dynamic was first discussed by Stanley Jevons, who observed that efficiency improvements in coal-powered engines increased, rather than decreased, levels of coal consumption. Jevons’ theory, which has come to be known as Jevons’ paradox or the rebound effect, relies on the concept of profitability, new inventions and users, and consumer behaviour (Alcott, 2005).

continues to rise. Relatively, coal in 2008 supplied a larger percentage (29 per cent) of primary energy than in 1973 (27 per cent). And in absolute terms, which ultimately are what is important, coal now supplies twice as much energy as it did in 1973, because the total amount of energy consumed has increased (Smil, 2008: 1-2).

This is particularly troubling, because climate science calls for not just the stabilizations of emissions, but also drastic reductions (Hansen, *et al*, 2008; Rockström, 2009). In Copenhagen there was a working consensus that CO<sup>2</sup> emissions in the developed world would need to be decreased by 80 percent by 2050. However, without rapid technological breakthroughs, or a transition towards a non-growth based economic model, the sheer challenge of this feat is at best astounding, and at worst unattainable. Modern society, (and increasingly the global society) have “locked themselves into an economic and social system that remains stable only through endless growth”(Homer-Dixon, 2003: 23).

The overriding logic of the system is the relentless pursuit of expansion for the sake of profit and accumulation (Foster, *et al.*, 2008: 6). As an economic system capitalism needs growth to survive. The simplest expression of capitalism’s expansionary imperative is outlined by Paterson (2000) who writes, “within modern capitalist economies a lack of growth is *the* definition of a crisis (recession)” (p.45). Profit maximization and growth is the primary goal, and in many ways this is a self-propelling process, “as surplus accumulated at one stage becomes the investment fund for the next.” (Clark and York, 2005: 407). To sustain this process a constant and increasing supply of energy inputs is required (Paterson, 2000: 49; Clark and York, 2005:p. 407). It is estimated that the world economy will double to \$100 trillion by 2030 (Harvey, 2009). Fossil fuels will continue to be the primary energy source that drives this expansion. Energy demand is expected to increase by 45 per cent globally, and by 77 per cent in non-OECD countries over that same period (International Energy Agency, 2008; Energy Information Administration 2009). Mirroring this increased demand, CO<sup>2</sup> emissions will rise by an estimated 44 per cent (International Energy Agency, 2008). These numbers do not bode well for avoiding cataclysmic climate change. It must be asked then, at what point does addressing the dynamics of capitalism become unavoidable? Clearly, as seen

in the G20's commitment to reestablishing growth while combating climate change, the international community is not yet there (Group of 20, 2009).

## **2.7 The Myth of Decarbonization**

Ecological modernization is built upon the notion that the economy can be decarbonized. Conventional strategies for decarbonization can be lumped into two main categories. The first are market 'solutions', which involve government intervention in the market with the use of subsidies, energy taxes, emission caps, and carbon trading schemes. The rationale for this is that if the market signals are strong enough energy consumers will use less fossil fuel energy, improve efficiency, or find alternative forms of energy. Marketization provides an easy mental model for understanding how a problem as massive as climate change can be solved through the market (Shellenberger, *et al.* 2008: 98). Proponents point to the success of the Montreal Protocol's cap and trading scheme in curbing chlorofluorocarbons. A number of studies suggest that the required price to curb carbon emissions, however, would be prohibitively expensive (cf. *Ibid.*). For example most potential policies in the US look to set the price of CO<sub>2</sub> at around \$7-12 per ton. For today's alternatives to be cost competitive the price would need to be \$34-74 per ton or for photovoltaic energy to be competitive it would need to be \$217 per ton (*Ibid.*: 98). At these levels government intervention to increase the cost of energy would negatively impact the economy, and thus has the potential to destabilize the very government that is setting the price.

To date, governments and voters are far more concerned about the immediate economic impact of high energy prices than the distant, relatively slow moving threat of climate change (cf. Green, *et al.*, 2007; Shellenberger, *et al.*, 2008). As a result successful policies tend to set weak targets, or are too limited in their scale. For example, in the European Union's emission trading market, in 2006, carbon was initially priced at £30 per ton. But the Union issued far too many permits for fear of disrupting business, and by 2007 the price dropped to £0.10. In a report release in September 2010, the prominent European NGO Sandbag (which exists to argue in favour of carbon markets), found that over its entire five-year period (2008-2013) of the E.U. emission trading scheme is likely

to reduce emissions by less than a third of one per cent of the E.U.'s total emissions (Sandbag, 2010). Similar outcomes have been found with carbon taxes. Every country that implemented a carbon tax between 1990 and 1999 has since frozen, reduced, or eliminated the tax, or has omitted the major polluters (Donnelly, 2009). Even proponents of the carbon tax implemented in British Columbia in 2009 acknowledge that the tax will need to be increased by 400 per cent in order to change consumer behaviour (Bader, 2009). Such an increase, even over time, would be an incredible political feat. Given the role fossil fuels play in the economy and the structural power of capital (which is discussed later), it is highly unlikely that state decision makers will, in the immediate future, commit the emission caps or carbon taxes required to achieve significant reductions in CO<sup>2</sup> emission.

The Breakthrough Institute argues, “for economic and political reasons, a regulation-centred approach to global warming cannot achieve the international consensus targets of 80 per cent reductions”(Shellenberger, 2008: 98). Instead they propose that, “the key to achieving deep reductions is to drive down the real price of and improve the performance of clean energy technology as rapidly as possible” (Ibid.:98). This, they conclude, can only be done through massive public investment in renewable clean energy technology. Public investment, then, is the second approach to ecological modernization. Rather than drive up the price of fossil fuels, it seeks to drive down the price of alternatives in the attempt to make fossil fuels uncompetitive. On their side is the unpredictability of technological breakthroughs, indeed the more resources that are poured into alternative forms of energy the more likely it is that a breakthrough will be found. But much like marketization, the investment approach is stuck within the growth paradigm. Climate change policy is dominated almost completely by economic concerns, and as a result, even those proposing far-reaching action to reduce greenhouse gas emissions feel compelled to argue in the language of economic efficiency (Alam, 2009: 171). Both approaches “seriously underestimate” the scale of the technological shift required to address climate change (cf. Pielke, 2008: 1; Smil, 2008). In their systemic analysis, Chris Green, Soham Bakshi and Maryam Dilmaghani (2007), argue that the stabilization of CO<sub>2</sub> will take huge amounts of carbon free energy that no current technology or even

combination of technologies can provide. Even if a breakthrough is discovered, and rapid and aggressive action is taken immediately to transform the world's energy system would take several decades to complete (cf. Green, *et al.*, 2007; Smil, 2008). To complicate things further, the world is on a development and energy path that will bring with it a surge in CO<sub>2</sub> emissions. The carbon free energy required to stabilize the climate in 2100 at 500 part per million is expected to be at least two to three times the total amount of energy consumed in 2000 (Green, *et al.*, 2007: 620). There is a serious lack of evidence that current technologies, deployed to their full potential will be able to stabilize emissions. The gravity of Green, Baksi and Dilmaghani's findings could not be more telling of the dubious commitments governments have made to emission cuts. For example, without major technological breakthroughs the emission reduction targets set by France, Germany and England of 60 to 80 per cent reductions by 2050 are simply not credible (p. 625). The United Kingdom's Sustainable Development Commission is even more explicit in their recent report *Prosperity Without Growth*, arguing that the "simplistic assumption" that investment in new technologies and efficiency "will allow us to stabilise the climate and protect against resource scarcity are nothing short of delusional. Those who promote decoupling of growth need to take a closer look at the historical evidence – and at the basic arithmetic of growth" (Jackson, 2009: 8).

To support this unorthodox position Jackson analyzes the historical data on resource use and carbon emissions to arrive at what he calls the "myth of decoupling." In their analysis they make the distinction between relative and absolute decoupling. Relative decoupling is "about doing more with less: more economic activity with less environmental damage; more goods and services with fewer resource inputs and fewer emissions" (Ibid.: 48). Put simply, this means improving efficiency, and there are clear patterns in OECD countries that they are becoming less energy and resource intensive. In the last 30 years the global carbon intensity has declined by almost a quarter "from just over one kilogram of carbon dioxide per US dollar in 1980 to 770 grams of carbon dioxide per US dollar in 2006" (Ibid.: 49). Yet despite declining energy and carbon intensities, CO<sub>2</sub> emissions have increased 80 per cent since 1970. There are clear patterns of relative decoupling here, as World Gross Domestic Product has increased faster than CO<sub>2</sub> emissions, but there is no

*absolute* decoupling because emissions continue to grow exponentially. The concept of absolute versus relative decoupling is of particular importance for global environmental problems, like climate change, because although emission may decrease in one region what matters is an absolute reduction globally.

Take, for example, the United Kingdom. The Kyoto Protocol signatory touts that domestic emissions have been reduced by six per cent between 1990 and 2004. But, as the *Prosperity Without Growth* report elucidates, when the emissions embedded in trade are taken into account, their total emissions have increased by 11 per cent (Ibid.: 51). UK emissions reductions have been achieved on the back of other countries, which are now doing their dirty work. Ultimately, what matters most is the total amount of worldwide emissions. Some OECD countries may show improvements but emissions continue to climb globally at an exponential rate. And as the International Energy Agency's *World Energy Outlook 2008* found, OECD countries alone cannot put the world onto a 450 ppm trajectory, let alone the 350 ppm trajectory scientists are calling for, even if they reduced their emissions to zero. The *Prosperity Without Growth* report concludes their analysis of decoupling by stating that:

Resource efficiency, renewable energy and reductions in material throughput all have a vital role to play in ensuring the sustainability of economic activity. But the analysis in this chapter suggests that it is entirely fanciful to suppose that 'deep' emission and resource cuts can be achieved without confronting the structure of market economies. (p. 57)

Since fossil energy is the cornerstone of the modern industrial economy, the likelihood that states will be able to resolve climate change using conventional methods remains bleak. The notion that climate change can be outgrown through decarbonization sits comfortably with the prevailing normative underpinnings of the dominant international climate discourse. However, as the *Prosperity Without Growth* report indicates decarbonization is better understood by what Colin Hay observes as the tendency for the state to pursue "tactical or cosmetic action" when legitimation crises threaten the conditions of accumulation. The weak ecological modernization methods that are championed by so many stand as a stark reminder of how a dependence on economic

growth has blunted political possibilities. As the evidence presented in the *Prosperity Without Growth* report indicates, conventional climate politics are at best a short-term reprieve from the tension between accumulation and legitimation.

## **2.8 Conclusion**

The purpose of this chapter has been to provide a critical lens through which to understand the historical failures of a narrow state-centric understanding of climate politics. I argue that the modern state's ineffective, yet predictable response arises from its structural dependence on capitalism's fossil fuel mode of production. This argument is developed using the general theory of the environmentally induced legitimation, as presented by Colin Hay, which provides a clear path for navigating the origins of these failures, and thus serves as a valuable heuristic approach through which to understand how the state is likely to act in future. When the unprecedented ecological costs of unmitigated climate change are weighted against the unprecedented monetary costs of prevention it becomes increasingly clear that the state faces a legitimation crisis. On the one hand, inaction precedes ecological ruin. While on the other, effective action requires transformations that are inherently anti-capitalistic, and thus exist outside the state's own logic. Since both options result in the end of the contemporary state, one can expect climate policies that are just strong enough to relieve symptoms or ameliorate fears, but weak enough that they do not undermine the conditions of accumulation. Thus, the widely shared faith in ecological modernization can be understood as a short-term attempt to secure legitimacy without addressing the deeper contradictions inherent in the contemporary model of development. As the *Prosperity Without Growth* (2009) report outlines the few examples of decarbonization appear to be achieved at the expense of emissions elsewhere. There is a serious lack of evidence that decarbonization can happen on a wide scale. Even with a full commitment to a non-fossil fuels economy, which in itself would be a historical feat. Green, Bakshi and Dilmaghani's (2007) analysis shows that at the moment, a carbon free economy cannot be achieved without confronting the dynamics of capitalism itself. Even the most aggressive and pervasive institutional attempts to confront climate change would fall woefully short of what is needed.

In his book *Global Warming and Global Politics*, Matthew Paterson (1996) argues that in order to understand a state's position towards climate change one must first understand "the way in which fossil energy is inserted into the national economy" (p. 157-162). However, even though each country has different roles in the world, and contributes different amounts to climate change, the fossil fuel dependent mode of production and circulation means that all modern states face some degree of the climate-capitalism contradiction. Thus, what is of greater significance is that despite marginal interstate differences, to date, all states are weak in the face of climate change. This parallels an observation made by Ken Conca (1993) who argues that all states are only able to resolve those environmental crises that do not threaten the interests and routines of industrial capitalism. Even though the modern state nominally has the power to act, and even though it is in own long-term self-interest to act, it cannot actively pursue the structural reforms necessary to curb absolute levels of fossil fuel consumption because it cannot "actively shrink its own economy" (Hausknot 2008, p. 21).

This paradox afflicts all modern states, as the peculiar economic institution (capitalism), along with its political counterpart (liberal democracy), are structurally dependent on cheap and abundant supplies of fossil energy for both production and circulation. While such claims do not eliminate the possibility of drastic reductions in CO2 emissions, they do suggest that if (or, arguably when) these reductions do come they are likely to be the result of geopolitical instability or declining fossil fuel deposits, and not breakthroughs in approaches to climate policy or through tough reduction plans (Pardy, 2008: 202). Some commentators have suggested that it is perhaps fortuitous that climate change and fossil fuel scarcity may be arriving at roughly the same time (Pardy, 2008: endnote 62; Foster 2009: 105). Perhaps this argument is valid strictly from an ecological standpoint, but by virtue of modernity's dependence on fossil energy many of the social, political and economic impacts that may come from catastrophic climate change are similar to those that may come from energy scarcity.<sup>8</sup> Both threaten economic stability and have the

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<sup>8</sup> Indeed, it is beyond the scope of this paper to fully analyze the energy scarcity debate, there is a mountain of academic, government and industry literature that covers the subjects of peak oil, and the declining energy return on investment. It is worth mentioning, however, that with oil prices climbing from \$20 a barrel in 2000 to \$150 a barrel in 2008; with 3 barrels consumed to every

potential to trigger a prolonged economic crisis; both have the potential to cause global food and water shortages; both will impact the world unevenly and thus have the potential to trigger mass migration; both threaten the erosion of peace and stability; and both stem from different ends of the same branch. Whether it is from lack of input or excessive output, the twin energy crises put modern society on a collision course with the ecological boundaries of the earth.

