



BEYOND THE SPECTACLE?
A COMPARATIVE CRITIQUE OF THE 'GREEN
CONSUMER' IN GLOBAL AND CHINESE
SUSTAINABILITY TRANSITIONS

by

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Abstract

This thesis presents the findings of a comparative analysis between the neoliberal sustainable development narrative and the fast-emerging Chinese ecological civilization narrative from a political ecological perspective. The contradictory role of the 'sustainable consumer' that the narratives employ is used to draw conclusions on the extent of convergence and divergence between the two potentially competing discourses. This allows for original contributions on how subjects are created and governed in discourses of sustainability transitions.

As sustainable development increases its reach as a mode of governance, covering new spaces and even 'future generations', it brings into being new kinds of citizens: the 'sustainable consumer'. This citizen type reconciles the contradictory demands on the citizen to be both a consumer and an environmentalist. Environmental citizens are thus incorporated into market architecture as 'sustainable consumers' to assume the role of the privileged agent of change whose political possibilities are limited. This paradox is analysed from a poststructuralist perspective, where the consumer subject *performs* the market-sanctioned role of sustainability while contributing to its ongoing depoliticization. The extension of market logics into the governance of crises, transition, and imagination is arguably challenged by a Chinese narrative that promotes a 'different form of development'. Some have argued this offers 'hope' for a counter-narrative to the dominance of market logics.

This thesis, however, shows such arguments are flawed in two ways. First, the treatment of ecological civilization as a singular discourse fails to account for the opposing articulations of it between domestic and international audiences. Second, the role of consumerism in absorbing care for the environment is fundamental to both ecological civilization and neoliberal sustainable development: neither discourse offers a different form of environmental citizenship beyond the consumer. Markets continue to mediate human-nature and socio-nature relations, with implications for considering China's emergent role in global environmental governance.

List of Acronyms

AIIB	-	Asia Infrastructure and Investment Bank
ASEAN	-	Association of South-East Asian Nations
BBC	-	British Broadcasting Corporation
BRI	-	Belt and Road Initiative
CBD	-	Convention on Biological Diversity
CCS	-	Carbon capture and storage
CDM	-	Clean Development Mechanism
CDS	-	Critical discourse studies
CO ₂	-	Carbon dioxide
CO ₂ e	-	Carbon dioxide equivalent
COP	-	Conference of the Parties
CPC	-	Communist Party of China
CSR	-	Corporate social responsibility
CUSP	-	Centre for the Understanding of Sustainable Prosperity
DHA	-	Discourse-Historical Approach
DMC	-	Domestic material consumption
EC	-	Ecological civilization
EKC	-	Environmental Kuznets curve
ETS	-	Emissions trading scheme
EU	-	European Union
EU ETS	-	European Union Emissions Trading Scheme
FYP	-	Five-Year Plan
GDP	-	Gross domestic product
GHG	-	Greenhouse gas
IEA	-	International Energy Agency
IGO	-	Intergovernmental organisation
IMF	-	International Monetary Fund
INGO	-	International non-governmental organisation

Beyond the Spectacle? A Comparative Critique of the 'Green Consumer' in Global and Chinese Sustainability Transitions

IPBES	-	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	-	Intergovernmental Panel on Climate Change
IPE	-	International political economy
MEE	-	(Chinese) Ministry of Ecology and Environment
MoD	-	(UK) Ministry of Defence
NASA	-	National Aeronautics and Space Administration
NGO	-	Non-Governmental Organisation
NO _x	-	Nitrogen oxides (generic)
NSD	-	Neoliberal sustainable development
OBOR	-	One Belt, One Road (generally replaced by BRI)
OECD	-	Organisation for Economic Development
PDT	-	Post-structuralist discourse theory
PPM	-	Parts per million
PRC	-	Peoples' Republic of China
SDG(s)	-	Sustainable Development Goal(s)
TNC(s)	-	Transnational corporation(s)
UN	-	United Nations
UNCED	-	United Nations Conference on Environment and Development
UNEP	-	United Nations Environment Program
UNFCCC	-	United Nations Framework Convention on Climate Change
USD	-	United States dollars
WCED	-	World Commission on Environment and Development
WHO	-	World Health Organisation
WRI	-	World Resources Institute
WST	-	World-Systems Theory
WTO	-	World Trade Organisations
WWF	-	(Formerly) World Wildlife Fund (For Nature)

Note on Language

Where possible, and unless otherwise stated, the thesis has used official English translations of the various resources included in the analysis of Chinese discourses. Where a specific point of analysis has required recourse to the original Chinese, simple translations of no more than a few words have been carried out by the author unless otherwise stated. In such instances these were confirmed by graduate volunteers from the Sun Wah International Business School at Liaoning University, to whom thanks are due. Earlier stages of the research benefited from translations of larger texts carried out by qualified translators, for which a certificate of translation is provided in Appendix D. I am also grateful to several qualified interpreters during field work in China.

Where Simplified Chinese (Mandarin) is used, it is accompanied by its *pinyin* (the system of Latinisation), and its English translation. The original Chinese is included in these sections for transparency, such as where the analysis is informed by differences between the officially translated English document and its original Chinese.

Unless explicitly asked otherwise, Chinese names are rendered family name first, given name second, such as in *Xi Jinping*.

1. Introduction

Jacques Chirac said [in 2002] that our house is burning down, and we are blind to it. We are no longer blind, but the house is still burning.

French diplomat Laurent Fabius, 2017

As we become increasingly mindful of our own health, the wellbeing of our family and that of the planet, we're reshaping how we shop ... Welcome to the era of the mindful consumer.

Managing Director Rob Colins, Waitrose and Partners, 2018

This thesis investigates what links these two observations in the context of the globalising political economy of neoliberal sustainable development, and whether it is challenged by the self-defined 'new development paradigm' of China. As the spatial and temporal reach of the neoliberal sustainable development (NSD) agenda expands, it brings under its governance new subjects and new places. It brings into being future generations and regulates their needs and potentialities in the present. It regulates what knowledges and what socio-nature relations matter, and which do not. The agenda determines which socio-environmental struggles are made visible and which are left invisible, while sanctioning particular modes of environmental expression and activism and delegitimising others. The NSD agenda is propelled by urgency but confronted by contradictions and paradoxical claims on and about citizens, whose governance is contained not only in the formalised architecture of the state, but in the minutiae of day-to-day interactions, in particular with the market.

One such paradox is highlighted by French diplomat Laurent Fabius who led the diplomatic effort in bringing about the 2015 Paris Climate Agreement at the 21st Conference of the Parties (COP21). Speaking at COP23 in Bonn, 2017, he remarked that 'Jacques Chirac said [in 2002] that our house is burning down, and we are blind to it. We are no longer blind, but the house is still burning.' He captures succinctly the paradox of the yawning gap between knowledge of environmental crises and actions to mitigate

against them. Making sense of this worsening contradiction, and how it might be challenged, is the base issue to which this thesis contributes. Not only is the house still burning, but it has intensified: air pollution kills over 6.5 million people, or 11.6% of global deaths, every year (UNEP, 2017: 7), and disproportionately affects women and children in the global south; climate change worsens hurricanes and floods (Reed et al., 2015); and plastic pollution in the sea increases by around 8 million metric tons each year (Chen, 2015) and has already entered our food and water supplies (Seltenrich, 2015). This plastic is predicted to outweigh all fish by 2050 (World Economic Forum, 2016). Species' extinction rates are accelerating; one million species are at risk of extinction, and the 'health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide' (IPBES, 2019). Trisos, Merow, and Pigot (2020) have shown that marine ecosystem collapse is likely, without immediate and drastic cuts in GHG emissions, in the 2020s, whilst land ecosystems could collapse in the 2040s (Trisos *et al*, 2020). These collapses will have colossal and unequal impacts on food and energy systems.

Moreover, the barriers to putting out the fire are not technical or scientific, but political, social, and economic – the inertia of our systems and institutions. This research grew out of a basic question that, by a small contribution, it helps answer: *Why does the fire continue to burn when we know how to extinguish it?* From this, it is possible to identify a general paradox in global environmental governance. On one hand, knowledges and lived experiences of environmental degradation have increased in diversity and intensity, and this has been met, through organised political struggle, with the emergence of environmental issues at the heart of global governance. On the other hand, things have worsened in every metric of defining a liveable planet, and in local and Indigenous accounts of Nature. The exponentially increasing production, movement, consumption, and wasting of commodities lies at the heart of each of these issues – consumerism connects these crises across and through geographies. At the same time, the consumer has emerged under neoliberal governance as the sovereign agent and expression of citizenship. More things are commoditised, and more is consumed – though the distribution of consumption remains highly unequal and overwhelmingly concentrated in global minorities in wealthy areas. As will be shown, this is also where the power *to commoditise*, as a violent epistemology, is concentrated.

Political ecological study often begins and ends with contradictions (Robbins, 2007; 2012), and within its broad discipline the study of narratives and subjects enjoys a diverse set of approaches and applications. Agrawal (2005), for instance, developed the term 'environmental subjects' to describe those 'for whom the environment constitutes a critical domain of thought and action' (2005: 16). But how are environmental subjects brought into being and how are they governed in the liminal space between the quickening collapse of one system and the slow emergence of a new system? Can 'sustainability transitions' reimagine environmental citizenship beyond the market?

To help answer this, this research looks at the social construction of agency and the socially available tools for actors to identify with. This brings into question the role of the consumer, and the way this category of citizenship absorbs the responsibility, agency, and hopes of the sustainability transition. A sustainability transition in this sense is conceived of as the discursive possibilities and limitations constructed by a hegemonic regime for imagining and bringing into being a liveable future. This is discussed further in section 2.1.2 as it relates to political economy and political ecology. Consumerism, as argued here, is a cornerstone of neoliberal imaginings of transitioning to a liveable future; indeed, it is a key practice in need of 'greening' and itself a contributor to greening. It is seen as capable of accommodating a new environmental awareness, and even as essential for finding sustainability: the new, mindful consumer will put out the fire. Environmental awareness looks for expression in the market, which responds by enlarging its offering and co-constructing the aesthetics of environmental activism. However, in campaigning for change, the most radical thing the 'mindful consumer' can do is consume differently: the horizon of change is narrowed to the individual and the performative. The discourse legitimises a particular avenue for sustainability transition that privileges minor reformism and occludes transformist practices (cf. Cox, 1981).

This research investigates and critiques the discourses of global sustainability agendas, how they manifest, and to what extent they are challenged in the emergent discourse of China which, according to some (Foster, 2017, Pan, 2016, Zhou 2017), marks a counter-narrative capable of challenging a Westernised economic orthodoxy - the neoliberal regime of environmental governance. This research asks to what extent this counter-narrative creates different environmental subjects, or indeed sees beyond the individual subject and creates environmental communities. To do so, it first lays the foundation of the environmental subject (what I term the 'sustainable consumer-subject'),

before considering the discourse of China's 'ecological civilization', and emerging and comprehensive framework for transitioning to a sustainable future, as defined in section 1.3.¹ both in its deployment domestically and in the global fora of environmental governance.

1.1. The Spectacle: The Historical Moment and its Contradictions

Guy Debord first detailed the characteristics of the *Society of the Spectacle* in 1967. Writing in 1988, he summed up the *Spectacle* as:

the autocratic reign of the market economy which had acceded to an irresponsible sovereignty, and the totality of new techniques of government which accompanied this reign. (Debord, 1998 [1988]: 2.)

The intervening years, he argued, had reaffirmed his analysis. The interpretive research presented in this thesis contends that such a reign is discernible in the extension of the *Spectacle* into new domains: into the planetary crises which have been subsumed by it. One key result of this is epistemic – the 'spectacle' of the market economy provides a privileged mode of explaining the crisis and its solution. Debord's insights, though valuable, cannot offer a complete theoretical framework, or a complete means of identifying the problem. For both, it is necessary to turn to the analyses of the 'post-political' (Mouffe, 2005). Debord's *Spectacle* as 'autocratic reign' gains analytical depth if it is considered as the expansion of technocratic, neoliberal modes of consensus-based governance, and the retreat of political identities from the spaces of governance (cf. Mouffe, 2005). The depolitical here is not understood as the absence of politics per se, but of political identities and political oppositions. In place, appeals to 'common sense' obscure the political and power-laden histories of such sense-making. We do not witness an 'end of history' but an outcome of it, one which can seem fixed and total, but is fluid and changing as new political identities are formed and reformed to confront it. It is in

¹ Throughout, I use *ecological civilization* – a widely-used anglicisation of 生态文明 (*shēngtài wénmíng*) in Western and Chinese academic literature. It is also sometimes anglicised as Eco-Civilisation, both with and without capitalisation. As covered in Chapter 6, 生态文明 has sometimes been officially translated as 'ecological progress', though this is taken as a highly contextual instance of 'appropriate' language in global fora.

revealing contradictions, and lack of consensus, therefore, that a return to the political, and to the democratic, might be possible (Rancière, 2001).

The broad approach of this research is informed, among others, by Debord's outline of what might be considered an early adoption of the situated approach to critique:

IN ORDER TO DESCRIBE the spectacle, its formation, its functions and whatever forces may hasten its demise, a few artificial distinctions are called for. To analyze the spectacle means talking its language to some degree – to the degree, in fact, that we are obliged to engage the methodology of the society to which the spectacle gives expression. For what the spectacle expresses is the total practice of one particular economic and social formation; it is, so to speak, that formation's *agenda*. It is also the historical moment by which we happen to be governed. (Debord, 1992 [1967]: 15, emphases original.)

As interpretive research, the situated researcher is an inherent part of the studied world. The lived experiences, elite knowledges, and local and Indigenous knowledges offer reflections on the state of *unsustainability*. The privileged mode of understanding this as a crisis, that of neoliberal sustainable development, is a totalising narrative whose historical moment also governs researchers who study it. (I offer a reflexive account of the research journey in Annex I.) The tools available emerge, at least partially, from the subject of study to reflect its structures of power and knowledge. For a study of socio-environment discourses in the context of crisis and transition, it is necessary to be able to highlight what is in crisis, yet in doing so it is necessary to predetermine what knowledges are most appropriate and whose experiences are most valid. Indeed, the epistemic claims of neoliberal sustainable development to know and to interpret crises and their fixes is part of the critique offered in subsequent chapters. To highlight the contradictions and paradoxes of the discourse is, to a great extent, to rely on the tools it also deploys, from empirical science to language of 'environmental issues' abstracted from the holistic lived experience.

Debord's outline provides some of the grammar employed in the thesis, and the sustainable development *agenda* that has emerged as a key organising principle in global environmental governance (and governance more generally) is taken as the imperfect and politically contingent extension of the spectacle into the latest contradiction of capitalism. It is therefore necessary to outline what is meant by neoliberal sustainable development, though this question is returned to throughout the thesis in relation to the

analysed corpora of texts through the lens of the construction of the sustainable consumer.

While a full account of *neoliberalism* is not possible here, it is possible to outline how the term is deployed both here and in political ecology; in fact, it is necessary given the wide and often inconsistent use of the term. Harvey's (2005) basic summation of neoliberalism as the insistence that market exchange should guide human action is a good starting point as it is here that the fundamental role of the market and the individual are sketched out in relation to one another. Going further, a general characterisation from critical geography is offered in the introduction of the special issue of *Geoforum* on 'neoliberal nature' wherein neoliberalism reflects a

complex assemblage of ideological commitments, discursive representations, and institutional practices, all propagated by highly specific class alliances and organized at multiple geographical scales (McCarthy and Prudham, 2004: 276).

The generality of the description is not accidental: in overly defining a specific 'neoliberalism' in local practice, the emphasis on the globality of the project and the reach of its central tenets into new areas of life risk being lost (*ibid.*; Peek and Tickell, 2002). Nevertheless, it is possible to define the term operatively for the purpose of this study.

Salleh writes that it is the material dependence between the global North and South that is central to understanding the global project. For Salleh, this 'extractivism', 'with attendant ecological and humanly embodied debts, is also the basis of neoliberal 'sustainable development' models like the 'green new deal' and UNEP's 'green economy' favored by transnational business' (Salleh, 2015: 432).² Salleh argues that for 'critical political ecologists', the point is 'to interrogate this new form of technocratic management' because 'profit-oriented industrial provisioning in the name of progress is materially incompatible with global ecological health and democratic futures' (*ibid.* 432-433). Whilst questions could be raised of the newness of such a form of management, or governmentality, the principle remains. As such, this study deploys 'neoliberal

² It should be noted the 'green new deal' here refers to a specific framework emerging from the 2007/8 financial crisis and is not comparable to the much more recent activist-led calls for a green new deal.

sustainable development' to frame an agenda of global(ised) proportions with particular local spatial and temporal impacts and implications that can be characterised as:

- A techno-managerialism in which particular knowledges are deployed by which to govern and that serve to delineate an elite class capable of understanding nature, its crises, its fixes, and its future.
- A primacy of market exchange and the sovereign economic individual as a political-economic 'common sense'.
- An emphasis on the 'win-win' of economic development as a function of economic growth and the protection, conservation, and restoration of non-human nature.

This thesis engages with these core characteristics whilst, particularly in Chapter Four, expanding on their meaning and implications through analysis of the sustainable consumer. For now, the latter of these three is turned to in order to explore the sustainability crisis and the crisis of developmental approaches.

At its most fundamental, the United Nations (UN), Organisation for Economic Cooperation and Development (OECD), European Union (EU), International Monetary Fund (IMF) and World Bank, among others, all present sustainable development not merely as necessary for the environment but beneficial for the economy *as it is*. Especially since 2012, intergovernmental organisations (IGOs) have offered a broad consensus and commitment to 'green growth' (e.g. OECD, 2011) as the *ex machina* of 'greening' capitalism within sustainability transitions. How 'sustainability' is to be interpreted, by whom, and for whose gain are therefore increasingly important questions for policy and, more importantly, finding the political.

The starting point for such an approach is the recognition of two paradoxes. First, that of the prevalent sustainability discourse: the increase of sustainability 'talk' has coincided with a worsening of ecological crises, such as those symbolised by the terming of the 'Anthropocene'³, the surpassing of 400 parts per million (PPM) of atmospheric CO₂, and the increasing attention given to air and (especially marine) plastic pollution,

³ To replace Holocene in official geologic time from about 1950, the adoption of 'Anthropocene' was formally recommended by an official panel (the Working Group on the Anthropocene), in 2016.

to name just a few. At the point of surpassing the 400 PPM of CO₂ threshold in 2013, NASA's then Global Change and Energy Manager, Dr Michael Gunson, commented that the 'world is quickening the rate of accumulation of CO₂, and has shown no signs of slowing this down. It should be a psychological tripwire for everyone' (NASA, 2013). The current data from the Mauna Loa Observatory (31 March 2020) indicates 415 PPM CO₂ (NOAA, 2020). This psychological tripwire has yet to materialise. Similarly, the Intergovernmental Panel on Climate Change, in its most recent assessment⁴, warns that:

[h]uman influence on the climate system is clear, and recent anthropogenic emissions of green-house gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems. (IPCC, 2014: 2.)

Elsewhere, the IPCC (2019) has pointed to the centrality of distributional justice in mitigating climate change. It notes, 'with *high confidence*', that the large majority of modelling studies that constructed pathways characterised by inequality could not limit global warming to 1.5 degrees Celsius (2019: 22). Confronting climate change, in other words, must also tackle global inequality. However, as Kütting (2014) makes clear, the dominant assumption that simply providing evidence of the scale and severity of climate change and other environmental issues will institute the change needed to mitigate them is demonstrably flawed; a greater account of genealogical processes and hegemonic structures is needed to account for the failure of significant action.

