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# **Peak oil and the Apocalypse**

**Apocalyptic imaginaries as a threat to politics proper**

**Emil Pull**

Department of Human Geography  
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Examiner: Henrik Gutzon Larsen  
Teacher: Guy Baeten

## Abstract

This thesis will examine the discourse of peak oil understood from a post-political perspective and challenge the un-reflexive assumption of peak oil as a natural challenger to current hegemony. It will do so by constructing a theoretical framework for 'politics proper' through which the peak oil discourse will be assessed. The conclusion is that while peak oil offer the potential of a serious rupture with the current regime; the discourse is also infused with apocalyptic imaginaries and populist maneuvers threatening to render such a rupture insignificant. The thesis warns against letting apolitical infusion obscure and hinder the illumination of proper political subjects and diverse alternatives to our current regime.

**Key words:** Peak oil, post politics, populism, apocalyptic imaginaries, democracy

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## 2. Introduction

According to Slovenian philosopher Slavoj Žižek there is only one true ideological question today, from which all following formulations must stem; “do we endorse the predominant naturalization of capitalism, or does today’s global capitalism contain antagonisms which are sufficiently strong to prevent its indefinite reproduction” (Žižek 2009:90f). Or put differently; are there problems within capitalism to warrant searching for an alternate social order, or can any current antagonisms be cured from within the capitalistic hegemony; a hegemony that since the fall of the Berlin wall and the east block more and more is promoted as the only practical, even the only *possible* way of organizing society.

Žižek (2009) identifies four such antagonisms: the looming threat of ecological apocalypse, the notion of private property with regards to intellectual property, new techno-scientific developments (mainly in biotechnology), and lastly the creation of new apartheid (walls and boundaries of exclusion). The first three antagonisms assume opposition against the closure/privatization of ‘commons’, *commons of culture*: cognitive capital like language, education but also public healthcare, postal systems and roads etcetera; *commons of external nature*: depletion of natural resources, pollution, end to biodiversity etcetera; *commons of internal nature*: the biogenetic heritage of man and the creation of a ‘New Man’. These three antagonisms share a perception of potential destruction of realms, possibly even the destruction of civilization and humanity itself. Žižek (ibid) argues that it is, however, only by the last antagonism, the antagonism of the Included and the Excluded that we find a subversive edge. The other three antagonisms can only be rendered as challengers to hegemony by calling upon the antagonism of inclusion and exclusion (Žižek 2009).

Within the first three antagonisms lies an inherent opportunity for ‘managerial fixes’. Ecological threats become issues of sustainable development, intellectual property legal challenges, and techno-scientific developments a question of ethics. Problems are formulated and solved within the hegemony. It is not too far-fetched to imagine society overcoming the above antagonisms without addressing the issue of inclusion and exclusion; a society where environmental issues, issues of intellectual property and techno-scientific dangers have been managed and rendered ‘obsolete’; but where the stratification of power and the marked differences of the Included and the Excluded remain the same or even accentuated further. “[W]ithout the antagonism between the Included and the Excluded we may well find ourselves in a world in which Bill Gates is the greatest humanitarian battling against poverty and disease, and Rupert Murdoch the greatest environmentalist mobilizing hundreds of millions through his media empire” (Žižek 2009: 98). While the first three antagonisms concern the (economic, anthropological and physical) survival of society, and possibly humanity itself, the latter concerns that of equality and *justice*.

In this thesis I will examine a specific discourse that is often labeled and handled as a potential antagonistic element to our world order in general and capitalism in particular; namely peak oil. I will claim, however, that while peak oil as formulated by its advocates might pose a serious threat to ‘our economies’ it does not by necessity challenge the social order of things. In fact I would claim that the contrary holds true. Existing power relations tend to be accentuated in times of crises as a result of the birth of populist movements and discontent. I will further explore the dangers of the peak oil discourse being far removed as a saving grace and a proper challenger to hegemony to instead be actively used as a populist tool to depoliticize discourse and reproduce hegemony and

claim that discourses aimed at environmental security are often articulated and reproduced from within and by the hegemonic regime, and as such fail to offer supersession and an actual challenge to hegemony.

It is important to note that this thesis does not examine the issue of oil scarcity at any length. Nor does it refute that peak oil (or other Malthusian inspired discourses) might pose a real and very serious threat to our society. What is of interest to the author is how the discourse of peak oil is being presented by advocates of the peak oil discourse. More specifically the aim of this thesis is to scrutinize the popular claim that peak oil will revolutionize the world – and if so, what contents such a revolution would/could have. Further it is important to note that the need to actually challenge our current hegemony is a normative stance underpinning much of this thesis. But while various reasons for this necessity can be implicitly read throughout the thesis (for instance it is claimed that there can be no true democracy without challenging hegemony) – it is nonetheless a normative stance, and the thesis will not challenge or discuss that stance in any explicit detail.

Barring this introductory chapter where the aim and goals of the thesis are outlined and a short presentation of the peak oil idea (see below) is presented, and not counting the methodological chapter where the theoretical framework underpinning the thesis is constructed, this thesis is divided into two parts. The first part (chapter 4) examines and develops a specific understanding of democracy and politics, asserting that we currently live in times that in practice and theory divert from the democratic ideals – that we live in a world best described as post-democratic and post-political. The chapter ends with in mildly constructive streak, suggesting how politics can be reaffirmed and reinvented in a new guise; namely in and by agonistic confrontation. The second part (chapter 5) of the thesis analyses the predominant take on environment in general, and peak oil in particular. It attempts to dissect the peak oil discourse building on knowledge attained about post-democracy in the first part. Stressing that while peak oil accounts alternatively presents an inevitable apocalypse or a way to release us from the shackles of capitalism and build a better world order; both accounts hold the potential to foster populism and only further accentuate existing power relations and a reproduction of our hegemonic regime. I also make the claim that the peak oil discourse in recent years has changed and seemingly increased in sophistication. What this change can mean will be discussed towards the end of the second part of the thesis.

## 2.2 Peak Oil crash course

The term peak oil was at the turn of the millennia an unknown expression. Though Malthusian theories and discourses regarding the finitude of natural resources had touched upon depletion of oil before, it wasn't until in late December 2000 that the expression peak oil was coin. The term was conceived as part of the naming process of the newly founded association ASPO (*The Association for the Study of Peak Oil*) by petroleum geologist Colin Campbell and energy physicist Kjell Aleklett (Aleklett 2012). ASPO can (according to cofounder Aleklett 2012) be said to have launched the modern discourse of peak oil and introduced it to the academic field during the past decade and a half.

Though the actual term peak oil might have originated from the turn of the millennia, the theory itself was formalized by Shell employee and geologist M. King Hubbert in the 1950s. In short Hubbert constructed a statistical model over the rate of oil discoveries over time. Hubbert assumed

(from surveys done on oil discoveries in US lower 48<sup>1</sup>, that showed discoveries to have peaked in the 1930s) that during a regions early exploitation of oil, findings would present themselves at an ever increasing rate, to finally reach its peak when half the reservoirs had been found. A point after which the rate of discovery would decline in an inverted symmetrical fashion, creating a bell shaped curve. Hubbard proceeded in modeling the behavior of an oil well during its various production stages, and assumed that the production rate of a well would take the same bell shape as that of oil discoveries, and that it would be possible to combine the assumed production curves of all wells in a region to extrapolate the peak of production for the region as a whole (ibid). Using his model and the statistical data available in the mid-1950s Hubbert predicted the peak oil of US lower 48 to occur sometime in between 1965 and 1971. Looking back and 1971 is indeed the year where US lower 48 oil production was at its highest (ibid). As a consequence Hubbert and his model received much international acclaim, and he and his bell shaped curve is still at the heart of the peak oil discourse as it is formulated today.

Peak oil perceived as a discourse obviously transcends the mere notion of a global production peak of oil and the mathematical models used to examine and predict this peak in time – be they models derived from geophysics, statistics or economics. As a discourse peak oil is rather understood as the totality of theories and practices regarding such a peak in production. A discourse with aforementioned models of prediction included, but also including social, economic and political theories of *impact* as well as grass-root movements and the discourse as presented in media. Such theories of impact range from apocalyptic imageries regarding oil wars and a collapse of the global economic system, to more moderate theories of impact with energy preservation and gradual adaption to oil scarcity at the center of analysis. Below follows a brief presentation of how discourses will be perceived and conceptualized within the thesis.

### 3. Discourse and dialectics

*”Outside a frame of references composed of defined terms and theory there is no scientific data, only chaos”<sup>2</sup> – Gunnar Myrdal (1971)*

Discourse in this thesis will be understood in its expanded sense developed by Chantal Mouffe and Ernesto Laclau (Kolankiewicz 2012, Laclau 2010). In this tradition discourse is not understood (as often is within discourse theory) as being merely lingual. Discourse is not limited to any combination of speech and writing. Language, the traditional foundation of discourse theory, should rather be understood as only one instance of the social, and thus only “one of the possible ways for meaning to be articulated and for discourse to be disclosed” (Kolankiewicz 2012:127). Instead discourse should be understood as the totality of practices that comprise any societal formation/configuration. Discourse understood as such leaves no object and no practice as being non-discursive. Reality manifests itself only through discourse, and everything is discursively embedded. Mouffe and Laclau (Kolankiewicz 2012) make certain to point out that this is no anti-material ontology; they acknowledge the existence of materiality, but claim that no object can be stripped of its discursive meaning. Objects will never present themselves to us as mere existential entities, but will always have discourse – line of thoughts, associations, preconceptions, prejudices

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<sup>1</sup> The 48 states south of Canada

<sup>2</sup> Authors translation

– imbedded into them. This means that there is no meaning to draw a distinction between discourse and non-discourse, since the only way to reach reality is through discourse (ibid).

The above understanding opens up a multitude of entry points for fruitful analysis of discourse. Text and language is not the primary of discourse theory for Mouffe and Laclau, in contrast to how discourse theory is traditionally conducted. Instead “every action, practice, ritual and institution is meaningful, everything social can be subject to discourse analysis” (Kolankiewicz 2012: 128). In practice this means that discourse theory can be combined with a multitude of qualitative methods, and a wide range of empirics. As such discourse theory would appropriately be labeled ontology, a theory of how reality is comprised, and possibly an epistemology, a theory of how reality can be accessed by the researcher. Or put otherwise, a specific mode of thinking when it comes to reading gathered material collected for analysis.

### 3.2 Dialectics

Dialectics understood by Carchedi (2008) rests on three different principles; 1) ‘that social phenomena are always both realized and potential’; 2) ‘that social phenomena are always both determinant and determined’, and; 3) ‘that social phenomena are subject to constant movement and change’ (ibid). The first principle simply means that reality has, using Carchedi’s (2008) term, a ‘double dimension’; that which already is realized, and that which is only potentially existent. The concept of potential existence is intuitively evident, objects around us are what they are, but could be something different. Carchedi (ibid) argues that the same holds true for abstract social phenomena. The Swedish state is what it is, but could be realized into something different. A commodity bears a distinct value at the realization of its production (the abstract of labor consumed during its production), a value that might or might not be realized when it is sold (depending on how useful the customer finds the commodity). Even tendencies have their potential phenomena imbedded: “the rise (counter-tendency) is potentially present in the fall (the tendency) when the latter becomes realized and the fall (the tendency) is potentially present in the rise (the counter-tendency) when the latter becomes realized” (Carchedi 2008:497). Thus what is activated can only be what is already potentially present in a phenomenon.