Both climate change and energy scarcity present a fundamental challenge to modern societies because, borrowing Blühdorn's wording, they are problems that "cannot be resolved, but neither can [they] not be resolved" (Blühdorn, 2007: 265). As the twin energy crisis worsens it will necessarily impact contemporary political institutions, but the question begs, how will these institutions be tested and constrained? To begin to answer this question we must first develop a historical understanding of the modern state; in particular, the ways it is grounded in capitalism, liberalism and democracy. This understanding is developed in the next chapter.

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one barrel found in 2009; and with the worlds most populous countries and regions increasing their demand and dependence on fossil fuels the possibility of an energy scarce future is not some far off delusion.

## Chapter 3: The Origins of the Liberal Democratic State

### 3.1 Introduction

Building on the analysis developed in the previous chapter, this chapter begins with the premise that capitalism, due to its historical dependence on fossil energy, is incompatible with resolving the twin crises. With no readily available alternative to the fossil energy regime, and from the perspective of the pending climate and energy crises, the capitalist mode of production has been shown to be deeply problematic and ecologically destructive. A solution to the crisis must, thus, lie in revolutionizing the current modes of production and circulation in ways that dramatically decrease material throughputs of fossil energy dependent capital. In this sense, this thesis, then, continues in the tradition post-fossil fuel theorizing that has experienced a deluge of attention in recent years (see for example: Milani, 2000; Victor 2008; Homer-Dixon and Garrison, 2009; Rubin, 2009; Jackson; 2009;). Much of this body of work is informed by the principles of ecological economics, which emerged in the 1970's in response to the Club of Rome's *Limits to Growth* report and the OPEC oil crisis. The new generation embraces steady state economic principles, however, they are expressed with the explicit intention of ending Western society's fossil fuel addiction. Post-fossil fuel theorists have put forward a range of compelling arguments for economic reformation; more prudent ways of measuring wealth and wellbeing; re-localizing economies; building renewable energy economies; and overhauling current government policies and priorities.

While I agree with the critiques that highlight the problematic nature of fossil-capitalism and support the need to develop alternative economies, I question the completeness of their analyses. Their focus is largely on production and consumption processes, which inevitably isolate the economy from social and political realities. More than an economic input, energy (fossil or non-fossil) is a vital, transhistoric force in all human societies at all levels of interaction with nature (Huber, 2008: 106). In other words, it is not simply a 'resource' or an economic input but rather is a social relation (Ibid.). As David Harvey argues, a given resource "can be defined only in relationship to the mode of production which seeks to make use of them and simultaneously 'produces' them through both

physical and mental activity of the users” (Harvey, 1974: 265). All forms of social organization exist in relation to their surrounding environments, and thus, although they shape their environment, they are also shaped by it. It is through these relationships, Harvey continues, that “the totality shapes the parts to preserve the whole” (Ibid.). Thus, although the movement away from fossil energy would necessarily reorganize economic life, it would also reorganize the whole of society, changing how people work, eat, transport, house and, indeed, govern themselves. Where fossil energy shapes the boundaries of economic production and circulation, it also shapes the boundaries of socio-political production and circulation. In other words, while modern economics can be characterized as a fossil fuels mode of production, one can make similar claims about modern politics. As Timothy Mitchell (2009) observes:

Political possibilities were opened up or narrowed down by different ways of organizing the flow and concentration of energy, and these possibilities were enhanced or limited by arrangements of people, finance, expertise and violence that were assembled in relationship to the distribution and control of energy (p. 401)

The implications of a post-fossil fuel future for modern politics remains a troubling blind spot in much of the post-fossil fuel theorizing. The work that is dedicated to the politics of the twin crises is, more often than not, uncritical of both the role the modern state plays in reproducing the conditions for fossil capitalism, and the significant location of the modern state within the historical development of the fossil fuel energy regime. Thus, inherent in much of the post-fossil fuel theorizing is the largely unexamined assumption that the liberal democratic state can shed its capitalist form and adjust to new ecological, social, and economic realities. By limiting their inquiry to the economic sphere these analyses problematize capitalism, while unwittingly universalize and neutralize its political counterpart: liberal democracy.<sup>9</sup> This, I contend, is profoundly problematic because not only do the structures and dynamics of liberal democracy make the twin crises extremely difficult to resolve, but they too, are endowed with a particular history and trajectory that may also be incompatible with a post-fossil fuel world.

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<sup>9</sup> Ellen Wood first made a similar point generally, but it is apposite here (Wood, 1981 p. 181).

Before I can defend this claim, and flesh out its implications, it is necessary that I state explicitly what is meant by liberal democracy. Democracy, in all its forms, is notoriously difficult to define. This is especially true in the modern era because (1) it means different things to different people at different times and in different places (Held, 2006 1-3); (2) the history of modern democracy and the history of false claims to it are inseparable (Markoff, 1996: 103); there is no ideal form or example to compare it to because all democracies exist on a spectrum (Diamond, 2008, 21-25); and even the regimes that are considered the hallmarks of modern democracy struggle to balance a variety of democratic and antidemocratic forces and dynamics (Tilly, 2007: 3-4). Keeping this persistent opacity in mind, the definition that follows seeks to develop an understanding of liberal democracy that allows us to locate it within the context of the twin crises, other definitions surely exist that exclude or include different attributes, but it is the definition presented here that serves as the point of reference for the remainder of this paper.

From a procedural perspective, democracy refers to popular self-government, or what Abraham Lincoln famously called “government of the people, by the people, and for the people” (Quoted in Pitkin, 2004: 337). In this sense it can be defined as a regime that is committed to fair, frequent, and competitive elections, which are open to all adult citizens and produces changes in governmental personal and policy (cf. Tilly, 2007: 8; Dahl, 1989).<sup>10</sup> We can take from this that democracy is not simply the presence of elections. Non-democratic countries often hold elections in an attempt to secure democratic legitimacy (see, for example, North Korea or Zimbabwe), but if they do not meet the criteria stated above then they are not democratic (Tilly, 2007: 8). Not all countries, however, that meet these procedural requirements can be considered *liberal* democracies. What sets liberal democracies apart is their strong commitment to the rule of law, individual liberty, and human rights (Mouffe, 2009: 2; Tilly, 2007: 7; Zakaria, 1997: 22; Touraine, 1997). These requirements, which have little to do with elections or

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<sup>10</sup> Even this simple definition can create confusion: how often is frequent? Who are considered citizens? Does it include women, minorities and other social groups? For my purposes here, and so as not to be stymied by qualifiers and stipulations, ‘fair’ means that the elections aren’t rigged, and all votes are counted; ‘frequent’ is in the order of years, not decades; ‘competitive’ means that there are at least two viable candidates; ‘all adult citizens’ means that no adult social groups are excluded; and ‘changes to government’ means that the oppositions has a chance to win.

representation, suggest that democracy in the modern era can be measured on a procedural and a substantive scale. Freedom House, a democracy monitoring organization, which is reference widely in the literature (Tilly, 2007; Diamond, 2008; Sørensen, 2010), uses such a scale to assign every recognized country in the world a democratic rating between 1 (being more democratic or “more free”) and 7 (being less democratic or “less free”). The index measures two dimensions, one for competition and participation (called political rights) and one for civil liberties (Tilly, 2007; Sørensen, 2010). Identifying these two dimensions of democracy is helpful for two reasons: *first*, it allows us to distinguish between liberal democracy and what Fareed Zakaria (1997) has termed “illiberal” democracy. Illiberal democracy refers to those regimes that meet the procedural requirements but frequently ignore “the constitutional limits of their power and [deprive] their citizens of basic rights and freedoms” (see for example Sierra Leone, Slovakia, Pakistan, etc) (p. 22). *Second*, it allows us to measure the *degree* of democracy. Democratic regimes are not static. Across time, they are inevitably forced to make tradeoffs between their substantive commitments (the rule of law, individual liberty, and human rights). In making these tradeoffs, however, they do not necessarily stop being liberal democracies. The U.S. government, for example, chose to suspend some basic individual liberties following 9/11, in doing so it did not stop being a liberal democracy, but, by Freedom House standards, it certainly did become less democratic.

With these qualifiers stated, we can now begin to sketch the tempestuous boundaries of liberal democracy: (1) meaningful and regular competition amongst individuals and groups for all effective positions of government power; (2) inclusive political participation in the selection of leaders or policies, in that no adult social groups is excluded; (3) an adherence to the rule of law, the formal separation of powers, and a commitment to civil and political rights and liberties; and (4) a sufficient level of those rights and liberties—these include freedom of speech, freedom of the press, freedom of association—to ensure competition and participation (Dahl, 1989; Tilly, 2007).

Before I continue further, it is necessary to air one underlying assumption upon which this entire argument rests: democracy, and in particular liberal democracy as it has been

defined here, is worth defending and strengthening. This assumption, I must stress, has less to do with what democracy is, and more to do with what it tries or professes to be. Indeed, in practice democracy has always fallen short of its ideals (Dahl, 1998: 60). Thus, it should be defended, not as a panacea for all injustices and evils but as an attainable system of government through which “pressing, substantive issues will receive a better opportunity for deliberation, debate, and resolution” (Held, 2006: 261). For this reason, despite its failures, democracy has come closer than any attainable alternative in achieving a greater degree of legitimate authority, political equality, liberty, self-determination and common good. Additionally, it should be defended because modern democracy has a fragile history (Markoff, 1996; Held, 2006; Huntington, 1991).<sup>11</sup> As the past century in Europe alone has shown, democracy is a remarkably difficult form of government to create and sustain: fascism, Nazism and Stalinism came very close to eradicating it altogether (Held, 2006: 1). The failed democratic experiments of the past serve as potent reminders that democracy is neither an end point on the political timeline, nor does it represent a progression past authoritarianism and tyranny (Markoff, 1996: 1-2; Huntington, 1991: 17-21).<sup>12</sup> Likewise, it should be strengthened and extended so it has a better chance of living up to what it promises and so that there is greater access to it. To defend and strengthen it requires first that, as Mouffe (2009) explains, we identify its specific dynamics and acknowledge the tension that arise from its informing logics.

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<sup>11</sup> From a macro-perspective, the history of modern democracy is regularly described as “the waves of democracy.” For example, between 1910 and the mid-1920s the world experienced a great democratic wave as there was considerable parliamentary reform in western Europe, the extension of suffrage to women in several countries, and the formation of democracies in the new countries that emerged from the first World War. This wave was followed by an antidemocratic wave in the 1920s and 1930s, which saw fascist movements, authoritarian monarchs, and anti-democratic militaries expel democratic forces from much of Europe and Latin America. The changing political landscape after the military defeat of fascism in World War II was a diffusion of the political system of victors: democracy spread, but it was dampened by rise of communism which competed for the dominant ideology. The fall of communism gave way to what has been called the ‘third wave’ of democracy. Democracy has been achieved, or claimed by an unprecedented number of countries, although there is indication, with the growing influence of authoritarian capitalist regimes (most notably China and Russia), that third wave is perhaps at or past its end (For a more detailed discussion see Sørensen, 2010; Markoff, 1996; Huntington, 1991).

<sup>12</sup> Thomas Carothers (2002), for example, shows of the 100 countries or so that have democratized in the last two decades only a small number—probably fewer than 20—are on their way to becoming “successful, well-functioning democracies or at least have made some democratic progress and still enjoy a positive dynamic of democratization” (p.9).

It is here that a most crucial point can be pulled from the foregoing discussion: although often referred to without distinction, liberal democracy is actually the merger of two separate traditions. On the one side democracy, which is an attempt to bestow power to the sovereign people. On the other side liberalism, which provides the symbolic framework within which this democratic rule is exercised (Mouffe, 2009: 2). The values of individual liberty, freedom of choice and limited state power, while central to the liberal tradition, are not “part and parcel of the democratic tradition whose core values, equality and popular sovereignty, are different” (Ibid.). Thus when discussing liberal democracy we are really discussing an articulation between two very different traditions (Ibid.: 3) In the modern era, liberalism predated democracy, and the history of the liberal democratic state was liberal first (aimed at maximizing individual autonomy and restricting state power over civil society), and democratic later (aimed at creating state structures that would remain responsive to the autonomous people) (Sørensen, 2010: 442; Macpherson, 2006, Eckersley, 2004). Liberalism’s embrace of democracy was at best reluctant, and at worst violent. The point being, there is no necessary relationship “between those two distinct traditions but only a contingent historical articulation” (Mouffe, 2009: 3). The distinction between liberalism and democracy is a crucial one moving forward because it allows us to understand them both separately and in relation to each other, and thus to identify their peculiar priorities, and trajectories, and the points of tension that exist between them.

To refocus the discussion back around challenges posed by the twin crises, this distinction is especially pointed for two reasons: *first*, all Western democracies can be considered, to varying degrees, liberal democracies (Held, 2006: 59). It is these countries that I am most interested in for the purposes of this paper because it is these countries which (1) have historically driven the twin crises; (2) serve as the dominant model for the rest of the world to follow; (3) through their positions in the global economy and international community will dictate, to a large degree, how the world responds; and (4) as the discussion in the next chapter will explicate, their response is most likely to depend on how they can deflect the costs of their actions onto the rest of the world. Although many Western nations have long traditions of liberal democracy it is prudent to

remember that these traditions were first forged and institutionalized in a bygone world that knew nothing of the horrors of global resource depletion, climate change, massive loss of biodiversity, and the threats of nuclear war (Eckersley, 2004, p. 109).

*Second*, liberalism (and as a result liberal democracy) has a significant historical relationship to capitalism.<sup>13</sup> The deep-seated nature of this relationship—as I will discuss in detail shortly—is shown best by the fact that no liberal democracy has ever existed in a country prior to it first having a market-capitalist economy (Macpherson, 2006: 5; Therborn 1997: 142-144, Dahl, 1998). Grasping this relationship and drawing out its implications is significant to this analysis because, as has been discussed, the twin crises pose a potentially overwhelming challenge for *fossil-capitalism*. Any notion that a drastic overhaul of this system can be achieved without a drastic overhaul of the state and its political institutions, uncritically casts the liberal democratic state as a disinterested and unproblematic actor in the creation and reproduction of economic and social realities. A key criticism of much of the post-fossil fuel theorizing is, thus, that it projects an uncritical *assumption of democracy*. By assumption of democracy, I am referring to the assumption that the liberal democratic state can respond to the structural nature of the twin crises in such a way that it can preserve its liberal (commitment to the rule of law, individual liberty, and human rights) and democratic (commitment to popular sovereignty) commitments. If, for example, climate change or energy scarcity triggers a profound social or economic crisis the liberal democratic state will undoubtedly be invigorated to respond, to rationalize, to organize, to mitigate and to manage the crisis, but in the process may stop being both liberal and democratic (Hausknost, 2008, p. 11). There is no guarantee, and little supporting evidence, that liberal democracy is adequate for addressing the end of the age of fossil fuels, for which it emerged to govern. Thus as, Hausknost (2008) argues, using Kunstler’s terminology, it is not out of the question that a lasting ecological or energy crisis could “turn a liberal democratic state into an

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<sup>13</sup> It is necessary here to distinguish between political liberalism and economic liberalism. While the former refers to the modern commitment to the rule of law, the separation of powers and human right. The latter is predicated on the belief that society is better off if autonomous individuals are allowed to choose and act freely in the market. These are two very different priorities that are underpinned by the same ideology. I discuss them in more detail below, but for now it is suffice to say that economic liberalism created the conditions for modern political liberalism to take root.

authoritarian state in that the state will claim to navigate society through a ‘long emergency’, thus suspending” its liberal democratic institutions, and/or liberal ideals (p.11). Indeed—from the anti-democratic wave that emerged after the great depression and the temporary suspension of democratic rights and procedures during World War II to the anti-liberal wave that has followed the war on terror—there are numerous examples of liberal democracies weakening and/or folding under the weight of a profound crisis.