Outside of policy or scientific discourses, news media, the blogosphere, think tanks, and other domains have provided numerous labels and frames for citizens to occupy or be placed in; alarmists, radicals, eco-terrorists, contrarians, deniers, green consumers, and so on. Mass media provides us with visual renderings of climate catastrophe and environmental destruction in box-office hits; narratives that tap into a latent awareness of human-induced crises. In the UK, for instance, David Attenborough's *Blue Planet Two* (BBC, 2017) sent home the shocking images of plastic pollution in the marine environment, stirring up a wave of voices that announced a new awareness and energy for change.⁵ Advertisers and marketers provide consumer spaces

⁴ The IPCC reports on a 7-year cycle as a metanalysis of relevant literature.

⁵ The 'Food and Drink Report 2018-19' (Waitrose and Partners, 2019), for instance says that: 'Our research found that 88% of those who watched the programme have altered their behaviour as a result. Since the episode aired at the end of 2017, our customer services team has seen an 800% increase in questions about plastic.'

of safe 'green' consumption; tokens of distinction that focuses this new energy on the individual and calls on them as consumers to 'save the planet' through a minor change in purchasing habits. Sustainability 'talk' has profusely organised responses to environmental crises; new categories for civil society to engage with and identify what can be changed and what must remain the same. The first paradox, therefore, is the divergence between sustainability *agendas* and sustainability *outcomes*. This project's key critical impetus is the deconstruction of these fault lines and the political constructions of permanency and change.

The second paradox is implicit within the sustainable development discourse as it is typically invoked: that sustainability can be attained alongside, indeed depending on, exponential economic growth in quantitative terms. The potential conflict in the discourse around 'sustainable development' has been talked about regularly, particularly in literature focusing on ecological economics: steady-state economy, degrowth, dematerialisation, redistribution, and so on. Such approaches concentrate on the problems of insisting on exponential, quantitative economic growth, and associated material throughput, within an ecosystem of finite resources and sinks. Bioenvironmental perspectives, to borrow from Clapp and Dauvergne's (2011; see also Dryzek, 2013: 34-37) categorisation, have also pointed to the importance of planetary boundaries and inherent complexity: nuances which are rarely captured in mainstream policy making. The key concern here is the institutionalising of the role of the 'consumer' in the production of innovation, and how central this is to the response to environmental problems: that ecological limits represent a failure to innovate technically, and continued (indeed, increasing) mass consumption of the 'right type' is part of the solution, rather than part of the problem. This Promethean response represents a specific instance of the second paradox: citizens are encouraged to identify both with commodification and consumption, and with 'acting sustainably'.

The contradiction between the economic system's need for exponential growth and the 'limits' of physical material to feed this are not new. At least as far back as the Club of Rome's highly-debated publication *Limits to Growth* (1972), an early computer modelling of exponential economic and populational growth on Earth as a closed

thermodynamic system⁶, the profound dilemma of economic growth as both the guarantor of improving the human condition and a fundamental danger to the ecosystems that underpin our way of life has been a fault line among environmental and ecological economists (Neumayer, 2013; Daly 1996). Most recently, high-level events have projected the ecological economists' key line of 'redefining prosperity' (see especially Jackson, 2013a; 2013b) to audiences far beyond fringe academic circles. For instance, an EU parliamentary conference, the *Post-Growth Conference for Europe* (CUSP, 2018) took place between 18-20th September 2018, and an article in *Foreign Policy* entitled *Why growth can't be green* by anthropologist Jason Hickel (Hickel, 2018) reached far beyond the economic core with 20,216 social media shares (*Foreign Policy*, 2018). Ecological sustainability and, to a lesser extent, social sustainability are the key limiting factors in such discourses, which point to widely-cited scientific frameworks, such as the Planetary Boundaries framework, to help discern a 'carrying capacity' and 'safe operating space' for humanity (Steffen *et al.* 2015; Rockström *et al.* 2009).

Sustainability is talked about in particular ways that are politically determined. In Foucauldian terms, the radically contingent constellations of meaning are historically determined; they are outcomes of inherently political power-struggles, and in emerging as dominant from such struggles, their status is privileged and taken for granted. Differing discourses are implicated in political practices and power relations; they provide a filter through which complex problems are reduced, communicated, and acted on. As Dryzek (2013: 10) highlights, '[d]iscourses can themselves embody power in the way they condition the perceptions and values of those subject to them, such that some interests are advanced, others suppressed, some people made more compliant and governable'. The critical project is therefore the deconstruction of such narratives that assert themselves as inherent to the problem at hand and mask particular interests as general interests.

This research, then, begins with the assertion that the sustainable development discourse serves to depoliticise the concept of sustainability. This follows closely the

⁶ Earlier literatures in particular called on the laws of thermodynamics as a means of explaining how increases in material throughput cannot be sustained beyond the ability of those materials to replenish themselves. A 'closed' system, like Earth, has no significant inputs or outputs of material, but does have inputs of energy (from the Sun). The natural conclusion being material throughput cannot grow exponentially or indefinitely.

emergence of the 'post-ecological era' with its defining 'politics of unsustainability' first defined by Blühdorn and Welsh (2006), and later developed by Blühdorn (2011a, 2011b, 2013). This locates the issue alongside similar theoretical arguments of the post-political and post-democratic. On the emergence of post-democratic cities, for instance, Swyngedouw observes that 'the 'political' is retreating while social space is increasingly colonised by policies (or policing)' (Swyngedouw, 2010). This helps frame the paradox this research begins with: the proliferation of sustainability *agendas* without sustainability *outcomes*, and it locates the political project in the need to recapture what sustainability means; a largely privately-led effort to sustain the means of capital accumulation under a broad neoliberalisation, or as a need to transcend it.

This occurs not in a universal sense or, as Foucault's epochal interpretation of discourse might assert, according to a shared logic that varies according only to time. Instead, various sustainability discourses exist that each seek to imbue common signifiers with particular meanings. The point of the critical discourse approach, therefore, is the deconstruction of these meanings and the revealing of their contingency (Howarth, 2010). Moreover, adopting a normative stance in the research, the impetus lies in revealing the points of contestation between different discourses. In doing so, a broader project of *re-politicisation* becomes apparent whereby the political frontier, obscured by a dominant or hegemonic discourse, is revealed by different articulations and investments of meaning of particular phrases. In short, the question of *what* is being sustained is often obscured and taken for granted.

1.2. Sustainably Consuming or Consuming Sustainability?

Owing to the vastness of the sustainable development discourse(s), this thesis is primarily concerned with consumerism. This offers a specific instance with definable limits within a broader discourse, providing a limited scope for a discourse analysis for methodological more than analytical reasons. This is because the process of commoditisation is inherently without end. The construction of new markets, new commodities, and new consumers – a simultaneous intensification and extensification of consumer demand – mediated through cultural production and the colonising and co-opting of public space, from cities (Swyngedouw, 2010) to the internet (Castells, 2010), are simultaneously drivers and conditions of the expansion of capital. The discourse analytical approach (Howarth, 2010; Jacobs, 2018) aims to explore the embeddedness of

such conditions within sustainability transitions: in effect, what remains the same when new futures are imagined, proposed, and implemented.

Commoditisation and consumerism are thus central elements to the thesis; such a focus does not serve to limit the analysis along disciplinary lines, but to provide a more limited body of discursive resources whose genealogy can be more tangibly traced and whose counter-hegemonic articulations better identified. It is in these discourses that the individual is brought into being as an agent of change, not as a citizen but as a consumer. The thesis considers this from two angles: The neoliberal lens which considers the constitution of the sustainable consumer in both marketing and political institutions; and the performative lens where sustainability is spectacle – a mode of identification wherein the commodity serves as a representation of an ideal. This theoretical basis, and its reflexive application to the institutionalisation of consumerism in sustainability transitions, is a key original contribution this thesis seeks to make.

It is therefore necessary to better define consumerism, both in a wider social sciences context and in terms of its relationship to the sustainability crisis. For its broader frame, the research begins with Zygmunt Bauman's widely cited definition of consumerism:

We may say that 'consumerism' is a type of social arrangement that results from recycling mundane, permanent and so to speak 'regime-neutral' human wants, desires and longings into the principal propelling and operating force of society, a force that coordinates systemic reproduction, social integration, social stratification and the formation of human individuals, as well as playing a major role in the processes of individual and group self-identification and in the selection and pursuit of individual life policies. (Bauman, 2007: 35).

Consumerism can thus be separated from consumption. While consumption can be simply rendered 'a permanent and irremovable condition and aspect of life...one of the inseparable elements of biological survival' (*ibid*: 25), consumerism can be considered an attribute of society. A dominant arbiter of inter-human and human-environment relations, consumerism and its related practices of transport, storage, waste, and production colonise and manage space.

How this definition of consumerism relates to sustainability is both ecological and social, and it is important to distinguish between often deployed terms relating, broadly, to nature. *Ecological* in a-political usage generally relates to the relationships, state of (dis/) equilibrium, and coexistence between species and their environment. Political ecology as explored further in section 2.1. (re)inserts the social: it 'is a field

within environmental studies focusing on power relations as well as the coproduction of nature and society', while global political ecology is further concerned with the globalization of environmental problems, burdens, and benefits, and the formal ordering, mobility, and prevalence of knowledges about nature. A central aim of this research is to demonstrate the analytical limits of the term 'sustainable' by showing the often purposeful disconnect between socially accepted sustainable *actions* and the biophysical 'reality' of sustainability. As such, sustainability in this thesis has two definitions relating to environmental sustainability: a 'performative' social dimension in which people act out the regulated actions of the sustainable consumer, and the 'functional' dimension that is the biophysical restraints on maintaining a given system indefinitely. The former of these is inherent in the widely deployed term 'green', which takes on a multitude of meanings while alluding always to the idea of something environmentally good. Consumerism, it is shown, is frequently prefixed by a range of related terms, though most commonly 'sustainable' and 'green'.

In *environment* we have a related but broader term that commonly relates to the surroundings external to oneself – the physical environment of the living world, its chemical properties and so on. While ecological degradation can refer to the decline in equilibrium, loss of species, interactions, and functions (and in anthropocentric views, the loss of 'ecosystem services' derived from this, such as pollination), environmental degradation can refer more broadly to physical issues, such as air pollution and climate change⁷. In practice, these issues overlap and co-evolve, and as such the terms are sometimes used indiscriminately when talking of impacts. Human geographers and political ecologists also often distinguish the subjective environment as the complex production of the environment through the perception of the environment by people and society. Chapter four details how this distinction can relate to 'types' of sustainability outlined above and how it can resolve an ontological tension in how sustainability is understood as something that 'exists' and something that is acted out quite apart from its materiality.

⁷ It should be noted however that Chinese use of the English term 'ecology' (Chinese: 生态 *Shēngtài*) in translated documents and speeches often reflects a broader use, and often describes aspects of both the living and physical world. Ecological civilization should be understood in this broader way.

The tremendous environmental impact of mass consumerism is so fundamental that constituent elements of it are primary reasons given for the adoption of *Anthropocene* as the modern geological era (Zalasiewicz et al., 2017). This generalised area of investigation is of central concern to ecological economics for whom the aggregate of consumption at the planetary scale represents a key constituent of sustainability (Jackson, 2013). However, this research problematises primarily the social aspect. The particular social modality of the sustainability crisis is, if not predominantly then at least substantially, mediated through consumerism. This mediation is twofold: First, 'natural resources' are understood in terms of function, availability, demand, and price: their exploitation is driven by the need for surplus. 'Nature' is thus itself commoditised, quantified, and in these and other ways only understood through an ever-expanding human agency. Second, the mainstream 'fixes' of the crisis work *with* rather than *against* this system: to paraphrase, the masters' tools are called upon to bring down the masters' house (Lorde, 1984). Green consumerism and green growth emerge to save the consumer system at the point it fails most spectacularly.

Tim Jackson, an ecological economist, characterises the problem as an 'iron cage of consumerism': 'On the one hand, the profit motive stimulates a continual search for newer, better or cheaper products and services. On the other, our own relentless search for social status lock us into an escalating spiral of consumerism' (Jackson, 2013a). The needs of a 'life without shame' (Sen, 1984) evolve with society. Adam Smith, in his 1776 *Wealth of Nations*, points out that a 'linen shirt, for example, is, strictly speaking, not a necessary of life', but also that one would not dare to leave the house without one for fear of being associated with a lower socioeconomic status (Smith, 1936 [1776]: 821). The 'shame' of the under-consumer is not new, but its exact social configurations are. The socially constructed ethics of a 'life without shame' have come to include the need to consume sustainably, not just through the traditional tools of the advertiser, but the tools of state and mechanisms of global governance, and more broadly in the meaning-making symbology of consumerism: the green version of Smith's linen shirt.

The commodity, therefore, is viewed as that which 'arrogates to itself everything that in human activity exists in a fluid state so as to possess it in a congealed form' (Debord, 1995: 26). Following more orthodox critical literatures on the commodity as sign (for example, Baudrillard, 1968), the commodity must perform its primary function: to communicate and reinforce a set of ideals which it makes manifest not in substance

but in representation. The commodity has no autonomy in doing so; only as a nodal point of a system of signs – the privileged sign around which meaning is organised – does the commodity achieve this social function. This has a simple but significant implication for the 'green' commodity: the performance of the commodity's 'greenness' lies in its ability to represent and communicate a set of ideals, not in its more objective utility to tackle a given crisis of sustainability. 'Green' consumerism has gilded the crisis but is incapable of transcending it.

It is possible to extrapolate from a more orthodox reading of the commodity that green consumerism is merely a form of environmental consciousness whose expression has been legitimised by bourgeois elites and capital interests. Green consumerism can thus be viewed as a sanctioned form of environmental care. Whilst this thesis begins with the importance of the commodity as signifier, it shows how this extrapolation from orthodox critical theory is, whilst a necessary precursor, an insufficient explanation of the present moment. For instance, it fails to account for the emergence of alternative articulations or to locate the political moment between these developing discourses and their hegemonic blocs and those of the hegemonic order. By locating the conflict at the level of language, that is, at the level of signification, this shortcoming is resolved.

Sustainable consumerism is thus conceptualised as a passive revolution in which the crisis of unsustainability has emerged as sufficient to challenge, but presently insufficient to displace, the dominant economic imaginary. The institution of sustainable consumerism, therefore, is determined, rather than determining. Its ability to present a new, challenging hegemonic bloc is undermined by its incorporation into the machinery of neoliberal economics, along the lines argued by Cox (1988) in which characteristics of international organisation include representing and furthering hegemonic interests, and absorbing challenges and intellectuals.

Owing to this, the role of IGOs, national banks, states, and international regimes is central to identifying the political moment: the articulation and re-articulation of sustainability and imagined futures. China is presented as a possible counter-hegemonic bloc to a Westernised hegemonic order wherein the imagined futures that are brought into reality via sustainability transitions are invested with normative, power-laden assumptions of the ideal make-up of society.

1.3. China: (Re)Emergence and (Re)Articulation

China has been suggested as both a point of radical departure from an internationalised/Westernised set of norms (cf. Carter and Mol, 2006; Humphrey and Messner, 2008; Grumbine and Xu, 2011; Roberts, 2011; Gu,; Papa and Gleason, 2012; among others) as well as a place where the dominant interests of global capital have become consolidated with an outwardly-revised image. The re-emergence of China as a globally important actor remains a central question for the study of international relations and global politics in a wide variety of subdomains. Not least, environmental and climate change governance literatures have grappled with the issue of norm transference, knowledge and technology transfer, and consensus building in the context of a (re)assertive China (Carter and Mol, 2006; Tourney, 2015.)

This research takes a fresh look at the debate through a discourse theory lens. Doing so can help illuminate taken for granted assumptions that manifest as common sense, and thus gain a deeper appreciation of the extent of convergence on base issues of power in the global system. This process of mapping extant discourses can reveal where fault lines appear between competing discourses. The creation of subjects through what Agrawal (2005) called an 'environmentality', drawing on Foucault's (1979) concept of governmentality, is a key theme within political ecology. Governmentality, and its more specific variants of environmentality and eco-governmentality, offer a means of analysing the governing of the conduct of human behaviour, even at the minutiae of mundane practices, beyond the state. As McKee points out,

recent commentaries on neoliberal (or advanced liberal) governmentality have highlighted how endeavours to devolve autonomy and responsibility from the state to an active citizenry represent a form of 'regulated freedom' in which the subject's capacity for action is used as a political strategy to secure the ends of government (McKee, 2009: 470).

This is important for considering how the citizen is regulated even as they enjoy the 'freedom' of consumerism, and especially of 'green' consumerism. Discourse theory offers an analytical approach of engaging with power-knowledge structures whereby what emerges as 'common sense' (for instance, to the consumer looking for an ethical choice) is a product of power, rather than of an objective application of technical knowledge or 'best practice'. To examine this in closer detail, this research concentrates

on a comparison between neoliberal sustainable development and the discourse of *ecological civilization* in China.

Ecological civilization is often traced back to 2007 and Hu Jintao at the 17th National Congress of the Chinese Communist Party (CCP) in 2007 (Heurtebise, 2012). By 2011, it was included in the 12th Five-Year Plan, the comprehensive blueprint by which China plans, to a great extent, its socioeconomic development, touching on all facets of government. By 2013, it had become one of five national objectives. Under Xi Jinping, it has been more coherently codified as a framework for constructing a liveable future. Importantly, it has most recently entered into global environmental governance spaces, as in 2019 with the announcement that the 'theme' of the most important United Nations biodiversity talks, the China-hosted fifteenth Conference of the Parties of the UN Conference on Biological Diversity (UNCBD COP15), will be 'ecological civilization'. Ecological civilization is becoming solidified in domestic governance and increasingly present internationally.

Though 2007 is often cited as the emergence of the term, articulations of ecological civilization by the state apparatus, in fact, predate this. In one of the earliest comprehensive outlines, Pan Yue, Vice Director of the State Environmental Protection Administration, wrote an 'Expert's View' article in 2006 in the Beijing Review titled 'Evolution of an Ecological Civilization'. This often-overlooked articulation is important for its culturally deterministic lines of meaning between Taoism, Confucianism, and the promise of ecological civilization. Most interestingly, the articulation is constructed in opposition to a Westernised interpretation of nature:

We live with Chinese culture, but our modernization drive is based on Western logic. However, it's not a wise choice to copy the Western model of industrial modernization, especially in China, because that model will result in serious conflicts with the environment and resources in such a developing country as China. In this sense, it's necessary to turn to the traditional Chinese culture for a correct guideline in our modernization and our cultural structure and to make the ecological wisdom in the Chinese civilization an important component of the ecological civilization. (Pan, 2006.)

As will become apparent, there is no single definition of an ecological civilization, and in fact its articulation by the Chinese state varies across time and space in often fundamental ways. Nor can it be said that its early equivalences with Taoism, Confucianism, and the rejection of the 'Western model of industrial modernization', are consistent qualities of the discourse across space. It is these *possible* articulations,

nevertheless, that suggest the development of a counter-hegemonic agenda for a sustainable future – one in which connection to and within nature function outside the regulation of market exchange, the institutions of consumerism, and the commodification of nature. It is therefore an essential line of inquiry.

Ecological civilization, its pluralism notwithstanding, is treated as an environmentality, or eco-governmentality, in the tradition of Agrawal (2005), wherein the regime functions as a regulatory framework in which subjects are brought into being (in this case, the 'sustainable consumer'). Regulation, in this sense, is decentred – the subject takes on part of the task of regulating their behaviour in relation to capital, the environment, and their purchasing habits. In Foucault's original concept, he explored how prisoners regulate their behaviour beyond the formal architecture of the prison – how they internalise and subsequently perform the actions of a 'prisoner' as a subject. Political ecology, and many other disciplines and subdisciplines across the social and political sciences, build on this mode of analysis – governmentality – as a way of analysing and revealing the boundaries of governance beyond its formalised institutions, and the ways in which it creates subject positions. This is the means by which neoliberal sustainable development and ecological civilization are analysed.