The second principle, that ‘social phenomena are always both determinant and determined’ can simply be understood as how the relationships in between different phenomena work, and the logic through which phenomena are being called into existence. Intuitively we can deduce that all parts of social reality are interconnected, that one phenomenon leads to or reproduces another. And that our social reality as a whole constantly changes over time. Society irrefutably is ever evolving (or devolving). Dialectical determination is the ordering or conceptual structuring of this movement. Carchedi (ibid) distinguishes between determinants (the already existing) that spawn the determined (the reproduced) phenomena. The determined ones are already present as potentials in the determinant phenomena, and as such they call into existence their own conditions of reproduction. Or as Carchedi puts it; “[a] relation of *mutual determination*, or *dialectical relation*, is one in which *the determinant phenomenon calls into realized existence the determined one from within its own potentialities. The determined phenomenon, in its turn, becomes the realized condition of the determinant phenomenon’s reproduction or supersession*” (Carchedi 2008:499). Carchedi (ibid) offers an example; with the accumulation of capital the capitalistic system with its distinct mode of production was developed, and with the capitalistic mode of production capital accumulation was developed. One could also consider how new professions, relations or material things in and by themselves reproduce the utilization or need

of the same<sup>3</sup>. And further, every “phenomenon is an element of society and is thus connected directly or indirectly to all other phenomena, each phenomenon is the condition of existence and/or reproduction and/or supersession of all other phenomena” (Carchedi 2008:500).

The third principle; that ‘social phenomena are subject to constant movement and change’ is a natural consequence of the first two principles. Movement and change are understood as the reproduction of potential phenomena from already realized phenomena, and vice versa (Carchedi 2008). This movement is not chaotic but follows specific social and historical laws. For Carchedi (ibid) those laws under our current capitalist system would be the modes of production and the force of social laws in our socio-economic system – the inherent laws of capitalism if you will. For instance “the wealth produced in any society must be distributed for that society to reproduce itself. Under capitalism wealth is produced as value and thus surplus value in the form of money. The distribution of wealth is thus the distribution of Labour’s product between Labour and Capital, as wages and profits. Due to their importance, the laws of movement set the framework within which other (non-essential) phenomena are subject to change” (Carchedi 2008:504).

So what does this give? The complex relation and the bindings between social phenomena gives that the social structure is dynamic rather than static. In fact, the relationships between phenomena, between realizations of the potential, also show society’s movement. It also becomes apparent that movement equals structure and that any contraposition between structure and movement is purely artificial. It is the dialectal structure that cause, even is, movement. Or put differently; “relation shows also *society’s movement*, the change undergone by realized social phenomena due to the realization of their potentialities and thus both the reproduction and the supersession of society as a whole” (ibid:513).

Carchedi (2008) further claims that the reproduction is not equilibrium. Dialectal reproduction is not a cyclic process, but rather a process that strives for supersession (ibid). Reproduction in a dialectal sense is not merely a status-quo, but rather the counter tendency to the tendency of supersession. Economic theory centered on equilibriums can only explain reproduction, being ‘constitutionally blind’ to capitalism’s supersession. This is according to Carchedi (2008) the fundamental critique of ‘bourgeois economic theory’. It would thus become apparent that the task of a researcher of social sciences is to study the reproductive phenomena in society, interpret them based on the laws of movement to which they’re bound, and if the researcher has a constructive streak; to identify where and under what circumstances mere reproduction processes can and has elevated and lead to supersession.

### 3.3 The synthesis

Trying to combine Mouffe’s and Laclau’s understanding of discourse and Carchedi’s understanding of dialectics will give us a fruitful theoretical frame for handling the empirical material and to understand the captured instances of reality that any material or set of data are an expression of. As well as enabling us to understand the motion in between these ‘snapshots’, and possibly even make a certain amount of extrapolation possible. Discourse should in this thesis be understood as all the practices, objects and expressions of and surrounding a (or several, at various abstraction levels) social phenomenon – as it is, in all of its totality. Discourse is what gives meaning to the

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<sup>3</sup> With the invention of the computer, computer innovators became needed for instance.



chaotic and contradictory status and entwinement of any series of practices and lines of thoughts comprising what can mundanely be called social processes, and *dialectics* is the force, or set of law-like principles that propels and explains change within, both the singular and every set of, discourses. This understanding of discourse enables us to look at and analyze, and provide a method for handling the static and immovable sets of data that comprise most of what we call empirics. And this understanding of dialectics gives us a theoretical framework with which we can analyze and understand change within the discourses themselves.

This thesis will mainly focus on theory and thought development using a limited set of academic texts to illustrate the progress of our discourse of interest – peak oil. Our methodological framework makes analysis possible using much wider and more varied material than can be found within the scope of this thesis however. This is intentional and done for two reasons. Firstly because as dialectics give, there are no closed processes and research must be conducted in such a manner as to accept this openness of the system; to ‘finish without end’ and make further advances possible. In following that line of thought there is a point in creating bigger shoes for yourself than what is strictly needed, to keep the system open and to further enable continued research on the matters dealt within. Secondly there is always a point in exploring and building upon one’s ontology. Every academic endeavor contains the opportunity of expanding the scope of the researcher’s own understanding of reality, to open up doors and make visible what was previously hidden. Methodological constructs will always be a reflection of one’s ontology, and as such there is a certain allure in developing a framework on a higher abstraction level and capable of dealing with more than what is strictly needed in order to handle the data at hand.

More specifically this thesis will analyze and discuss a rather narrow material. The discussion on post politics in the first part (chapter 4) of the thesis will build upon a tradition that can be traced to Jaques Rancière (2005, 2010a, 2010b, 2010c etcetera) and is in much a theory building endeavor without much empirics. It will implicitly relay on the empiric material of the named theorists. The second part (chapter 5) will also be theory developing for most part, but will use a sample of academic peer-reviewed articles listed in a database of nearly two hundred articles on ASPOs web site. Since ASPO is an academic hub for ‘peak oil-ists’, and since only a handful of the article authors (to this author’s knowledge) are directly connected to ASPO (ASPO does not host the articles themselves, nor do they retain any copyrights; but provide links to publishers and journals) it is this authors hope that the cross-section of articles found in the database is a relatively representative cut of ‘peak oil-ists’ within academia and their take on the peak oil discourse over the decades.

## 4. The postpolitical condition

*“Postdemocracy is the government practice and conceptual legitimating of a democracy after the demos, a democracy that has eliminated the appearance, miscount and dispute of the people and is thereby reducible to the sole interplay of state mechanisms and combinations of social energies and interests... It is the practice and theory of what is appropriate with no gap left between the forms of the state and the state of social relations” – Jacques Rancière<sup>4</sup>*

*“People often say that, in a democracy, decisions are made by a majority of the people. Of course, that is not true. Decisions are made by a majority of those who make themselves heard and who vote - a very different thing” – Walter Henry Judd<sup>5</sup>*

With the fall of the Soviet union in 1991 voices were raised to affirm – what had already been proposed a decade earlier with the introduction of the postmodern discourse by Jean-Francois Lyotard – that we now live in the end of history. The world has embraced liberal democracy, and no further clashes between ideological ideas would ever arise again (Fukuyama 1992). Now it was time to reinvent politics. To move away from the antagonism of the previous grand stories (communism, liberalism, fascism etcetera) and let politics enter the realm of post-modernity, to adapt to a post-ideological world. In the following chapter an attempt to reconcile and formulate a common for the basis of contemporary post-democratic thought in the tradition of Jacques Rancière (2005, 2010a, 2010b, 2010c), Slavoj Žižek (2009, 2010), Chantal Mouffe (2008) etcetera, will be made. It is a necessary theoretical deep-dive, in order to understand the premises of post-political thought that will construct the backbone in the analysis of the proposed recent change in the peak oil discourse. The chapter will be structured thematically while still giving some historical account and understanding to the dialectal processes at work. It will start with presenting the idea of the end of ideology, followed up with the proposed change of aim for politics in a non-ideological world order (illustrated by Mouffe’s (2005) reading of Beck and Giddens managerial society).

Secondly it will address a line of thought and give examples of a perceived issue of democratic excesses manifested in modern society. Excesses attributed as a grave danger to the ‘good rule’ (Rancière 2005, 2010a). This is a line of thought that has popularized and fueled what many (of the aforementioned theorists) have perceived to be highly anti-democratic and post-political practices and social theories. Finally a different understanding of democracy will be offered, an understanding that further explains the notion of recent decade’s post-political and post-democratic developments, practices and ideals, and the critique thereof.

Since Fukuyama a number of thinkers have tried to conceptualize the nature of the post-ideological world – a world where collective identities have “become hopelessly outdated, owing to the growth of individualism and [the need for those identities] to be relinquished” (Mouffe 2005:35). German sociologist Ulrich Beck claims that we live in a time where we are highly conscious of the flaws of our societal system. We live in a society where the old industrial ideals regarding infinite resources and infinite technological and economic progress is no longer being taken for granted, or that the

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<sup>4</sup> Rancière 1999:102

<sup>5</sup> Saying attributed to the republican politician and orator Walter Henry Judd (1898-1994)

processes to achieve progress at least are not without risk. And these risks are better addressed at an individual level than by using the ‘old ideological crutches’ of the past (ibid:38).

Historically traditional values like class and gender struggles (that needed collective mobilization) was what propelled society forward. But according to Beck these values are outdated and the need for such mobilization is no longer there. It is no longer the instrumental rationality (the rationality of our institutions – our political parties, our unions or other collective identifiers and manifestations) that determines social history and dictate social change. The fundamental conflicts today are ”no longer of a distributional nature, about income, jobs, welfare benefits, but are conflicts over ‘distributive responsibility’, i.e. how to prevent and control the risks accompanying the production of goods and the treats entailed by the advances of modernization” (Mouffe 2005:37).

Politics according to Beck (Mouffe 2005:39) should obviously adapt to this new reality of risk management and the obsolete constructs of collective identities. The main issues of concern to man in modern society cannot be captured by traditional subjects of politics like parties or unions. Instead we see an increase of NGOs and grass-root movements, disengaged from party politics, addressing issues and topics that were previously considered apolitical. What used to be political; wages, conditions at the work place, social security issues etc. are no longer considered to be political, and what used to be apolitical is now political. This shift of politics Beck (ibid) calls substitute politics – a process where “politics” is individualized and made able to free itself from its institutional shackles. A process Beck’s colleague Anthony Giddens (Brännström 2010) would say marks the shift from ‘emancipatory politics’ to ‘life style politics’.

Beck (Mouffe 2005) means that to meet the challenges of a modern and knowledge based society, where no individual or group can posses’ insight of all aspects of an issue, politics must expand and reinvent itself. The conventional institutional rationality must be overthrown in favor of a more stratified understanding of politics. Experts, politicians, common man, businesses and the industry must (and are) all take part in reshaping the political and help manage the risks is society. The goal for politics is to open up a range of conventional and unconventional forums where a wide array of topics can be discussed and agreements reached via consensus. A prime example according to Beck (ibid) is the environmental threats looming at the horizon – threats that needs to be managed in and by all levels of society; research and information by experts; recycling and sustainable consumer patterns for individuals; environmental regulations by the state; sustainable practices by businesses and industry etcetera.