The point being, that only by understanding liberal democracy’s peculiar relations, embedded trajectories and internal tensions can we begin to understand how it will be tested, challenged and constrained by the twin crises, and, thus, this path is necessary for envisaging how it can be defended and strengthened as the twin crises worsen. The vestiges of the Industrial Revolution, absolutism and the formation of liberal thought are the prologue to how liberal democracies operate and function today, and thus provide a window for theorizing how they will respond and change in the face of the twin crises. To develop this understanding, I will explore the historical relationship between industrial (fossil) capitalism, the liberal state, and the rise of modern democracy. In doing so I will focus on the historically specific context in which industrial capitalism and the liberal state emerged, and argue that these societies were not democratized *per se*, but rather modern democracy was conceived in such a way that it could fit their pre-existing conditions.

### **3.2 The Rise of Industrial Capitalism and the Establishment of the Market Economy**

It can be argued that the story of liberal democracy begins in the Industrial Revolution. It was during this transformative period that the seeds of liberalization and democratization were, albeit largely unwittingly, planted in the soil of Western societies. Many commentators have observed that liberal democracy is a direct product of market-capitalism (cf. Schumpeter, 1976: 297; Macpherson, 2006: 5; Lipset, 1994: 5; Therborn 1997: 143; Dahl, 1998: 166). This claim finds validity in the juxtaposed facts that (1) all liberal democracies exist in countries whose economic systems are predominantly capitalist, and (2) no liberal democracy has ever existed in a country prior to its first

having a market-capitalist economy (Macpherson, 2006: 5; Therborn 1997: 142-144, Dahl, 1998: 166). Since market-capitalism has historically preceded liberal democracy this suggests that it creates the conditions necessary for liberal democracy to be realized. This does not suggest that market-capitalism is a sufficient condition for liberal democracy, but it does suggest, that at least to date, it is a necessary condition. Understanding the relationship between market-capitalism and liberal democracy requires a deeper analysis of the historical origins of market-capitalism; in particular of how and why market-capitalism promotes the conditions for liberal democracy.

It is not my intention here to provide an original account of these origins, but rather to illuminate the established accounts in a light that opens the space for theorizing how the twin crises are likely to impact liberal democracy. Thus, although what follows seeks to locate the general connection between market-capitalism and liberal democracy, it is accompanied by a more specific intention of locating the role fossil energy has played in the dissemination and reproduction of both these dominant economic and political institutions.

The Industrial Revolution is often characterized as an energy revolution—marked by a societal transition from exploiting solar energy (in the form of water, wind and biomass) to stored or fossilized energy (primarily in the form of coal). More specifically, however, because of how this new form of energy was concentrated and directed, the Industrial Revolution can be characterized as the beginning of a materialistic revolution—marked by the unprecedented advancement in the tools of production and the unprecedented expansion of the accumulation process (Polanyi, 2001: 24). The changing productive landscape gave rise to a new form of economics: industrial capitalism. Industrialism is the “material or technological side of economics,” and it involves a “particular use of energy, materials, and cog-labor.” Capitalism on the other hand can be understood as the “financial and monetary side” (Milani, 2000: 5), and is essentially a self-propelling process where accumulation becomes an end in itself, as surplus profits at one stage become the investment fund for the next round of accumulation (Prudham, 2009). What made industrial capitalism such a domineering force was the congruence of the physical

properties of fossil energy with the capitalist mode of development (Altvater, 2007: 41). The unprecedented advancement of the economy's productive capacity, which was powered by the exploitation of fossil energy, allowed for an unprecedented accumulation of wealth. This, in turn, through the logic of capitalism—i.e. accumulation for accumulation's sake, to reference Marx (1987)—led to the unprecedented accumulation of capital, which further advanced productive capacity, creating a cycle of expansion.

Compared to other energy sources fossil energy fulfils almost perfectly the requirements of capitalism's accumulation process (Altvater, 2007: 41). These requirements are threefold: *first*, fossil energy facilitates the transformation of pre-capitalist patterns of space and place into capitalist ones by severing energy availability from geographical constraints. With the advent of fossil exploitation, local energy availability no longer dictated industry's location or lifespan, allowing for the greater concentration of production. *Second*, "fossil energy can be used 24 hours a day, 365 days a year with constant intensity, allowing the organization of production processes independently of social time schedules, biological and other natural rhythms." And *third*, "fossil energy can be used very flexibly in production, consumption and transportation, and in the use of time and space" (Ibid.: 41-42). The union of industrialism and capitalism unleashed unprecedented levels of accumulation and economic growth, as wealth became "increasingly independent of natural conditions and their limitation" (Ibid.).

In his classic work, *The Great Transformation: The economic and political origins of our time*, Karl Polanyi (2001) argues that the transformative feature of the Industrial Revolution was the establishment of the free-market economy (p.42-43). Certainly markets existed in pre-industrial societies, but they played only a secondary role in everyday life and were embedded in social relations (Ibid.: 46). Prior to industrialization markets for land, labour and capital were not yet extensive, and thus a significant part of human life was insulated from markets (MacEwan, 1999: 114-115). What changed with the augmentation of industrial capitalism was the "all encompassing reach and enormous tempo of market transactions" (Altvater and Mahnkopf, 1997: 450). Altvater and Mahnkopf use the term 'reach' to refer to both the "physical and spatial extension," and

also the “functional-spatial process” of integrating all aspect of society into market relations (Ibid.: 450). In other words, the Industrial Revolution propelled the expansion of the market to cover all elements of society. People continued to be linked through markets for goods and services, but markets for land, labour and capital became widespread. Since the majority of people did not have access to productive land or productive capital, they were forced to earn their livelihood by selling their labour in the market for wages and salaries (MacEwan, 1999: 114). Life became increasingly organized through the market, and since all the elements of industry—land, labour, and capital—became commodities to be bought and sold, social relations were transformed into market relations (cf. Polanyi, 2001: 78; Macpherson, 2006: 9-10). Accordingly, this had profound social and political implications: for the first time in human history, “instead of the economy being embedded in social relations, social relations [became] embedded in the economic system” (Polanyi, 2001: p.57). The rise of industrial capitalism, therefore, transformed not just economic arrangements, but society as a whole.

### **3.3 The Need for a Liberal State**

Wherever market-capitalism spread it proved to be an enormously liberalizing force (Macpherson, 2006: 9). This was, in part, due to its unprecedented productive capacity: it is estimated that “fossilized industrial productions vis-à-vis the steam engine in England in the late-18<sup>th</sup> century led to a hundred-fold increase in labor-productivity in the textile industry” (Huber, 2008: 110). Accordingly, the output of manufactured goods roughly doubled in the second half of the 18<sup>th</sup> century and grew even more rapidly in the early 19<sup>th</sup> century (Hunt, 2003: 44). The impact on society proved to be revolutionary as wealth and class came to depend less on religious sanctity and redistribution, and more on the ability of one to accumulate in the capitalism-market (Nitzan and Bichler, 2009: 39). Over time, the relentless expansion of the market and the potential for endless material growth began to subvert the “deference to political hierarchy and the stationary economy of feudalism” (Ibid.: 27). The Industrial Revolution catapulted a capitalist class into a position of newfound social power, which gradually began to undermine the legitimacy of traditional orthodoxy. The customs, status and the authoritarian allocation of work and rewards, which defined pre-capitalist society, gave way to a society based on

“individual mobility, on contract and on impersonal market allocation of work and rewards in response to individual choice” (Macpherson, 2006: 9-10).

Market-capitalism, thus, emerged as both the engine of economic growth and the vehicle of liberation (Nitzan and Bichler, 2009: 39). Rather than the “visible, hierarchical power, legitimized by a willful god” this emerging ideology imagined a society “based on invisible, horizontal forces, anchored in objective science” (Ibid.). But before such liberation could be fully realized it had to be cut free from the shackles of the old politics (Hunt, 2003: 40). As Nitzan and Bichler (2009) put it:

Divine right had to give way to natural right, sanctified ownership to private property, religion to rationalism, paternalism to individualism, obedience to self-interest and utility, hierarchical power to competition, [and] absolutism to constitutionalism (p.40)

A liberal conception of society was not entirely new. Liberal thought emerged more than a century before the Industrial Revolution, most prominently with Thomas Hobbes (1588-1679) who attempted to balance a commitment to absolutism with the struggles against tyranny. It continued and was expanded upon by John Locke (1632-1704) who fathered the liberal constitutionalist tradition, which would become the “dominant thread in the changing fabric of European and American politics for the eighteenth century” (Held, 2006: 59). It took, however, the extreme social disruption of early industrialism, the dramatic expansion of the market, and the emerging influence of the capitalist class to propelled liberalism to prominence (Polanyi, 2001, xxii; Hunt, 2003: 44). While the freedom of choice trumpeted by liberals was originally limited to freedom of economic choice, it gradually became associated with most areas of life, including religious and political affairs. Still, as David Held (2006) explains, “[w]hile different variants of liberalism interpreted [freedom of choice] in different ways they were all united around the advocacy of a constitutional state, private property and the competitive market economy as the central mechanism for controlling individual interests” (p. 59).

Liberalism is predicated on the belief that individual liberty will be maximized if individuals are allowed to pursue their own self-interest in the free-market. Since the self-interested individual will rationally use their capital and labour where it is most productive, it follows that what is optimal for the individual—the free pursuit of self-interest and unrestricted accumulation—is optimal for society, which is, after all, just an aggregation of individuals (Lean, 1998: 6-7; Hunt, 2003: 46). For liberals, then, the requirements of capitalism—private property, competitive self-interest, economic liberty, and minimal government interference—are the same requirements for liberty (Cahn, 1995: 11). Capitalism is the market where freedom and liberty are expressed, while liberalism provides the justification for endless accumulation and individual gain. It is through the other that each can reach its optimal expression.

Since it was through the free-market, and not the state, that individual liberty and social goods would be maximized, liberalism berthed a politics that rejected the heavy-handed, absolutist state (Hunt, 2003: 51). The state was deemed at best a ‘necessary evil,’ to quote Thomas Paine, tolerable only because the free-market depends on the ‘orderly oppression of law,’ to quote Adam Smith (in Sayer, 1991: 73). Since subsistence, liberty and security were all deemed functions of material wealth, the only legitimate role of government was to promote the formation of new markets and enhance the functioning of existing ones (Cahn, 1995: 11). Liberty required laws, regulations, and tax structures, that would make or allow for market society to function, and the kind of state services—national defense, military expansion, education, sanitation and various sorts of assistance to industry, such as tariffs and grants for railway development—that were necessary to make the system run efficiently and profitably (Macpherson, 2006: 11). The only legitimate purpose of the state, then, was to ensure the “conditions necessary for individuals to pursue their interests without risk of arbitrary political interference, to participate freely in economic transactions, to exchange labour and goods on the market and to appropriate resources privately” (Held, 2006: 75-76). Thus, where the dogmas of the divine right legitimized the power of the absolutist state, the dogmas of the market and individualism would supply legitimacy to a liberalizing state.

The practical application of liberalism, however, presented a number of challenges. For liberals (and liberal democrats) there is a constant struggle to balance the might of the state with the rights of the people. As Held (2006) explains:

while the state must have a monopoly of coercive power to provide a secure basis upon which ‘free trade’, business and family life can prosper, its coercive and regulatory capability must be contained so that its agents do not interfere with the political and social freedoms of individual citizens, with their pursuit of their particular interests in competitive relations with one another (p. 59)

Thus, a dominant challenge in liberal thought became how to design a powerful yet limited state, one capable of both maintaining functioning markets and upholding individual liberty. Furthermore, how could it be ensured that this new sovereign power would not infringe on the liberties of the sovereign people it was designed to serve (cf. Macpherson, 2006: 11; Held, 2006: 59)?

The solution was two pronged: *first*, a constitution would strictly define the limits to state power and separate the power of the state from those who control state power; and *second*, a representative system of alternate or multiple parties “whereby governments could be held responsible to different sections of the class or classes that had a political voice” (Macpherson, 2006: 12-13). The establishment of a constitution and a ‘competitive party system’ marks the inception of the liberal state. It was established by revolution in “England in the seventeenth century, in American in the eighteenth, in France in the eighteenth and nineteenth, and by a variety of methods in most other Western countries sometime within those centuries” (Ibid.: 11). The purpose of this ‘competitive party system’ was to uphold and promote the free-market, by keeping government responsive to the shifting interests of the dominant economic class (Ibid.: 12-13). This is the liberal state, and although it was a responsive party system, there was little that was democratic about it, in terms of full representation and equal rights. Representation was limited to white, male, property owners of the new wealthy class, who had benefited greatly from the growth of the market economy. The liberal state, by design, had little regard for any other group. Despite trumpeting the universality of

‘natural right’, early liberal thinkers seldom questioned the contradiction of systematically excluding so many—women, minorities, and the poor—from the state. In England, the country of its origin, it was “well established and working well half a century or a century before franchise became at all democratic” (Ibid.: 11-13). This should not come as a surprise, as the purpose of this state was to promote liberal society, and its embodying institutions, for which there is nothing inherently democratic or equal.