Political ecological research, and studies of subject positions, often begin with paradoxes, inconsistencies, or, as I argue here, a state of discursive dissonance in which two irreconcilable pursuits are reconciled in a fantasy which, despite its impossibility, is deployed as a means of governing. China has concentrated on the importance of growing its domestic consumption markets and growing the middle class. The aspirational GDP is a key part of the government's legitimacy. At the same time, the government has taken significant steps in trying to tackle the problems of climate change and pollution, in many respects 'learning', in its own language, from the EU's leadership, and in other respects maintaining a unique blend of intervention and market-focused mechanisms. In addition, much of China's external economic policy is dominated by 'sustainable development' as part of its Belt and Road initiative (BRI), which was recently pledged an extra \$124 billion dollars amid revelations that outward investment overall is slowing. This represents a particularly interesting context: the dire need for environmental action, the campaign to be a global 'leader' rather than merely a global 'player', and the related need for economic growth.

The BRI represents an especially important policy through which to examine the role of ecological civilization and wider 'greening' language as recent pledges of BRI increasingly allude the need for sustainability and living in harmony with nature. The BRI, according to the World Bank, includes a third of world trade and over 60% of the global population (World Bank, 2018). Projects have concentrated on the construction the physical infrastructure facilitating global trade, including ports, roads, and processing centres. Between 2013 and 2018, the BRI has been bolstered by 170 agreements with 125 countries, doubling from its original agreements with 64 countries (OECD, 2018: 9). According to President Xi Jinping,

China will actively promote international co-operation through the Belt and Road Initiative. In doing so, we hope to achieve policy, infrastructure, trade, financial, and people-to-people connectivity and thus build a new platform for international co-operation to create new drivers of shared development (Xi, 2017).

Nevertheless, more recently the BRI has attracted criticism for likely environmental impact and the perception of 'debt diplomacy', leading to some economies withdrawing (Kuo, 2019).

As such, China, represents a congruence of factors that make it increasingly central to both global environmental governance and global development. Since Xi Jinping took power, China has contended with multiple domestic and global challenges: the need for development, globally significant domestic oversupply, and environmental pollution, complicated by the likely impacts of climate change and ongoing impacts of desertification. This has produced a particular 'sustainable development' path. At the same time, the fast-increasing middle classes in China emulate Western consumer behaviour, spurred by an eclectic mixture of transnational brands and domestic companies, themselves increasingly looking internationally.

China's size and growing influence, particularly among the global South, means global environmental crises cannot be solved without it. With a post-Copenhagen EU and Trump-era US both lagging in global environmental leadership, China's responsibility to provide normative leadership, already partly realised in its energy policies, is largely externally imposed rather than internally propelled. For this reason, the rhetorical platform China adopts, as well the more fundamental discursive resources available to its 1.3 billion citizens is the key application of the theory developed here: the performativity of sustainability.

1.4. Research Agenda and Structure of the Thesis

Poststructuralist discourse analysis provides the qualitative data that informs this normative research. It builds three corpora of documents (Annex II, figs. 10-14) whose content and context are critically analysed. The research proceeds from two research questions:

1. How are 'green' consumers brought into being in narratives of sustainability transitions?
2. Does China's *ecological civilization* represent a counter-articulation to neoliberal sustainability narratives in its global engagement?

The research aims to make three main contributions. First, a discourse-theoretical account of the emergence of the green consumer as green performance, situating this in the depoliticization literature of post-Marxism. In doing so it identifies the logics by which the 'sustainable consumer', as a subject of sustainability transitions, is governed. Second, the potential for China to represent a counter-hegemonic bloc with its articulation of *ecological civilization* does not fit neatly into hard/soft power, or state/non-state agency. Instead, 'green power' considers the ability of a discourse to shape the global transition to a sustainable system; or, in other words, to offer a social, political and economic imagined future: the system of governance which (re)creates environmental subjects. Finally, the research offers an analysis of China's *Belt and Road Initiative* (BRI) and its increasing role in global fora. This assesses the degree to which China's ecological civilization is embedded within the initiative, how its articulations change as a result, and the state of convergence between these embedded norms and that those of more Westernised articulations of sustainability. This is spurred by the first paradox this thesis began with: environmental and climate 'talk' have increased while in all significant respects these areas are worsening, and even accelerating (UN, 2020).

By beginning with the individualisation of responsibility via the formal and social institutions of ethical and sustainable consumerism, this research project offers a theory of sustainable performativity that helps explain this first paradox. This is the act of sustainability as identity that is grounded in the social practices of consumerism, marketing, aspirations, and distinction-making. With this model, the approach offers a new analysis of the constitution of the 'consumer' as the privileged agent of change in sustainability transitions by focusing not just on the interface between consumer,

consumed, and producer, but the co-option and reproduction of this construct in international regimes. By analysing the global institutional discourses of the UN, its agencies, the World Bank, and others, the research contributes a greater understanding of the ways in which consumerism is constructed not just in the socio-political domain, but the formal domain of politics, where I argue it emerges as a form of common sense: an outcome of the system's inertia more than a process of democratic deliberation.

Within the discourse of sustainable development, consumerism arises not simply as a specific arena of human activity in need of 'greening', but in its own right as a *facilitator* of sustainability transitions. The exponential growth in consumerism will be both sustained and sustainable. This second paradox, therefore, arises where calls for environmental sustainability and consumer society are presented as not just mutually deliverable objectives, but mutually reinforcing – what must be consumed to deliver sustainability, and what must be sustained to deliver consumerism. This brings into sharper focus the normative research problem tackled here: the depoliticising of sustainability transitions through the discourse of 'sustainable consumption'.

I posit that these two paradoxes are not unrelated phenomena. There is clearly a disconnect between what is talked about and more concrete outcomes; and there are contradictions between the identified complicity of mass consumerism in environmental crises, and the construction of consumerism as a mechanism for environmental fixes. Discourse theory presents a way of drawing links between these two phenomena whilst providing a lens through which to analyse the discursive resources drawn on that help sustain them. Environmental crises gain social meaning through language, broadly defined. The kinds of narratives, and the way they are communicated and by whom, play determining roles in how crises, solutions, and actors are understood. In such an approach, language is constitutive *of* social relations, rather than constituted *by* them. The wider networks and systems of meaning, the ways in which consent is organised, are fundamental not just to understanding crises, but formulating responses to them. Which aspects of social and economic relations are taken for granted shapes how responses to crises are seen as legitimate. Consumerism represents one such set of social and economic relations. It therefore becomes a key discourse that seeks to fixate a specific understanding of sustainability which benefits its particular modes of existence. This ranges from the role of consumers in the production of technical innovation to the importance of maintaining exponential economic growth.

However, consumerism is at the same time a socially constructed, transient, and politically contingent set of norms, expectations, relationships, identities, and so forth. This hints at one of the problems in early Marxian literature whereby consumerism has a more or less fixed function within a grand theory of economic relations. Such assumptions serve to universalise a set of social behaviours and afford them a misleading sense of permanency. Instead, building on poststructuralism, this research looks into the local discourse of consumerism where the subject positions, the discursively constructed means of identification, contradict one another. The growing domestic markets, income, and global prominence of China represents such an example where sustainability and development concerns are both of key importance and continually in flux.

Following this introduction, the thesis is divided into six further chapters. Chapter Two contains the literature review, divided into subsections that represent the three strands of literature that are brought together (political ecology and critique, sustainable development, and global politics, with an emphasis on the role of China) and details the gaps in knowledge that lie at the interface of these disciplines, wherein I situate a performative theory of sustainable transitions and the varying articulations of the consumer subject between a Westernised and Chinese discourse.

Chapter Three details the theoretical and methodological framework. In broad terms, I use discourse analysis to analyse corpora of primary sources, situating this approach within the umbrella of critical discourse studies (CDS). In particular, the thesis uses poststructuralist discourse theory (PDT), building on the seminal works of Laclau and Mouffe (2014 [1985]), and the wider, more recent contributions of the 'Essex School' of discourse analysis (Howarth *et al*, 2016; Howarth and Griggs 2012; Howarth 2010; Townshend, 2004; Howarth, Norval and Stavrakakis, 2000).

Laclau and Mouffe's formulation of hegemony requires that 'the two conditions of a hegemonic articulation are the presence of antagonistic forces and the instability of the frontiers which separate them' (Laclau and Mouffe, 2001: 136). In the case of sustainable consumerism and the occlusion of alternative imaginaries, there exist various floating signifiers and the possibility of their articulation by opposing camps. This discursive arena is the focus of analysis here, and the existence of multiple ways of articulating nodal terms like sustainability and development, as well as other elements such as nature, value, and resource, constitute competing hegemonic articulations.

In determining a specific methodology, this chapter also considers the ethics and practicalities of conducting research in China. This presented particular challenges, as well as opportunities, that shaped the research and imposed external limits on what was and was not possible in the field. In particular, issues of translation, researcher embeddedness and reflexivity, and the highly-politicised context are discussed in relation to how these shaped the research journey, while a fuller account of the researcher's reflections are included in Annex I to make more transparent the situated interpretation of these discursive resources.

Chapters Four, Five, and Six form the analytical segment of the thesis. Chapter Four concerns the globalised, neoliberal discourse of sustainability, with a focus on the emergence of the 'sustainable consumer' as a social category. The aim of this chapter is to evaluate the discursive resources of this globalised sustainable development paradigm. In the broader research project, this provides a benchmark for analysing the discursive resources of the ecological civilization framework in China, and the extent to which these converge or diverge, and how China challenges or re-articulates a globalised discourse. This section therefore illustrates the characteristics of a hegemonic economic imaginary in the way of sustainable development. Hegemony is derived from a radicalising of Gramsci's original formulation by way of Laclau and Mouffe, as although 'we may recover the basic concepts of Gramscian analysis...it will be necessary to radicalize them in a direction that leads us beyond Gramsci' (Laclau and Mouffe, 2001: 136).

With this basis, the chapter follows by detailing and situating sustainable consumerism within the broader literature, before referring to the study's findings to illustrate the construction of the sustainable consumer-subject. This section details the results of an interpretive discourse analysis of resources from governmental and inter-governmental sources, international non-governmental organisations (INGOs), and private enterprises. Governmental archives are drawn on to investigate the characteristics of sustainable consumerism as an economic imaginary and regulative ideal, and the ways and extent to which the consumer is called upon as the agent of change. The analysis of private enterprise discourses, using examples from hybrid and electric vehicle manufacturers, considers the construction of the sustainable consumer subject and the aesthetics of spaces regulated by the sustainable consumer agenda. The

section concludes with a discussion of the implications of these findings for the following chapters.

Chapter Five concerns the discourse of *ecological civilization* in China. This chapter builds on a quickly expanding literature that considers China's capacity to articulate a different form of sustainability. However, critical, especially political-ecological, analyses of this remain lacking. Chapter Five therefore considers more fundamental areas of convergence, especially that of the role of consumers and consumerism, to show that base convergences are more significant than the proximate divergences in policy. The deconstruction of this is not to show a 'hidden reality', but to consider the power-laden assumptions embedded in the inertia of the system of governance.

Chapter Six is the final analytical chapter and is effectively the obverse to Chapter Five - it considers the influence of China's counter-articulation of sustainability on a regional and global basis. This primarily draws on China's flagship economic policy of the Belt and Road Initiative as an economically, politically, and spatially significant undertaking where China's hard and soft power influence is called upon and expanded. 'Green power' is the main theoretical tool employed to analyse the extent to which China's strong domestic narrative carries over into the regional and global sustainability transitions, helping establish global consensus in environmental governance. Consumerism and commodification, and the wider development framework these contribute to and rely on, remain the key focus to build a comparison with conclusions from previous chapters. Finally, Chapter Seven offers conclusions and considers the implications of the analysis for the identified knowledge gaps in Chapter Two.

2. Literature Review

The thesis is located at an intersection of disciplinary literatures, themselves often lying transdisciplinary. Three broad themes characterise this: political ecology, international politics, and sustainable development and consumerism. Alongside this thematic literature, too, is the considerable theoretical canon of critical theory, critical discourse studies, and poststructural discourse theory (PDT). A complete analysis of these schools is not possible. Instead, the literature review concentrates on that literature which has itself bridged the relevant disciplines or tackled more directly the research questions this thesis answers.

The second section reviews the relevant background literature that helps formulate the subject of study and provides the normative dimension. This is crucial in locating the study within its broader context. Because political ecology itself represents a diverse field, the review helps clarify where in this mixture a definition can be delimited and helps to distinguish what is traditionally thought of as a subfield of geography from the 'environmental politics' field. As such, the significance of this section is also in highlighting 'the political', and setting the groundwork for the research which is, ultimately, political rather than geographical. Here, I also review the debates in the nature of social critique, and especially where these intersect with political ecology.

Thirdly, consumerism, environmentalism, and performativity arise out of this broad interpretation of the political; as such I draw on literature that highlights the inherently political nature of an otherwise taken-for-granted paradigm. I begin by introducing the key literature on sustainable development with a concentration on revealing its changing nature since the 1987 Brundtland Report mainstreamed the term. I follow this with a detailed analysis of more critical works: refutations of sustainable development per se, but also the broader theoretical works along the Marxist/critical stream which provide a more political-economic critique. A key aim here is to further refine and locate the subject of study in the literature and reveal the gaps to which this study contributes; ultimately it grounds the concept of 'one-dimensional sustainability'.

The final section, *China, Hegemony and Ecological Civilization*, reviews the literature that has concentrated on the ways in which nature, the environment, and sustainability have been understood, conceptualised, and interacted with in realm of global politics. A secondary aim is to establish which actors have emerged in the

literature with a prominent position in determining how environmental issues are managed. This sets the groundwork for this research's key analytical question of the extent to which China emerges as a counter-hegemonic bloc with a fundamentally divergent articulation of 'sustainability' that opens up new spaces and subject positions for society; or the extent to which it rearticulates what amounts to the passive revolution and depoliticization of the environmental movement. Ecological civilization is also reviewed, whilst these discussions are picked up again in Chapter Five.

Due to the continual reflections on theory and therefore the theoretical canon, the literature review cannot fully close the discussions that take place; instead, these are revisited as they are 'used' in the subsequent analysis. In particular, discussions of the consumer subject grounded in works by Bauman, Marcuse, and others, are revisited as they are applied in the analysis of sustainable-consumer subjects in Chapter Four. Nevertheless, the literature presented here marks the initial engagements with key texts and debates that inform the research project to 2017. Because the research sits at the intersection of a number of disciplines, I have structured the literature review according to these broadly defined categories: critique and political ecology (taking account of the discourse theoretical literature); consumerism, environmentalism, and performativity (focusing on the consumer subject); and international politics (with a focus on the re-emergence of China and hegemony/counter-hegemony dynamics). Throughout, the focus is on the common ground between these areas. This captures the background and rationale for the study including its underlying assumptions as well as the more specific elements of the study (unique characteristics of environmental governance in China and emergence of politically contested spaces).

Below, the intersections between these three areas are simplified and rendered in a Venn diagram (figure 1). This is an indication of the cross-over in subject area, either by what the discipline is typically concerned with, or by what it critiques. For instance, ecosystem services are often central to attempts to create markets out of 'nature'. Sustainable development, particularly in the management of commons, adopts the framework to economise ecosystem functionality. Political ecological approaches often critique this process along critical-theoretical lines. Figure 1 therefore approximates relationships between the disciplines by what is argued, countered, and often synthesised. Sustainable development has become a ubiquitous framing of the sustainability transition in intergovernmental organisations and is frequently

synonymous with 'environmental care' in neoliberal institutionalist approaches. Global political ecology, by contrast, focuses on the marginalised, colonised, suppressed, and disadvantaged of such approaches and frameworks. International politics, focusing on China, identifies the broader questions of international relations, whilst the discursive turn has helped challenge the supremacy of the approach of 'great power politics', opening space for cross fertilising knowledge production.

Figure 1: Venn diagram to show intersections of the main disciplines by topic.

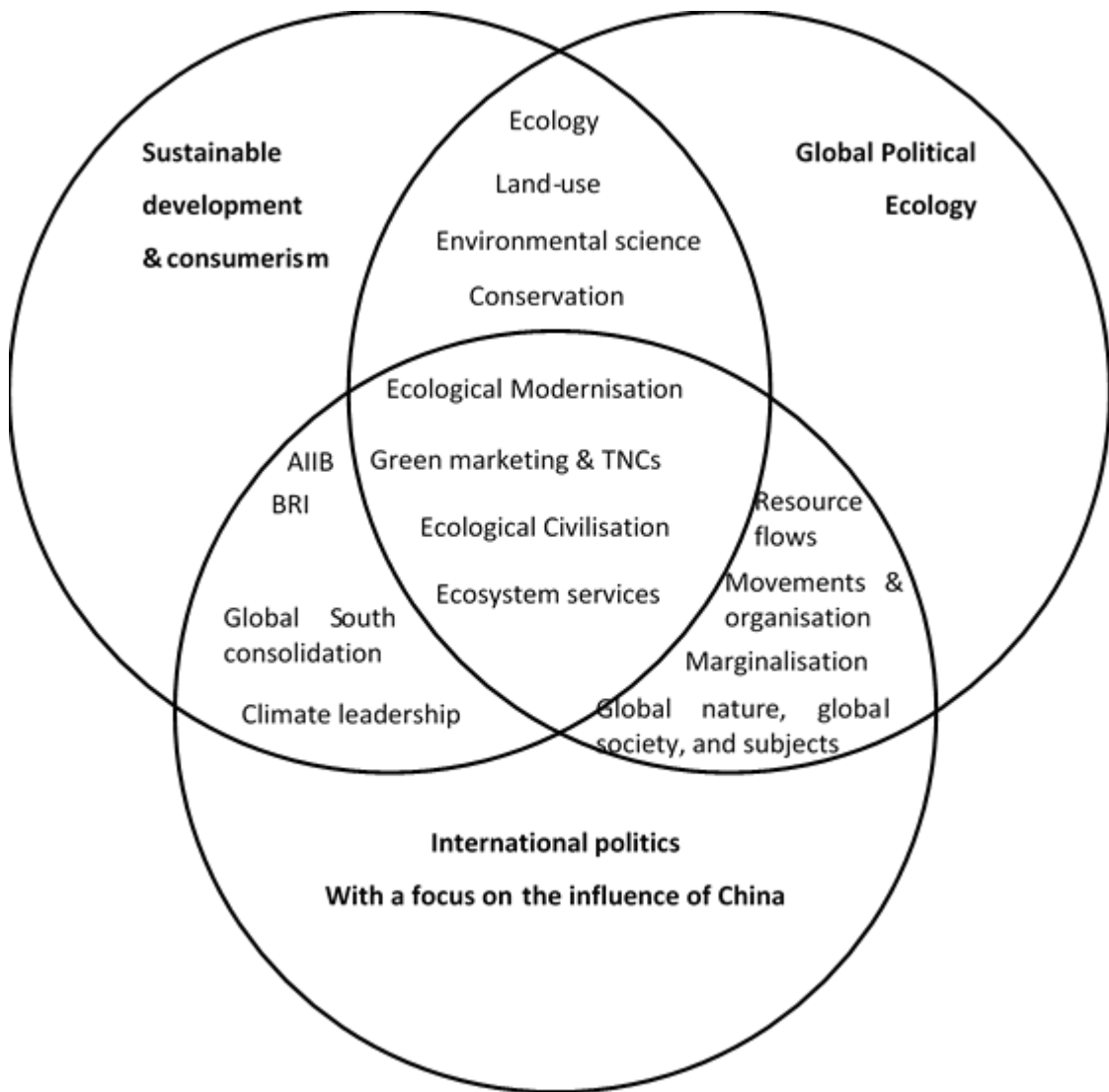
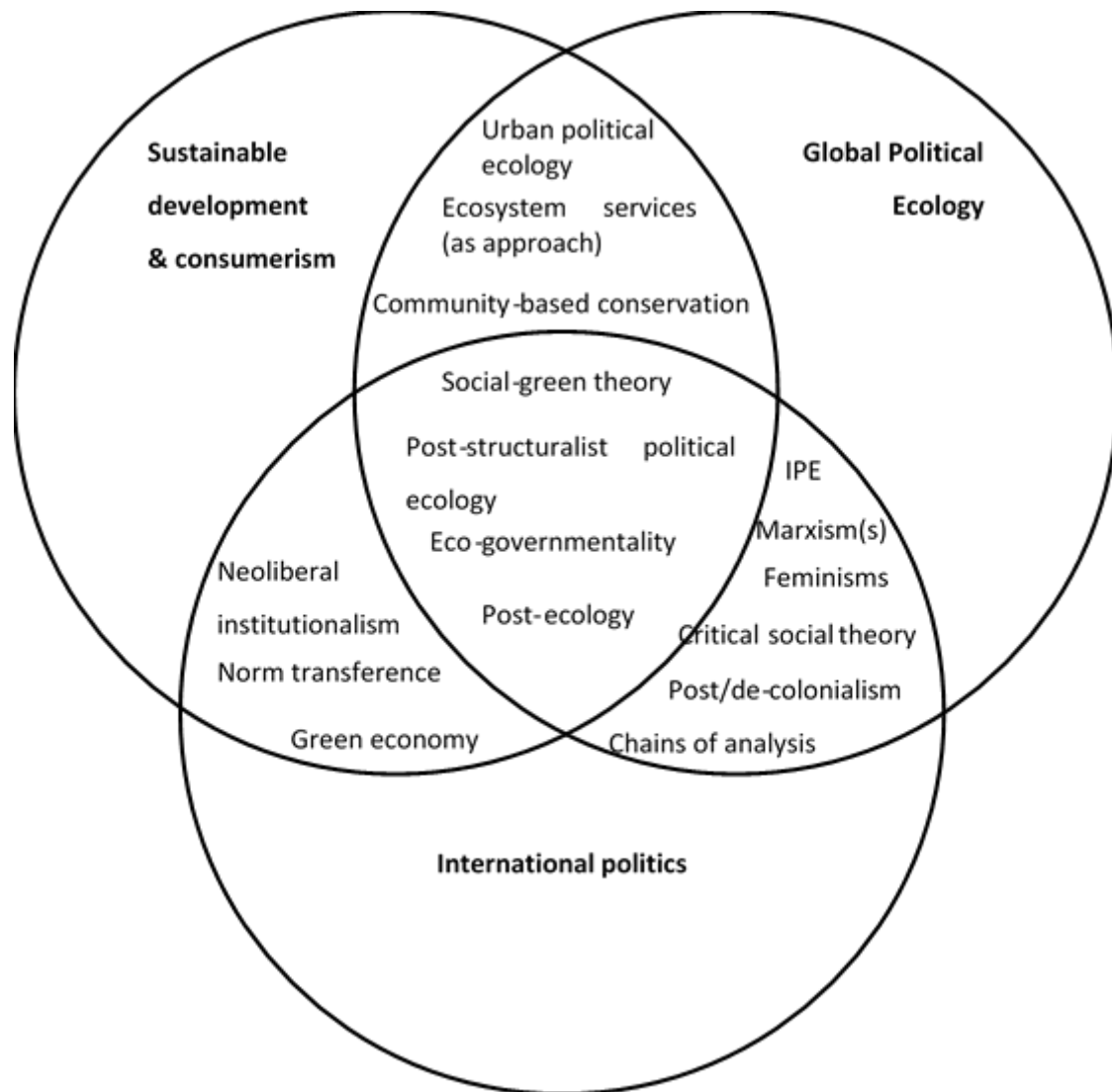