This transition from conventional antagonistic and institutionalized politics to risk management in a risk society has by necessity blurred the boundaries between the private and the public spheres. The polemic condition between the political right and left, or the division of class and gender and other antagonisms cannot properly identify or manage the risks our society face. Truths cannot be found in the isolation of ideological standpoints but can only, according to Beck (ibid), be found and managed by dissuading antagonistic standpoints and reach consensus between a diversity of parties. All parties must realize the inadequacy of their knowledge and take a stance of general skepticism. In a society where skepticism has been generalized conflict will be pacified, and we will realize the need to work together and in accord, and realize that reaching consensus is the ultimate goal of politics (Mouffe 2005, Brännström 2010).

This view on politics as a joint and collaborative process, in part disengaged and in part meshed with the traditional institutionalized pathways of politics has proven very fruitful. Politics regarded as being in equal part highly individualized as it is promoted to cover a much wider range of interests than traditional politics – and the notion of the goal of politics being reaching consensual decisions via a managerial approach has been said (see Harvey 1989, 2010) to have had deep implications for both governing and governance. The emergence and popularization of so called public-private partnership, where city planning becomes the domain for consensual practices in between the public and private sector (Harvey 1989), is one example of this transition. The framing of environmental issues another (that will be addressed at length in the coming). Before addressing the implication of the consensual approach to politics we will take a brief look at another, seemingly detached – but as we will see highly entangled, effect of the supposed end to history by the reconciliation of ideology into liberal democracy as the only and the everlasting ‘grand story’.

## 4.2 Hatred of democracy

In 1975 the report ‘*The crisis of Democracy: Report on the governability of democracies to the trilateral commission*’ (Crozier, Michel, Huntington Samuel P, Watanuki Joji, 1975 New York University Press)<sup>6</sup> was published at the request of a trilateral commission of politicians, experts and businessmen from the US, Japan and western Europe. The report suggested that democracy was in crisis. The reason was said to be ever increasing demands on the governments by their populace. Demands that were said to lead to the abolishment of all authority and had made individuals and groups opposed to discipline and unwilling to face up to the sacrifices required for society to function (Rancière 2005). French philosopher Jaques Rancière saw this as the beginning to the end of totalitarianism and dictatorships being the main threats to democracy. Now it was the very manifestations of the democratic society – democratic life – that was perceived as the biggest threat (ibid, Rancière 2010b).

These ‘threats’ to democracy were apparent in both Europe and the US in the late 1960s and early 1970s, with constant and active opposition and questioning of authority, elitism and pragmatism. The cure proposed against this abundance of (and therefore threat against) democracy was a shift in attitude and a focus towards completely different goals. Instead of communal activism, private happiness, social relations and material wealth would be the ideals of democratic life (Rancière 2005). In time it got apparent that this solution had a back side to it. By diminishing political fervor and steer the individual away from collectivism and into individualism demands on the government increased rather than decreased – though the aim of the demands were obviously different. Citizens became indifferent to the common good, and the governments became drained on authority (ibid).

Democratic life could either mean a vital and strong activism and partaking in the public debate – which was bad; or it could mean political indifference and a focus on individual and material happiness – which was also bad. The excesses of democracy – on the one hand excessive activism, and on the other excessive consumerism had become the real enemy. Good governance thus became a matter of suppressing the excesses of democracy (Rancière 2005). According to Rancière (ibid) this analysis can only sustain itself on the basis of a threefold operation. By reducing democracy to a form of society and; by identifying society as spawned from the egalitarian individual rule and call everything from consumerism to activism into the object of society and

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<sup>6</sup> Rancière 2005:14

lastly; to hold the democratic and individual society accountable for the inherent logic of eternal growth heralded by capitalism. Only by this reduction of the political, the sociological and the economic to a single dimension and entity – can the ‘progress’ and manifestations of society be explained on the basis of a singular phenomenon; democracy (ibid).

Such an operation is intuitively hard to acknowledge, we rarely translate democracy to the totality of public and private life and society as a whole. However this operation of equating democracy with the excesses of society is according to Rancière (2005) a vital and active process both in academia and practice, and has been since the 1970s. As we will see and based on the understanding of politics and democracy that this thesis will develop such an operation (equating democracy with society and ‘blame’ democracy for any societal excesses) and the analysis that follows (the overarching need to quell the excesses of democracy, in order to protect and legitimize democracy) is impossible. That said, the contempt for the ‘excesses of democracy’ is very much alive, and big efforts are being made to tame and control these excesses.

### 4.3 The excesses of democracy

Slovenian philosopher Slavoj Žižek (2010) noted that in 2007 the people of the Czech Republic voiced concerns and raised demands for a public vote on the US plans to install radar equipment on Czech soil. Over 70 percent of the Czech populace was opposed to the plans. Yet the Czech government, denying its citizen a public vote, went forward with their plans and allowed the US to build their radars. The official stance was that matters of such importance should be left to experts and not to the whims of the masses. A stance that begs to consider the contents of democracy and what issues should be dealt with by experts alone. Should questions of economics be left to economists, issues of power be left to the strong – and then; what is left to vote on (Žižek 2010)?

A year later, in 2008, Ireland voted against the treaty of Lisbon in a public vote. Ireland was the only country in the EU that actually held a public vote, and the only reason this was allowed was due to some ‘oddities’ in their constitution that gave right to a public vote (Ross 2010). The treaty was an updated version of a previous treaty that had been voted down in public votes in both France and the Netherlands. The treaty itself had according to its cowriter Valéry Giscard d’Estaing merely been updated cosmetically (ibid), and this time around all countries besides Ireland would be represented by their representatives – and no public votes be held. Once it was clear that the Irish population had turned the treaty down the uproar and indignation among politicians and press alike in Europe was a fact. The French foreign minister said it to be extremely embarrassing for the Irish population. The speaker of the European parliament said that it was a big disappointment that the Irish were not prepared to do what was necessary to secure further democratization of Europe, and Nicolas Sarkozy called for an immediate re-vote (ibid).

These are but a few examples of governmental and popular practices to control and suppress what Rancière (2005, 2010a, 2010c) would call ‘the excesses of democracy’. Several other instances of oppression or ‘failure’ to adhere to public opinion have played out this recent decade. One instance would be the public vote on Swedish nuclear power in 1980 that resulted in the decision of total dismantlement in 2010 (a process that has been postponed, without debate, onto the future) or what many theorists (Holmström 2012) and opinion makers (see Lundgren & Danielsson 2012 and

Zetterström 2001) would call Sweden's silent entry (by cooperation rather than formal entry) into NATO via PPF and EAPR<sup>7</sup> and via joint combat exercises in recent years.

These practices to control and subdue the effects of democratic life, in the name of democracy, can according to Rancière (2005) only make sense in the aforementioned process of attributing to democracy all social and economic processes spawned from capitalism, by defining democracy not only as the rule of law and practices of representative governing, but also the totality of social life as reproduced under our economic paradigm. A statement that begs to question what alternative view of democracy and politics we have at our disposal.

#### 4.4 Democracy – the empty signifier

Democracy as a concept stands unchallenged in the western hemisphere and all but very few would address themselves as democrats, but there is also very few that have a clear and specific answer as to what democracy really is. Wendy Brown (2010) puts it eloquently, and I paraphrase; 'Berlusconi and Bush, Derrida and Balibar, Italian communists and Hamas; we're all democrats!'. Giorgio Agamben (2010) means that the popular understanding of democracy is the constitutional formation of the political body on the one hand, and a way to govern on the other; the right to rule and the way to exercise that rule in practice. This inevitably means that democracy has two dimensions, a judicial-political, and an economic-managerial; and to understand and grasp democracy is to understand these two dimensions. Alain Badiou (2010) acknowledges the same thought but further claims democracy to be but an emblem behind which an ordering of power 'hides'. Democracy is but the legitimation and upholding of static power formations in order to secure the reproduction of our capitalistic system – for the benefit of the few, and the demise of many.

Wendy Brown (2010) goes even further and claim democracy to be an empty signifier; something to which each and every one can tie their dreams and wishes. The democratic term is hollow and without meaning – or conversely holds an all-encompassing meaning for everything that is good, without discrimination. She further proposes democracy in the grasp of capitalism to have been reduced to a brand. A brand among other brands (think Starbucks or Apple) that promote 'meaning' rather than contents to goods, in our modern consumerist society. Jean-Luc Nancy (2010) agrees and claims democracy to mean everything – politics, aesthetics, justice, law and civilization. By equating democracy with the good rule democracy has effectively erased any possibility of raising questions or critique, or to oppose. What is left over is merely a few marginalized questions regarding different democratic systems and attitudes.

Similar arguments regarding the hollow and meaningless object of democracy has been raised by a multitude of theorists (see above, but also Žižek 2010, Bensaïd 2010, Dikec 2005 among others) and how this hollowness masks or assimilates and thus equates democracy to neoliberalism and its practices; a far reach from the original meaning of the word democracy as the rule of the 'demos'. In this tradition the representative system and voting procedures are, and have always been, merely

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<sup>7</sup> PPF stands for Partnership for Peace, a partnership program between NATO and non NATO states for joint military peace operations around the world. EAPR is the political framework for a Euro-Atlantic partnership program on issues of security and intelligence between NATO and 22 non NATO states. The program also includes issues of a more general nature, where cooperation and common policy is of value to the members (Regeringen: <http://www.regeringen.se/sb/d/2561>).

a way to legitimize and reproduce what is in fact oligarchy rather than democracy. Pierre Rosanvallon (2010) provides multiple examples of practices (in changing voting procedures, in reshaping qualifications for the representatives etc) ranging from the French revolution up until today where for instance parliamentarism, one of the emblems of democracy, has served the purpose of controlling and acting as the opposing power *against* democracy; with the aim of realizing an elected and thus legitimized aristocracy. If democracy as popularly understood is the empty signifier of Brown (2010), and if it serves no other purpose than to legitimize and/or hide the universalization and enable uninterrupted reproduction of an economic system (capitalism), then what place does democracy have in theory and practice? Rancière offers an alternative understanding of democracy that might show us a way forward.

#### 4.5 Dissent as politics proper

Rancière (2005, 2010a) suggests looking backwards and consulting Plato's Republic. According to Plato there are a number of natural hierarchies in society that rests on pre-given and natural foundations; authority based on seniority (gerontocracy), knowledge (plutocracy or technocracy) or power (oligarchy) etcetera, and then there is democracy – where the ground for the power of ruling rests on; nothing! (ibid). What Rancière (2005, 2010a) means is that in democracy, interpreted as the rule of the people (demos; people, -cracy; rule), there is no naturally given (or divine or elsewhere grounded) authority distinguishing the rule from the ruled. In every system (and in the realities of our own society) there are objective differences and forms of power operating in society; theoretical principles governing the distributions of power, position and capacity. Governments and the rule of law are institutions formulating these principles and formalizing the position and capacity of power. Democracy on the other hand gives power to those without any claim to power; power without seniority or wealth or strength or other qualifications that involve a clear distribution of positions – but instead by qualification without qualification. Qualification based on nothing else than an egalitarian presumption. As such Rancière(2005, 2010a-c) means that democracy can never equate a system of governing.