### **3.4 A Democratic Afterthought**

Despite a parliamentary, competitive party system, there was little intention of the liberal state ever becoming democratic. Indeed, most early liberal thinkers thought democracy was the antithesis of the liberal state and market-capitalism (Therborn, 1997: 141). As late as 1870 there was only one democracy in Western Europe: Switzerland. The other states often thought to be democratic, Britain, the Netherlands, Belgium, had parliamentary governments and competitive party systems, but voting was limited based on income and property qualifications (Macpherson, 2006). There were, however, unforeseen democratizing forces embedded in the liberal state that eventually became impossible to stop. Macpherson (2006) attributes this phenomenon to aspects of liberalism that are necessarily incorporated into the state in order to prevent its overreach and ensure it remains responsive. For liberal politics to work there had to be specific liberties guaranteed by the state:

there had to be freedom of association—that is, freedom to form political parties, and freedom to the kinds of associations we now know as pressure groups, whose purpose is to bring bear on parties and on governments the combined pressure of the interests they represent. And there had to be freedom of speech and publication, for without these the freedom of association is of no use. These freedoms could not very well be limited to men of the directing classes. They had to be demanded in principle for everyone [because all were endowed with the same natural rights]. The risk that others would use them to get a political voice was a risk that had to be taken (p.12)

In addition to freedom of speech and freedom of association there had to be consistency and substantive equality in the law to ensure access to and the full development of the market. These liberties were to be guaranteed in a constitution that restricted in scope

and constrained in practice the reach of government, in an attempt to maximize the possible freedom for each individual (Held, 2006: 65). A constitution would help to ensure that a government's power would remain legally circumscribed and divided, which was thought to be the best way to ensure that the power and purpose of the state could "clearly be distinguished from the power of those who are entrusted with state duties and the power of those who are presided over" (Ibid.: 39).

The rights enshrined in liberal constitutions anticipated the advancement of democracy. For example, although not a democratic theorist himself, the writings of John Locke, the father of liberal constitutionalism, suggest the importance of individual rights, popular sovereignty, majority rule, division of public power, constitutional monarchy and a representative system of parliamentary government. All of which were key aspects of liberal democratic government as it developed in the nineteenth and early twentieth centuries (Ibid.: 65).

Now, as the proletariat became increasingly concentrated in centres of industrial production, and as their basic needs were increasingly met through rising productivity, there was a collective realization that they, as a class, were not represented in the government. And, thus, by virtue of the logic of the political system, they did not count. Using the basic rights guaranteed to them by the liberal state the uncounted—the working class, women, minorities—began to demand the right to vote. There was little justification for withholding the vote, as the liberal state legitimized itself on providing equal rights and opportunities to all. Despite this sound theoretical reasoning for the expansion of suffrage, the battle for its practical application was not an easy one. It took decades of organization, mobilization and agitation before the liberal state would eventually become what is considered, by modern standards, to be democratic (cf. Held 2006: 94; Macpherson, 2006: 13).

There are two important qualifications that deserve comment: the first is, of course, that in these early liberal democracies, less than half the adult population was permitted to participate. Even after income and property qualifications were removed it would be

decades before women and minority groups earn the right to be counted. The second, which is closely linked to the first, is how that enfranchisement spread. By the time demands for democratization were occurring these movements were largely focused on being included in the competitive liberal society. That is to say, that the demands from the working class movements, at that time, were not to radically transform the liberal social order, but to gain access to it (Macpherson, 2006: 85). Suffrage was a late addition to the already well-established and widely accepted market-capitalist economy. Thus, enfranchisement was added only once the working class, which was a direct product of the market society, had become a strong competitive force—strong enough to command some weight in that competitive process. A democratic society was achieved on the ground that in a society built upon and legitimized by ‘natural rights’, personal choice and competition it was unfair not to have universal enfranchisement (Eckersley, 2004: 105-106). As Macpherson (2006) argues, “[w]hen competition and freedom of choice are set up as general principles, when they are proclaimed to be a good thing, or even *the* good thing, logic demands that everyone be allowed into the competition”(p. 68). Thus, democracy became the logical addition to the fully developed competitive market society. Liberal democracy is thus, “the unique product of successfully developing capitalist market society” (Ibid.: 51-52).

### **3.5 Democratizing Liberalism or Liberalizing Democracy**

The purpose of this rather lengthy discussion is to situate liberal democracy within a specific historical context. Free-market society and competitive liberal politics preceded modern democracy, and thus this peculiar society and these peculiar politics provided the logic and rationale for which modern democracy would adhere. Stated differently, the liberal order not only preceded democracy in the modern age it also provided the conditions under which democracy was forced to accommodate. Liberalism provided its own rationale for the state—to protect the property rights of individuals; it provided its own rationale for controlling state power—a separation of powers and representational government; it provided its own definition of civil society—an agglomeration of autonomous individuals; and it provided its own rationale for maximizing societal good—by allowing these individuals to compete freely in the market and accumulate as they wish (cf. Eckersley, 2004: 107; Macpherson, 2006: 6). In liberal society, democracy

is not an end in itself, but rather, when exercised under the right conditions and constraints, a means. Hayek, for example, observed democracy as at best a “utilitarian device” that could help safeguard liberalism (Hayek, 2007: 52). That is to say, for liberals (and neoliberals alike) democracy is only useful as long as it does not endanger liberal institutions; it is to be discarded when it does (Mouffe, 2009: 3).

The point here is not to dismiss or belittle the significance of the various democratic movements—indeed they have wrought a number noteworthy accomplishment that this author is not prepared to live without. The point is, however, to demonstrate that although the liberal state was eventually democratized, the meaning of democracy was first liberalized (Macpherson, 2006: 6). In the process, the democratic movement did not so much transform the structure of the liberal state, but rather expanded its already competitive, representative logic to the classes who were created by the expansion of the market economy. Democracy emerged as a stabilizing force for both the liberal state and market-capitalism. The proletariat could exercise considerable political power, but as long as their rights and political power were granted through a liberal constitution and liberal laws the impact on accumulation, and redistribution would remain marginal (Milani, 2000: 16). Thus, the addition of democracy did not destroy, or even weaken the liberal state, instead it strengthened both itself and the market economy, by quelling growing social unrest, and further universalizing the dogmas of market utility.

The purpose of this historical recount is twofold: *first*, it demonstrates why liberal democracy cannot be considered an unbiased actor held hostage by capital’s interests in maintaining the fossil fuel mode of production. Liberal democracy is endowed with a distinct logic, and reproduces a distinct trajectory both of which have historically hinged on an abundant supply of fossil energy. To assume liberal democracy can emerge from the twin crises unscathed, is to assume that it can rid itself of an economic and political ideology that informs its very existence and structure. Thus, we arrive at a most critical point in this argument, as it has been developed so far: in the same way one looks critically at capitalism—with its underlying logic and historical momentum—in the face of the twin crises, one must also look critically at liberal democracy. This critical

approach is necessitated by virtue of democracy's historically specific relationship with market-capitalism, but also, by virtue of how liberal democracy organize, legitimize and reproduce itself. Liberal democracy depends on a certain set of ecological and social conditions. If these conditions are undermined—be it from geopolitical instability, dramatic decreases in the flows of dense energy materials, prolonged economic downturn or ecological collapse—then democracy will necessarily transform. But as history has shown, the intense social struggles for emancipation and security that first brought about liberal democracy, have frequently sacrificed it in an attempt to achieve the same ends (Held, 2006: 1). As the instability created by 9/11 may suggest, what comes out on the other side of crisis may be without many of the basic principles Western liberal democracies proclaim to champion.<sup>14</sup>

*Second*, it allows us to identify the contradictions inherent to liberal democracy itself.

Numerous commentators have observed the paradoxical relationship between liberalism (in both its economic and political form) and democracy (Mouffe, 2009; Macpherson, 2006; Dahl, 1998). These paradoxes arise from the conflicting pursuits of different traditions, which create tensions, both between liberal democracy and its material counterpart market-capitalism, and within liberal democracy itself. In the case of the former, tension arises between an economic system that demands economic *inequality*, and a political system that demands political *equality*. In the case of the latter, tension arises between an political ideology that professes inclusion and prioritizes individual liberty, and a political institution that requires exclusion and prioritizes the common good. It is the dynamic struggles at these points of tension that, historically, have been the drivers of social change, and thus understanding where the twin crises intersects with these tensions is crucial in understanding how liberal democracies will be challenged, tested, and constrained as the crises worsen. It is this matter that taken up in the next two chapters. In Chapter Four I look externally at the tensions between liberal democracy and market capitalism, while in Chapter Five I look internally at the tensions between

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<sup>14</sup> Here, of course, I am speaking not of a cessation in the voting process but of an erosion of the most basic ideals and freedoms afforded in American democracy: the right to due process, habeas corpus, illegal search and seizure, torture, declaration of an unconstitutional war, etc. Although George W. Bush first perpetrated these violations, Barack Obama, by not prosecuting or ending many of these programs, has since institutionalized them. It is debatable which is worse.

liberalism and democracy. In both cases I seek to illuminate how these tensions have, historically, been managed and mitigated, and identify where the twin crises may exacerbate (and be exacerbated by) these tensions.

## **Chapter 4: Liberal Democracy and Fossil Capitalism**

### **4.1 Introduction**

As sketched in the previous chapter the Industrial Revolution and market-capitalism have a significant historical relationship to the exploitation of fossil energy. The rise of industrial capitalism was an economically, politically and socially transformative force, which created the space in which both the liberal state and, eventually, liberal democracy would emerge. Since no liberal democracy has ever existed without a predominately capitalist system, it has been suggested that market capitalism is a necessary (although not sufficient) precursor to liberal democracy (Touraine, 1997; Therborn, 1997). This relationship, however, is marked by contradictions, which arise from liberal democracy's necessary commitment to socio-political equality, and market-capitalism's tendency to generate vast economic inequality (cf. Dahl, 1998; Wolin, 2008; Held, 2006). Developing a thorough understanding of the precise nature of this contradiction is crucial in our understanding of how the twin crises may impact liberal democracies because, as will be argued below, the worsening twin crises will exacerbate the tension created by these contradictions in ways that may challenge the balance in this fragile political order.

### **4.2 Equality versus Inequality**

Democratic governance, in all its forms, has always purported a notion of equality. This is less to do with wealth and status and more to do with the opportunity for all citizens to participate in society and to realize their full capacities. Equal opportunity is what pre-liberal (and non-liberal) societies denied the majority, and the liberal revolution was very much about opening up opportunity to all (Macpherson, 2006: 69). Equality of opportunity, however, can mean very different things. On one hand it can mean "equal right to a fully human life for all those who exert themselves," this is how it was defined in the classical (ancient) democratic societies. On the other, it can mean an "equal legal right" to get into the competitive economic race of accumulating more for oneself (Ibid.). It was this latter interpretation that necessarily prevailed in liberal society, and thus became the foundation for liberal democracy's conception of equality.

Liberal-capitalism, however, demands inequality. By simple definition, market-capitalism requires a minority who owns productive capital and a majority who must sell their labour for access to that capital. Inherently, these relationships are unequal relationships. A paradox emerges between these conflicting traditions because economic inequality carries the potential of undermining the promise of political equality. Although the liberal-capitalism is legitimized as a society based on individual freedom of choice, the unequal economic relations it promotes create the conditions for inequality in that freedom of choice. In the words of Macpherson, “all are free but some are freer than others” (Ibid.: 11). This contradiction is not just a present-day phenomenon. In fact, it was the primary ground from which early liberal thinkers first opposed democracy. They feared that the political equality granted by democracy would eventually undermine the necessary economic inequality of market-capitalism. They postulated that if the poor majority could vote they would surely vote for a massive redistribution of wealth and capital. It was for this reason that representation in the early liberal state was limited by property and income.

Despite these original fears, democracy eventually would be seen as the fulfillment of a fully developed market society. Democracy and market-capitalism, at first, found alliance against the monarchy, aristocracy and the church, but as each became “more politically self-conscious, more aware of divergent concerns, each began to define, identify and pursue strategies that reflected the reality of opposed interest and contrasting conceptions of power” (Wolin, 2008: 269). Robert Dahl (1998) characterizes the contentious relationship between the conflicting ideologies as “antagonistic-symbiosis.” He compares them to “two persons bound in a tempestuous marriage that is riven by conflict and yet endures because neither partner wishes to separate from the other”, and suggests that attempts to balance the conflict between political equality and economic inequality remains a permanent tension in all liberal democracies (p. 158). The dynamic struggle between the degree of equality and inequality each can tolerate without compromising their necessary ideals and relations can be seen as a driving force behind political, social and economic change (cf. Wolin, 2008: 269).

The tension between capitalism and democracy, and its tendency to drive social change is illustrated, perhaps, most clearly by what has been called the Polanyi Problem (Munck, 2005: 6), named after Karl Polanyi. Polanyi, writing at the end of the Second World War, characterized what he observed as a “double movement” between, on the one hand, the relentless pursuit of market-capitalism to “disembed” itself from societal controls, while on the other hand, society’s necessary pursuit to re-embed the economy and “protect itself against the perils inherent in a self-regulating market system: (Polanyi, 2001: 80). Polanyi called market-capitalism’s tendency to push for deregulation the “disembedding process.” He argued that liberalism, which is predicated on the belief that liberty is secured through the *free*-market, demands a disembedded economy that was not subject to societal control (i.e. any social, political or moral regulation, interference or intervention). Liberals argued for the free-market on the grounds that it was the only legitimate path to liberty, and the primary function of the liberal state (which was a product of liberal dogmas) was, thus, to establish such an order. The significance of Polanyi’s analysis, however, is in showing that the free-market is, in fact, a myth. Although the liberal creed demands it, and although the liberal state has repeatedly tried to establish such an order, it has always resulted in devastation (social or environmental) and, thus, necessarily has always been met by a counter-movement that seeks to protect society from the overwhelming side effects of deregulated market-capitalism. Polanyi, argued that liberal society is forever stretched between two opposing forces: one pushing for a complete separation of the economy and one pulling for some control of the unfettered market in order to soften its negative side-effects. This, according to Polanyi, “was the one comprehensive feature in the history of the age” (Ibid.).

The constant attempt to disembed the market is a phenomenon unique to liberal society. Prior to the rise of liberalism, markets were governed by a variety of social or moral principles, such as reciprocity, that openly embedded the economy in social relations. Free-market advocates, however, backed by the prominence of liberal dogmas and the coercive power of the liberal state, attacked this tradition arguing, as they continue to argue today, that if liberty, prosperity and security are achieved through the free-market,

then the full functioning of the free-market (and thus the maximization of liberty, security and prosperity) demands an institutional separation of the political and economic spheres. The establishment of such an order, however, required the creation of markets of land, labour and money or rather the commoditization of all facets of society (Polanyi 2001: 74-75; Altvater, 1997: 459). To convert land and labour into commodities to be bought and sold, however, was to subordinate the very substance of society to the laws of the market (Ibid: 74-76). This process, Polanyi argued, would necessarily rob human beings and their environment “of the protective covering of cultural institutions...[and] human beings would perish from the effects of social exposure; they would die as victims of acute social dislocation through vice, perversion, crime and starvation” (Ibid.: 73). It is from this point that Polanyi concludes that the very idea of a free-market society implies a “stark utopia” because it cannot exist for any length of time without “annihilating the human and natural substance of society” (Polanyi, 2001: 3-4).