Figure 2 builds on this by showing the overlap in theoretical tradition. This is important for identifying the approach articulated in this research, but also the strong relationship between, on the one hand, positivist, liberal-institutional theories of governance and the emergence of a techno-managerial approach to sustainability, and on the other hand more critical approaches and their focus on wider systems of power,

knowledge, and agency. Sustainable development, as detailed later, forecloses possibilities of radical change, and suppresses local and Indigenous knowledges through the hegemonic imposition of its epistemic claims on nature. By contrast, political ecology seeks to amplify diverse knowledges and practices, and destabilise the knowledge-power structures that suppress them. Meanwhile critical approaches in international politics, such as international political economy (IPE), Marxism, and World-System Theory (WST) have focused on processes of globalised capital accumulation and suppression, drawing attention to the ways in which the movement of goods, capital, people, and other species, have led to highly unjust and inequitable distributions of the benefits and burdens of environmental issues throughout the world.

Overall, the broad traditions of sustainable development and political ecology vary considerably in what is problematised, which determines the point of intervention necessary, and the scale and degree of change required; indeed, what it is legitimate or illegitimate to change. Liberal institutional approaches tend to problematise proximate causes or impacts either side of a given arrangement. For instance, car emissions are problematised in the issue of unsustainable transport. Electric cars emerge as a technical fix to the consumer emissions problem. The wider conditions remain the same while the proximate cause is identified and managed by existing institutions arranged according to existing power relations. Critical approaches, on the other hand, problematise wider systems of power and knowledge, production and consumption, organisation, and marginalisation. In the same problem of unsustainable transport, the cultural meaning of car ownership, the globally distributed impacts of manufacture, assembly, and use, and the vested interests of maintaining the status quo are problematised. Theory thus has a central role in the identification and construction of a problem and a crisis, the framing of which is important in not simply identifying fixes, but in constructing and determining validity and legitimacy.

Figure 2: Venn diagram to show intersections of the main disciplines by theoretical tradition.



2.1. Critique and Political Ecology

This section outlines the key elements that situate the research in the field of political ecology. In doing, the aim is to outline the key tools of critical political ecology, how they have developed in the literature, and how this study has employed them.

The earlier writings on ecology as an emergent area of scientific interest hinted at the inherently political nature of the discipline. As Sears highlighted in 1964, '[b]y its very nature, ecology affords a continuing critique of man's [sic] operations within the

ecosystem' (1964: 11-12). Indeed, as has proved an interesting question, he postulated whether the study of ecology would 'endanger the assumptions and practices accepted by modern societies' (*ibid.*). The 'subversive subject', as Sear's paper was entitled, might thus be understood as an inherently critical project that emerged alongside a new political agenda of the 1960s and 1970s that questioned the 'destructiveness of human behaviour' (Forsyth, 2003: 5). However, as Robbins (2012) argues, the continuing development of 'ecology' as a subject means it is now possible, indeed necessary, to delineate an expressly *political* ecology from an *apolitical* one. Robbins (2012: 13) argues that the difference between these two approaches is:

the difference between identifying broader systems rather than blaming proximate and local forces; between viewing ecological systems as power-laden rather than politically inert; and between taking an explicitly normative approach rather than one that claims the objectivity of disinterest.

This 'explicitly normative approach' is not consistent among the numerous contributors to political ecology, however.

In an important early work on the subject, Blaikie and Brookfield⁸ stated that political ecology 'combines the concerns of ecology and a broadly defined political economy' (1987: 17), which seeks to treat environmental change as an outcome of productive forces and choices in a local context (Robbins, 2012: 15). Greenberg and Park similarly sought to 'link the distribution of power with productive activity and ecological analysis' (1994: 1). Such approaches are instrumental in revealing the inherently industrial basis that forms the dominant human-nature relationship, wherein the former exploits or comes to 'dominate' the latter. Such political ecologies point back to the means of attributing 'value' to 'nature' and provide a useful vocabulary for problematising mainstream approaches to, for example, as expanded on in Chapter 5, the ecosystems services framework in which ecosystems 'provide' for human need and want, and their 'value' thus is external to them. Despite outlining many of its features, Brookfield, nonetheless, demonstrates a weariness to prescribe a top-down 'structural

⁸ Accepting that, for most of his career, Harold Brookfield avoided the title 'political ecologist'; he later admitted that his work has indeed contributed to the field after all, especially in the 1987 work with Blaikie. His earlier works stand as a helpful testament to the underlying political dimensions of ecological research, even when this is not explicitly mentioned (e.g. Brookfield, 1962).

determinism', and cautions against Marxist political economy becoming the default explanation for ecological degradation and environmental burdens.

In Blaikie's and Brookfield's conception of political ecology and its relationship to political economy, poverty and wealth relations can induce environmental degradation (Blaikie and Brookfield, 1987: 48). 'Marginalisation' therefore points to the society and ecology nexus, whereby the marginalisation of people leads to those people inhabiting marginalised land, which becomes a positive feedback loop (Martinez-Alier, 1989). The 'result is hypothesized to be a degraded landscape that returns less and less to an increasingly impoverished and desperate community - a cycle of social and environmental degradation' (Robbins, 2012: 91). Such an approach has clear implications for the importance of development. Following this line of thought, sustainable development seems an essential part of any 'fix' for ecological degradation. Because social relations are integral to environmental problems, a clear agenda for critiquing 'apolitical' ecologies and bioenvironmental approaches emerges in which 'pure science' is revealed at the very least as insufficient, and arguably power-laden in its omission of social and political struggles.

Similarly, Peet and Watts begin with the principles of political economy, but they take this approach further in their attempt to explain local movements as responses to 'the tensions and contradictions of under-production crises' and understand 'the discursive character of their politics' (1996: pp.38-39). In such work, a strand of thought within political ecology that pays closer attention to the role of discourse and narratives is clear. As Watts (2000) further elaborates, 'knowledge, power and practice' become central categories of analysis 'to understand the complex relations between nature and society'. This resonates clearly with a more explicitly critical social approach in which the deconstruction of the power-knowledge nexus lies at the heart of the political-analytical method.

Authors such as Sullivan (e.g. 2017) further delineate a 'critical political ecology', whereby the operation of revealing the role of power in the formation of policy, via the ways in which 'power structures the ontologies' of environmental and economic governance, is central (Sullivan, 2017). Stott and Sullivan (2000) capture this orientation of political ecology as 'the political circumstances that forced people into activities which caused environmental destruction in the absence of alternative possibilities' (Stott and Sullivan, 2000: 4). In such an approach, the normative drive becomes about:

illustrating the political dimensions of environmental narratives and in deconstructing particular narratives to suggest that accepted ideas of degradation and deterioration may not be simple linear trends and tend to predominate. (*Ibid.*: 5).

Here, the emphasis is squarely on the role of narratives in normalising particular modes of relating to nature, and thus legitimising means of destruction and exploitation; or, conversely, conservation, value investment, and so forth. The transience and contingency of these narratives is central; indeed, Sullivan remarks that the site of 'politics' lies at the borders of the power-structured ontologies. However, the benefits of discourse analysis are often occluded from even those perspectives which privilege the role of narratives and the manner of representing nature, the environment, crises, and other such concepts.

I argue that such an approach cannot afford to occlude discourse theory as a means of understanding and organising critique. Laclau and Mouffe's discourse theory (2014, among others), and the Essex School more generally, provides a different grammar for understanding essentially similar processes - the location of the political frontier; the emphasis on deconstruction; the role of hegemonic forces; and 'power' in the Foucauldian sense to mention a few. In addition, critical discourse studies can help locate the inherently political project of this approach to political ecology, and shares a number of questions and goals such as how this project can further a radical democratic agenda wherein the *re*-politicisation of increasingly 'taken for granted' processes might be realised.

Much has been written about 'combining' critical social theory and green thought; although, as always, there are important points of difference. For the purposes of situating this theoretical framework, I suggest works in this field can be broadly split into two parts: in one, the revealing of critical theory's green credentials or capacity for green critique, whereby a space for a 'green' critique tends to arise out of or exist alongside a social critique; and, in the other, the potential for a more discrete green theory to use the 'tools' of critical theory. The distinction is important insofar as revealing which theoretical tradition serves as the philosophical basis, but also how this relates to epistemic discourses of the environment, such as deep ecology and bioenvironmental approaches which stress geophysical boundaries, limits, and horizons, and market-liberal and social-green approaches where the (political) economy is of central concern (see, for example, Clapp and Dauvergne, 2013; Dryzek, 2013). Both critical theory and

green theory represent broad and diverse churches and in practice applied uses of each have defied stringent labelling and categorisation - a positive thing whose problematisation is not the purpose of this section. Nevertheless, it is important to locate this theoretical framework in the relevant ontological and epistemological approach.

Radical democratisation represents a broad and growing body of literature, and an extensive review is not possible here. However, I base this study's interpretation primarily on the work of Mouffe and other post-Marxists. Therefore, I define radical democratisation broadly as occurring through the engagement and participation of a politicised citizenry that contributes to their own and society's self-constitution, and the fulfilment of two base conditions: the continual extension of the ethico-political principles of 'liberty' and 'equality' (Mouffe, 2005), and the self-grounding of the democratic project (Rancière, 2006: 41). Radical democracy thus distinguishes itself from other systems through the insistence on a continual state of agonism (Mouffe, 2005), and from contemporary-liberal democracy by the removal of constraints that demarcate legitimate, formalised spheres of contestation and spaces of politics (Ingram, 2006). Norval comments that 'contemporary radical democrats deconstruct rather than reject the liberal tradition' (2001: 588, see also Lloyd and Little, 2009: 2). This is an important basis for this study, where the liberal tradition of democracy is not viewed as inherently problematic, but merely incomplete. It is clear that a more radical position than the fundamental liberal concept of equality and freedom for all is not possible (Mouffe, 1995); the point, therefore, is to engage with those extant systems which, in principle, exist for the realisation of this ideal, and through critique to show their shortcomings in this realisation.

Radical democracy therefore seeks to engage with the democratic project on the basis of a pluralistic emancipation in which various identities, those extant and those yet to be realised, replace the universal revolutionary identity of the working class. For this project, it is clear how in the struggle to hegemonize an articulation of sustainability the abandoning of a fundamental and universal working class/bourgeois dichotomy is essential. This grows in part out of the crisis in Marxism that Laclau and Mouffe highlight as the context for their post-Marxism; the erosion of class identity in advanced post-industrial societies. But also, as sustainability concerns phenomena spanning the local to the global, engagement with localised networks - such as indigenous land rights in South America or campaigns for clean air in urban China - the abandoning of *a priori*

identities is essential for any theory seeking to understand, explain, or indeed reveal, the common identification that organises local-global networks.

For radical democracy, then, a central aim concerns re-politicisation and re-engagement with social groups. The demarcation of official, legitimate, and regulated places of 'politics' by liberal representative democracy is therefore a key area of critique. For sustainability, engaging with the practice of sustainable living concerns, for the consumer-subject, particular purchasing habits reinforced by constructed spaces of 'green' consumerism – from the 'smart city' or the 'ethical city', to more specific point-of-purchase media and imagery. Speaking on global south climate change adaptation, President of Friends of the Earth International, Karen Nansen, at the UNFCCC COP23 (2017), alluded to the crisis in democracy by arguing that 'People's power is the answer – it's time for governments to recognise people's demands', whilst also highlighting that 'globalised systems control decision making, such as food and energy systems'. The problem is further compounded by the fact that 'this [climate change] crisis is inextricably linked to other crises that humanity is facing', says Nansen, 'to fight climate change and linked crises we need to talk about root causes'. This compounds the issue further. A central aim of the political ecological approach taken here is to show the complexity of local decisions and move away from simplistic, proximate causes to complex, root causes.

However, recognition of the simultaneity of the democratic deficit with the ongoing need for the involvement of citizens in sustainability transitions raises the key question of how to address the problems inherent to a narrowly defined, liberal-representative democracy. Radical democratic principles represent the normative scope of this thesis, therefore, but the question of how to engage in a critique of existing systems so that this might be realised is essential. Mouffe argues that 'Such a perspective does not imply the rejection of liberal democracy and its replacement by a completely new political form of society', as revolutionary theories entailed, 'but a radicalization of the modern democratic tradition' (Mouffe, 1995: 1).

2.1.1. On science

Poststructuralism, and aspects of critical theory more broadly, have often been met with the charge that they are unscientific; the abandoning of the objective positioning of the researcher is tantamount to abandoning the scientific ideals of detachment, repetition, and universalism. On the other hand, proponents of positivism are accused of adopting

subjective positions and through their failure to engage with the contingency of their placements produce more limited conclusions than a transparent engagement with ontology with produce. The classic rebuttal of Donna Harraway provides a useful departure point here; writing in *Feminist Studies*, 'situated knowledges' provides a means of understanding (and making clear through transparent discussions) *what* subjectivity is comprised of in a researcher's particular approach and gaze (Harraway, 1988). Harraway's strength of argument lies in the commitment to 'faithful accounts of the world', whilst arguing that researchers '...become answerable for what we learn how to see' (*ibid.*).

Harraway's argument requires that, rather than the pretence of objectivity, the personalised subjectivity of the researcher is made clear. This is certainly the approach of this research in the social sciences (researcher reflections are offered in Annex I). However, in the case of natural sciences, the paradigm of objective, positivist science is owed a considerable debt for the (albeit partial) success of bringing environmental crises on to the attention of world institutions and political bodies, though this should not obscure the importance of social mobilisations in achieving this. Whilst science has clearly been important, however, it has generally been social movements and networks that have established its importance and enabled the recognition (such as it is) of crisis.

This points to, as outlined earlier, the distinction between the material and the social in discourse theory. As an example, Robbins (2012) highlights the process of desertification, which incidentally represents a significant issue in the complex state of air pollution in Shenyang (where initial fieldwork was carried out) and other Chinese cities. On the one hand, desertification can be thought of as a social construct; from the scientific categorisation of land that gives 'desert' meaning, to the recognition of the expansion of these areas as a 'crisis', an inherently social phenomenon (in the absence of society there is no anthropic 'crisis'). On the other hand, referring to desertification as a social construct risks downplaying its real risks to people and communities, as well as its explanations in which human activities are at least partially complicit. Revealing the ultimate causes of such issues (e.g. global, marketised influences on land-use change) rather than their proximate causes (e.g. particulate matter transport from desert regions to urban regions) often requires recourse to natural sciences to trace local issues through chains of causality.

The issue is not unique to environmental and climate events and crises. Sokal⁹ puts this somewhat succinctly in his berating of the constructionist turn in the humanities and social sciences: 'Theorizing about the 'social construction of reality' won't help us find a cure for AIDS or devise strategies for preventing global warming' (Sokal, 1996: 63-4). Sokal's grounding of his critique in his care for such issues and his bemoaning of the Left's abandonment of science notwithstanding, the picture he creates of social constructionism is problematical for the simple reason that he conflates specifically *social* reality with reality in general. Laclau and Mouffe, for example, specifically draw a line between a material event (the dropping of a brick, the warming of the planet) and the way that society *applies meaning* to this. The need for such a stance is clear from Sokal's own critique; 'global warming' remains a contested political issue.

Tim Forsyth puts this problem succinctly: '[m]any environmental activists and scientists argue that climate science is beyond politics, while climate change deniers claim that the science is above all politically motivated' (Forsyth, 2015: 103). In a discussion of integrating science and politics, Forsyth outlines his key argument that 'scholars should ... always consider how politics and ecology mutually shape each other, rather than assuming that either of these terms is fixed' (*ibid.*). This begins, then, with a recognition of the co-development of our understanding of politics and science. Doing so, Forsyth argues, means researchers are 'best placed to address urgent environmental problems without pre-fixing either facts or norms' (*ibid.*). I interpret this in line with broader aims of this research to limit *a priori* assumptions about which types of knowledge are best placed to make sense of a given environmental crisis. A key example of this is again air pollution in Shenyang, China, where a number of scientific studies have outlined, for example, relationships between air pollution and mortality, the changing makeup of air pollution itself, historical trends of increases and decreases of certain pollutants, among many other things. On one hand, this provides new avenues

⁹ Sokal's infamous 'hoax' has done the most to demonstrate this view, in which the physicist sought to deride the French school generally by submitting a nonsensical article on the 'hermeneutics of quantum gravity' to the journal *Social Text*, which was not peer reviewed, eventually appearing in a special issue *Science Wars*. It has also served to ensure Sokal's name is tied to the domain he vehemently criticised. His 'argument' is considered here as an oft-cited flashpoint of the 'science wars', rather than to afford his contribution any particular merit to critical theory. (See Derrida, 1997 for a discussion.)

of critical exploration whilst simultaneously revealing the politics of science. For instance, one study showed a causal link between PM2.5 pollutants and increased mortality from malignant tumours (Li *et al*, 2018; see also Yang *et al*, 2020), most significantly in summer months – a pollutant that was historically not recorded officially, and reshapes the received wisdom that pollution is significant mainly in the winter (due to increases in energy use). At the same time, however, the significance of air pollution remains a discursive matter. The 'experiential element' shows how everyday experiences of air pollution shape local understandings of air pollution and have an impact on the types of regulations adopted, and what is viewed as a success. Moreover, the revealing of PM2.5 as a significant cause of mortality, a decidedly 'natural sciences' study, aides a political ecological study: PM2.5 is primarily a product of increased car usage (sulphur dioxide and nitrogen dioxide). Understanding the cultural, social, and political economic factors for increased car ownership and use, such as an expanding middle class where the status of car ownerships symbolises 'arrival' in a particular socioeconomic status, is evidently important for identifying ultimate drivers of pollution (including global markets and consumerism) from proximate causes (emissions from tailpipes). There are clearly significant co-benefits for positivistic natural sciences and political ecological inquiry if the normative aim is the reduction of environmental harms.