“Democracy means precisely that the ‘power of the *demos*’ is the power of those that no *archè* entitled them to exercise. Democracy is not a definite set of institutions, nor is it the power of a specific group. It is a supplementary, or grounding, power that at once legitimizes and de-legitimizes every set of institutions or the power of any one set of people”<sup>8</sup>Rancière 2010a:52

Rancière (2010b) claims (like Rosanvallon 2010) that democracy as a term was invented by its own enemies; those in position to rule by virtue of class, wealth, age or knowledge – enemies mockingly calling upon democracy as the rule of those without authority to do so. It is therefore a fatal mistake equating democracy with representative system of governing or any arbitrary construct of state mechanisms and institutions. The logic of the state is in fact the very *archè* that democracy challenges. In a parliamentary system (or any other system of division of authority) hierarchies of power is formalized and reproduced, while democracy opposes formalization and systematization of power (Rancière 2005). Democracy should instead be understood as processes enabling this very

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<sup>8</sup> Arché is for Rancière the pillars of naturally given authority that gives rise to power distribution; wealth, knowledge, age etc. Or in other words; the logic by which power is distributed.

rupture between the ordered and the chaotic; the challenge of those who stand on the sidelines and those who's standing has already been ordered by the *archè*.

Politics thus become the anarchist act of breaking the logic of predetermined power relations. To 'give voice to what was previously heard only as noise'. To count those who were uncouncted. As such politics for Rancière (2005, 2010a-c) always take form as dissent (the opposite of consensus), an act of opposition rather than of negotiation. The negotiation of power is something that takes place within the logic of *archè*, and is as such apolitical. The mechanism of state interplay and the processes of governing belong to those that already are in power, and only by introducing the anarchistic rupture of making heard those on the outside of the inherent logic of the system, is politics made and democracy realized.

Then how does this rupture look? How is politics realized? Rancière (2005) sees the conflict between the logic of the *archè* and the *demos* as being the battle between two spheres, the private and the public. The public sphere is the arena in which the logics of democracy and egalitarian values meet the conflicting logic and manifestation of *archè* in polemic struggle. A struggle in which the naturally strong constantly try to privatize the public sphere in a process Rancière calls public privatization. By conquering and privatizing the public sphere the area where politics can reign grow smaller, and the possibilities of opposing the logic of the *archè* diminishes. In practice this process is realized when governments internalizes issues and make matters 'into their own', into questions of internal management instead of public concern (ibid). Democracy then becomes about conquering/reconquering<sup>9</sup> and questioning government's 'privatization' of matters that could equally well be matters of public strife; to extend the reaches of the public sphere and introduce new fields for polemic struggle against the structured order of things.

Mustafa Dikec explores the apparent spatiality of Rancière's take on politics. In order to analyze this dimension, that for him seems to be a core constituent of Rancière's thought, Dikec defines space as "neither naturally given nor immutable, but rather [...] a product of interrelations always in the making, and never 'a totally coherent and interrelated system of interconnections', and, thus, is both disrupted and a source of disruption" (Dikec 2005:180). Given the mobility and instability of space, the space of politics can never be equal to the static organization of political parties and institutions. Instead politics is made possible by the individuals and groups transgressing the fixed structure and logic of organized society to "constitute themselves spatially, open new discursive spaces of political debate, transform the (proper) space of circulation into a space of parade, or transform the (proper) space of work into a space in which a political capacity can be demonstrated, rather than simply succeeding into pre-given structures when the Time comes" (Dikec 2003:181)

#### 4.6 Agonistic politics

One of the main issues with politics proper understood in a strict Rancièrean sense is that the phenomena becomes far from a strict process of action. In fact, an act or process of politics proper could be interpreted as so elusive and distant from the ruling regime that it risk losing contents. Rancière can for instance only provide us with a handful of examples throughout modern history

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<sup>9</sup> Consider matters of wages, racial and sexual rights, voting rights for women etc. These are all issues that were at one time considered to be apolitical. They belonged to the private sphere. But via polemic movements (the mobilization of the workers, Rosa Parks manifestation and the consecutive black movement, etc) these are issues that has been (temporarily in some cases) conquered and placed in the private sphere, open for political strife.



of political acts (the Paris commune, women voting rights and a few others). As such the term becomes problematic. Claiming that the majority of fighting for workers' rights on the barricades in the streets and in union offices and parliament during the 60s and 70s was apolitical would not only be provocative to a whole generation of politically active individuals and collectives. It would also risk rendering the political act so rare and random that the term loses relevance.

Drawing on the underlying understanding of democracy as a rupture with hegemony and a conflict between different logics Chantal Mouffe (2008) introduces what she calls the 'agonistic' approach; a constructive frame for dealing with and promoting politics. Mouffe (ibid) means that the ultimate task of democracy doctrines is to figure out how the antagonistic dimension of politics, the core constituent of politics proper, can be given outlets that does not destroy the political cohesiveness. Instead of reaching consensus via the negotiation of interest on perceived neutral ground (politics according to Beck and Giddens as discussed above) politics should be seen as the strife-laden relationship between *legitimate* enemies. The legitimacy of this enemy relationship is what to Mouffe (ibid) differentiates politics of antagonism and agonism. While antagonism is disruptive and strives for delegitimize the opposing part; be it via a violent and militarized revolution from the left, or via capital outmaneuvering and solidification of hegemony and the death of politics proper by the right. Agonism on the other hand strives for the construction of a playing field where the antagonistic dimension is allowed to play out; but under a common set of rules. A 'consensual strife' of sorts. The agonistic approach is radical, even revolutionary in the sense that it strives to overthrow hegemony, but it does not delegitimize the right of conflicting ideas to take part in the (sometimes violent) strife.

Using our methodological frame of reference, it seems that the popularized understanding of democracy – the prevalent democratic discourse – attempts to close the dialectal movement of its own being; enabling reproduction (a reproduction of already given power formations within our 'oligarchy'), but prohibiting supersession and actual 'progress'. As we've learned discourse does not acknowledge solid states, and dialectal movements are not processes that strive for equilibrium. It is therefore interesting to consider where democracy under suppressive pressure is heading; towards supersession or towards degradation.

To many theorists (see above) of the post-political paradigm, efforts from states and governments seem to attempt to stabilize and find that impossible dialectal equilibrium. In the attempt to secure existing positions of power discourses are articulated in a way to preserve an imagined solid state for liberal democracy. But in so doing they risk a negative dialectical supersession into an apolitical and populist regime with a heavy dose of democratic contempt. For Rancière, in slight contrast, it seems that the lack of dialectical movement forms the natural state in society. The bursts of activity activating the dialectal chain of discourse reproduction elevated to discourse supersession are always chaotic and random and limited in its temporal scope. Power hierarchies are fixed and only moveable by 'revolutionary' activities. Mouffe (2005) offers a synthesis where the antagonistic necessity of politics proper is acknowledged, but where the constructive dead-end of politics-realized under the thought of Rancière is circumvented. Mouffe (ibid) gives us a way to be constructive regarding the realization of politics; a way to challenge hegemony and to realize supersession from our current state of existence; an existence that by the principles of dialectics has other potentials imbedded to be realized.

With this rather lengthy account for the nature of democracy, post politics and politics proper we shall now look to our discourse of interest; peak oil. In order to do so we will approach the peak oil discourse from a more general point of view, in considering the whole discourse on environmental change – and more particularly how environmental change is being framed under ‘ecologies of fear’, and use that framing as a springboard to further analyze the peak oil discourse.

## 5. Ecologies of fear and apocalyptic imageries

In the following an attempt to examine how post political dogmas has infused the discourse of environmental change, and how ecologies of fear via apocalyptic imageries threaten to eliminate the possibility of disagreement and dissent that we’ve learned constitutes the possibility of politics proper. This field has been thoroughly examined by Eric Swyngedouw (2010) and his theories rather than self-claimed empirics will guide us through this process.

Over the past decade or so we have seen an ever increasing concern and debate over environmental change in general (biodiversity, deforestation etc.) and of global warming in particular. What was first popularized by Margret Thatcher while running for Prime Minister in the UK, has since formed into a huge and massively influential discourse leaving no one uninformed. It is a discourse with strong apocalyptic imageries attached to it. Global climate change is increasingly staged as a looming danger to both ‘nature’ as such and as a threat to the very survival of our civilization. A danger that if not acted upon immediately, will inevitably lead to a time where it is too late. Politicians of various positions, environmental activists, business leaders and the scientific community alike have now formed a fragile consensus around the dangers of and the need to act against global environmental change. Swyngedouw (2010) argues that this move towards a consensual view on the nature of the problem and the need for managerial approaches to mitigate the issue, has unfolded in parallel and entanglement with the consolidation of the new neo-liberal and post-political dogma of evacuated dispute and disagreement from the public sphere (ibid 215).

While as Swyngedouw (2010) points out there really is no consensus about what nature is and how to relate to it, there is a wide consensus over the need to act, think and be more ‘environmentally sustainable’. Large oil companies like BP (revealingly renamed from British Petroleum to Beyond Petroleum) and Shell brand themselves as eco-sensible. Politicians of all brands claim themselves to promote eco friendliness and both governments and media frequently usher the need for sustainable life styles and reforms. Swyngedouw (ibid) means that this consensual framing is in itself sustained by a particular scientific discourse where the relation between ‘matters of fact’ and ‘matters of concern’ has been short-circuited. The changing atmospheric composition caused by increasing levels of CO<sub>2</sub> and other greenhouse gases is a matter of fact – a fact that without proper political intermediation translates into matters of concern. While the matters of concern that arise from the matters of fact is of a political nature, that nature is disavowed and the concerns themselves elevated to fact. While the matters of concern are highly political, they have been de-politized by a relegation to the terrain beyond dispute, to a space that forecloses dissensus or disagreement – to where “scientific expertise becomes the foundation and guarantee for properly constituted politics/policies” (Swyngedouw 2010:217).

This consensual framing and short-circuit of the political dimension of environmental change is according to Swyngedouw (ibid) upheld and sustained by ‘ecologies of fear’; “[t]he discursive matrix through which the contemporary meaning of the environmental condition is woven is one quilted

systemically by the continuous invocation of fear and danger, the specter of ecological annihilation or at least seriously distressed socio-ecological conditions for many people in the near future” (Swyngedouw 2010:217). These ‘ecologies of fear’ are in turn sustained by apocalyptic imaginaries like a world in permanent war over resources; a world with everlasting water shortages, droughts, storms and floods; increased water levels to where whole nations are situated below water and a society thrown back to the stone age due to a collapse of the global economy; be it from resource scarcity and peak oil, or constant wars in a world out of synch.

Swyngedouw (2010) argues that “sustaining and nurturing apocalyptic imaginaries is an integral and vital part of the new cultural politics of capitalism [...] for which the management of fear is a central leitmotif” (Swyngedouw 2010:219) and that the management of fear is a powerful tool in “disavowing or displacing social conflict and antagonism” (ibid). As such apocalyptic imaginaries exhort a decisively populist framing without alternate trajectories around which politics proper can arise. It is a mobilization without a political subject. Instead the imaginaries call for techno-managerial advances and socio-cultural transformations “organized within the horizons of a capitalist order that is beyond dispute” (ibid). In other words; radical change is called for, but only within the scope of our current system so that nothing really has to change.