Central to Polanyi’s analysis of liberal society is the dissuasion of the popular notion that the establishment of the free-market is somehow an organic process. Polanyi shows concisely that ‘marketization’ of society has always resulted from the conscious actions of the liberal state, which forces the market onto society, and then seeks to protect the market from society. As he writes, the emergence of national markets was:

in no way the result of the gradual and spontaneous emancipation of the economic sphere from governmental control. On the contrary, the market has been the outcome of a conscious and often violent intervention on the part of government which imposed the market organization on society for noneconomic ends (Polanyi, 2001: 259)<sup>15</sup>

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<sup>15</sup> To make this case Polanyi points towards: (1) the The Poor Law reform of 1834, which deregulated the labour market and commodified labour; (2) the Bank Act in 1844, which commodified money by established the gold standard necessary for the self-regulation of the monetary sphere; and (3) repeal of the Corn Law in 1846, which promoted the free trade of grain, and thus the commodification of land

Although liberalism purports that it is only through the free-market that liberty can be obtained, the history of markets, as laid out by Polanyi, shows that the apparently liberating market has always be forced onto society, and society has always pushed back against it.

Following through on Polanyi's critique, we arrive at the paradox between capitalism (what Polanyi called liberal economics) and democracy: although liberalism purports that liberty, prosperity and security are achieved through the free-capitalist-market, the establishment of such an institution undermines the very elements that make up society (people and land). Society is, thus, forced to protect itself from the very institution that supposedly provides the path to its emancipation. Stated differently, the conditions necessary for the full realization of what liberalism promises cannot be achieved without annihilating society itself, but by intervening in order to prevent annihilation, society can never grasp the emancipating promises of liberalism.

Polanyi's critique, thus, provides us with a path for understanding of the ineradicable paradox between these two traditions. However, a key question looms: why has one not done away with the other? Stated differently, if the pursuits of liberal-capitalism are undermined by the exercise of democracy then why hasn't the liberal state used its coercive power to do away with democracy? Or, if the exercise of democracy is undermined by the pursuits of liberal-capitalism then why haven't the people used their sovereign power to do away with liberal economics? The former question is a relatively easy one to address, as the answer is embedded in the dynamics Polanyi's double movement. The latter, however, requires a broader discussion. I will address each in turn

First, as the foregoing discussion indicates a spontaneous outcome of the Polanyi's double movement was the eventual establishment of democracy. Although the various suffrage movements used the rights bestowed by the liberal state to achieved access to the state (Macpherson, 2006), it was the disruption and dislocation caused by the state's repeated attempts to disembed the economy that prompted democratization. Or rather, in Polanyi words, "the more the labor market contorted the lives of the workers, the more

insistently they clamored for the vote” (Polanyi, 2001: 233). In this sense democracy became a necessary although reluctant recession on the part of the liberal state to stabilize the social turmoil and unrest that were resulting from efforts to disembed the market. But with the addition of democracy, the liberal state had to itself change in order to protect the market. With democratization, liberal constitutionalism, which was originally meant to protect private property from arbitrary confiscation by despotic rules, had to be reinterpreted so as to safeguard capital from the impoverished masses; likewise the separation powers, which was originally conceived to separate the power of the state from those who wielded state power, had to be expanded to include the separation of public and private life which was necessary for upholding a capitalist market system in a democracy (Ibid.: 233-234). Thus, from a liberal-capitalist perspective, the democratization of liberal society did not result in more freedom, but less. However, as Stephen Gill (2005) has suggested, the process of democratization is really a metaphor for the spontaneous social-political forces that have sought to counter the destructive and dislocating tendencies of the free-market. In some liberal nations (primarily those early liberal states which encompass much of the Western world), democracy has become a necessary attribute in softening and legitimizing the disruptive, crisis-ridden nature of market-capitalism.

To address the second question of why democracy has not done away with liberal economics, requires that we turn, once again, to the dynamics of market-capitalism. It should be noted first, however, that Polanyi, at the time of writing, thought society had abandoned the notion of ‘disembedded liberalism.’ An underlying theme in his work was that the widespread political transformations that emerged in the 1920’s and culminated with Great Depression signified the “destruction of [the market] society”. The New Deal in the U.S., Nazism in Germany, and Stalinism in the Soviet Union were all divergent reactions on the part of society to protect itself from the market, and thus products of the double movement. He argued that these social movements represented an end point to the “market system”, writing that the economy “will no longer be self-regulating, even in principle, since it will not be comprised of labor, land, and money” (Ibid.: 257-259).

Hindsight suggests, however, that Polanyi mistook an ebb in the disembedding process for an end to the process itself. Clearly there were aspects of the disembedding process that Polanyi did not fully appreciate, as marketization and commoditization are part of the “capitalist system’s tendencies that was and is still at work” (Altvater and Mahnkopf 1997: 451). The long post-war boom that followed Polanyi’s critique, is better understood as a period of ‘embedded liberalism’, as the crisis of capitalism in the great depression triggered the transnational liberal order to combine with state intervention at a domestic level (Munck, 2002). In the 1970s and 1980s, however, embedded liberalism came under attack from a resurgence market-fetishism, in the form of neoliberalism. “If economic liberalism was the organizing principle of society when Polanyi was writing, neo-liberalism holds that dominant role today” (Ibid.). But the underlying tensions that Polanyi observed remain intact as capital continues to try to free itself from social and political constraints, and society continues to try to pull capital back under its control. If the inherent pursuit of market-capitalism is destructive and dislocating to the point that it undermines the basic conditions of social stability, then why hasn’t society pushed back in such a way as to permanently relieve the tension, and thus transform economic relations? Or as it was phrased above: if the tension between liberal-capitalism and democracy is permanent, then why has society not done away with market-capitalism in an attempt to achieve a deeper expression of democracy. The answer comes, at least in part, from liberal democracies deep-seated dependence on market-capitalism. Although, democracy emerged as a response to the destructive pursuits of market-capitalism, it became, at the same time, dependent on the material conditions it creates. This co-evolution means that in protecting itself from the exploits of market-capitalism, it must also find ways to protect market capitalism (a conclusion that comes strikingly close to Hay’s Environmentally Induced Legitimation, discussed in chapter two). It is here that we get a much clearer sense of Dahl’s (1998) characterization of the relationship between democracy and market-capitalism as “antagonistic symbiosis” (p. 158).

### **4.3 The Material Conditions of Liberal Democracy**

The unprecedented materialistic conditions created by market-capitalism are derived from its internal dynamics to drive outwardly appropriating new inputs, and its unprecedented

productive capacity. As was discussed earlier, both of these dynamics are rooted deeply in the use of fossil fuels. Further elaboration on both of these dynamic is, however, required, as each will be impacted by the twin crises, and thus has the potential exacerbate the tension between market-capitalism and liberal democracy:

#### **4.3.1 Spatial Expansion**

The first aspect is the tendency of market-capitalism to drive outwards. While marketization drives inwardly commodifying all aspect of social life (a process which was the primary point of reference for Polanyi), it also drive outwardly to not yet affected frontiers and populations (Altvater, 1997: 451). This dynamic is the driving force behind economic globalization, and one that, like the great transformation Polanyi described, is a “conscious” and “often violent” pursuit on behalf of the liberal democratic state to impose the market onto society (Munck, 2007). Although at this time it is on other societies. As Munck explains, “[c]apital mobility was encouraged, free trade was sanctified, labour was made more ‘flexible’ and macro-economic management became fully market compliant. [Globalization] was no smooth, gradual and organic evolution of the market according to natural principles” (Ibid.: 137) Commodification on a global scale has provided new opportunities for the exploitation of both labour and land that are not bound to national economies or national counter-movements.

At a global scale the exploits of the deregulated market demands the opening up not yet exploited frontiers of land and labour. This, at least in part, explains the colonialistic and imperialistic tendencies of all liberal societies, as their long-term survival depends on the appropriation of people and resources outside their fixed boundaries. Although the centralized, territorial state remains the precondition for the functioning of market-capitalism, in a globalizing world the economic sphere can escape the constraints of counter forces on its way to reaching its full expansionary expression, which from the outset has been to transcend national boundaries on the path to becoming a global market. (cf. Görg and Hirsch, 1998: 594).

Thus globalization, as Altvater (2007a) observes, is embodied by both the globalization of liberal dogmas and the globalization of “Western production and consumption

patterns” (9). On a planetary scale, however, the devastating tendencies of the deregulated market, that Polanyi observed, are not resolved but rather displaced across space (onto other people and other environments) and across time (onto future generations). By carving out new opportunities for exploitation, the capitalist market creates new conditions for inequality. Mirroring what Polanyi observed at the national level, the global market dictates the conditions of uneven development and devastations. Thus we see disparities such as those reported by the U.N. that 20 per cent of humanity (located primarily in Western liberal democracies) consume 80 per cent of the world resources, while 80 per cent of humanity is left to fight over only 20 per cent (Altvater, 1999b: 292). Western liberal democracies, who have been the primary drivers behind the globalization process, preserve their unprecedented material needs on the back of commodification (and resulting devastation) elsewhere. The wealth of nations, and subsequently the politics of nations, then, is highly positional and oligarchical (Altvater, 1999a). Thus, despite an era of unprecedented material affluence, it is only enjoyed by a small minority of the world’s populations. These “islands of prosperity and contentment” exist in “vast seas of poverty and in situation characterized by insecurity, economic deprivation, ecological degradation and violence” (Gill, 2005: 56).

The globalization of market-capitalist relations (and thus the destructive legacy of neoliberalism), as Altvater and Mahnkopft (1997) suggest, are made possible only by the abundant use of, and consistent access to fossil energy (p. 451). The expansionary logic of market-capitalism has always maintained global (indeed extra-global) aspirations, however, it is only with the exploitation of fossil energy that the market has been able to become global force. Fossil energy severs the biotic, spatial and temporal ties that had once limited the development of a global self-regulating market. In doing so, the market is allowed to outgrow its social bed, something that was not possible for most of human history. It is only with the continuous, and increasing influx of fossil energy, “have we had the expansion of human capacities and at the same time freedom from spatial and temporal limitation” (p.457).

However, the more successful the globalization process is the faster it undermines its own conditions because these patterns are necessarily materially intensive and ecologically degrading. In an increasingly *full* world—where depletion and pollution become ever-more consequential—the propensity for market-capitalism to outgrow its social bed ‘threatens to annihilate the human and natural substance’ of *global* society. Indeed, this mirrors concerns from ecological Marxists, such as James O’Connor (1998), who argues that market-capitalism can afford to destroy a given ecosystem and move onto the next, but at a global scale it will eventually run out of the next frontier ecosystems.

Although fossil energy has played a vital role in the expansion of the market society and the displacement of its self-destructive tendencies, it is now fossil energy that obstructs its future development (Altvater, 2007a: 8). Not only will access to energy supplies become increasingly contested, which stands to reconnect the burgeoning economy with immediate temporal and spatial limitation, but the combustion of fossil energy produces so much harmful emission that the ecological conditions for modern society cannot be assured (Ibid.). In this sense, both the threat of energy scarcity and catastrophic climate change are the foreseeable conclusion of a disembedded global economy run amok. This is one side of Polanyi’s double movement globalized—and indeed, it will likely be met with counter movements the directions of which are still being mapped.

#### **4.3.2 Productive Capacity**

The second dynamic of market-capitalism that creates the material conditions favourable to liberal democracy—and which, indeed, has long been facilitated by the first dynamic—is market-capitalism’s unprecedented productive capacity. It has been argued widely that the existence and reproduction of liberal democracy depends largely on this capacity. Therborn (1997), for example, argues that, “democracy is viable *only* because of the elasticity and expansive capacity of capitalism” (p.137). By ‘elasticity’ he is referring to capitalism ever-rising productivity, which increases the rate of exploitation, along with the real income of the exploited. The support for these claims lies in the strong correlation between wealth creation and democracy, and between economic stagnation and democratic failure (cf. Lipset, 1994; Przeworski, *et al.* (2000); and Inglehart, 1990). This correlation was first described by Lipset (1994), who wrote, “the

more well-to-do a nation, the greater chances that it will sustain democracy... [because] a society divided between a large impoverished mass and a small favored elite would result either in oligarchy...or in tyranny” (p. 75). Przeworski, *et al.* (2000), who found a firm relationship between a nation’s level of economic development and its probability of sustaining democracy has reaffirmed Lipset’s observation.<sup>16</sup>

Without widespread wealth creation the inconsistency between the equality promised by democracy, and the inequality necessitated by market-capitalism has the potential to overwhelm the material conditions of this historically fragile political order. The vast disparity and the oligarchical tendencies between the have- and have not-nations, which are exacerbated by the twin crises, precede the vast disparity and oligarchical tendencies within nations themselves. The material conditions for democracy set the stage for absolute scarcity to push democracies towards oligarchy—or perhaps more appropriately, because of how liberal society consolidates power, towards plutocracy. In times of scarcity, equality amounts to shared poverty for all, but the unprecedented productive forces of market-capitalism and the promise of endless growth and abundance have created the space for parts of the world, as Ophuls suggests, to become relatively open, egalitarian, libertarian, conflict free and, ultimately, democratic (Ophuls, 1977: 143). The prospects of economic growth tomorrow minimize concerns over rampant inequality today. This, in essence, is the power of the American Dream, and why all modern democracies rely on a pro-growth mantra. The fears of mass redistribution or of the poor controlling the reigns of power are downgraded as long as capitalism remains the powerful engine of economic growth and prosperity—the rich may get richer, but the poor get a little extra too. In this sense the institutionalization of democracy has valorized the class disparities that are inherent to capitalism (Sherman and Smith, 2007: 11).

If economic growth is a stabilizing force that is necessary for keeping the “political house in order” (Lipset, 1994: 17), how might the worsening twin crises impact liberal polity? It is not coincidental that deteriorating environmental conditions, resource scarcity, and

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<sup>16</sup> It should be clarified that the connection Przeworski observed was not necessarily between wealth and the creation of democracy, but between wealth and the maintenance of democracy.

geopolitical instability, which have all proven to be detrimental to economic growth, also represent profound threats to very conditionality of democracy. As Ophuls (1977) observed, scarcity has a strong tendency of eroding “the material basis for the relatively benign individualist and democratic politics,” which in turn puts immense pressure on democratic institutions (p. 163). As the political transformation that rippled through Europe alone during the great depression indicates disruptions in material flows and prolonged economic stagnation can be calamitous for democratic governance.