There remains, however, a dominant fear that allowing for the social construction of the environment risks downplaying and removing the legitimacy of important scientific knowledge about the environment. Such science has been instrumental in revealing the scale and depth of the ecological crises we face. Dunlap and Catton argue that the constructionist critique risks 'global change' appearing as 'little threat to the future of our species' (Dunlap and Catton 1994: 23). As Demeritt highlights, such lines of argument have brought 'even that arch iconoclast Bruno Latour' to question '[whether] I was wrong to participate in the invention of science studies' (Demeritt, 2006 and Latour quoted in *ibid.*). Demeritt goes on to argue that much criticism, particularly that of Sokal (1996), arises from a misperception of what constructionism is, assuming its logical conclusion amounts to the argument that 'the laws of physics are mere social conventions' (Sokal, quotes in *ibid.*). As Laclau and Mouffe highlight, the social constructionist critique need not entail the removal of a material, objective world: a brick falling occurs outside of our ability to think about it; the planet heats up regardless of what metaphors we employ or 'phony science' is used. Sokal's argument infers that the

construction of the *meaning* of these events is somehow synonymous with the construction of the events themselves. The warming of the planet as a result of human action cannot be denied by a constructionist critique, but the various articulations of what this *means*, not to mention the powerful discourses that refute this claim, clearly create a space for a constructionist critique and, more specifically, a discursive approach whereby the hegemony of a given articulation becomes the logic for action.

Within political ecology, an agenda for the critique of scientific categorisation is also made. Woolgar, for example, makes the point that 'nature and reality are the by-products rather than the predeterminants of scientific activity' (Woolgar, 1988: 89). In this line of thought, social antagonisms arise as 'struggles over ideas about nature, in which one group prevail[s] not because they hold a better or more accurate account of a process ... but because they access and mobilize social power to create consensus on the truth' (Robbins, 2012: 128). This has clear reflections of Foucault and arguably Laclau and Mouffe's theory of the social. I identify this as a problem in reconciling the clear need for scientific evidence about the environment (whether socially constructed or not, its impacts on people and communities are real, as are human impacts on ecological processes), with a social ontology in which unadulterated access to an objective world is impossible. The purpose of this section is not to try to reconcile this on a universal basis, but to outline the approach this research project adopts for the sake of critical clarity.

2.1.2. Sustainability transitions and political ecology

This thesis is centrally concerned with the resources made available by which people self-govern their behaviour and, therefore, may understand their behaviours, actions, and selves, in relation to n/Nature under conditions of sustainability crises and in imagining their fixes. It is focused, therefore, on a liminal state wherein competing visions know of, interpret, and represent a given crisis *and* its solution(s). These are typified as 'sustainability transitions' in a broad sense: discourses that are placed to let people know what is wrong, and what is necessary to fix, avoid, or transcend it.

Critical theory broadly is well versed, perhaps uniquely so, in the conceptualisation of such transformations. Gramsci's central ideas are canonical in this sense: the survivability of fundamental aspects of a given system are contained in his appropriation of the term 'passive revolution' (Gramsci, 2003: 59; 106-114). Gramsci contends, referencing Marx's Critique of Political Economy, that

The concept of “passive revolution” must be rigorously derived from the two fundamental principles of political science: 1. that no social formation disappears as long as the productive forces which have developed within it still find room for further forward movement’; 2. That society does not set itself tasks for whose solution the necessary conditions have not already been incubated, etc. (*ibid.*: 106.)

Gramsci’s argument paints a pessimistic view for sustainability transitions: while technical developments may expand in innovative ways, fundamental social forms will remain. This is in a context where even the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) authors argue in *Science* that:

Despite the severity of the threats and lack of enough progress in tackling them to date, opportunities exist to change future trajectories through transformative action. Such action must begin immediately, however, and address the root economic, social, and technological causes of nature’s deterioration. (Díaz *et al*, 2019.)

In this assessment, transformations must occur concurrently across economic, social, and technological dimensions, while the political economic inertia maintaining a given social formation remains unproblematised and the social relations of production do not represent obstacles to realising such a transformation.

Sustainability transitions enjoys its own literary canon. According to a comprehensive review by Markard, Raven, and Truffer, the field has increased in diversity of perspectives and quantity of publications, encompassing the four broad categories of transition management, strategic niche management, multi-level perspective, and technological innovation systems (Markard *et al*, 2012). The authors define sustainability transitions as:

long-term, multi-dimensional, and fundamental transformation processes through which established socio-technical systems shift to more sustainable modes of production and consumption.

The ‘multi-dimensional’ nature of such transitions is of direct relevance here, as the thesis develops the argument that (neoliberal) sustainable development is concerned with a singular ‘dimension’: that of consumerism in the Marcusian sense. What distinguishes these approaches is a different conception of dimension.

Markard *et al* define these dimensions as the ‘technological, material, organizational, institutional, political, economic, and socio-cultural’ (*ibid.*: 956), which reflects similar categorisation by Penna and Geels (2012). In Penna’s and Geels’ (*ibid.*) valuable analysis of issue life cycles, the progress of an ‘issue’ develops dialectically

between industry and other actors across these dimensions, which are brought into the picture at different points in the issue's development. Industry remains the central node around which the issue life cycle develops. This is important for considering the inherently social nature of the development of an 'issue' of socioenvironmental concern (air pollution is provided as the case study). In the final analysis, however, the authors do not consider that what is being acted on by industry in its 'greening' is this 'issue' at the end of a complex social dialectic of multiple diverse actors highly abstracted from its physical environmental condition. The question, therefore, is to what extent does this social artefact reflect the material environmental issue? Industry greening, which must necessarily engage with a socially constructed issue that emerges from a complex of actors across multiple dimensions, is not necessarily greening in terms of a *functional* sustainability, but one derived from a long process of re-articulatory practices by which the 'issue' gains ever-new meaning.

This is demonstrable in the case study of American cars and public perception of air pollution that the authors draw on (*Ibid.*: 1004-1014). This provides valuable insights, but ultimately the study is cut off in 1985 'because policy makers and the public perceived the installation of the three-way catalytic converters as a satisfactory solution' (*ibid.*: 1005). Crucially, the issue of air pollution was not *solved* it was *perceived as such*. In fact, the Union of Concerned Scientists warned in 2008 that cars, trucks, and buses remain 'a major source of air pollution in the United States' which 'carries significant risks for human health and the environment' (*ibid.* 2008). Moreover, Stewart *et al* show how 'respiratory problems are correlated significantly with pollution levels' in the US and the effects are 'more serious for specific subgroups based upon sex, ethnicity, poverty, and age' (Stewart *et al*, 2015). The public perception of a solution (the social 'being' of a sustainability issue) is, in this case, detached from the *functional existence* of the issue and the unjust distributions of its burdens in society. Such an interpretation of a sustainability transition risks, therefore, assuming a solution has been found even if in reality the 'issue' has merely been reframed or its impacts moved territorially to communities structurally prevented from voicing concerns. The model, therefore, also relies on the assumption that actors across the 'dimensions' have a just and effective influence over the issue lifecycle. This is relevant to observations from Avelino *et al* who point out, learning from a special issue on the politics of sustainability transitions, that 'transition research sometimes adopts a shallow relational ontology of 'the social' and

'the material', without explicitly accounting for 'the political' (Avelino *et al*, 2016: 560). This points to an important space in which political ecology and critical geography broadly can contribute and, in other ways, learn from research on sustainability transitions.

If instead of separate 'dimensions' in Penna and Geel's model, politics, business, industry, and so on, are seen as interconnected *domains* then, by contrast, *dimension* in this thesis refers to a particular construction of an issue that remains stable *across* different domains. That is, they share ontological and epistemological assumptions about what the 'issue' fundamentally is a problem of. Sustainable consumerism, as detailed in Chapter Four, represents a dominant dimension due to the resilience of the philosophical foundations of the premise that particular consumerisms will resolve sustainability crises, and are therefore inherent to a sustainability transition. Such contributions within the expanding literature on sustainability transitions (as socio-technical transitions) outline the importance of continued study particularly of the dialectic life cycle of an 'issue', the response this leverages from industry together with enabling policy landscapes, and, crucially, how public perceptions of 'solutions' relate to *actually resolved* sustainability issues.

Despite the relevance of this to political ecology and political economy, as Newell (2020) argues, the 'perspectives and insights from Global Political Economy (GPE) have yet to feature significantly in the study of sustainability transitions', and (global) political ecology builds substantially on the tools of that discipline (Neuman, 2009). Newell may, however, be understating even his own work on the issue in applying a political economics lens to discuss the relationship between neoliberalism and socio-technical transitions drawing on a case study of energy in Kenya:

The socio-technical landscape provides a point of departure for analysing the ways in which neoliberal principles of energy governance have been advanced through the institutional power of international finance institutions exercised in partnership with state actors. (Newell and Philips, 2016: 40)

This helps draw lines between sustainability transition research focused on the socio-technical landscape and those more concerned with the implications of power and knowledge. Lawhon and Murphy, for instance, highlight that 'Socio-technical transition studies and political ecology have overlapping interests and approaches in that both explore human-environment relations and their consequences, and include descriptive and normative components'. Although they present important critiques of the field, they

suggest human geography and political ecology are well placed to learn from and contribute to the spatial, temporal, and scalar characteristics of sustainable development and sustainability transitions.

2.1.3. The Post-Ecological Era

Blühdorn and Welsh define post-ecologism as:

an era in which the historically radical and transformative elements of environmental movements and eco-political thought are blunted through mainstreaming and have been reconfigured by comprehensive cultural change. (Blühdorn and Welsh, 2007: 187.)

At least for now, post-ecologism as a term remains largely within academic literature but alludes to the more general condition of the de-radicalising of eco-politics, and the resilience of consumer capitalism in the face of crisis. In this sense, post-ecologism is not new. Gorz wrote in 1980 that capitalism merely assimilates the 'ecological necessities as technical constraints' and adapts to overcome these with new 'conditions of exploitation' (Gorz, 1980: 3). Not dissimilarly, Žižek's contributions to ethical consumerism outlined the fundamental problems of awareness-branding that highlights a particular 'wrong' whilst still participating in the complicit system of late global capitalism (see particularly Žižek, 2009). Post-ecologism, therefore, can be understood as a more specific articulation of the post-political or post-democratic paradigm (cf. Blühdorn in Wilson and Swyngedouw eds., 2015).

In particular, Swyngedouw's seminal works in urban political ecology have perhaps done the most to apply, among others, Žižek's (2006), Ranciere's (2001), and Mouffe's (2005) arguments of the post-political and post-democratic to a geography of urban space. Swyngedouw sums up the subsequent identification of the necessary political moment:

To the extent that the current post-political condition that combines consensual 'Third Way' politics with a hegemonic neo-liberal view of social ordering constitutes one particular fiction (one that in fact forecloses dissent, conflict, and the possibility of a different future) and reveals its perverse underbelly each time it becomes geographically concrete in the world, there is an urgent need for different stories and fictions that can be mobilised for realisation. (Swyngedouw, 2009: 13.)

Viewed in this way, post-ecologism shares with the post-political a similar take on an era 'both haunted and paradoxical' in which '[e]verything, so it seems, can be aired, made visible, discussed, and rendered contentious' (Wilson and Swyngedouw, eds.,

2015: 2). As Wilson and Swyngedouw broadly define it, the post-political (and its variants) refers to how the 'political – understood as a space of contestation and agonistic engagement – is increasingly colonised by politics' which is understood as 'technocratic mechanisms and consensual procedures that operate within an unquestioned framework of representative democracy, free market economics, and cosmopolitan liberalism' (*ibid.*: 6). Post-ecologism captures this phenomenon (or these phenomena) with respect to the erosion of sustainability as a site of political engagement, and its replacement by a formalised institutional politics that imposes the limits of implications

I argue this depoliticising occurs on at least two levels: first, the limits on what unsustainability is *allowed to be a crisis of* – frequently simplified proximate causes rather than globalised systems; and second what this crisis is *allowed to entail* in terms of change. These two levels are closely connected: the initially-imposed conditions of crisis determine the permissible 'fixes' available.

As such, post-ecologism aims to talk about the coincidence of success and failure in the ecological movement. Rather than focusing on anti-environmentalist marginalisation, it seeks to understand an almost opposite phenomenon: how ecological concerns became centre stage in mainstream politics, whilst concurrently failing to derail any of the key principles underlying the dominant economic imaginary. The underlying paradox of this research project, the increased talk but continued inaction, is therefore formalised into a coherent conceptual framework.

Writing in a European context, Nikel and Reid posit this as 'the comprehensive success of the environmental movement and its comprehensive failure' (Nikel and Reid, 2006: 133). Blühdorn similarly concentrates on the importance of the EU, for example leading up to the 2009 Copenhagen Summit (COP15) (Blühdorn, 2012). Here, he maintains that 'beyond the green rhetoric, the key actors' primary objective is not really to achieve radical change, but to defend and sustain established practices' (*ibid.*). This further alludes to the paradox articulated in this research project; the simultaneity of 'green rhetoric' and failure to act. However, while Blühdorn is right to highlight the objectives of the key actors in this way, as is argued in more detail later, it is problematic to draw a line between what is alleged as 'green' on one hand (the 'rhetoric'), and what is deemed genuinely sustainable on the other without articulating how this division is calculated.

As this indicates, most post-ecological research has tended to concentrate on European eco-politics (e.g. Blühdorn and Welsh, 2007; Blühdorn, 2009; Zeyer and Roth, 2013), and occasionally specific instances of formalised interstate eco-politics (e.g. Blühdorn 2011; 2012). While important in their own right, I suggest this concentration is problematic in two ways: first, its geographic limitation; and second, the potential confirmation bias of affirming the existence of depoliticised (de-political) discourses in the demarcated spaces of 'politics' of those very discourses (i.e. locating depoliticised discourses of international sustainability in the institutional frameworks created by those discourses). Taken together, these problems risk writing localised, regionalised, and global-south forms of political struggle out of the post-ecological paradigm. This critique invites two considerations: how to expand the post-ecological paradigm beyond the Eurocentric concentration, and how to engage with political struggle from the bottom-up. It is important to note those efforts that have been made to engage with the latter of these problems, and Zeyer and Roth (2013) set out a convincing framework from a public understanding of science perspective in which a discursive psychological approach enables them to engage directly with 'discourse in the making'. Although very localised, the model, as they outline, 'may well be generalizable', and they conclude that post-ecologism 'is not an active orientation toward materialism and hedonism' but rather 'a reaction to a lost locus of self-control in a common sense-oriented inner and outer world' (*ibid.*). This raises the question of loci of control, self-perception, and agency; all of which serve to muddy the waters of what has elsewhere in the literature been simplified.

This research project, therefore, utilises the conceptual framework of the post-ecological era and applies it to more internationalised discourses of sustainability, while also digging deeper into the social articulations of sustainability through a localised case study. In particular, sustainable consumerism is regarded as an instance of the performative behaviours that contribute to the 'strategies of *simulation*' of acting sustainably (Blühdorn, 2013). Blühdorn identifies this form of politics in 'advanced post-industrial societies' (*ibid.*), and the literature generally makes little mention of this mode of eco-politics in emerging economies. This research therefore investigates the sustainability agendas of China, looking primarily for instances where this form of politics has been replicated, reformed, or countered in a key global actor. If we are moving (or indeed have already moved) into a post-ecological era, it stands to reason

that the geographic distribution of its identified features and discursive resources is essential.

I argue this is essential for at least one key reason: global South countries have become increasingly important actors, voices, and observers of ecological crises. In the case of the latter, arguably much more so than post-industrial societies whose geographic location and greater political and technical resilience reduces, for now, exposure to existing crises. A post-ecological era defined in and by the European academy risks two things in this line of thinking: first, failing to consider the radical forms of eco-politics extant in, for example, South America (for example, Rocheleau and Ross, 1995; Rocheleau *et al.*, 2001); and second, reproducing the problem of Western knowledge production in which 'what happens here' is assumed to reflect 'what might happen there'. The former of these opens up a broader research agenda than is considered here in the case of China, but is a necessary consideration, nonetheless. The latter calls into question how we produce ecological and sustainability knowledge.

2.2. Consumerism, Environmentalism, and Performativity

Environmental issues have featured in marketing research since at least 1969 (Leonidou and Leonidou, 2011), with the number of publications increasing sharply in recent years, alongside a 'greater maturity and rigour' (*ibid.*). At the same time, sustainability research has broadened topically to encompass diverse areas and sub-disciplines, from supply chain management, to information systems, to accounting (McDonagh and Prothero, 2014). In spite of this quantitative and qualitative expansion, critical considerations remain underexplored, namely the problematisation of 'green marketing' (and its related concepts) and its deconstruction as a politically constituted discourse. Elsewhere, much has been written on topics such as consumer fetishism (Goodman, 2004), identities (Griskevicius, Tyber and Van den Bergh, 2010), space and moral distance (Chatterjee, 2003), ecological citizenship (Dobson 2003), among other important themes. However, what remains lacking is an evaluation of subjects and subjectivities, and politically-contingent constructions of 'sustainability' in discursive processes.

Bauman's widely-cited sociology of consumerism, *Consuming Life* (2007), distinguishes consumerism as the principle propellant and coordinator of modern life. *Homo eligans* (*ibid.*: 42, 61) emerges, in Bauman's 'consumer society', to reflect the 'the indivisible sovereignty of the unencumbered subject; a sovereignty which tends in

turn to be interpreted as the individual's right to free choice'. Here, if only in this sense, Bauman draws clear parallels with Marcuse: the *one-dimensional [hu]man* belongs clearly to that species of *Homo eligens*, 'choosing [hu]man'. Both concepts live in similar contexts and are interpolated in similar ways. However, while Marcuse's *one dimensional [hu]man* is constrained by a relentless modernity of displacement, alienation, and economisation, *Homo eligens* is set free by it; but the aesthetics of choice and freedom obscure, whilst rendering manageable, the costs of 'progress'.

For Marcuse, a consciousness of exploitation arose as a consequence of its experience – the *imagination au pouvoir* was available to the individual who could imagine a better life. In a more orthodox Marxian sense, collective action could arise as a consequence of this 'revealing' of the base identity obscured by a totalising modernity. Bauman's *Homo eligens* is less able to recognise their exploitation, and particularly their exploitation of others. Their consent to be governed in this way is continually reaffirmed by their seeking of the apparent opportunities, choices, and freedoms that modernity has placed on their horizons. Their exploitation of others is not hidden so much as it is neutralised as a point around which to organise and protest by the availability of care as commodity, from a choice of charity donations to 'ethical' goods. The recipient, constructed by the charitable endeavour, awaits modernity's reach as it is extended from the 'haves' to the 'have nots', where sleeper entrepreneurs await activation by capital.