### 5.1 Populist maneuvers within environmental discourses

Swyngedouw (2010) argues that environmental politics and the sustainability debate signal a range of populist maneuvers that ‘infuse the post-political condition’. He proceeds in summarizing the particular ways this populism is expressed. Firstly the issue of climate change is not merely perceived as global, but also as a universal threat. In so doing it cuts through any heterogeneity and forecloses ideological response and antagonism by distilling a common threat to all of nature and humanity; we’re all universal victims. Secondly, “this universalizing claim of the pending catastrophe is socially homogenizing” (Swyngedouw 2010:221), though apparent (geographical and social) differences exist within the apocalyptic scenario – we’re all in the same boat. Thirdly the apocalyptic thought related to climate change “reinforces the nature-society dichotomy and the causal power of nature to derail civilizations” (ibid 222). Stabilizing climate change is argued to be the only way to save our way of life within the capitalistic system. We need to reverse into an imagined state of equilibrium present in the past. The enemy is externalized and objectified, viewed as intruders in the system. The system itself is not at fault, but its pathological syndrome (greenhouse gasses, depletion of resources, immigrants’ etcetera). As such, the cure is internal. Remove the problem (remove excess CO<sub>2</sub> from the atmosphere via commodification and carbon trade, find alternate sources of energy/resources) and return to a status quo and the problem will be solved and the system have survived (ibid).

Fourth, “populism is based on a politics of ‘the people know best’ [...], supported by a scientific technocracy assumed to be neutral” (Swyngedouw 2010:223). A good solution (if not the optimal) will be reached via a governing of stakeholder participation that “operates beyond the state and permits a form of self-management, self-organization and controlled self-disciplining” (ibid) all under the logics of the current and non-disputed liberal-capitalism. Fifth, “populist tactics do not identify a privileged subject of change [...], but instead invoke a common condition [...], the need for common humanity-wide action, mutual collaboration and cooperation” (Swyngedouw 2010:223). The political subject is all-encompassing. Internal strife, heterogeneity and

disagreement, the necessity for politics proper to be called into being, is replaced by a homogenization of the political subject.

Sixth, “populist demands are always addressed to the elites” (ibid). Change is never about replacing the elites, but to call upon them to take action. Populism as such is always non-partisan and apolitical in that it does not question the order of things, but rather calls upon the system to return to an imagined status quo when times were better. Seventh, “no proper names are assigned to a post-political populist politics”. The dimension of naming and counting that which was previously unnamed or uncounted, so central to the idea of creating political subjects in the thought of Rancière (2005, 2010a) is never present in populist politics. “Only ‘empty’ signifiers like ‘climate change policy’, ‘bio-diversity policy’, or a vacuous ‘sustainable policy’ replace the proper names of politics” (Swyngedouw 2010:224). In contrast to other signifiers that promise a ‘positive’ content for the future like *communism*, *liberalism* or *socialism*, politics of populism is only captured in its ‘negative’ contents; no promise for a better tomorrow or a transcendence of the current. At best apocalyptic imaginaries promise a never ending managerial effort to return to a status quo.

Finally populism in the shape of apocalyptic imaginaries “forecloses universalization as a positive socio-environmental injunction or project. [...] [T]he environmental problem does not posit a positive and named socio-environmental situation, an embodied vision, a desire that awaits realization, a fiction to be realized. In that sense, populism does not solve problems, it moves them elsewhere” (Swyngedouw 2010:224). Consider how nuclear power is once again portrayed as a possible future solution to greenhouse gas emissions and the depletion of oil, and branded a green alternative. The socio-natural construct of CO<sub>2</sub> is replaced with another socio-natural object (U234/238) as the object of remedy for our current predicament.

It should be clear that climate change discourses utilizing apocalyptic imaginaries foreclose the possibility of politics proper as discussed at length earlier in this thesis. In the following I will look closer on the peak oil discourse to see if it should be included in the part and parcel hegemony of populist post political discourses using apocalyptic imaginaries to exile the possibility of politics proper. Peak oil is often portrayed as the point of no return on the inevitable downfall of liberal capitalism, and is thus framed as a discourse to break hegemony.

## 5.2 Oil as a matter of concern

The peak oil discourse largely follows the same particular scientific discourse that the major eco-discourses discussed by Swyngedouw (2010) does; directly translating ‘matters of fact’ into ‘matters of concern’, effectively short circuiting the political dimension of such a transformation by rendering ‘matters of concern’ into a terrain beyond dissent and disagreement. This process of political foreclosure can be implicitly read in the vast majority of the data at hand; where oil’s indisputable finitude is directly translated to scarcity and where the political and economic dimension of oil is being reduced to ‘laws of nature’ (a peak in production following a bell shaped curb towards inevitable decline). An overwhelming amount of research being done on peak oil is highly technical and simply models attempting to forecast the peak’s point in time, or temporal extensions made possible by new technologies etc. There is rarely a questioning of the core assumptions or laws governing ‘the peak and the curve’. A telling example is Heffington & Brasovan (1994) who state that since Hubbert first presented his theory “the effect on ultimate oil production quantity due to social, political, economic, and technological effects has not been well

addressed” (ibid:813). What follows is a four page analysis of US oil extraction growth patterns resulting in; one mathematical equation, a slightly skewed bell curve and a conclusion that says Hubbert was wrong, US will have a total of 5% higher oil production than what Hubbert predicted, before oil in the US is depleted (ibid). The social, political, economic and technological effects are implicitly regarded as captured by merely analyzing historical trends of actual production and extrapolating it onto the future using Hubberts bell curve.

Other examples of similar accounts, making various geological and economic assumptions in order to accurately depict the bell curve (by including new data, new oil findings – including nonconventional oil, or more sophisticated mathematical models) are abundant (see for instance Hallock et al 1994, Brant 2007 and Castro et al 2009). While this kind of research surely can give some insight into different production scenarios and be of help in forecasting oil well productions in certain areas, they are by their nature one-sidedly apolitical. To ‘peak oil-ists’ they represent the scientific technocracy, the neutral scientists that oftentimes never mention any societal effects or suggests any solutions to the ‘inevitable decline’. These are the ‘hard’ scientists to whom the ‘softer’ peak oil researchers turn when trying to map the socio-economic impacts on and off peak oil; again, without questioning the core fundamentals of the theory. Logar et al. (2013) cites both Hallock et al (1994) and Castro et al (2009) when trying to analyze the future of tourism in Spain for instance. Hallock et al (1994) also acts as the basis for the article “Public Health and Medicine in an Age of Energy Scarcity” (Schwartz et al. 2011). While both these articles might provide good insight into their respective sectors (tourism and health and medicine respectively), they are also symptomatic in their implicit and un-reflexive translation of ‘matter of fact’ in to ‘matter of concern’.

Consulting Swyngedouw’s theories regarding ‘ecologies of fear’ as an instrument for the cultural politics of capitalism aimed at displacing and disavowing conflict and antagonism, this chapter will examine the particular ways in which populism is infused into the peak oil discourse. Important to keep in mind is that unlike global warming for instance, there is no broad and mobilized general consensus around peak oil. As such it is obviously more difficult to claim, like Swyngedouw (2010) does with respect to increased levels of CO<sub>2</sub> in the atmosphere and the global warming discourse, that peak oil is being mobilized as an integral and *important* reproducing factor behind global capitalism (though as we will see it might very well turn out that way). Peak oil is at present a rather marginalized and disruptive discourse. What will be examined is rather the *dangers* that peak-oilists face when trying to mobilize peak oil as a natural end-point to capitalism; a potential or inevitable revolutionary force to break hegemony. In order to make this examination the next section will draw on the ways in which populism manifests itself in environmental discourse according to Swyngedouw (2010), as elaborated upon in the previous chapter. The data analyzed will consist of the previously mentioned database of peer-reviewed articles from ASPO.

### 5.2.2 Populist maneuvers within peak oil

The first infusion of populism into the eco-discourse Swyngedouw (2010) identifies is the extension of the issue beyond and above the global, labeling the problem as a universal threat; making the issue all-encompassing and cutting through any heterogeneity – a process foreclosing any ideological response. Peak oil surely present declining oil rates as such a universal threat to its theorists. The literature is riddled with doom and unstoppable apocalypse. Richard C. Duncan’s (1996) Olduvai theory would present a most illustrate example. The theory is widely cited within

peak oil circles and claims that our current global energy use will lead to an inevitable transition to a post-Industrial Stone Age, irrespective of measures taken. A more moderate (in apocalyptic terms) account is given by James Leigh (2008) who depicts peak oil to “facilitate civilization clash in a grab for the world's oil resources” (Leigh 2008:3) and for “nations [to possibly] weld together to forge continent-wide civilization superpowers” (ibid) waging war over the remains of oil (future peak oil wars and oil imperialism is a common motif in several papers; see Foster (2008) and Leigh (2011) for other such accounts).

In a somewhat more spiritual account of the looming environmental disaster and peak oil Timothy Leduc (2008) suggests that “[w]hile liberal secularists may think the Christian apocalypse to be a misguided belief, scientific discourses on the potential interacting impacts of climatic changes and energy shortages offer an almost complementary rational depiction of apocalypse” (ibid:255). Right as he is, he never questions this apocalyptic framing, but rather insists that apocalyptic imaginaries holds the potential to infuse a secular form of ethics, enabling us to face up to the difficulties of a deteriorating climate. Though pressed on in various ways and to various degrees – for ‘peak oil-ists’ the apocalypse is nigh and that the treat (preventable or not) is universal is certainly one of the leitmotifs in the peak oil discourse.

The socially homogenizing element, Swyngedouw’s (2010) second denominator for populism, is also a very common denotative in the literature. Particularly differences in how peak oil will affect various geographical parts of the world is prominent (see Becken 2008 and Leigh 2008 etc.). It is however very rare that differences are discussed in terms of social classes and using other vocabularies accentuating social differences (globally or regionally). Differences are more commonly discussed in technocratic ways, in national or regional ‘peaks’ for instance (Höök et al. (2009) gives a classic comparative analysis of the Danish peak and how it connects to energy policies in Sweden and Norway). The topic of analysis rarely transgress the bounds of oil supply and demand. Where politics is infused in the analysis it is often via macro-scale geopolitical accounts. Leigh & Vucovic (2010) give a through account for the potential Iranian hegemony in oil producing Islamic countries and attempts to politicize oil via its geopolitical and strategic importance. They enter into some depth in analyzing political and religious trends and movements in their attempt to extrapolate potential new power configurations in the Middle East. For instance they reach the conclusion that “we could expect to see Shia power appear in an array of nations, to a significant level, of course giving Iran access to much political power, in and across these nations, through their proxies or vassals” (ibid:18) and for the Islamic world under peak oil “to confront the dominance of the Western Christian civilization in world economics and politics” (ibid:21). Intriguing as the analysis is, in the end it largely fuels the same apocalyptic imaginaries as has previously been presented, albeit with a twist. Instead of a pure man versus nature clash of apocalyptic proportions they usher for (western) homogenization against yet another threat; that of the clash of civilization;

“Within a new world order, of a tripartite mix of continent-wide civilization superpowers, an Iran-led Sunni:Shia Islamist coalition, across large stretches of the Islamic world, with aggressive revolutionary and apocalyptic inspiration from Teheran, may be the launch pad for attempted far-reaching Islamist influence. This Islamist bloc, rich in oil, and therefore petropower, and awash in nuclear weapons, could usher in a host of dramatic world events and trends” Leigh & Vucovic (2010:31)

As much as the above might be perceived as an illumination and counting of interests exceeding the simplistic clash between man and nature and expanding the discourse to account for a wider multitude of parties, the framing is decidedly apocalyptic and exclusive while being homogenizing at the same. Rather than accounting for varying and diverse societal configurations the approach is distinctly ‘west centered’. It is an ‘us versus them’ approach that nonetheless seek homogenization against a common and universal threat.