Historically, scarcity has been overcome by securing non-local though-puts, but at the limits of environmental space this is likely to be an increasingly contested practice. In a full world democracies will no longer be able to easily outgrow or outsource their equality-inequality contradiction without explicit and increasingly aggressive acts of political, economic or military force. Which is to say that the fundamental tension between market-capitalism and liberal democracy can no longer be masked, displaced or soften. In a climate and energy constrained world modern democracy will increasingly be forced to actively confront the economic institution that has defined its very existence

#### **4.4 Conclusion**

As the foregoing discussion has sought to elucidate there exists permanent tension between liberalism democracy and market-capitalism, yet at the same time an antagonistic balance between them. The tension arises from conflicting trajectories of these two traditions, where as the balance arises from the protective features of democracy and the material conditions of capitalism. Their relationship is a dynamic struggle, and a driving force behind economic, social and political change. Identifying the nature of this tension is crucial in understanding how the twin crises will impact liberal democracy, because as the crises challenge the ecological, economic and geopolitical status quo it will test and constrain in new ways what has historically been a fragile relationship.

This is a process that is very much underway as the struggles for power and strategic position, are increasingly being seen through a “prism of a struggle for energy resources against the backdrop of damage inflicted by climate change” (Giddens, 2009: 206).

Giddens points to the US, which has already shifted “strategic and military planning” towards competing for natural resources—a competition that the Pentagon sees as underway (Ibid.). A report issued by the Pentagon in 2003, entitled *An Abrupt Climate Change Scenario and Its Implications for United States National Security*, paints a frightening picture of a future dominated by resources scarcity, food and water shortages, mass migration, extreme weather and widespread political instability. The authors recommend that climate change “should be elevated beyond a scientific debate to a U.S. national security concern” (Schwartz and Randall, 2003: 3). The report gives seven preliminary recommendations, including that a “No-regret Strategies should be identified and implemented to ensure reliable access to food and water supplies, and to ensure national security” (Ibid.: 22). A similar mandate has been echoed by the British Defence Secretary, who suggested that the convergence of climate change and resource scarcity were increasing the likelihood of violent conflict for land, water and energy (Klare, 2006: 1). Climate change he warned “will make scarce resources, clean water, viable agricultural land even scarcer...[making] the emergence of violent conflict more rather than less likely” (Quoted in Ibid.). With soaring population and consumption rates, dwindling energy supplies and a changing climate destabilizing vital ecological systems and regions, the stage is being, or perhaps has been, set “for persistent and worldwide struggles over vital resources” (Ibid.). Undoubtedly this new era will change the relationship between market-capitalism and liberal democracy as it will become increasingly difficult to mask, displace and soften the contradictions between these two conflicting traditions.

## Chapter 5: Liberalism versus Democracy

### 5.1 Introduction

Staying with Polanyi for now, a key insight that emerges from his work is that conscious intervention to construct a planned utopia has been, in fact, the prerogative of the liberal state in its repeated attempts to construct and impose a free-market society. The counter-movements that followed—from democracy itself, to the eventual rise of communism, Nazism, and the welfare state—were spontaneous acts that arose from diverse social interests attempting to insulate themselves from the dislocating and devastating effects of the free-market (cf. Holmwood 2000: 34-35). Or as Polanyi (2001) succinctly put it, “laissez-faire was planned; planning was not” (2001). Perhaps needless to say, this is an insight that positions itself in direct confrontation with much of the liberal tradition (including its reading of history), especially as it has been characterized most prominently by Fredrick Von Hayek.

In the same year that Polanyi published *The Great Transformation*, Hayek’s released another widely influential work of political economy: *The Road to Serfdom*. While Polanyi’s work focused on broadening the critique of the free-market and outlining its dire consequences if left unchecked, Hayek’s work was a direct response to newfound prominence of intervention and planning (in both the welfare and communist state) that emerged in the great depression. Hayek argued that any efforts by the state, whether through bureaucrats or representatives, in the name of ‘common purpose’ or ‘social good’ that manage the economy or redistribute resources will always resort in coercive government (see Held, 2006: 203-204). Although Hayek does not make the case for a market utopia, as many liberals before him did, he does argue that the benefits of a free-market system drastically outweigh its disadvantages, thus, making it a worthy pursuit. Hence, he was not opposed to democracy in principle, but rather argued that without the proper restraints it had the potential to “be as oppressive as the worst dictatorships” (Hayek, 2007: 52). His support for democracy was, thus, as a means that could protect the highest political end: liberty (Held, 2006: 205). Planning and intervention, however,

undermined both liberty and democracy. He wrote that there is a fundamental “clash between planning and democracy,” and it is only through the free-market, and the freedom of choice it promotes, that a society can ensure civil liberties and maintain its democratic institutions (Hayek, 2007: 27). And thus, ultimately, as Held (2006: 203-205) summarizes, Hayek presents a case for a free-market society and a minimal state as the only order in which freedom and liberal democracy can genuinely exist. I begin this chapter by comparing Polanyi to Hayek, because (1) it was Hayek’s work that would become a cornerstone in the resurgence of market fetishism that emerged in the form of neoliberalism in the final quarter of the twentieth-century and has since dominated the political landscape; and (2) his conditions for liberty—embodied by free-economics and restricted politics—roughly sketch the boundaries for how liberals and neoliberal envisage how democracy *should* be framed, constrained and practiced. This narrow conception of how democracy is ‘best’ practiced points to the irreconcilable tension between liberalism and democracy (Mouffe, 2009), one that can be characterized as the paradox between liberty (as demanded by liberalism) and equality (as required by democracy). In melding these two ideals, liberal democracies are endowed with peculiar trajectories and biases that, as I will outline, become increasingly problematic as the twin crises worsen. My intent here is not to be exhaustive, as indeed there are a number of threads that could be pulled but rather it is to illustrate *some* of the potential points of tension that may arise from within liberal democracy as the twin crises worsens. I will address three distinct points of tension: *first* is structural in nature and arises from the types of power relations liberal democracies promote; *second* is institutional and arises from the nature of representation in liberal democracies; and *third* is ontological and arises from liberalism conception of the autonomous self.

## **5.2 Liberal Democracy and Power**

In liberal democracies inequality is facilitated and perpetuated by the types of social relations that the state enforces. Liberal democratic governments exist to uphold and enforce a specific kind of society, with a specific set of rights and relations (Macpherson, 2006: 5). This is to say that liberal democracy, like all other forms of government, is a system of power. To have any relevance it, again like all other forms of governance, must have the means and authority (i.e. the power) to make people do things they would

prefer not to do, and to prevent them from doing things they would prefer to do (Ibid.: 57). Put simply: the governors must have the power to govern. Liberal ideology is underpinned by a strong distrust of (or at least ambivalence towards) governmental power and the constitutional and representative tradition can be understood as an expression of liberals' and liberal democrats' preoccupation with limiting state power.

Liberal democracy, however, is a system of power in a second, perhaps less obvious sense. The historical legitimacy of liberal democracy has always depended on its ability to protect the conditions of the free-market and enforce property rights in the interest of maintaining substantive equality. Power relations between individuals and groups are directly and indirectly expressed through property. Strong property rights are the foundation of market-capitalism, and both their nature and stability depend on a strong state (MacEwan, 1999: 126). Market-capitalism would not be market-capitalism if capital, and the power to accumulate it, were not concentrated in hands of the minority (Ibid.:61). This basic condition means that the majority must transfer part of their power (via their labour) to the minority in order to gain access to productive capital. This transfer of power means that different people, in different capacities, have power over others (Macpherson, 2006: 57). Thus in a market-capitalist system direct control over property becomes indirect control over people. And by enforcing these relationships, liberal democracies enforce a net transfer of power, as some are able to get more out of others than others get out of them (Ibid.: 61). In liberal democracies, social power is accumulated in the market, thus, wealth and property are more than just income and assets, they are the source of power, and the means through which it accrues. It is for this reason Macpherson refers to liberal democracies as 'double systems of power,' in that the social relationships they enforce are themselves power relations (Ibid.:57). By enforcing power relations indirectly through the protection of the market, the liberal democratic state is an active agent in the uneven distribution of power (Ibid.: 61).<sup>17</sup>

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<sup>17</sup> Although the power relations enforced by liberal democracies are less direct and arguably less rigid than in non-liberal societies, they can be just as unequal and unjust

The set of rights, claims and relations promoted and enforced by liberal democracies means that the accumulation of wealth is akin to the accumulation of power, and thus through the expansionary logic of market-capitalism where accumulation begets accumulation, social power is increasingly concentrated in the hands of a relatively small number of individuals and organizations (cf. Bowles and Gintis, 1986: 53; Hunt, 2003: 53). By promoting these relationships, liberal democracy promotes the conditions that betray one of its most fundamental ideals: political equality. As Dahl (1998) explains, “a market-capitalist economy inevitably generates inequalities in the political resources to which different citizens have access.” Thus a market-capitalist economy seriously impairs political equality [as] citizens who are economically unequal are unlikely to be politically equal. Liberal democracies close proximity to market-capitalism creates the conditions where “full political equality is impossible” (p.158).

While liberals and liberal-democrats were preoccupied with limiting the accumulation of power in the state, they paid little concern to the accumulation of power in civil society, which by the very nature of market-capitalism is bound to be vast and uneven. Economic inequality has created a stable and powerful minority class, which possesses considerable power over civil society, which at times can be equal to, if not greater than that of elected officials (cf. Harvey, 2006: 34; Schweickart, 2002: 106). Macpherson (2006) suggests that the transfer and concentration of power is permissible, and indeed goes largely unnoticed, because it is overshadowed by the productivity of the capitalist economy (p. 70). It is only when productivity declines that this transfer is noticed, and efforts are subsequently made to slow or reverse it.

The 2007-2008 financial crisis provides a pointed example of how the unequal distribution of economic power can undermine the promise equal political power:

The cause of the 2007-2008 financial crisis is complex, contested and falls largely outside the scope of this paper. It is appropriate to say, however, that in terms of its global impact, the 2007-2008 financial crisis was the largest in history. Many have suggested that the only thing that saved the world from a Global Great Depression was government

intervention (Panitch and Gidin, 2010; Krugman, 2009). Of particular interest here is how and where the government intervened.

Looking specifically at the experience in the U.S., for example, rather than the government bailing out citizens by, say, buying toxic assets (i.e. peoples' homes) and setting up public housing programs—which would have allowed millions to stay in their homes, and subsequently would have relieved banks of these toxic assets—the government gave a \$700 billion bailout, with very few strings attached, to the very institutions that caused the crisis.<sup>18</sup> While the financial crisis was the biggest loss of asset wealth ever to occur (Harvey, 2008), the financial bailout that followed was the largest transfer of private debt onto the public sphere in history, and it passed despite strong opposition from US citizens. A CBS/New York Time news poll found that nearly two thirds of US citizens disapproved of bailout on the grounds that it helped 'Wall street' and not 'Main street' (CBS/New York Times, 2008). Despite this strong public opposition, the will of the people proved no match for the power and influence of the financial industry, which seemed to dictate the government's response. In his award-winning coverage of the financial crisis, journalist Matt Taibbi writes, "[t]he reality is that the worldwide economic meltdown and the bailout that followed were together a kind of revolution, a coup d'état. They cemented and formalized a political trend that has been snowballing for decades: the gradual takeover of the government by a small class of connected insiders, who used money to control elections, buy influence and systematically weaken financial regulations" (Taibbi, 2009). Taibbi provides one of the most complete and scathing accounts of the crisis, but what his analysis misses, is that this trend has not only been 'snowballing for decades', but is as old as the liberal state itself: from the financial crisis in 2008, to the savings and loans crisis in the early 1980, to the dissolution of the old poor laws in England in 1834<sup>19</sup>—the state has consistently

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<sup>18</sup> \$700 billion is the value that was first voted on by the US congress under the TARP program. However, if one includes the other 35 government programs, and the loans and investments guaranteed by the Federal Reserve the financial bailout is actually closer to \$4.74 trillion dollars (Center for Media and Democracy, July 20, 2010).

<sup>19</sup> The dissolution of the Old Poor Law is regularly called upon to illustrate how new forms of social power, which had been accumulated in the economic sphere, were used to pressure and change the political sphere (cf. Polanyi, 1944: 92; Hunt, 2003: 45; Huber, 2008: 109). In England,

intervened at the behest of private interests, often with little concern for the costs to public interests. The financial crisis and bailout do not represent a “revolution” or a “coup d'état” but rather the unmasking of the true nature of the uneven distribution of social power that is propagated in liberal society. The bailout can be understood as yet another chapter in the tradition of a powerful economic class who fervently opposes government intervention in the market on ideological grounds, but openly supports and catalyzes it when it stands to benefit their interests.

Some commentators have argued that the 2008 financial crisis signals the end of neoliberalism, as it is likely to be followed by an era of more government intervention and regulation. It would appear they are right in some respects, as there seems to be less opposition to government intervention now than there was three years ago. But what if we analyze the neoliberal project not just in terms of government regulation, but also in terms of distribution of power?

One of the most prominent critics of neoliberalism, David Harvey (2006) argues that neoliberalism is as much a political project as it is an economic project. Harvey contends that the main achievements of neoliberalism have “been redistributive rather than generative,” and thus it is better understood as an attempt to consolidate and reconstruct class power (Ibid.: 25). As the record clearly shows, neoliberalism has been dismal in

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The Poor Relief Act, of 1601, had guaranteed everyone, able bodied or not, subsistence to be paid by public taxes (Polanyi, 1944: 82; Hunt, 2003: 45). The Law had several amendments including the Speenhamland Law which was passed in 1775, the beginning of the most active period of the Industrial Revolution. The Speenhamland Law reaffirmed the ‘right to live.’ The ‘right the live,’ however, did not suit the needs of the emerging capitalist class, who subscribed to the Liberal belief that labourers were naturally lazy, and thus only “a large reward or fear of starvation and deprivation could force them to work” (Hunt, 2003: 45). With out the incentive to work a “new class of employers was being created, but no corresponding class of employees” (Polanyi, 1944: 84). The emerging ‘employers class’ rallied against the Poor Laws by applying pressure to England’s young representative liberal state. Poor Law Reforms was passed in 1834. Almost immediately a national market for labour was established, which was essential to market-capitalism’s development, as it supplied capitalists with a desperate and versatile labour force (Huber, 2008: 108). The labour market was the last element of industry to be turned into a national market, and thus it was not until dissolution of the Old Poor Law in 1834 that market-capitalism became a societal system (Polanyi, 1944: 87).

creating wealth, but spectacular in transferring wealth and consolidation power into the upper classes. Harvey characterizes this as “accumulation by dispossession” (Ibid.), arguing that this process is as lively as it has ever been (Harvey, 2009). The financial crisis, he explains, was solved at the expense of the sovereign debt crisis and now, again drawing from the experience in the U.S., the bailed-out financial institutions are once again hugely profitable, even while millions around the world still are in recession, and the government at all levels is grappling with the threat or reality of insolvency. Nothing less should be expected. After all, this is what was likely to happen to the public sector after it took on unprecedented levels of private debt, while at the same time was left juggling lower tax revenues and higher demands for welfare services.