The formalising of care for market externalities, from exploitative labour conditions to environmental destruction, enables hegemonic discourses to sanction forms of care and cleanse protest symbology of its capacity to affect change. The aesthetic, meanwhile, is captured as a saleable identity, often marketed to those whose collective action engineered the meaning of the original articulation, from Doc Martins to Keep Cups.

A deeper reading of consumption borrows from a strong scholarly history in critical studies of consumerism, going at least as far back as Marx's *Capital* and the fetishization of commodities, and the 'distancing' between the consumer subject and the (social and environmental) conditions of production. Adorno takes this further in the culture industry thesis, in which he posits that the ever-encroaching interests of capital and an individualised consumer society constitute a 'total system' of reproduction. As Biro (*in* Biro, ed., 2013) indicates, the mass acculturation of ecological dystopia (and, perhaps ironically, to significant profit) is well underway in film and TV. Indeed, films

such as James Cameron's *Avatar* (2009), which builds on the simple logic of 'industrialized resource extraction: bad, communion with non-human nature: good' (*ibid.*), reached a record-breaking USD2.7 billion in global revenue (Box Office Mojo, 2017). This brings a certain salience to Walter Benjamin's statement that mass culture 'has reached such a degree that it can experience its own destruction as aesthetic pleasure of the highest order' (Benjamin, 2002 [1969]: 94).

An understanding of ecological crisis is thus pervasive among civil society. However, as Kütting (2009) highlights, the assumption that actors will 'change their behaviour in the face of the appropriate evidence' is demonstrably flawed. Horkheimer and Adorno offer some explanation for this in their cultural theory, wherein the 'industry robs the individual of this function' of imposing meaning on sensory experience (Horkheimer and Adorno, 1972: 123). In this sense, as an 'awareness' of ecological catastrophe increases, its *meaning* is produced by cultural phenomena. That is to say the assumption that sustainable behaviour will follow as a rational consequence of evidence and awareness is problematic. This brings into question the role of discourse: how is the 'sustainable consumer' identity constituted in ways that reproduce an economic and cultural orthodoxy?

In finding sustainability, here defined as a safe operating space for human activity within planetary and biospherical boundaries (Rockström *et al.* 2009), the absence of the *quantity* of consumerism in dominant sustainable development discourses is the central problem. Connolly and Prothero (2003) argue that '[c]onsumers, even when they are environmentally concerned, are still consuming, only they consume perceived green products and re-cycle more. The actual level of consumption is not identified as a problem.' They show that in 'buying an image [...] both consumption and environmentally responsible consumption are a means of constructing self-identity. Both are communication systems incorporating meanings and signs (Connolly and Prothero 2003: 286).

Bauman's *Homo elicens* (Bauman 2007: 42, 61), both metaphorically and theoretically, presents a teleological explanans for the shift from a society of producers to one of consumers, where the latter emerges as an inevitable artefact of capitalism's progress. While power and the political are not absent from this developmentalist approach, they are underemployed. Dean's culture-governance thesis (2007: 61) departing from similar territory, is the

view that rule in contemporary liberal democracies increasingly operates through capacities for self-government and thus needs to act upon, reform and utilize individual and collective conduct so that it might be amenable to such rule. (Bauman, 2007: 61)

But, going beyond Bauman, Dean searches instead for the situated deployments of power which contextualise the emergence of so-called responsible consumers. For Dean, these 'divide populations and seek to fabricate specific forms of individuality', producing 'self-evident truths for public policy and governmental practices' and normalisations 'of particular ways of life embedded in a particular social and political order' (Bauman, 2007: 78). The analytical focus, then, must be to understand 'how identities are formed as ideals for certain social strata engaged in particular social and political practices and come to act as educative mechanisms for others' (*ibid.*).

Nevertheless, recent trends in consumer culture and political consumerism studies have formed a note of caution about taking the individualisation of consumerism as a given (Trentmann, 2007), and insist instead that the 'political is back' as the spheres of consumerism and citizenship collide in both public life and the academy (*ibid.*: 147). This points to a key question with which this strand of research has yet to fully engage: is consumerism more politicised, or is citizenship more commoditised? The 'colliding spheres' hypothesis is absent an analysis of the collateral damage of this collision: at the heart is an assumption that politics, at least partially, can be realised through the acts of the consumer, including the still performative act of refusing to consume in specific ways (the boycott).

The work of Micheletti and Stolle (2007) is informative here. The authors note, convincingly, that the existing domains of international law and politics, and particularly the economic IGOs, have failed to meaningfully grasp the social justice problems that occur, proximately, as a result of deregulated, globalised trade. Whilst the ethics and morality of such practices can be widely questioned, most frequently they are not illegal, and cannot be proven to be intentional. They posit that in this context organised consumers, particularly in the West, can impact positively on these trends in the global economy, disproportionately in the global South: 'This ambitious responsibility-taking mission demands creative cooperation among a vast array of actors' (Micheletti and Stolle, 2007: 160). Implicit in the work, however, is the assumption that largely affluent consumers in the West are both conscious of and sympathetic to the conditions of commodity production in the global South. Emancipation becomes reliant

upon the whims of affluent consumers: for the citizen-consumer narrative, workers themselves cannot bring about their emancipation, but rely on the goodwill of consumers in richer countries who must 'sacrifice' marginally greater affordability for liveable conditions.

In Micheletti's and Stolle's (2007) work, they point out the important struggles over time in the anti-sweatshop movement, to its global movement today. Less attention, however, is given to why this practice was not ended at any particular juncture, but merely moved geographically. The political geography of the citizen-consumer binds affluent, white-majority consumers to the story of emancipation in global South countries. Moreover, the study fails to answer the question of how consumers come to know the issue at hand. With the myriad interrelated issues that deregulated economic globalisation produces and reinforces, which the authors note (Micheletti and Stolle, 2007: 159), by which process do particular issues gain attention? Do representations of these issues as struggles in which the consumer plays an activist role simplify the particular problem and remove it from its socio-political context where it interacts with other failures? Whereas political ecological literature has focused on the expansion of the chains of analysis to locate ultimate and systemic problems, the domain of political consumerism reverses this: it focuses on the most proximate causes of the social and/or environmental impact.

In the case of the anti-sweatshop movement, the comprehensive knowledge of conditions, of supply chains, of corporate actions and inactions, of the (de)regulatory environment, and the established networks through which this information traverses globally has produced broad and diverse issue framings and alliances with the understanding that cheap clothing has social costs (Bair and Palpacuer, 2012; Benford and Snow, 2000), alongside claims that the 'ethical revolution [is] sweeping through the world's sweatshops' (The Independent, 2005). For all its successes of awareness raising, of corporate social responsibility, and of, at times, regulatory action, it has failed to end the existence of sweatshops. Locally, the issues have been resolved as they have moved elsewhere. Ultimately, the movement has not moved significantly closer to a future in which it is no longer needed, as seen in the 2013 collapse of the Rana Plaza building, Bangladesh, housing several garment workshops and resulting the deaths of over 1,100 people (Karim, 2014). As Radin and Calkins point out, '[t]oday's sweatshops violate our notions of justice, yet they continue to flourish' (Radin and Calkins, 2006: 261).

More recently, political consumerism as a category of analysis has been assumed to capture 'the creative ways in which citizens, consumers, and political activists use the market as their arena for politics' (Michelletti and Stolle, 2013: ii). In their more generalised and extensive contribution, Michelletti and Stolle briefly consider the charge that cumulative advantage and disadvantage play a significant role in determining the level and nature of political engagement (Pacheco and Plutzer, 2008). They contend that although 'all forms of political and social participation depend on socioeconomic resources, political consumerism might be a case where such resources matter even more' (Michelletti and Stolle, 2013: 61). Their analysis fails to consider the fact that it is only in 'political consumerism' where *ownership* of these resources explicitly matters. Whereas forms of political organisation outside the market, whether religions, trade unions, political parties, and so on, can ensure the wide involvement of citizens (or workers, or worshipers, or voters) by the communal ownership and deployment of resources, it is only in the political consumer where access is a function of individual purchasing power. Even the political choice to *not* consume is contingent, as a political function, on the *ability* to consume – it is this rejection of the ability, the refusal to perform, that constitutes the seemingly political act.

Moreover, the unequal distribution of socioeconomic power, whether locally or globally, ensures that entry into the 'political arena' of political consumerism is restricted to those least likely to be directly impacted by the socioeconomic injustice. As a form of politics, it is perhaps unique among social movements that it functions without the involvement of those it claims to emancipate. The exclusion of marginalised groups and the centring of the consumer enables the individual to cast themselves as the protagonist in the story of another's political struggle. It ensures that, ultimately, workers oppressed by deregulated global capitalism can thank it for moving on to someone else and somewhere else as, by Michelletti and Stolle's (2007) admission, these oppressive practices move underground or abroad. Instead of being 'solved', they incorporate new spaces and places into an enlarging system of accumulation; a spatio-temporal fix in historical materialist traditions (Harvey, 2003).

Ultimately, the problem with the consumer-citizen or the political consumer narrative is not its existence in political life but its monopoly over it. Few would argue that purchasing power, when this results in the ability to choose, does not confer some ethical responsibility in the absence of transformational change. This therefore forms a

central theme in this thesis where the continual return to the consumer as the agent of change in sustainability transitions represents a key characteristic of depoliticized sustainability. Because the consumer-subject is so central, the inability of the consumer to transcend conditions of capitalism makes it a carefully curated, elite-sanction form of 'activism' – one inherently unlikely to illicit a significant degree of change. Despite the conspicuous performance, the fact remains that the most radical act a 'political consumer' can do is to buy a different brand.

If the consumer-subject is limited to acting within the performative identities that various commodity markets engender, it is necessary to consider alternative forms and performances. In *Fracking the Neighbourhood*, Gullion's (2015) valuable contribution to the study of environmental activism details the importance of the performative in embodying and making intuitive the lived struggles of oppressed communities. 'Activists', writes Gullion (2015: 158), 'express the pain and suffering they experience as residents of an environmental sacrifice zone through performative environmentalism'. Residents interviewed identify two key struggles: to be seen by others locally, and to have their pain seen by the bureaucratic structures and recognised as a 'problem', because 'no official body has said there's a problem here; in fact, the health department specifically said there is not a problem here' (interview with activist quoted in Gullion, 2015: 155).

Gullion's ethnographic study highlights the importance of performativity as a tool, a form of praxis, and a process of emancipative storytelling. It focuses on the performances of activists as roadside protestors, City Hall picketers, and community health guardians. In all senses, environmental performativity has a positive role to play in expressing tangibly the pain of activists. 'Performing pain' takes place in a 'multitude of forms: Collective sign holding. Blogs and Facebook pages. Newspaper editorials. Speaking at regulatory and city council meetings.' (*Ibid.*: 160). The performance of pain and environmentalism is literal: 'Artists construct visual and auditory representations of their pain. Filmmakers create and share videos. Rational voices. Theatrical voices.' (*Ibid.*). To each of these there is a consciousness to the performance – it is deliberate and targeted. Whilst the 'performance turn' in the social sciences is recognised in Gullion's work (by way of Denzin, 2003), less is said of the ways in which roles *qua* subject positions are *performed* – that is, brought into social being through the act of representation. In this sense, the environmental activist performs the role of the activist

in the same the role of the consumer is given meaning by acts of consumerism; this does not disempower the radical act but locates the individual role within the structure of social meaning.

This latter aspect of performativity is the main consideration of this research project. Whereas Gullion's important work locates a place-specific rendering of the performative activist, it does not engage with the fluidity of this category - 'activist' is captured as a taken-for-granted category, one signified by the radical acts of dissent and protest. A broader analysis of the environmental performativity of the activist needs to be on how these signifying practices change over time and across space and according to different regimes of truth. In performing pain, are the activists of Barnett Shale more authentic activists than those who express their concerns through consumerism, even if the latter internalise the same level of pain in relation to the environment?

For Houtman *et al* (2011), the answer is clear:

even though individuals now relentlessly aim to act out their originality, uniqueness, and personal authenticity, and almost obsessively insist on remaining true to themselves, they paradoxically do so in social environments that expect and demand them to do precisely that (Houtman *et al*, 2011: 22)

Here, the writers make clear that the insistence on the authentic self in modernity is itself an outcome of social control: the 'individual' is brought into being by a socio-economic structure. Whilst this research project occupies a similar position the rigidity of the determining structure is not taken for granted. Houtman *et al* do not outline how a political moment can emerge in which this is challenged. Soper, on the other hand, argues that an 'altered conception of what it is to flourish' must arise to challenge the 'Euro-American mode of consumption that has become the model of the 'good life' for so many other societies' (Soper, 2008: 571). Soper's position more resembles that put forward by ecological economists, particular of the Centre for the Understanding of Sustainable Prosperity (see in particular Jackson, 2009), whereby the political project is to redefine what is meant by 'prosperity'. There is natural overlap between the ecological economic objective of finding a sustainable imaginary beyond the paradigm of ever-increasing material growth, and this research project's concern with the reproduction of (and possible challenge to) 'one dimensional sustainability'.

Without the identification and pursuit of a political moment, the critique of the individualization/consumer paradox becomes an infinite cycle: citizens searching for the authentic mode of resistance will simply replace one form of commoditised activism

for another without fundamentally altering the outcome. In short, it is not sufficient to outline the conditions of one-dimensional [hu]man or one-dimensional sustainability; the political point must be its transcendence. Sober (2008) highlights what this can resemble in the search for the discourse that redefines prosperity outside of the market. Whilst this can and does emerge in particular spaces and times, there is a nascent body of research that looks at where and how this might emerge to legitimise and illegitimise global environmental governance, to which this literature review now turns.

2.3. China, Hegemony, and Ecological Civilization

Political ecological research in and on the PRC is limited, even as the field has enjoyed considerable expansion (Yeh: 619-632, in Bryant, ed., 2015). Contributing to this 'lacuna' is the 'Chinese state control on scholarship, which affects foreign researchers' access' (*Ibid.*: 619)¹⁰. A global political ecology approach, especially one adopting discourse analysis as the main methodology, remains both possible and important for the investigation of some forms of contradictions that emerge from the Ecological Civilisation imaginary. For some, China represents a challenge to the market-liberal archetype from which sustainable development, as a policy agenda, is fashioned (Gare, 2017, Grumbine and Xu, 2011; Roberts, 2011; Gu, Humphrey and Messner, 2008; Papa and Gleason, 2012; among others). For others, China's legitimacy as an environmental actor is tied to its adoption of neoliberal environmental governance reforms (Carter and Mol, 2006), even as some point out worsening environmental conditions *as a result* of doing so (Jahiel, 2006). More recently, and most importantly for this research project, the importance of Chinese narratives of sustainability has begun to receive attention, whilst the case remains that 'little work' (at least in the anglophone literature) has actually been done on this (Geall and Ely 2018: 2).

Despite the varied literatures, it is possible to identify common issues. Three problems overall are clear. First, much analysis has been tempted to view the Communist Party of China (CPC) and the state as an internally-consistent identity and political blackhole, rather than a highly contradicted terrain with competing power

¹⁰ See Annex A for a critical reflection of this researcher's experience here, and its influence in the development of the research pathway.

interests, visions, and specialisations (for example, the outward-looking, highly financialised Shanghai; the highly securitised Xinjiang; the deeply polluted urban centres and the 'demonstration zones' of 'Beautiful China'). This means the party-political practice of justifying CPC rule (often reduced to the guarantee of a growing economy), and the ongoing political struggle to interpret history, represent the present, and imagine the future, is often absent in understandings of emergent discourses in China. In essence, it is often forgotten that China is also in conflict with itself. This is a central part of understanding ecological civilization as a proposition that reconciles development and the environment in China's domestic image while legitimizing CPC rule both at home and internationally, as explored in Chapter Five.

Second, there is a tendency to compartmentalise the economy, politics, and the environment, leading, such as in Carter's and Mol's (2006) case, to an oversimplified representation of 'environmental issues' capable of existing and being addressed outside of the domains of the economy and domestic or international politics. Lastly, the issue of access to research subjects permeates social and political research in China as state censorship and other influences can put potential research subjects off engaging in research projects (Tran, 2017; see also Foreign Correspondents' Club of China, 2016 for a detailed discussion of access to participants). This research project therefore grew out of these identified problems; the latter influencing, over time, the research pathway as impacts were felt (see Chapter 3 and Annex 1 for more detailed discussions).

This section proceeds by first reviewing the relevant literature regarding the construction of China as an emergent or re-emergent regional and global power and the implication of this on global ecopolitics. Here, the theoretical work on hegemony in the neo- and post-Marxist canons are revisited and supplemented by considering literature of different, or no explicit, theoretical traditions. This is important for locating one of the research questions, that of the extent to which China's global articulations of ecological civilization serve to re-politicise sustainability transitions and the imagining of a liveable future, in the relevant literature. After this, I consider the limited literature on the ecopolitics of ecological civilization. Whilst plenty is written on policies under the broad umbrella of this term, it often functions as a proxy for environmental governance rather than as a power-laden and politically contingent discourse. This may be because, as Goron (2018) has noted, domestic researchers are increasingly obliged to reference their work in relation to CPC ideology, where otherwise a more general (or more specific)

reference might be used. In a comparative literature search, a Chinese journal with close state alignment shows considerably higher references than those only remotely connected to an organ of the state (*ibid.*). The expansion in literature referencing ecological civilization, therefore, does not necessarily correlate with a proportionate expansion in critical engagements. Nevertheless, there remains a nascent body of literature in which to ground the research the project and indicate where it contributes.

2.3.1. (Re)Emergence and Environmental Counter-Hegemony

Holzinger, Knill and Arts (2008) argued that 'international harmonisation' and 'transnational communication' were the primary causes of environmental policy convergence between industrialised countries. International harmonisation presupposes the existence of international institutions whose 'institutional arrangements constrain and shape domestic policy choices' where actors concede some element of control in recognition of common interests (*ibid.*: 556). This is distinguished from transnational communication, whereby organisations (in this case, states and private enterprises) learn from and emulate policies deemed to increase social (international) legitimacy by converging on policies that are highly valued by the society. The key aspect here is that policy convergence takes place based on policies that are socially legitimising, thus reproducing internationally legitimate norms, rather than just a logic of achieving the greatest efficiency for a set of objectives (*ibid.*; Powell and DiMaggio, 1991). Whilst this offers something of a framework for assessing the flow of norms between one state and another (Braun, 2014), it offers less in the way of determining which norms are more likely to be prevalent and why; it marginalises an analysis of power. Instead of this, *hegemony* provides a means of understanding the preservation of power in social phenomenon.

Gramsci's (1973) formulation of hegemony, as a means of drawing attention to the ways governance arrangements reproduce structures of power and political practices, has often been drawn on in political ecology's focus on 'material, institutional and discursive practices of power' (Newell, 2012: 32). For poststructuralist discourse theory, hegemony is derived from a radicalising of Gramsci's original formulation by way of Laclau's and Mouffe's seminal work in post-Marxist theory (Laclau and Mouffe, 2001: 135-137). Hegemony in this sense rejects the permanent fixation of a fundamental class. In this mix, the neo-Gramscian language of Robert Cox helps to conceptualise of the more specific instance of sustainable consumerism. The formulation of reformative

versus transformative approaches provides a useful framework for conceptualising of sustainable consumerism – as a reformative practice that emerges to save the contradictory logic of capital accumulation amidst the socio-ecological crises of its making. In the process of becoming hegemonized, sustainable consumerism suppresses more transformative approaches.

Laclau and Mouffe's formulation of hegemony requires that 'the two conditions of a hegemonic articulation are the presence of antagonistic forces and the instability of the frontiers which separate them' (*ibid.*). In the case of sustainable consumerism and the occlusion of alternative imaginaries, there exist various floating signifiers and the possibility of their articulation by opposing camps. This discursive arena is the focus of analysis here, and the existence of multiple ways of articulating nodal terms like sustainability and development, as well as other elements such as nature, value, and resource, constitute competing hegemonic articulations.