The third entry of populism into the eco-discourse that Swyngedouw (2010) identifies is the reinforcement of the nature-society dichotomy and the power of nature to derail civilization. While the close and entangled relationship of man and nature is indeed a central leitmotif for ‘peak oilists’. Consider for instance Cutler’s (2003) call to listen to “the important feedbacks between the economy and the environment” (ibid:18) in order to “guide the development of sustainable economies” (ibid) in his aptly titled paper ‘Biophysical Constraints to Economic Growth’ (Cutler 2003). And while voices within the discourse are raised for a sort of reversal to an imagined equilibrium (see for instance Hall & Klintgaard’s (2006) call for a biophysical-based paradigm shift in economics where the whole nature is proposed to be economized and prized in order to accentuate the man-nature relationship) peak oil does not assume a stance of trying to stabilizing the system in the same manner as Swyngedouw’s (2010) global warming activists and theorists. It might be due to the immaturity of the discourse and the fact that the discourse in many cases still resides in a purely apocalyptic state without excursions into managerial fixes and upholding of ‘our way of life within our current system’.

However, though the discourse is showing signs of ‘maturing’ and developing a new more moderate register (see below), at large the discourse is highly critical of the current economic regime. Many peak oil theorists see the system rather than oil as the pathological syndrome. Lloyd (2007) for instance claims that reversal is impossible and that “peak oil seems to be falling into the ‘no technical solution’ category” (ibid:5806) when it comes to salvaging Hardin’s classical ‘commons’. So while the nature-society dichotomy and the power of nature to overthrow civilization is readily present in the discourse, the imagined equilibrium state of the past does not seem as alluring.

The fourth syndrome of populism within the eco-discourse (Swyngedouw 2010) is the politics of ‘the people knows best’ supported by a scientific neutral technocracy. I will briefly go out-of-bounds and look beyond the scope of academia to address this issue. Peak oil is largely a grass-root movement, and one of a very diverse nature. Backed by contemporary authoritative academics like Campbell and Aleklett, and academic organizations such as ASPO<sup>10</sup> and The Oil Drum<sup>11</sup>; and together with a wide array of parties such as: environmental movements (the Transition Network<sup>12</sup> for instance), de-growth movements (see Research & Degrowth<sup>13</sup>) and conferences (among others the conference on ‘Economic De-growth for Ecological Sustainability and Social Equity’<sup>14</sup>), politicians (Swedish green party member Per Bolund has motioned<sup>15</sup> for Sweden to

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<sup>10</sup> Found on <http://www.peakoil.net>

<sup>11</sup> Found on <http://www.theoil Drum.com>

<sup>12</sup> Found on <http://www.transitionnetwork.org/>

<sup>13</sup> Found on <http://www.degrowth.org/>

<sup>14</sup> Found on <http://events.it-sudparis.eu/degrowthconference/en/>

<sup>15</sup> Motion 2013/14:N440 *Biodrivmedelsindustri för att rusta Sverige mot oljeproduktionstoppen (peak oil)* by Per Bolund (mp)

prepare for the coming of peak oil for instance) and other influential parties on the fringes (Sweden's most read economic blogger Lars Wilderäng<sup>16</sup> for one) and with survivalists movements and doomsday 'preppers' at the extreme end of the spectrum (see the National geographic channel's reality show 'Doomsday Preppers' for an intriguing illustration) peak oil is indeed a very diverse discourse. The movements do vary in 'elitism' and 'exclusivity' (with the 'doomsday preppers' distrusting all but themselves and the de-growth movements trying to reach and embrace all), but to some extent they all mobilize collective identities that could be interpreted as a 'the people knows best' politics, and they all draw on an assumed neutral technocracy (represented by leading academics and ASPO among others) that would suggest a certain amount of populist infusion.

Though there certainly are disagreements within the academic movement; Duncan's (1996) extreme Olduvai theory stands in stark contrast to more moderate analysis of tourist developments over the coming decades in the wake of peak oil (depicted by Logar (2013) and Yeoman et al (2007) for instance). These disagreements can hardly be categorized as internal strife within the discourse. In fact the instances of internal criticism and inter-evaluation seem very low. The general development appears to be that of a progressive science where the theory is being fine-tuned and developed on the basis of new findings and more refined modelling in a highly positivistic manner. It is a discourse without signs of any 'Kuhnian' paradigm-shifts or attempts at 'Popperian' falsification. One could explain this on the basis of Swyngedouw's (2010) fifth populist denominator; the lack of privileged subjects of change. Homogenization of the political subject (in this case the subject is 'everyone' and 'all of global society') is necessary due to the overwhelming and apocalyptic threat. To consider singulars (the marginalized and oppressed, alternative interest etc.) would only speed up the pace towards doom. Surely accounts of groups being privileged or disadvantaged as an effect of the coming change exist (see for instance Friedrichs' (2010) geopolitical account for the probable development towards predatory militarism in the wake of peak oil), but such accounts are rarely explored and merely used to accentuate the universality (exceptions to the rule in the case of the privileged, and a further plead for urgency when it comes to the disadvantaged).

While the inevitability of a new world order (one without cheap oil) is heralded in the discourse, there is an ideological vacuum when it comes to envisioning this new order. With few exceptions (see Foster's (2002) Marxist account for sustainable ecology that by its logic inevitably lead to communism or Bryant's (2007) thermodynamic economy, for instance) the discourse in general frames the issue and potential solutions within our current regime and calls upon the existing elites to act rather than for replacing them. In that tradition there is no Rancièrian counting of the uncounted or any proper names assigned to the theory. The majority of research is instead highly technical (see Bopp 1980, Jukić et al 2005, Michael 2011 etc.) and framed as informational (when is the peak here, how do we best calculate supply shortages) rather than a discourse with political subjects to be named and counted. Where names are assigned it is the old terms of ecology and sustainability rehashed and used without assigned contents (see Czúcz et al 2010). The use of empty signifiers and the tendency to address demands to the elites would constitute Swyngedouw's (2010) sixth and seventh populist maneuvers.

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<sup>16</sup> Found on <http://cornucopia.cornubot.se/>



Building on the above it is not controversial to claim that peak oil is usually captured in the negative rather than the positive. Where peak oil takes on an embodied vision (as we have seen it rarely does even that, and stick to somber technocratic accounts of geo-statistical nature), it is one of ‘doom and gloom unless...’, rather than a named socio-environmental desire waiting for realization. As such peak oil discourse fails to be and account for ideology. Peak oil does not promise remedy via an alternate world order, it presents a problem (the end of cheap oil) and in the best case attempts to move it around via managerial fixes (see Becken 2008 and Leigh 2011 for instance), and in the worst case conclude that we are indeed facing the end of times (Duncan 1996). It is however a diverse discourse, and as seen above (and discussed below) not all accounts are populist in and by themselves, and certain aspects transcends populism to promise proper rupture. It is rather the tendency of the discourse to move in a decisively populist direction.

### 5.3 Normalizing the apocalypse

In order to further shed some light on the temporal (dialectic) progression of the discourse and its conflicting elements we will look to another environmental topic, namely climate-induced migration (CM). Giovanni Bettini (2013) notes how over the past two decades the debate over CM has been highly polarized into two large fractions – the maximalist versus the minimalist perspectives. The main contestation between the registers<sup>17</sup> was that of weather CM should be considered and dealt with as a security issue. The maximalist approach “preached with alarmist tones the compelling character of CM and stressed its security implications. This lead them either to fear that abrupt tides of ‘climate refugees’ would threaten regional stability and possible lead to armed conflicts [...], or call for their protection” (Bettini 2013:2). The maximalist approach quickly lost ground in academia, but its alarmist tones and apocalyptic disposition was still reproduced in media and by NGOs towards the end of the last decade. This has however changed recently, and a more mundane register has ‘overcome’ this polarization.

Bettini (2013) argues that this shift is more than the affirmation of one register over another, that it rather marks the emergence of a new register – and not in contestation with the previous two, but in replacement of. It is a register with softer tones dismantling friction between the previous registers. The alarmist tone is giving way for “milder and more consensual storylines about the fostering of human security and the enhancing of resilience [...]. Security is still discussed, but articulated in the apparently more liberal terms of *human security*” (Bettini 2013:3). The new register is broader and more advanced than its predecessors, capable of accommodating for different perspectives. It surely represents an improvement of the debate from previous registers. The deterministic streaks and the tendency to pathologize migrations have been washed away and the register opens for a multi-causal understanding of migration phenomena. The re-contextualizing of CM into adaption strategies mainly stress the necessity to recognize the benefits of migration to economic development and individual welfare and conclude that “migration can have a decisive role in improving the economic conditions of the lower social strata” (Bettini 2013:11).

Bettini (ibid) argues that despite the increased sophistication, this shift away from securitization (where CM is perceived as a threat; with tidal waves of refugees pressing on the borders of regions and nations less affected by the environmental changes as the imprinted imagery) does not

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<sup>17</sup> Bettini defines a register as; “the contours of a debate and [...] the discursive landscape in which different positions and discourses articulate and enter into contact (or conflict)” (Bettini 2013)

necessarily mark a democratization of the debate. While the register is seemingly more refined Bettini (ibid) means it pacifies the debate. The new register leaves no room for questioning its own grounds. Rather; the more human tone and framing demarcates a move towards consolidation of the issue under neoliberal rule. The softening of tones are not solely the result of analytical advancement of the issue, but rather driven by political context and convenience. The pacification and mainstreaming of the issue has in much turned CM into an issue of governing rather than of politics. The new register envision policies of socio-economic control and for the governing of displaced populations by constructing subjects able to sustain good circulation and economic development.

While Bettini (2013) never generalizes his findings and expands on the theory – of emerging registers pacifying antagonisms and quelling old registers – into other discourses; it might be well worth testing the hypothesis on peak oil. It is important to stress that the forthcoming is far from an exhaustive analysis and elaborate definition of registers within the peak oil discourse. It should still provide some insight into the potential/risk of peak oil heading into yet another direction where the antagonism towards present hegemony is pacified or even rendered into processes reproducing and fortifying current formations. Another dialectal dead end, where the discourse is reformulated and reproduced, but where supersession into a new ‘paradigm’ is actively discouraged; where emancipatory and politically empowering discourses are foreclosed by a managerial and post-political stance.