What is surprising though is how quickly the free-market mantras of lower taxes, less government interventions, and the perils of public debt have recatalyzed in pro-business circles, and in many cases are being championed by the same individuals who pleaded for public intervention at the height of the crisis. With nowhere left to transfer the vast amounts of debt taken on by the public sector, governments from around the world are now freezing spending and making deep cuts to social programs. This austerity mandate was the centrepiece of the G20 in June of 2010. As Panitch and Giddin’s (2010) argue, “even though the growth in state deficits was directly the product of bailing out the banks, the loss of revenue and the emergency spending, governments were expected to shift their policy priorities to public sector austerity. The G20 was reconvened in Toronto to reassure financial markets that they heard the message.” The neoliberal turn that has dominated the global political and economic landscape since the 1970s is a vivid example of the power disparities perpetuated in liberal democracy.

The troubling aspect of neoliberalism that I am attempting to explicate here is its disdain for democracy and democratic ideals, a disdain it carries despite often professing otherwise (Harvey, 2006 25; Wolin, 2008). Neoliberalism views democracy as a form of “mob rule” that produces the majority of the barriers that threatened accumulation (Harvey, 2006 25). Its preferred form of governance “is ‘public-private partnership’ in which state and key business interests collaborate closely together to coordinate their

activities around the aim of enhancing capital accumulation” (Ibid.) The all too familiar result is that those that are regulated write the regulations, and citizens become increasingly disenfranchised (Ibid.). The threat to freedom and liberty does not come only from the political realm as neoliberals profess, but also from, what Zizek (2010) calls, “the ‘apolitical’ network of social relations.” Or, put differently, powerful private actors pursuing their own interests at the expense of the interests of society-in-general. When boiled down, the conflicts between private and public power mean that while liberal society espouses universal participation in mapping the political-economic course, powerful economic interests increasingly dominate the personal fate of the average citizen (Cahn, 1995: 9)

Refocusing this line of argument around the issues climate change and energy scarcity, the twin crises offer a clear and illuminating example of society’s fate being dominated and directed by powerful economic interests. The weakness in the response to the threat of climate change, for example, has been based largely on the power and influence of the fossil fuel lobby (Newell and Paterson, 1998: 680) that exploits the state’s legitimacy imperative. It is important to distinguish here between the structural power of capital and the general interest of the state as it relates to growth/accumulation. As was discussed in detail in Chapter Two the state depends on economic growth as means of securing legitimacy. Historically, growth is tethered directly to energy consumption, which is overwhelmingly derived from fossil energy. The state’s structural dependence on growth means that it is forced to reconcile the irreconcilable, namely the short-term interests of accumulation and long-term integrity of the environment. The uneven distribution of social power adds another layer to Hay’s environmentally induced legitimation crisis because economic interests are disproportionate ability to pressure politicians, sway public opinion, construct normative discourse, and squeeze economies. There are myriad examples of this from the tobacco industry, to the pharmaceutical industry, to the agricultural industry. As I will demonstrate below, the structural significance of fossil fuels in the global economy greatly compounds the influence of powerful economic interests. Not only is there an immensely powerful fossil fuel industry, but also maintaining the fossil mode of production serves the accumulation process in general (cf.

Newell and Paterson 2009: 81-82). In other words, because of the central and necessary role of fossil energy in capitalist accumulation today, the state is pressured by and forced to intervene on behalf of the interest of *capital-in-general*, rather than in the interest of one segment of capital.

Peter Newell and Matthew Paterson argue the structural origins of the twin crises, “means powerful economic actors have had much more direct influence on the sort of regime than they have in other environmental issue areas which do not touch on the core of the global economy so strongly” (Ibid.). Although the interests of capital are far from homogeneous, the structural significance of fossil energy means the general interests of the fossil fuel industry embodies the interests of “capital-in-general” (Newell and Paterson, 1998: 691-692). Newell and Paterson argue that the fossil fuel industry has “systematically been able to secure [its own] interests, and that the most plausible explanation for this is that their interests are taken as necessary for furthering the interests of 'capital-in-general'” (Ibid.: 693-694). In other words, “it is consequently not particularly important to describe energy industries in terms of how they relate to a 'fraction of capital', since their interests are taken by the majority of such fractions as basic conditions which need to be pursued to make accumulation in general possible” (ibid.: 694).

It is here that we arrive at an obvious, but none the less crucial point: as the crises continue to worsen, short-term interests of capital-in-general, will increasingly be put at odds with the long term interests of society-in-general. This sets the stage for a confrontation that the state actively (although unadmittedly) facilitates, but is, itself, not adequately equipped to resolve. Resolution requires society (the sovereign people) to reclaim the vast amount of power that has been accumulated in the private sector. It is here we once again find relevance in Polanyi’s double movement—in that the state’s active attempts to establish the conditions for the free market are pursued against the interests of society-in-general. Although the state may be forced to recognize the crises it creates, and seek to soften their immediate impacts, it does not have the means for addressing their structural nature. The twin crises, then, are anticipated by the

contradictions inherent to the liberal democratic state. Indeed, this conclusion has close proximity to James O'Connor's (1998) "second contradiction of capitalism." O'Connor characterizes Marx's 'first contradiction of capitalism' as a capital-labour conflict and one that inevitably leads to a crisis of overproduction and underconsumption. This parallels Polanyi's critique of the devastating effects the 'disembedded' capitalist-economy has on society, while his double movement is the class struggle, which follows the destruction. The second contradiction, however, arises from market-capitalism's tendency to "consume the conditions of production" (i.e. degrade labour, the environment, infrastructure), that in turn hinder the accumulation process. The degradation of the condition of consumption (a concept which mirrors Polanyi's fictitious commodities of labour and land) reduces the ability to accumulate, and increases costs of business, creating economic crisis. But the degraded conditions also trigger new forms of social and political backlash to protect and mitigate (a concept that mirrors Polanyi's double movement), that push the cost of business up further (Stroshane, 1997; O'Connor 1998). While the first contradiction gave rise to the class-based social movements which drove Polanyi's double movement, the second contradiction gives rise to new forms of social movements. Thus the appeal of O'Connor's thesis is that it links ecological degradation, economic crisis, and the growth of new movement for social change (Foster, 2009: 204-205), much like those that have arisen out of disdain over the failures of state-centric climate policy.<sup>20</sup>

### **5.3 Liberal Democracy and Representation**

A second point of tension emerges from the nature of representation in liberal democracies. Liberal democracy is a historically novel form of government. Although it borrows the latter half of its name from classical democracy, there are few similarities between them. As Pitkin (2004) explains, classical democracy was won from below; it was not based on universal human rights and it was entirely direct and participatory with no notion of representation. Representative politics, on the other hand, emerged only in the modern era, first as a means of securing and expanding tax flows, and later, with the rise of the liberal state, as a means for selecting a leaders. The point is, however, when

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<sup>20</sup> See for example, The World's People Climate Conference which was held in Bolivia (April 2010). It was a direct response to the failures at Copenhagen and was attended by over 30,000 people.

representation first appeared it had nothing to do with democracy. Although later it became the foundation of liberal democracy, it was at first “imposed as a duty from above, a matter of royal convenience and administrative control” (p. 337).

Through representation, the absolutist state created “new forms of and limits to state power—constitutionalism and eventually participation by powerful groups in the process of government itself” (Held, 2006: 57). Despite the “philosophical references to social contracts and popular sovereignty, private power and public authority” has always flowed from the top (M’Gonigle, 2000: 12). The same fundamental interests that are intrinsic in all states—expanding revenue base, increasing power and influence domestically and internationally, and rationalizing their administrative apparatuses—remain intact. Likewise, so do the fundamental priorities of the state—security, economic growth, and the competitive struggle of staying afloat in a hostile world (Eckersley, 2004: 88-89). While the liberal variant of the centralizing state uses representation as a check on state power, liberal architects were concerned primarily with the expansion and centralization of state power at the expense of the power of the sovereign people who legitimized it. Thus, while emphasis was given to establishing and protecting private economic and property rights outside the reach of governmental power, there was little concern given to controlling the “agglomeration of power centrally” (M’Gonigle, 1999: 18). The outcome has been, “the development of a centralized and hierarchical system of depersonalized and increasingly bureaucratic power” (Eckersley, 2004: 89). Despite the representative functions in liberal democracy, the hierarchical and bureaucratic tendencies leads to a steady deterioration of what one observer calls, “the control ratio between politics and the machinery of government” (Eckersley, 2004, 87). In other words, the modern state has the tendency of widening the “disjunction between those who make decisions, those who are politically responsible for them and those who are affected by them” (Ibid.: 87-88).

Indeed, the tendency of liberal democracies becoming less responsive is further accelerated by the nature of representation itself. The democratization of representation was thought to be necessary for a large and growing nation-state because it could filter

the views of ordinary citizens through a responsible elite, who were better able to manage the interests of the country (Pitkin 399). However, as Pitkin argues:

despite repeated efforts to democratize the representative system, the predominant result has been that representation has supplanted democracy instead of serving it. Our governors have become a self-perpetuating elite that rules—or rather, administers—passive or privatized masses of people. The representatives act not as agents of the people but simply instead of them ... We send them to take care of public affairs like hired experts, and they are professionals, entrenched in office and in party structures (p. 339)

Nowhere are the limits to representation more glaring than in the party politics, which dominate all liberal democracies. Political parties emerged as the organizing unit that could coalesce a fragmented public around a package of ideals and policies. They mobilize resources around candidates, provide the public with continuity, and tout a specific partisan ideology, which voters can apathetically endorse. In doing so, political parties have become both a stabilizing force, and the primary vehicle to power (Dahl, 1998: 86-88; Lipset, 1994: 14). The party system is now an indispensable institution in organizing and structuring liberal democracies (Powell, 1992: 199).

At the most basic level the overriding preoccupation of a political party is to acquire power. Unless a party can win an election it is doomed to insignificance. Accordingly, political parties have become organized into election fighting machines. Rather than a means to an end, winning the election becomes the end in itself. And in the process, liberal democratic politics become more about securing power than serving public interest. There is a general lack of concern for the purposes of government, democracy, representation and participation (Saward, 2003: 44). As Downs famously argued:

political parties in a democracy formulate policy strictly as a means of gaining votes. They do not seek to gain office in order to carry out certain preconceived policies or to serve any particular interests groups; rather they formulate policies and serve interest groups in order to gain office (Downs, 1957: 137)

Downs' argument has come to be characterized as free-market politics, in that there is competition amongst firms (political parties) over the hearts, minds and pockets of consumers (voters) (Nitzan and Bichler, 2001: 27). For the candidate and the representative, the easiest path to office, much like the path to staying in office, is by accessing party resources, and thus submitting themselves to party hierarchy. A party's success depends on its ability to mobilize resources and people around candidates and platforms, attract a wide base of votes, and respond quickly and uniformly to challenges. In doing so, however, the party becomes an increasing hierarchical, bureaucratic, and undemocratic institution (cf. Michels, 2001: 31-32; Held, 2006: 135). It is for this reason that if parties do not profess, what Michels (2001) calls, "unconditional ceasarsim" they at least exhibit "extremely strong centralizing and oligarchical tendencies" (p. 32). The party is best served when members uphold party lines. Thus, there is immense pressure and interest to serve the party before constituents and country. It is for this reason, as Weber argued, that in a party system representatives become "normally nothing better than well disciplined 'yes' men" (in Held, 2006: 135).

As a direct result of the representative party system, liberal democratic politics has become locked in a permanent campaign, where the people's representatives champion a position because it differentiates them from another candidate, defer resolving real crises in favour on wedge issues that can rally a base, and bend to interest groups who can support them financially. In doing so both the purpose for representation and the interest of the country take a back seat to the competitive political game. In the case of climate change, for example, even the acknowledgement of its anthropogenic roots is split almost evenly down party lines. And, when debates do occur on a potential course of action sides are largely decided by whose money is in what political coffers.

This permanent campaign politics that dominates the contemporary landscape is further compounded by the short electoral timeline that is a necessary component of all functioning democracies. With their gaze stuck on the next election, parties and politicians are constantly fighting for immediate support and approval, thus it is in the

interest of politicians and parties to construct narratives and pursue policies that are cautious, conservative, and serve short-term interests.

An experience with the Canadian Liberal Party in the lead up to the 2008 federal election is instructive of this dynamic, and is indicative of the wider challenges of climate change politics. Several months before the 2008 election the opposition Liberal Party, led by Stéphane Dion, proposed restructuring the tax system with what they coined a Green Shift. The justification was simple and prudent: ‘raise taxes on things we do not want’ (Carbon emissions) and ‘lower taxes on things we do want’ (income and savings). The plan was designed to be entirely revenue neutral (CTV, 2008a). At first, polls suggested that the emphasis on the environment could be widely supported by the Canadian public and many media accounts contended that the Liberals’ “unique approach could be the beginning of a new trend to do politics differently” (Jeffery, 2009: 84). The euphoria, however, did not last.

Before the minority Conservative Party government had even learnt the details of the plan they came out in opposition to it, claiming that it would kill jobs, trigger a deep recession and undermine national unity (CTV, 2008b). Rather than debating on the merit of a Green Shift, the Conservative Party launched a (largely disingenuous) public relations campaign centred around economic scare tactics rather than substance. The Conservatives painted the Green shift as a “tax grab that would bankrupt the country” and labeled it “Dion’s tax on everything” (Jeffery, 2009: 84), despite the fact that an independent body found that the Liberal’s Green Shift would lower taxes by a total \$1.5 billion (CTV, 2008c). Facts aside, the conservative party won the public relations battle and the Liberal Party was forced to abandon campaigning on the Green Shift in the lead up to the election. They suffered a significant drop in the poll numbers leading up to the election, which many contribute not to the content of the policy itself, but rather a failure to effectively ‘sell’ it to the public (Jeffery, 2009).

Although the Green Shift was not without its problems, it was, as Jeffery (2009) argues, “a genuine attempt to move beyond retail policies and establish a comprehensive vision

with national appeal” (p. 93). It was, however, not enough to overcome the empty lip-service, spin doctoring, and political showmanship that has come to dominate Canadian politics specifically, and liberal democratic politics in general. The failure of the Green Shift will likely impact climate change politics in Canada, and indeed around the world, for some time, as even the Canadian Liberals have now totally abandoned any notion of a carbon tax in their platform (Taber, 2009).