Sustainable consumerism is thus conceptualised as a passive revolution in which the crisis of unsustainability has emerged as sufficient to challenge, but presently insufficient to displace, the dominant economic imaginary. Gramsci's formulation of hegemony can be useful in articulating this, but the need for its radicalising along the lines of Laclau and Mouffe lies in the development of new political identities, and the paradoxical calls on individuals as subjects of sustainability *and* consumerism. The institution of sustainable consumerism, therefore, is determined, rather than determining. Its ability to present a hegemonic bloc is undermined by its incorporation into the machinery of neoliberal economics, along the lines argued by Cox (1988) in which characteristics of international organisation include representing and furthering hegemonic interests, and absorbing challenges and intellectuals.

It is possible to locate ecological civilization within the critical literature that calls, in various ways, for a fundamentally different understanding of the planetary 'crisis' and the shift to a new society of equality and ecological sustainability.

Foster (2017) argues from a predominantly orthodox Marxist perspective that ecological civilization, specifically that of China, is capable of fulfilling this role. For Foster,

Ecological civilization in the Marxian sense means the struggle to transcend the logic of all previous class-based civilizations, and particularly capitalism, namely, the interconnections between the domination/alienation of nature and the domination/alienation of humanity. (*Ibid.*: 11.)

As such, the transcendence of capitalism represents an inalienable feature of the civilization that emerges. For Goron (2018), Foster's argument represented an endorsement of China's model as an 'alternative development theory capable of revolutionising the global economic order and bring about a global ecological transition'. In fact, Foster, whilst describing the necessary utopianism of such a transition, he does not presuppose its existence in China, taking note of the fact that development in China has been on an increasingly capitalist and globalist footing. Instead, Foster highlights the critical question at the heart of this research:

Could [China] play a role of global leadership in relation to the Anthropocene – a role that the United States as the hegemonic power has currently abdicated [...]? Or is China too immersed in the capitalist road, too characterized by extremes of inequality, too unable to draw on social forces at its roots, to make this switch? (Foster, 2017: 14).

Foster does not, by his own admission, attempt to answer this question. He does, however, advance the notion that China's transition to ecological civilization carries with it 'hope' (*ibid.*: 14) that an emergent bloc will challenge Western capitalism and capitalism's capture of science for the purpose of accumulation.

Foster's key limitation is not only, as Goron implies, his endorsement of Chinese ecological civilization, but his ontological assumptions. By arguing for the need of an ecological civilization, composed of a wholly different and transcendent socio-nature relationship to the hegemonic Anthropocene, he looks for this in China on two grounds: its ideological engagement with historical-materialism and the fact China calls its new vision 'ecological civilization'. The latter is especially problematic as Foster fails to account for the performative quality of announcing the path to ecological civilization. 'Ecological civilization' as a signifier does not confer any objective truth or representation; more important than a semiotic similarity is how the discourse is structured in relation to the key points Foster explains: nature, capital, commodities, markets, and people.

While Foster places his hope in an ecological civilization brought about from the ground-up in China by people suddenly conscious of their oppression under worsening environmental and social conditions, Hubbert (2015) more convincingly demonstrates the flaws in assuming environmental consciousness will arise in a form that challenges existing structures in China. Based on research at the "Green Expo" in Shanghai, Hubbert specifically rejects the assumption that informs Foster's approach: 'rather than

assume that increasing environmental awareness equates to ecological progress', Hubbert interrogates what 'actually constitutes "environmental awareness"' (2015: 30). In doing so, she finds that environmental awareness reaffirms connections between people and the state, practices, and norms.

Whereas Foster assumes transformational change will be brought about by the awareness of class-based oppression, Hubbert reveals the complex, contradictory, and conjectural ways in which people respond to the call on them as environmentalists. This reaffirms Kütting's (2014) point that simply increasing awareness has not brought about significant change. Neither Foster nor Hubbert, however, offer an analysis of the specific ways in which environmental awareness is re-absorbed into the architecture of neoliberal, anthropocentric governance. Whilst Foster's analysis asks key questions, the approach does not offer the means of engaging meaningfully with them if the only political struggle is identified as the revealing of a deeper-rooted class antagonism. In sum, Marxian hopes of a counter-hegemonic bloc emerging from China's engagement with environmentalism take little account of the actual development of the ecological civilization paradigm and its tendency to be deployed as a framing device for free-market capitalism.

Both accounts of environmental awareness are absent a discussion of the process of sense-making for new subjects of environmental discourse. Citizens rarely have an unadulterated access to the conditions of their own environmental oppression. Whether urban air pollution, climate change, or plastic pollution, the sense of environmental degradation passes through the social-scientific machinations of knowledge production, and the social filters of knowledge dissemination which are often also a process of simplification in order to be 'understood'. Whilst a scientific discourse is, as discussed, best equipped for analyses of the characteristics of its 'existence', as it passes into social 'being', an environmental problem is a social fact subject to (mis)representation and different storytelling practices that situate it more or less in relation to fixes, causes, victims, polluters, and so on. As Newell puts it, the function of the historic bloc of sustainable development has been to obscure the 'fatal connection' between capitalism and ecological disaster (2012: 45), a narrative traceable to at least the 1992 UN Conference on Environment and Development (UNCED). A discussion of ecological civilization needs to account for the story this emerging historic bloc tells: does it similarly obscure the 'fatal connection', and if so, how? Hildyard (1993) pointed out the chief purpose of

the UNCED was to present the global economic order as capable of regulating its own impacts:

In brief, the Summit went according to plan. The net outcome was to minimize change to the status quo, an outcome that was inevitable from the outset of the UNCED process three years ago. (Hildyard, 1993: 22.)

While the World Bank gained expanded control over the Global Environmental Facility, transnational corporations (TNCs) were constructed as essential in the 'battle to save the planet' (*ibid.*) The UNCED presents a key event in the story sustainable development tells about the economy, its actors, and the environmental crisis. A similar analysis of ecological civilization's role in confronting, or accommodating, ultimate drivers of environmental degradation remains largely under-realised. To corrupt Hildyard's (1993) title, do the foxes remain in charge of the chickens in this new sustainability transition of ecological civilization?

Geall and Ely (2015) provide a valuable overview of the development of ecological civilization as a narrative. In detailing both the genesis of the term 'ecological civilization' (*shēngtài wénmíng* 生态文明) and the wider deployment of civilization narratives in China, they locate the term's emergence, debate, and later codification, and the historical context of China's engagement with the ecological environment since 1972 (*ibid.*: 5-6). Noting the importance of a constructivist approach to the study of green transitions (Leach *et al.*, 2010), the authors note that way that 'institutionalisation of particular framings of sustainable development ... have marginalised, displaced, or precluded certain motives and actors from the environmental arena' (Geall and Ely, 2015: 1). With a relevance to the goals of political ecological inquiry, the approach marks a rare but important step towards a fuller exploration of how ecological civilization makes particular actors visible and others invisible, particular processes legitimate and others unacceptable.

Whist the Working Paper offers only an outline, the discussion is significant for its conclusion that:

Perhaps surprisingly for a polity that is often characterised as authoritarian in nature, the case indicates that there are in fact tensions and debates about China's future pathways, and that dominant narratives might engender some opening up of potential pathways to sustainability. (*Ibid.*: 14.)

This is central to identifying the central question of this research – the resolution of these domestic tensions in the outward articulation of ecological civilization in global fora. The

authors reduce the discourse to a 'slogan' (*ibid.*) that has only recently been 'codified', a process they argue is about 'closing down a period of debate and negotiation in order to articulate a slogan as an implementable narrative' (*ibid.*: 7.) Whilst it is clear that the statist articulation of ecological civilization represents a closure in the official process of determining what the term means, it is not the case that the process of meaning-making is closed completely. This renders the discourse as an objective ontological fact whose meaning is now solidified and permanent, with significant implications for its future study. This ontological stance mirrors that of Foster's (2012) to the extent that the discourse forms a homogenous bloc of meaning. Within poststructural discourse theory, such a stance forecloses on the analyst's ability to locate a political moment in the struggle over this meaning. The fact that the discourse is never 'closed', but in a state of constant becoming as it is articulated and rearticulated in new contexts and with new meaning by association, helps render the narrative researchable as it struggles alongside competing stories in global environmental governance.

The opposing view, however, is present in the discussion of the language of ecological civilization. Whereas Geal's and Ely's brief paper does not offer an analysis of the socio-nature connections articulated by ecological civilization, others argue that only a differing 'human bio-ecological awareness' grounded in Chinese philosophy of harmony, can resolve 'the ecological crisis' (Zhou, 2017). Zhou argues moreover that 'the ultimate goal of linguistic harmony is to promote ecological civilization' while at the same time in a 'harmonious society, it is essential to attain linguistic harmony and eradicate the linguistic disharmony' (Zhou, 2017: 133), a view also argued, albeit more broadly, by Pan (2016). At a basic level, both Pan (2016) and Zhou (2017) argue ecological civilization can achieve something that neoliberal sustainable development cannot: a harmony between language and nature via a discernible Chinese ecolinguistic tradition. Both demonstrate the importance of the concept of 'harmony between man and nature' as a central metaphor of the ecological civilization discourse.

More problematically, however, Zhou's argument has, explicitly, the Chinese state's pursuit of 'harmony' as uniformity and standardisation, down to the phonetic and grammatical harmonization of society. In Zhou's argument, ecological civilization is a part of the Chinese state's policy of harmonization as a rigid framework of compliance with state authority. Whilst a fringe argument, it is important for its revealing of the close ties between state policy and research on ecological civilization

(see also Goron, 2018). In such a context, it is unsurprising that there exists a lacuna of research on the antagonisms and contradictions of the discourse.

In a comparative study of Chinese ecological discourse and Western counterparts, Zhou and Huang (2017) conclude

that Chinese ecological discourse can be traced back to its Confucian–Daoist traditions, and the comparative inquiry shows that Confucian–Daoist dimensions of Chinese ecological discourse may imply that the European counterpart of the Chinese approach may be encouraged to learn from Confucian–Daoist ideas for ecological consciousness. (Zhou and Huang, 2017: 265.)

The authors highlight that ecolinguistic harmonisation again provides the route to resolving human-nature relationships (*ibid.*: 272-276). The authors argue that the 'spiritual resources' of 'Confucian-Daoist dimensions of Chinese ecological discourse' can provide Western thought with the 'intercultural dialogue to jointly foster ecological consciousness' (*ibid.*: 276). Whilst Zhou and Huang present the discourse as capable of embodying a historical narrative outside a direct articulation of it as such, the authors capture a key question for political ecological inquiry: does ecological civilization bring into being different discursive resources by which to relate to nature, bringing new (or old) subjectivities of nature that go beyond the one-dimensional consumer-citizen?

2.4. Conclusion

The literature review shows how political ecology research has frequently drawn on critical theory for its mode of analysis. The subjects and narrative canon within political ecology in particular draws directly on both the ontological arguments and genealogical methodology of Foucault. The adoption *governmentality*, either as 'environmentality' or 'eco-governmentality' has been used to show how subjects are brought into being, regulated, and self-governed. Discourse theory and political ecology, therefore, draw on similar theoretical principles. They share, too, a tendency to both reveal and begin with contradictions in the identification of a research problem.

The post-ecological era (Blühdorn and Welsh, 2007) represents one key concept where the critical inquiry of depoliticization (Mouffe, 2005; Žižek, 2006; Ranciere, 2001) is applied with particular relevance to the politics of (un)sustainability. The post-political condition and the expansion of the sustainable development discourse are closely related: the latter provides the technocratic, managerialist grammar of the eco-

governmentality, while the post-democratic order is ill equipped to challenge the erasure of possibilities in the environmental citizen. Nevertheless, on this later point there remains limited research. The first conclusion, therefore, is that the *subject* of sustainability transitions – who is constructed and governed – is underexplored in the political ecological literature, despite the array of critical theoretical engagements with the constructions of subjects under other forms environmental governance.

The second conclusion is that political ecological literatures have yet to engage with the (re)emergence of China as a hegemonic bloc in the field of global environmental governance vis-à-vis the narrative of human-nature and socio-nature relations. Whilst the role of China enjoys wide attention throughout environmental politics, less attention has been directed to the challenges it represents in its discursive framings of nature, the environment, and the liveable future it projects domestically and internationally.

What research has been done (in 2017) on ecological civilization from Marxian, discourse, constructivist, and ecolinguistic perspectives reveals a contradictory terrain wherein 'ecological civilization' is at once hope for a counter-hegemonic political ecological imaginary, as well as an indicator that the existing neoliberal structures of global environmental governance remain in place in China. That change is necessary is not disputed. The research terrain also reveals questions on which the literature is more convergent than some have implied: crucially, the question of whether China influences the direction of global environmental governance and what form this will take remains a central line of inquiry, yet one that is rarely directly tackled. Moreover, a discourse theoretical approach has, to this researcher's knowledge, not been conducted on the emergence of ecological civilization and its redeployment of the nodal signifiers of Western sustainable development.

3. Theory and Methodology

This chapter combines theory and methodology owing to the close intertwining of the two in poststructuralist discourse theory. For critical discourse studies, 'any conception of discourse analysis as a methodological approach will always be rooted in a wider theory of discourse' (Atkinson, Held, and Jeffares 2011). It is therefore incumbent on the researcher to articulate the links between the theoretical framework and the methodological tools used. This chapter, then, addresses two issues. First, how the research problem can be articulated theoretically and understood discursively, entailing the social ontology required for understanding the problem, a consideration of what kinds of epistemic access exists for developing this understanding, and ultimately what broader implications there are for the 'post-political' that engenders this depoliticisation. And second, once this problem is understood theoretically, I discuss what conceptual frameworks exist for tackling it, and outline the theoretical framework this research project adopts.

As such, the chapter sets out the theoretical framework that underlies the methodology and informs the analysis. For an interpretive study, however, it is also important to note the dialectics of theory and praxis, whereby the theoretical framework evolves reflexively with its practical application. As such, both theoretical and methodological concerns are addressed throughout the project. Due to this more holistic approach, this research project also makes inroads into the application of discourse theory to political ecology in the context of China; though, as detailed later, caution is necessary in generalising its findings beyond the local context of the research.

I draw on the theoretical toolkit of discourse theory and the conceptual framework of the *post-ecological era* to further the project of critical political ecology, and particularly the depoliticization of sustainability through the mainstreaming of sustainability discourses. At the same time, the framework is scaled to the arena of global politics, an application requiring its own justification. Throughout, therefore, I focus on globalised discourses and outline the *sustainability agendas and outcomes* and *sustainable consumer-subject* concepts to reveal their complicity in the production of regional, national, and local forms of ecological crisis, movements, and articulatory practices.

I begin by detailing the discourse theory of Laclau and Mouffe and the Essex School of discourse analysis as a more specific set of philosophical assumptions arising

from the constructionist tradition. The analytical tools of internal and imminent critique form the basis of the discourse-analytic method employed, while the normative 'project' of radical democratisation provides a means of talking about the re-politicization of sustainability. I highlight the ongoing debates between a post-Marxist discourse theory and other approaches which share certain similar critical goals, particularly Fairclough's critical discourse analysis (Fairclough, 2014). This section serves to highlight some of the tools that are 'borrowed' from these approaches to form a consistent and coherent way of 'doing' a discourse analysis, such as Fairclough's concept of the 'order of discourse'. Throughout, the focus is on the relationship between language and ecologically destructive processes. This section, therefore, conveys how language and discourse are intrinsically part of the field of political ecology.

Having provided the base theoretical framework, discourse theory, and the area of 'green' thought to which this is applied, critical political ecology, I move on to considering the specific analytical categories deployed in the analysis of discourse, namely performativity, ecogovernmentality, and the construction of the sustainable consumer-subject as a legitimate agent of change. I posit an articulation of the *post-ecological era* that locates the discursive factors of political ecology in the case of sustainability and its depoliticization. I build on the work of Blühdorn (2011; Blühdorn and Welsh, 2007) and the discussions contained, particularly, in *Environmental Politics* from 2007 onwards. I argue the theorising of this 'era' is incomplete without substantial application to emerging economies, and insofar as it remains concentrated on 'advanced post-industrial societies' it remains ill-equipped to contend with some of the most important ecological and political actors, especially China. I maintain the reference to simulation and performance but focus instead on the antagonisms of sustainability in which ecologically unsustainable actions continue *as if* they comply with the need for radical change. Theoretically, I term the framework 'discursive post-ecology' in order to demonstrate its clear reference to both discursive ecologism and the post-ecological era.

Following those such as Giddens (1984), ontology as the 'question of being' is the priority before epistemology, 'the question of knowing', for the simple reason that the ontological state, the question of *what is*, of social phenomena determines the possibilities of *knowing about* them. The final section, therefore, covers epistemology and methodology. This allows for the question of ontology to ground the discussion of how to access social reality. This is placed last in the chapter as it brings together the different

strands of theory as well as the empirical results into a coherent mode of explanation and draws links between the macro and micro levels of analysis, and provides a clear and concise point of reference for addressing the research questions in the remaining chapters. Section 3.4 details the specific methods and process of searching for the texts that form the three corpora (see Annex II) and of analysing these. This section of the chapter ends with a discussion of the ethical issues encountered and the ethical framework used, including earlier steps in the research journey which, whilst ultimately left out of the final analysis directly, informed the interpretive analysis, and is thus a part of the production of knowledge.

3.1. Discourse Theory

Discourse theory represents one paradigm with a broader field of discourse analysis that also represents similarly critical methods such as critical discourse analysis (CDA), the discourse-historical approach (DHA) and discursive psychology. Each of these, at some point in their lineage, share some common influences, notably Foucault. More generally, they have each been used by broadly 'critical' research projects where the revealing of hidden power relations, political contingency, or historicity have been a normative drive. In this project, I outline the discourse theory of Laclau and Mouffe, building primarily on their seminal *Hegemony and Socialist Strategy: Towards a Radical Democratic Politics* (2014), as well as Laclau's later publications on discourse theory (1990; 1996), those of the 'Essex School' more generally (Howarth et al., 2000; Howarth, 2013), and Mouffe's later works on radical democracy and its normative potential (2008; see particularly section 3.3.5. of this chapter).

I begin by setting out the broader social ontology that underpins the discourse theory, where I distinguish it from other discourse approaches and formally define the research project's ontological assumptions, and similarly what this means for epistemology. In the same section, I outline the theory of signification; the post-structuralist adoption of Saussure's (2011 [1959]) networks of meaning. Leading on from this, I then outline what 'space' exists in such an approach for the 'natural sciences', weighing the arguments from those such as Latour with the ongoing (and arguably increasing) 'anti-environmentalism' problem. Section 3.3.3. then discusses how the metatheoretical concepts of power and hegemony are understood in post-Marxist terms, and link this back to discussions from political ecology. Finally, I outline the normative

and critical frameworks by grounding this in a discussion of radical democracy and previous discussions of the consumer subject, highlighting the work of, among others, Glasson (2016) for whom the *ecological* subject 'offers Greens hopes of a fulcrum from which to transcend' both mainstreaming and anti-environmentalism.

The social ontology set out here follows the controversial 'ontological turn' (for the controversies of this turn, see for example Critchley, 2004; Rorty, 1980). As Howarth (2013) highlights 'many social scientists claim to have discovered a paradigm or model of social behaviour...which can enable a practice of 'normal science' to be properly grounded and conducted' (2013: 88). However, the attainment of a value-free science of society, in which objective facts can be known in clear, presentable, and consistent ways is itself problematic. The problem remains that it is 'far from demonstrated that those who reject questions of ontology do not themselves presuppose certain ontological assumptions' (*ibid.*: 90). This charge is arguably fundamental to post-structuralism. As Jørgensen and Phillips (2002) highlight, when reduced to a simple spectrum of post-positivism to positivism, critical discourse approaches tend to gather towards the constructionist end. The extent to which the ontological approach is 'purely' constructionist provides one dynamic that helps to distinguish between critical-realist approaches such as CDA (see particularly Fairclough 1992, 1995, 2004) and an inherently post-positivist discourse theory. This simplification, however, risks presenting each approach as having more or less agreed upon a stance within this area of philosophy, obscuring the disagreement and variety within each approach, discourse theory included.