### 5.3.2 A softer peak oil?

The first occurrences of peer-reviewed articles that has been (retroactively<sup>18</sup>) said to deal with peak oil in the wake of the very first article by Hubble, originates from the early 1970. The number of articles over the following decades is rather scarce, and aimed at examining and attempting to forecast future oil production in the same or similar manners of Hubbert. The coining of the term peak oil was still in the future and the scope of the articles were mostly attempts to combine economic pricing theory with various depletion models in order to asses depletion rates for a limited set of wells in various regions (Beenstock 1977, Bopp 1980 and Sterman et al. 1998 for example). US and UK are the prime cases of inquiry, mostly due the solidity and availability of empirics in those countries. At large these early articles are aimed at reaffirming or reinvigorating Hubberts conclusions from 1969 and are highly technical and relaying on mathematical modelling. Social impact of the proposed decline in oil production is barely mentioned, though some authors discuss the phenomena from a securitization point of view, addressing energy and foreign political policy. Renshaw (1988) for instance discuss the insufficient efforts from the Carter administration in stimulating national oil production and limiting wasteful oil use in light of diminishing production trends in the US as well as abroad. Rensburg (1981) discuss from similar point of view when analyzing strategic stockpiling programs and argues that resource and mineral scarcity is an issue of national security.

The highly technological and method/model- developing approach of these early articles continue over all decades (see Ayeni et al 1992, Feygin 2004, Jukić et al. 2005 etc.). During the 90s articles articulating worries as to the *effects* of peak oil get more frequent however. They are still largely

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<sup>18</sup> The source material originates from a list of peer-reviewed articles linked from ASPO; <http://www.peakoil.net/publications> and are thus only articles written by “peak oil-ists”

technological and oriented towards model improvement, but also address social aspects of peak oil. Collin Campbell (1992) focuses on the problem of measuring and pin pointing the peak, but also insists on the urgency in addressing the issue (without specifying who should address from where and how), and declares that “[t]he world is rapidly approaching a turning point when it has to face the consequences of an irreversible decline in oil production” (ibid 1992). Cutler J. Cleveland (1993) in turn offers an economic model supporting the peak oil discourse, he somewhat paradoxically adds that “[t]here is an urgent need to move beyond the debate about assumptions, theories, and methodology” (Cleveland 1993:125), a necessity that stems from the *inevitable* economic recession of his model as a result of peak oil.

In the middle of the 90s we see the first tendencies towards apocalyptic imaginaries. In 1993 Campbell declares that “[t]he situation is serious, and the political and economic implications are colossal” (Campbell 1993:1) and that “[t]o speak of an impending oil shock is an oversimplification. [...] Next time, it will be not so much a shock but the onset of a permanent chronic condition, where the consumers will have to curb demand, whatever temporary shocks may occur” (ibid 18). Campbell do press the notion of a better future however. Pressing on the opportunity to develop our world in a better direction; “this challenge which is of critical importance for mankind in the 21st century. It will be a very different world, and grasping the greater hope, it may be a better one, but there is no time to lose in facing up to the adjustments that the end of cheap oil will impose on everyone” (Campbell 1993:19). Later in the decade Richard C. Duncan (1996) introduces the previously mentioned ‘Olduvai Theory’ that uses energy use per capita and thermodynamic laws to conclude that industrialization will be a very brief and temporary condition in human history and that we by 2100 will live in a post-industrial stone age. This is a stance that is present in several grass root movements mobilizing and preparing for peak oil by survivalist measures (see previous chapter).

There are obviously a wide array of academics, politicians and other influential actors (oil corporations like Shell and BP, think tanks etcetera) that dismissed peak oil in its totality for various reasons (Alekklett 2013 gives a large number of examples). Those aside and focusing on the “peak oil-ists”, there seems to be (using Bettini’s terminology) two registers emerging in academia over the 1980s until (and in some respects exceeding) the mid-2000s. The alarmists (like Duncan 1996 and Leigh 2008) that puts us at a point of no return; where resistance is futile and all we can do is to fight for the last drop to put off the inevitable for ourselves for as long as possible, and the moderates (like Campbell) that despite apocalyptic imaginaries see hope for the future. What is lacking from both perspectives during this period (1990s and early 2000s) is a politicizing of the subject into emancipatory politics. The alarmist are more concerned about putting their notion of the end of the world across than formulating fruitful solutions within or as a challenge to hegemony, and the moderates halt their apocalypse just short of mentioning that there might be a bright future after all, as long as we address the problem (mentions of ‘how’ to address the problem is rarely mentioned however).

During the end of the decade there is a visible change in tones however. As the discourse matures and peak oil in academia explodes<sup>19</sup> there might be what Bettini (2013) noticed with regards to

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<sup>19</sup> In ASPOs own list of peer-reviewed articles (<http://www.peakoil.net/publications/peer-reviewed-articles>) regarding peak oil 108 out of 180 articles were published between 2007 and 2012 (18 articles annually on average), with

climate migration, an emergence of a new register. Peak oil is no longer exclusively discussed from a macro perspective, but put into practice in a range of new fields like rural change (Coventry 2011), tourism (Yeoman et al 2007, Becken 2008, Leigh 2011), city planning (May et al 2008). Inevitable global change as a consequence of peak oil is still at the forefront but there are indications of the emergence of a new (not a consolidation of the two previous) and broader register more advanced than its predecessors, a register accommodating for a number of perspectives. The deterministic streaks and the tendency to pathologize peak oil have been (though far from washed away) considerably softened. Becken (2008) for instance presses on the need to plan and think eco-efficiently when it comes to tourism planning and Leigh about “harmonizing with the new realities” (Leigh 2011:165), stating that “those who harmonize with the trends, get on top of future history, before it gets on top of them” (ibid).

While still rather weak in academia, this new register in peak-oil academia has grown all the stronger and more apparent in other forums. Peak oil is no longer a term reserved to obscure academics and survivalist, but invoked in the vocabularies of certain specters (right winged Malthusian think tanks, big oil corporations alike) of the hegemonic elite (Bettini 2013). At last year’s Nobel Dialogue week the chairman of BP, Carl Henric Svanberg offered the following; “We need to move as fast as we can as time is not on our side. [...] We can’t pretend, for example, that climate change is not a serious issue. [...] The challenge is therefore twofold: Firstly, to supply enough energy to meet demand, and secondly to do so in a sustainable way, balancing environmental concerns with economic prosperity” (Svanberg 2013). Talking about a peak in demand rather than supply he distances himself from much of the peak oil discourse, but concludes the same; that change is coming and that it is serious. The common denominator for this new register is the notion that with managerial fixes like increased commodification of carbon, and via eco-friendly and sustainable planning and policies we might survive the coming apocalypse. A stance that bare much similarities with the emerging register in the CM debate identified by Bettini (2013) – a highly pacifying one, and one mobilized under consolidation with the current neoliberal hegemony.

## 6. Discussion and conclusions

Important to note is that this thesis only scratches on the surface of the peak oil discourse. It does not claim to give a full account for the diversity of movements and research into the field of depleting oil and its consequences for society. The aim is rather to shed light and to warn for what threatens to be a grave mistake; namely to suppose that peak oil by necessity offers a rupture of hegemony and a challenge to our current regime.

To Rancière (2010a) politics is a strife against the logics of hegemony. Mouffe (2005) offers a constructive way for democratic doctrines to take in order for regimes to embrace this strife and to truly ‘be’ democratic and allow for politics proper. For her the path lies in the act of acknowledging that there are interests in society that cannot be reconciled via consensual negotiation, and it lies in trying to realize ‘battlefields’ where irreconcilable standpoints can face each other in ‘combat’. This can only be realized by creating clear rifts between government and opposition, between left and right, between yay- and nay-sayers. Failure in offering clear alternatives that highlights social differences risks creating a vacuum of ‘passion’, in turn forcing antagonism

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the remaining 72 articles published between 1969 and 2007 (1.9 articles annually on average). Though this is far from any scientific research into the prevalence of peak oil discussions in academia, it gives a slight hint.

to take form in antidemocratic and populist movements, as popularly seen throughout Europe today. A Europe where ‘economism’ runs rampant and where the mere notion of alternatives to the current regime (save perhaps from some degree of fascist flirtation) are considered purely phantasmagorical (Swyngedouw 2011 discuss this at length).

It is on this account that I want to direct my main criticism towards the contemporary peak oil discourse. While surely addressing a subject of (potentially very grave) concern, the discourse actively attempts to foreclose the very notion of politicization of the subject. With apocalyptic imaginaries acting on one side (particularly in media, NGO’s and grassroot movements, but also to a large extent in academia), and with a consolidating register skewed towards managerial fixes within the hegemonic regime on the other; both work in tandem to exile the possibilities of real confrontation between properly defined alternatives and properly named political subjects. The ‘battlefield’ that is supposed to both realize the acting out of alternatives against each other, but also manifest and make visible social strife that was previously hidden, has turned to a hollow and already conquered battlefield. It is hollow in the sense that by apocalyptic imaginaries and fetishization of oil, the subject of strife (a world without oil) has become an empty object/signifier. It is a battle of all of humanity against inevitable destruction, a battle that forecloses actual strife; an already conquered battlefield in the sense that the alternative to doom is presented as ‘business as usual’, with some managerial fixes.

In the process of foreclosure and with the (intended or not) aim to consolidate hegemony a more moderate register in peak oil is appearing. It is important to note, that the tendencies towards the emergence of such a ‘mundane’ and pacifying register are still rather weak within the peak-oil academia. And that, though few, there are exceptionally intriguing and *potentially* hegemony breaking theories and models within the discourse. Hall and Klintgaard (2006) for instance call for a complete overhaul of our economic system into what they call ‘biophysical economics’, a move away from neoliberal market economy. In and by itself far from emancipatory, it does offer radical change. In a similar approach Bryant (2007) offers a thermodynamic model of a money system where he attempt to relate “interest rates, the rate of return, money demand and the velocity of circulation to entropy gain” (ibid:303) and where measurement of economic value is translated into thermodynamic terms. A construct that in itself does not challenge hegemonic power relation or offer emancipation, but potentially radical change and a possible break with hegemonic economy, a rupture where the possibility of proper strife and the articulation of alternatives and antagonisms open up for politics proper.

In a completely different approach Paul Tranter and Scott Sharpe (2007) call for a fundamental reconceptualization of children from passive receptacles of parental consumer desires to important social agents able to express themselves in the present. Using the animated blockbuster movie *Monsters Inc.* as an allegory they argue for emancipation of children as the engine in a cultural shift towards general peak oil awareness. While this approach certainly calls for emancipatory politics, it might however fail to address the hegemony of the neoliberal paradigm. But it offers a certain strife without falling in the pit of apocalyptic imaginaries.

Nevertheless, the ‘mundane’ register is seemingly gathering strength, and together with strictly apocalyptic imaginaries it threatens to act as a barrier against a proper politicization of peak oil. What is particularly dangerous in this process is that it threatens to play part of the Rancièrian

privatization of the public sphere. We stand to face either certain doom, or we rely on managerial fixes within our current hegemony. In short; we either suffer gruesomely or we trust in the power of capitalism to work it out for us. The severe lack of alternatives, of challenges to hegemony threaten to shade our view, to obscure and hide the potentiality of radical change, degradation via business as usual instead of supersession out of our oppressive hegemony into expanded democratization. When being challenged by apocalyptic imaginaries on the one hand, and a mundane register that acknowledges potential but radical change while still promising managerial fixes to deal with the issue – it is not strange that we feel content with the latter outlook. And would we for a moment be tempted to radicalize, we immediately stand to face the apocalypse. This foreclosure of politics proper; of inclusion politics of Žižek (2009) or agonistic politics of Mouffe (2005), this Rancièrian privatization of the public, might prove to be more catastrophic than the notion of a world with more expensive and less abundant oil.