The Liberal’s Green Shift experience is telling of the petty, myopic, and partisan nature of contemporary politics, but it also provides insight into the challenges crises like climate change and energy scarcity pose for modern societies. The short electoral timeline and partisan party system delimits the scope of the debate and the degree of political agency. There is little incentive for challenging the status quo despite the severity of a crisis. Likewise, there is a systematic bias for popular rather than difficult decision-making, regardless of how severe the threat of inaction is. Politicians are rendered into reactive rather than constructive agents because preventing a distant crisis would require them to spend political capital now, while the benefits of prevention will be felt later, and in many cases once they are out of office. Thus, crises are deferred until the public, which most often solidifies around a problem only once the crisis is visible and immediate, demands something be done (cf. Dryzek 2009, Giddens, 2009). However, as Parkin observes, “at time of uncertainty, fear and worry, people do two things – they retreat to known territory (the tribal instinct) and become more easily attracted to strong, simple solution-mongers who may or may not be charismatic” (Parkin, 2008: 10). The far easier story to sell is one of more quick fixes, more centralization, and in extreme cases, more militarization in order to achieve some short-term relief from the crisis.

The narrow limits to political agency hold true whether one holds power or is trying to gain power. Certainly, the very nature of competitive politics means that those in power have more agency than those out of it, but what representatives can do is still severely limited by these dynamics. This is a point Hausknot (2010) raises when he argues, “[it] is possible, nowadays, to campaign for a green alternative to capitalism, but even a green parliamentary majority would not be in the position to impose it onto society” (p. 6).

This is in part due the fears of capital flight and the potential economic downturn such an economic reformation would cause, but it also arises from the very nature of the representative party system itself. If we return to the analogy comparing representative democracy to free-market politics, which side of, for example, the climate crisis debate has an easier sales pitch to the public, those who begin their pitch by first denying that climate change exists, followed with a litany of reasons as to why addressing it will undermine economic growth, create massive job losses and decrease international competitiveness? Or those who claim that climate change is a serious, although still largely intangible challenge and drastic action needs to be taken immediately? True, this drastic action will reorganize the economy and much of day-to-day life, which will be hard in the short-term but will be beneficial in the long-term

This arguably oversimplified example is not meant to be facetious. Because most people have jobs and food, and live in a relatively stable ecological and social environment, if the latter side has any chance of maintaining credibility they must construct an alternative narrative where daily life is improved. Perhaps this can be done, but it is a daunting challenge in a world where “improved daily life” is most often defined in economic terms. Hence, we see why the normative climate change discourse is centred around creating new industries, better jobs, and stimulating green economic growth. But as the discussion on ecological modernization in Chapter Two suggests, its prominence is a short-term attempt to secure legitimacy without addressing the deeper contradictions inherent in the contemporary model of development. Thus despite their best intentions, many construct this narrative even as the same science that tells them climate change is a crisis, largely disqualifies it as a real ‘solution’. By taking this position they are squeezed into a liberal democratic paradox where *real* solutions are shelved for politically viable solutions, which, at least to date, by nature of them being viable, are far too inadequate to be labelled solutions.

In order to prevent the worst impacts of the twin crises and ward off “ecological, social and normative collapse” liberal democracy needs to enact structural change, “yet there is no vision of any viable alternatives, nor is there the political will or ability to deviate

from the established path” (Blühdorn, 2007: 265). Thus, as Eckersley observes (2004), while the liberal democratic state “cannot but acknowledge the ecological crisis, it nonetheless continues to function as if it were not present by denying, downplaying and naturalizing the ecological problems and declining to connect such problems with the basic structure and dynamics of economic and bureaucratic rationality” (p. 90) This amounts to what Ingolfur Blühdorn (2007) characterizes as the “politics of simulation,” in that late-modern societies “have neither the will nor the ability to *get serious*” and instead simulate ‘authentic’ politics in an attempt to “sustain—at least for the time being—what is known to be unsustainable” (original emphasis: p. 253). These claims must be tempered with an obvious advantage distinct to liberal democracies: their commitment to an open and pluralist society that operates outside the rigid state institutions. Indeed, this has the potential to facilitate the types of spontaneous and innovative social movement that resolving the twin crises demands.

#### **5.4 Liberal Ontology of the Self**

The third, and final point of tension to be addressed here arises from liberalism conception of individual autonomy which denies any social and ecological dependence (Eckersley, 2004: 104). Eckersley describes this conception of autonomy as one of the significant liberal dogmas, arguing that it casts a “dualistic conception of humanity and nature”, which gives rise to the notion of human exceptionalism from, and instrumentalism and chauvinism towards, the natural world (Ibid: 108). Nowhere is this “liberal ontology of the self” more prominent than with the individual, as an economic agent, “utilizing property rights in ways that privatize gains and displace social and ecological costs on to others” (Ibid: 104-105). In this we find both the truncated nature of liberal ontology and the inherent bias of the liberal state that reinforces it. Liberal ontology becomes increasingly problematic in an increasingly *full* world—which is indicated by the arrival of the twin crises—where the utility of the free-market, and the forms of freedom that it promotes, may be accessible to some, but is secured at the expense of others. At the limits of environmental space the actions of autonomous individuals acting in their own self-interest actually imperil, rather than enhance autonomy, self-determination and liberty for many, and environmental integrity for all

(Eckersley, 2004: 242). Thus, in liberalism's relentless pursuit for liberty it creates the conditions for oligarchy as that liberty is accessible to fewer and fewer people. In this sense, Hayek's condition for freedom, demanding the fullest possible scope of the 'free-market', is actually another road to serfdom.

The challenge, of course, is that as twin crises worsen, liberalism's condition for individual liberty becomes increasing at odds with social and ecological stability. Indeed, this is likely to invigorate individuals, capital and the state in attempts to maintain social, political, economic and ecological stability. But, in an increasingly full world maintaining the *status quo* will require increasingly exceptional acts that may be pursued in expense of the ontology they are trying to preserve. Which is to say, that the twin crises have the potential to transform geopolitics into what has been characterized as a "contest of exceptionalism", where the conditions for security and stability require the "justification and institutionalization of exceptional policies and emergency measures that hollow out central characteristics of liberal democratic government" (Huysmans, 2004: 25).<sup>21</sup> As the foregoing discussion has sought to elucidate, these types of tensions—between security and liberty, exceptionalism and constitutionalism, executive power and legislative power—have forever been present in liberal democracies. The twin crises, however, have the potential to propel them to the forefront as the increasingly contested struggle for the material flows that liberal democracies are accustomed to make the promises of liberal democracy increasingly impossible. The point being, that while exceptional politics and actions may be pursued under the guise of freedom and security, because of what they are trying to maintain they are often achieved at the expense of it.

Indeed, as a wide range of commentators already suggest the challenges posed by the twin crises are already changing the geo-political landscape and testing contemporary political institutions in new ways (Foster, 2009; Giddens; 2009; Homer-Dixon; 2008; Friedman 2008; Dyer, 2009; Klare 2006; Zizek 2004;). From the Iraq War, to the

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<sup>21</sup> Huysmans discusses the 'contest of exceptionalism' in the context 9/11. For example, in Great Britain, a country not attacked on 9/11, the government argued (and won), that in order to protect British citizens it needed to "suspend some liberties and rights and provide security agencies with more extensive power" (p. 25). Although the twin crises were not his focus his account is highly relevant here.

Nigerian Oil Crisis, to the genocide in Darfur (which is has been called the first anthropogenic climate change war, see: Giddens, 2009: 205) the intense politics of the twin crises are increasingly influencing history. Although each of these conflicts should disturb anyone who is concerned with basic human rights, freedom and democracy, such struggles for control and power have many precursors in human history—from which liberal democracies, despite their professed ideals, are not exempt. More ominously still, however, by challenging the conditionality of liberal democracy and exacerbating the already numerous tensions inherent to this fragile order, the worsening twin crises have the potential to make explicit expressions of force and oppression less exceptional, and indeed completely rational for the maintenance of prevailing ideology, and the institutions that embody it. Both climate change and energy scarcity set the stage for new waves of imperialism and protectionism to increasingly dominate geo-politics.

### **5.5 Act Globally, Think Locally?**

The changing distribution and availability of key resources, such as energy, food and water (all of which will be impacted by the twin crises), have long been a source of war, population displacement and state failure. Discussing the connection between resource scarcity and violence, Thomas Homer-Dixon (1999) argues that two types of resource wars are common: first is “resources capture” in that powerful groups take control of key resources at the expense of marginal groups; and second “ecological marginalization” where droves of displaced peoples move to ecologically and socially fragile areas creating further destabilization (p. 181). Iraq, Darfur and Nigeria all provide compelling examples of these tendencies at play. Homer-Dixon’s account parallels the conclusions drawn in the Pentagon’s report on climate change (2003), which suggests, “as abrupt climate change lowers the world’s carrying capacity aggressive wars are likely to be fought over food, water and energy... [this] could make humanity revert to its ancient norms of constant battles for diminishing resources” (Schwartz & Randall, 2003: 15-16). The Pentagon’s report on Climate Change is indicative of a larger discourse that suggests the current trajectory puts humanity on course for what, Foster (2009) argues, will be a “planetary apartheid system, gated and maintained by force, in which the gap between global rich and global poor constantly widens and the differential access to environmental

resources and amenities increases sharply” (p. 260; also see for example Dyer, 2009; Heinberg, 2006; Klare, 2002). Foster (2009), like the Pentagon (2003), like the Global Scenario Group (Raskin, *et. al*, 2002), among others, paint a future of a “global fortress world” in which the militarization of resources and borders closes down open societies, and isolates countries in response to an increasingly contested, unstable and conflict ridden world. In such a world, the exercise of democracy and access to freedom, as they are currently defined, will certainly be constrained. This makes understanding what exactly liberal democracy is (i.e. how it constructs power relations, how it institutionalizing change, etc.) and why it is that way (i.e. liberal conditions for freedom, liberal ontology, etc) absolutely crucial, as it is necessary for defending and finding ways of preserving the attributes that are most worth maintaining.

## Chapter 6: The Crisis of Liberal Democracy

The twin energy crises, ultimately, are etching the boundaries of an increasingly full world. These crises are creating new challenges and exacerbating old tensions through which liberal democracies are forced to navigate. Although often framed as an ecological, and occasionally as an economic problem, the twin crises anticipate a profound *crisis* of liberal democracy. As the foregoing discussion has sought to elucidate, this profound crisis is comprised of contradictions and tensions that have been forever present in liberal society, but are set to be challenged and constrained as both climate change and energy scarcity progress. This paper, being written from a predominately North American perspective, has sought to identify three separate, yet overlapping aspects of the crisis of liberal democracy, all of which will need to be confronted as the twin crises worsen.

The first aspect is the problem of political viability: this was developed in Chapter Two, and arises from the liberal democratic state's commitment to, and naturalization of, the growth-based capitalist economy. Market-capitalism, as it has been characterized here, is structurally dependent on the use of fossil energy in both production and circulation. Since no viable alternative to fossil fuels is realistically available, resolving the twin crises cannot be achieved without a willingness to confront the structures and dynamics of the global economy (Jackson, 2009: 57). Normative climate/energy discourse, however, has consistently failed to confront these structures, favouring instead the use of market mechanisms and marginal tinkering. Although governments may openly acknowledge the perils of the worsening twin crises, until they confront the structural origins, 'solutions' that are deemed politically viable must, from the outset, be woefully inadequate for meeting the objective. Governments and politicians are left chasing cosmetic responses to what is inherently a structural crisis. It is worth noting that even with unprecedented levels of international cooperation, integration and stability these cosmetic responses have yet to gain widespread agreement or application. This is especially ominous because as the worsening twin crises create new tensions and

fractures in the international community, the possibility of meaningful multilateral agreements becomes less likely.

Second, is the problem that arises from the historically significant relationship that liberal democracy has with market-capitalism. Through this relationship, liberal democracy has a significant historical basis in the use of fossil energy. This argument was developed by exploring (1) the historical connection between democracy, liberalism and fossil capitalism (see Chapter Three); (2) the permanent and dynamic tension that exists between these mutually dependent, yet conflicting ideologies; and (3) the crucial role fossil energy has played, and continues to play, in masking and displacing the source and the consequences of this tension (see Chapter Four). This relationship, I suggest, becomes increasingly problematic in the face of the twin crises because by preserving and prioritizing their material (or energetic) conditionality, liberal democracies are unwittingly sacrificing their ecological and social conditionality. Which is to say, the worsening twin crises stand to profoundly destabilize the ecological and social conditions that make liberal democracy possible. This arises from the tendency of liberal democracies to actively appropriate resources and displace social and ecological costs beyond their rigid spatial and temporal boundaries.

The final problem I explore is that which arises from the tensions embedded in liberal democracy itself. These tensions, as suggested in Chapter Five, emanate from the permanent tension between liberalism (with its conception of liberty) and democracy (with its requirement of equality). To illuminate these tension I explore three characteristics of liberal democratic society—power relations, representation, and the liberal ontology of the self—and suggest how they may be exacerbated by/exacerbate the twin crises.

Against the backdrop of these problems, the need for liberal democracies to confront the very structures and trajectories through which they have been, and continue to be, legitimized, organized and reproduced has never been more pressing. To ignore these underlying contradictions and tensions is to uncritically assume that liberal democracy

can navigate society through the end of the age it was designed to govern, and thus rid itself of an economic and political ideologies that inform its very existence. My intention here has not been to envisage how liberal democracy should be transformed, but rather to show why transformation is indeed necessary. Clearly there is much space, and an urgent need for more critical reflection on this topic, as it is only by coming to terms with the types and points of pressure that the twin crises exert on liberal democracy that we will be in a position build alternative institutions.

Unfortunately, in contemporary discourse, the stakes of the game do not match the scale of the problem. At stake is not just the integrity of the climate and wider environment, but also the integrity of society in general. The challenge is not limited to what kind of physical world we leave behind, but also what kind of institutional and constitutional world will be promoted now and inherited later (Wolin, 2008: 288). If democracy, in some form, is indeed the path to liberty, autonomy and self-determination, then defending it, deepening it, and globalizing it points, as Kovel (2000) suggests, to the “mobilization of our species” (p. 200). While the twin crises threaten the foundation of liberal democracy, their resolution follows the acquisition of substantive democracy, and thus the emancipation of humanity. Such a future is still very much within our grasp, but it requires that we first confront the structures of these problems, and thus, create the space to imagine an alternative.

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