Theoretically however, there is light in the tunnel. The dialectic movement strives for supersession by its inherent laws. That is not to say we should rely on the deterministic strides towards communism that Marx proposed. Capitalism has proven to be much more resilient than what Marx believed. Nonetheless, within the discourse, the set of phenomena that is peak oil – lies the potentiality of supersession, a groundbreaking supersession with the prospective to shake hegemony. It is my hope that we pay heed to the dangers of reproducing old systems when trying to overcome challenges that loom ahead, and that we take the road of proper radicalization and make discourses such as peak oil into vessels of proper political and radical change.

## 7. References

- Agamben, Giorgio. 2010. Inledande kommentar till demokratibegreppet. In *Vad Innebär det att vara demokrat?*. Hägersten: Tankekraft förlag.
- Babatunde J. Ayeni., Richard Pilat. 1992. Crude oil reserve estimation. An application of the autoregressive integrated moving average (ARIMA) model. *Journal of Petroleum Science and Engineering* 8 (1): 13-28.
- Badiou, Alain. 2010. Det demokratiska emblemet. In *Vad Innebär det att vara demokrat?*. Hägersten: Tankekraft förlag.
- Becken, Susanne. 2008. Developing indicators for managing tourism in the face of peak oil. *Tourism Management* 29 (4): 695-705.
- Bettini, Giovanni. 2013 Climate migration as an adaption strategy. In *Climatised moves – climate-induced migration and the politics of environmental discourse*. Lund: Media tryck.
- Bettini, Giovanni., Karaliotas, Lazaros. 2013. Exploring the limits of peak oil – naturalizing the political, de-politicising energy. *The geographical journal* 2013: 1-11.
- Beenstock, Michael. 1977. The depletion of UK oil resources. *Energy* 2 (3): 249-256.
- Bensaïd, Daniel. 2010. Den Permanenta skandalen. In *Vad Innebär det att vara demokrat?*. Hägersten: Tankekraft förlag.
- Bopp, Anthony E. 1980. A combined decline-curve and price analysis of US crude oil production 1968–1976. *Energy Economics* 2 (2): 111-114.
- Brandt, Adam R. 2007. Testing Hubbert. *Energy Policy* 35 (5): 3074–3088.
- Brown, Wendy. 2010. Numera är vi alla demokrater.... In *Vad Innebär det att vara demokrat?*. Hägersten: Tankekraft förlag.
- Bryant, John. 2007. A thermodynamic theory of economics. *International Journal of Energy* 4 (3): 302-337.
- Brännström, Leila. 2010. På spaning efter den politik som flytt. *Fronesis – Det politiska* 19-20: 18-23.
- Campbell, Colin. 1993. World oil: reserves, production, politics and prices. *Norwegian Petroleum Society Special Publications* 6: 1-20.
- Carchedi, Guglielmo. 2008. Logic and dialectics in social sciences, part I – Dialectics, social phenomena and non-equilibrium. *Critical sociology* 34 (4): 495-523.
- Castro, Carlos de., Miguel, Luis Javier., Mediavilla, Margarita. 2009. The role of non conventional oil in the attenuation of peak oil. *Energy Policy* 37 (5): 1825–1833.
- Cleveland, Cutler J. 1993. An exploration of alternative measures of natural resource scarcity – the case of petroleum resources in the U.S. *Ecological Economics* 7 (2): 123-157.

- Cleveland, Cutler J. 2003. Biophysical constraints to economic growth. In *Encyclopedia of Life Support Systems*, D. Al Gobaisi (red.) Oxford: EOLSS Publishers Co.
- Czúcz, Bálint., Gathman, Joseph P., Mcpherson, Guy R. 2010. The Impending Peak and Decline of Petroleum Production: an Underestimated Challenge for Conservation of Ecological Integrity. *Conservation Biology* 24 (4): 948-956.
- Dikec, Mustafa. 2005. Space, politics, and the political. *Environment and Planning D: Society and Space* 23: 171-188.
- Duncan, Richard C. 1996. The Olduvai Theory – Sliding Towards a Post-Industrial Stone Age. *Institute on Energy and Man*. June 27, 1996.
- Feygin, M. Satkin, R. 2004. The Oil Reserves-to-Production Ratio and Its Proper Interpretation. *Natural Resources Research* 13 (1): 57-60.
- Foster, John. 2008. Peak Oil and Energy Imperialism. *Monthly Review: An Independent Socialist Magazine* 60 (3): 12-33.
- Friedrichs, Jörg. 2010 Global energy crunch – How different parts of the world would react to a peak oil scenario. *Energy Policy* 38 (8): 4562-4569.
- Fukuyama, Francis. 1992. The end of history and the last man. New York: Free Press
- Hall, A.S, Charles. Klintgaard, A., Kent. 2006. The Need for a new, biophysical-based paradigm in economics for the second half of the age of oil. *International Journal of Transdisciplinary Research* 1 (1): 4-22.
- Hallock, John L. Jr., Tharakan, Pradeep J., Hall, Charles A.S., Jefferson, Michael., Wu, Wei. 2004. Forecasting the limits to the availability and diversity of global conventional oil supply. *Energy* 29 (11): 1673–1696.
- Harvey, David. 1989. From Managerialism to Entrepreneurialism – The Transformation in Urban Governance in Late Capitalism. *Geografiska Annaler. Series B, Human Geography* 71 (1): 3-17.
- Harvey, David. 2010. Kapitalets gåta och kapitalismens kriser. Hägersten: Tankekraft förlag.
- Heffington, W.M., Brasovan, M.W. 1994. Prediction of U.S. crude oil-production using growth curves. *Energy* 19 (7): 813–815.
- Holmström, Mikael. 2012. Den dolda alliansen – Sveriges hemliga NATO-förbindelser. Stockholm: Atlantis.
- Höök, M., Söderbergh, B., Aleklett, K. 2009. Future Danish oil and gas export. *Energy* 34 (11): 1826-1834.
- Jukić, Dragan. Scitovski, Rudolf. Sabo, Kristian. 2005. Total Least Squares Problem for the Hubbert Function. *Proceedings of the Conference on Applied Mathematics and Scientific Computing* 217-234



- Kolankiewicz, Marta. 2012. Where discourse ends – The discursive and the non-discursive in Laclau and Mouffe's discourse theory and in Fairclough's critical discourse analysis. In *Pondering on methods – A variety of methodological concerns*. Jacobsson, Katarina., Sjöberg, Katarina (eds.). Lund: Media tryck.
- Laclau, Ernesto. 2010. Ernesto Laclau och Roy Bhaskar – Diskursteori kontra kritisk realism. *Fronesis – Det politiska* 19-20: 178-192.
- Leduc, T. B. 2007. Fuelling America's Climatic Apocalypse. *Worldviews: Global Religions, Culture & Ecology* 11 (3): 255-283.
- Leigh, James. 2008. Beyond Peak Oil and World Geopolitical Implications. *Globalization* 7 (2): 3.
- Leigh, James. 2011. A geopolitics of Cyprus. *Meria Journal* 15 (4): 1-14.
- Leigh, James., Vuković, Predrag. 2010 Potential Iranian hegemony in oil producing Islamic countries -Implications for oil geopolitics. *Medunarodni Problemi* 62 (1): 7-36.
- Lloyd, Bob. 2007. The Commons revisited – The tragedy continues. *Energy Policy* 35 (11): 5806–5818.
- Logar, Ivana., Bergh, Jeroen C.J.M. van den. 2013. The impact of peak oil on tourism in Spain – An input–output analysis of price, demand and economy-wide effects. *Energy* 54: 155–166.
- Lundgren, Kjerstin., Danielsson, Staffan. 2012. Sverige ska inte smygas in i Nato. *Svenska Dagbladet*. 16 May. [http://www.svd.se/opinion/brannpunkt/sverige-ska-inte-smygas-in-i-nato\\_7204686.svd](http://www.svd.se/opinion/brannpunkt/sverige-ska-inte-smygas-in-i-nato_7204686.svd) (accessed 2013-12-20).
- May, Murray. Tranter, J., Paul. Warn, R., James. 2008. Towards a holistic framework for road safety in Australia. *Journal of Transport Geography* 16 (6): 395-405.
- Michael, Bertrand. 2011 Oil production – A probabilistic model of the Hubbert curve. *Applied Stochastic Models in Business and Industry* 27 (4): 434–449
- Myrdal, Gunnar. 1971. Vetenskap och politik I nationalekonomi. Stockholm: Rabén & Sjögren
- Rancière, Jacques. 1999. Disagreement – Politics and Philosophy. Minneapolis: University of Minnesota Press.
- Rancière, Jacques. 2005. Hatet mot demokratin. Hägersten: Tankekraft.
- Rancière, Jacques. 2010a. Dissensus – On politics and aesthetics. New York: Continuum.
- Rancière, Jacques. 2010b. Tio teser om politik in Det politiska. *Fronesis – Det politiska* 19-20: 96-110.
- Rancière, Jacques. 2010c. Ett samtal med Jacques Rancière. In *Vad Innebär det att vara demokrat?*. Tankekraft förlag: Hägersten.
- Rensburg, van, W.C.J.. 1981 Global competition for strategic mineral supplies. *Resources Policy* 7 (1): 4-13.

- Renshaw, Edward F. 1980. The decontrol of US oil production. *Energy Policy* 8 (1): 38-49.
- Rosanvallon, Pierre. 2010. Motdemokratien – politiken i misströns tid. Hägersten: Tankekraft förlag.
- Ross, Kristin. 2010. Demokrati till salu. In *Vad Innebär det att vara demokrat?*. Hägersten: Tankekraft förlag.
- Schwartz, B., Parker, C., Hess, J., Frumkin, H. 2011. Public Health and Medicine in an Age of Energy Scarcity: The Case of Petroleum. *American Journal Of Public Health* 101(9): 1560-1567.
- Sterman, John., D. Richardson, George P., Davidsen, Pål. 1988. Modeling the estimation of petroleum resources in the United States. *Technological Forecasting and Social Change* 33 (3): 219-249.
- Svanberg, Carl-Henric. 2013. Nobel dialogue week – energy scenarios and timescales. <http://www.bp.com/en/global/corporate/press/speeches/energy-scenarios-and-timescales.html> (accessed 2013-12-20).
- Swyngedouw, Erik. 2010. Apocalypse forever? – Post-political populism and the spectre of climate change. *Theory culture society* 27 (213): 213-232
- Swyngedouw, Erik. 2011. Interrogating post-democratization – reclaiming egalitarian political spaces. *Political geography* 30: 370-380
- Tranter, Paul. Sharpe, Scott. 2007. Children and Peak oil – An opportunity in crisis. *The International Journal of Children's Rights* 15 (1):181-197.
- Yeoman, Ian., Lennon, J. John., Blake, Adam., Galt, Miriam., Greenwood, Chris., McMahon-Beattie, Una. 2007. Oil depletion – What does this mean for Scottish tourism?. *Tourism Management* 28 (5): 1354-1365
- Zetterström, Margareta. 2001 Sverige smygs in i NATO och den framtida EU-armén. *Kritiska EU-fakta* 71.
- Žižek, Slavoj. 2009. First as tragedy then as farce. London: Verso.
- Žižek, Slavoj. 2010 Från demokrati till gudomligt våld. In *Vad Innebär det att vara demokrat?*. Hägersten: Tankekraft förlag.