Ontological assumptions within Laclau and Mouffe's discourse theory follow their theorising of 'the social'. The approach does not distinguish between discursive and non-discursive elements, nor does it rely on the materialist dialectic in which meaning is a production of both material and discursive realities. Instead, discourse encompasses all social phenomena, expanding the definition of 'discourse' beyond text, speech, or visual media to all aspects of social interaction. At the same time as expanding this definition, the social is inherently discursive; discourses are constitutive of social reality, rather than being constituted by social reality. This basic distinction distances discourse theory from other forms of discourse analysis such as CDA, as well as other critical theorists from whom Laclau and Mouffe adapt and radicalise particular concepts, principally Althusser and Gramsci. It also raises the potential problem of, if all social

phenomena are discursive and all meaning is discursively produced, then any and all social phenomena might form the object of study. Perhaps more problematically, it further stresses the researcher's balance between producer and observer of discourse.

This thesis therefore situates itself towards the constructionist end of the ontological 'scale'. However, a distinction is made between social reality and material reality. Following most post-Marxist theory, this research project leaves economic reductionism and even the materialist dialectic behind, in place of a post-structuralist account whereby meaning is fluid, power-laden, and always produced discursively. Outside of these networks of meaning, through which reality is produced, understood, and acted on, physical material conditions occur and react with each other, but there exists no unadulterated access to them. Laclau and Mouffe assert that

Every object is constituted as an object of discourse [and this] has nothing to do with whether there is a world external to thought...An earthquake or the falling of a brick is an event that certainly exists...independently of my will. But whether their specificity as objects is constructed in terms of 'natural phenomena' or 'expressions of the wrath of God;', depends upon the structuring of a discursive field. (Laclau and Mouffe, 2014 [1985]: 108.)

The *production of meaning* therefore takes place in the social; it is accessible only via discourse. As discussed in the next section, this has clear ramifications for a paradigm in which the role of science as the privileged provider of knowledge is central.

In the rejection of economic determinism, Laclau and Mouffe revisit neo-Marxists, especially Gramsci, for whom the economic model of base and superstructure was at least partly problematic. To simplify a broad literature, in more 'traditional' Marxist orientations the base structure – that is, the means of production – played the ultimate role of determining the superstructure – the meaning-producing institutions, whether of the state, the church, and others. In this conceptualisation the relationship between the materialist-economic base and the superstructure was one-way: the former was determinative of the latter. In Gramsci's (1973) critique, this created the problem of, if this is the case, how can an organic revolution take place if the superstructure is produced only by an economic-materialist base whose motivation is the continuation of the production of surplus value in the interests of profit? Gramsci problematises the one-sidedness of this relationship, opening up agency for the working classes to recognise their oppression and thus organise and work to undermine it.

However, in Gramsci's framework, the base and superstructure still exist *objectively*, and the base structure is determinative *in the final instance*. For environmentalism this is problematic: if the base and superstructure are objectively existing social facts, this privileges the 'working classes' as the fundamental revolutionary identity. Environmentalism (as with other social movements), on the other hand, seeks to build a new identity behind which organise counter-hegemonic formations. In place of the objective existence of fundamental class alliances, Laclau and Mouffe assert discursive processes and the primacy of politics shapes the extant groups in society (see particularly Laclau, 1990). As a result, the importance of networks replaces the base-determined groupings of people and identities. In place of the working class as the fixed revolutionary identity, new identities can form that engage with emergent discourses that challenge hegemonic discourses. The creation of a pluralistic radical-democratic politics reflected the identified 'crisis' underpinning Laclau and Mouffe's work: the erosion of class politics in the West and the authoritarian implementations of Marxism in the East. The abandoning of the essentialist manifestations of Marxism creates space, instead, for counter-hegemonic identities and networks to emerge without an *a priori* classism.

This makes *hegemony* central to discourse theory. In Laclau and Mouffe's theory, 'truth' in relation to the social is an ongoing struggle between discourses. Discourses evolve dialectically with their challengers in a constantly fluid dynamic in which the fixation of meaning around a particular aspect of the social is both impossible and the operating logic of a discourse and its subjects. In other words, a discourse seeks to establish what is 'known' in a common-sense way about a particular topic. The Foucauldian concept of *genealogy* (see, for example, Foucault, 1984) is a clear departure point here, whereby 'truth' emerges as a historical artefact; a discourse and the subject positions it creates are thus a reflection of power that exists as a function of the extent to which their radical contingency is obscured or forgotten. Mouffe calls 'hegemonic practices' the temporary stabilisation of a system of meaning, and adds that 'what is at a given moment accepted as the "natural order", jointly with the common sense that accompanies it, is the result of sedimented hegemonic practices' (Mouffe, 2008: 4). The radicalising of Gramsci's concept of hegemony thus provides the essential antagonism in discourse theory. Unlike Foucault's concept of an overarching discourse of an epoch,

Laclau and Mouffe locate the political struggle at the frontiers of discursive terrains – the mediations of the meaning of social phenomena.

The role of networks in the process of rearticulating tends to focus analysis at the local scales of (re)articulation, but as Grant, Keenoy, and Oswick (1998) point out, counter-hegemonic practices may also emerge as the result of 'an overt or covert struggle for discursive dominance' by strategically placed interest groups (1998: 8). Following on from this, this research is primarily interested in such strategically-positioned actors, particularly states, IGOs, and private companies, to produce *signs* – the joining of a signifier with the signified – and thus to produce what *makes sense* in relation to a nodal point. This requires setting out Laclau and Mouffe's theory of signification.

Borrowing fundamentally from Saussure's (2011 [1959]) theory of structural linguistics, Laclau and Mouffe posit the same building blocks of language-meaning, *la parole* in Saussure's vocabulary, whereby meaning is always and only relational. There exists no objective meaning of a word, and the meaning of a word is therefore a function of its relationship to other words. Jorgenson and Philips use the metaphor of a fishing net to demonstrate how signs acquire meaning in the Saussurian sense:

...the structure of language can be thought of as a fishing-net in which each sign has its place as one of the knots in the net. When the net is stretched out, the knot is fixed in position by its distance from the other knots in the net, just as the sign is defined by its distance from the other signs. (Jorgenson and Philips, 2002: 11.)

Saussure's original formulation of the system of signification fixated these meaning-constituting relationships of signs. Post-structuralism in general challenges this fixation. As Laclau points out, '[t]he post-structuralist trend has been to experiment in the logic of subversion of discursive identities which follows from the logical impossibility of constituting a closed system' (Laclau, 2007: 543-544). Thus, meaning is malleable due to the impossibility of closed system of meaning. This further articulates the place for hegemony, as discourses struggle to hegemonize a particular articulation, but also has implications for the formation of identities.

The concept of 'sustainability' is the nodal point around which differing discursive formations compete to hegemonize meaning. Each of these create different subject positions for subjects to occupy; that is, they formulate different modes of engaging with what it means to be sustainable. Sustainable consumerism, particularly when understood as part of the more general sustainable development discourse, represents one such hegemonic formulation in which the consumer-subject as a set of

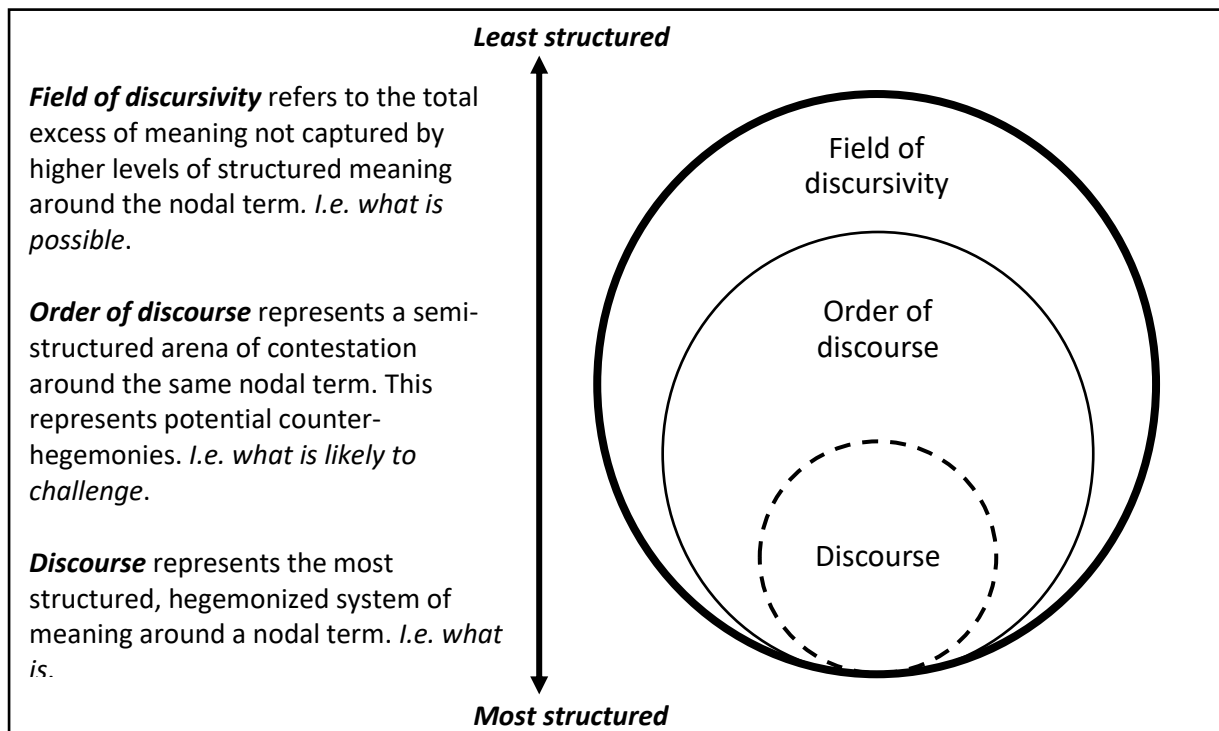
expectations and possibilities for action is given meaning. As indicated above, this meaning cannot be closed and fixated in time, but alludes to the idea of it; discourses attempt to establish meaning *as if* a permanent fixation were possible. 'Power' in the Foucauldian sense thus derives from the extent to which this is achieved – how the inherently political (what is termed the 'radically contingent') is taken as *apolitical*, as a common sensical way being so that its existence goes unquestioned, what is referred to by Foucault as the *sedimented* discourse. The appearance of fixation is reinforced in the continued (re)production of the discourse – by the carrying out and performance of the subject positions, for example. In the sustainability example, the simulation and performance of a sustainable consumer-subject reinforces the discourse of sustainable development.

Discourse theory takes the post-structuralist critique of Saussure to a conclusion in which the excess of meaning is contained in the 'field of discursivity'; the contained discourse is always challenged by articulative formations arising from within this surplus of meaning. Because a discourse can never be a closed system, as in Saussure's (2011 [1959]) formulation, a discourse never achieves a permanent fixation of meaning, but instead evolves dialectically with other discourses that emerge to challenge it. This formulation bears a clear resemblance to Gramsci's concept of the war of position that ultimately alludes to the resilience of a discourse's fundamental apparatus, even as it is challenged.

However, a key problem with this approach is the unstructured nature of the field of discursivity. Discourse theory, in Laclau and Mouffe's original formulation, offers no means of organising or ranking which signs might challenge or be incorporated by a given discourse. Jorgensen and Philips demonstrate this with the example of modern medicine. As a contained discourse with a nodal point of the (human) 'body', western medicine represents a system of meaning that imbues the word 'body' with its meaning as an object for scientific inquiry and all the regulatory apparatus that comes with that. The nodal point 'body' can thus be challenged by other forms of 'medicine'; alternative forms of therapy, homeopathy, and so on. Equally, religious discourses imbue 'body' with a different meaning still, and chains of equivalence are, in the Holy Trinity sense for example, drawn between 'body' and 'spirit'. These challenge the scientific and ethical principles underlying modern medicine in clear ways (Jorgensen and Philips, 2002). Jorgensen and Philips point out that the discourse of 'football', for

example, is unlikely to challenge modern medicine discourse around 'body', yet discourse theory offers no means of establishing this; Laclau and Mouffe offer no way of ordering extant discourses in the 'field of discursivity'. In place of this, Fairclough's

Figure 3: Illustration to show relationship between discourse theoretical concepts according to structuration. Y axis indicates most to least structured.



critical discourse analysis (CDA) approach defines an 'order of discourse' (Fairclough, 2013). Fairclough defines this as 'a social structuring of semiotic difference, a particular social ordering of relationships between different ways of making meaning' (*ibid.*: 89). This challenges Laclau's and Mouffe's distinction between a discourse (that is a partially fixed system of meaning) and the surplus of meaning which they refer to as the *field of discursivity*. It can be rendered, as in Figure 3, as a complete system of structuration, wherein the *order of discourse* contains discursive figurations most likely to challenge a dominant, or sedimented, discourse.

In detailing their theory of discourse, Laclau and Mouffe define their key theoretical concepts as follows:

we will call *articulation* any practice establishing a relation among elements such that their identity is modified as a result of the articulatory practice. The structured totality resulting from the articulatory practice, we will call *discourse*. The differential positions, insofar as they appear articulated within a discourse,

we will call *moments*. By contrast, we will call *element* any difference that is not discursively articulated (Laclau and Mouffe 2014: 105; italics original).

This study adopts these definitions of the key terms, but of particular importance is that of *articulation*. This is essential as the concept through which the performance and simulation of sustainability through the consumer act is understood theoretically. Through performance of 'green consumer', the arbitrary connections between the consumer, the consumed, and notions of sustainability are created and affirmed. The concept of *nodal point* represents the privileged sign that centres the network of meaning and thus organises meaning (e.g. Laclau and Mouffe 1985: 112). 'Sustainability' can therefore be understood as a nodal point in the discourse of sustainable development – actions are understood by the relationship to this signifier, and different articulations of 'sustainability' seek to invest it with different meaning.

The obfuscation of the sites of discursive contestation, the political frontier of a system of meaning, is achieved, in Laclau and Mouffe's language, in the 'myth': the imagined totality that organises a social space (such as 'the nation'). Laclau defines *myth* as

...a space of representation which bears no relation of continuity with the dominant 'structural objectivity'. Myth is thus a principle of reading of a given situation, whose terms are external to what is representable in the objective spatiality constituted by the given structure. (Laclau, 1990: 61.)

The discursive formation of the myth, as a distorted representation of reality, is (re)produced continually. Anderson draws attention to this in his *Imagined Communities*, in which the 'nation' is produced through phenomena that are imagined to be shared. A national anthem, a minute's silence, a flag, and a broad array of other signs, thus represent powerful ways of drawing connections between people that have never met and likely never will meet. More pertinently, an effect of the myth is to obscure the points of difference and divergent interests of different groups who are imagined as united under the myth. In the case of the 'nation', it serves to outline a broad unity between potentially conflicting social groups, such as classes in the Marxist sense. The myth can therefore obscure the radical contingencies and the political frontiers to the extent that *particular* interests (for example, capital accumulation) can be made to seem like *the general interest*, with clear implications for diverse social movements; not the least the sustainable consumer-subject whose participation in the contradictory goal of

sustainable exponential growth and the subsequent furthering of particular interests can be made to seem like serving a higher and more general interest (i.e. sustainability).

Having outlined the social ontological considerations and the theory of signification that provides meaning in place of an objective meaning derived from objective sensory perception, particularly with regards ecological sustainability it therefore becomes important to outline how a space for natural sciences can be preserved. The discussion therefore turns to how the natural, and particularly earth, sciences can be brought into a critique of ideology whilst reflecting on the extent to which such paradigms and their institutions are also products of social and inherently political processes. Following this, the discussion of critique continues by expanding on forms of critique and the normative project of radical democratisation.

3.1.1. A space for science

The scientific consensus is, and has been for decades, clear on the pressing climate and environmental impacts of modern industrialism, if not in the minutiae, then at least in the general sense. If political action were a simple function of locating and presenting the right evidence, followed by the unanimous changes in society as the result of rational thinkers and thinking, there would indeed be less need for a constructionist critique. In the ten years since the publication of the Stern Review (Stern, 2007) and the IPCC findings (IPCC, 2007), the world has witnessed, in close succession, the adoption of a wide-ranging climate accord and the notification of withdrawal of the planet's historically largest producer of emissions (the US) from that accord. At the same time as objective, positivistic studies that showed the greater economic sense lay in investments in solar and wind power, there were renewed commitments to coal, fossil fuel gas, oil exploration, and nuclear power. Scientific evidence, as Gabriella Kütting (2009) has outlined, has not led to the type and scale of change its conclusions have implied are essential.

The importance of constructionist critique, therefore, comes not necessarily from challenging scientific evidence but from investigating the wider discourses that contribute to suppressing it. For example, in revealing the mental acrobatics at play in criticising the 'phony science' of the scientific consensus at one point (as in US Senator Inhofe's speeches in 2003 and 2018), then committing to making 'decisions not on a political agenda, but on sound science' (Inhofe, 2003.) within the same speech. More pertinently, following Sokal's (1996) argument to its conclusion of rejecting any form of

social critique of the *conditions* of knowledge production encounters the opposite problem of limiting the space for a social critique. In the sustainability debates, this is most clear in claims made about population. In neo-Malthusian terms, calls have emerged for limits of population growth on the grounds of the inherent unsustainability of exponential growth of populations, as well as quantitative growth in terms of resources per capita. The renowned ecologist and author of *The Tragedy of the Commons*, Garret Hardin, quoted in *Commoner*, represents the disturbing conclusions of such lines of thought when he asks '[h]ow can we help a foreign country to escape overpopulation?', to which his own answer is '[c]learly, the worst thing we can do is send food... Atomic bombs would be kinder' (Hardin, quoted in *Commoner*, 1988: 156). Hardin expanded on this in an interview in 1979 with *Mother Earth New*: on overpopulation Hardin comments that 'Of course, this doesn't present a serious problem in a country like the United States' (Hardin, *Mother Earth News*, 2017). Hardin best reflects the tendency for overpopulation to always be the fault of someone else when the discourse is deployed. Bioenvironmentalist approaches that have occasionally offered such views have thus been accused of ignoring the social ramifications of such conclusions, as well as representing the problem in terms of populational growth aggregated at a planetary level rather than focusing instead on the *distribution* of resource use and market demands.

For the purposes of this chapter, the point here is that Hardin builds on 'science', with the identity of biologist or ecologist, with the effect that the disturbing conclusions reached appear as logical outcomes of a scientific enquiry. For discourse theory this presents the challenge of how to critique such a discourse. The tendency for the overpopulation discourse to 'Other' is clear from a discourse-internal critique. That this is complicit in violent racist discourse requires recourse to an external critique, yet it is clearly insufficient to end the analysis at the identification of the Other, or the revealing of internal inconsistencies, and not to consider the violence and racism of its assertions.

The key outcome of this for theory is that it becomes clear that 'science' cannot represent a single, universal arbitrator of environmental conflicts. Depending on what is calculated and where it is measured, differing accounts of responsibility can be articulated by appeals to 'fairness' arising from scientific evidence. This is not to problematise the scientific method *per se*, but to problematise the wider architecture of the social production of scientific knowledge which incorporates the institutions for

funding, the decisions of what is studied and what this occludes from being studied, and ultimately how this is communicated to society generally and adopted (or, of course, not adopted) by politicians and system of governance.

For this research, the scientific consensus represents a source of external critique for discourses of sustainability. I argue this is important for two key reasons: first, the broad scientific consensus is widely available and accessible in a number of languages, such as through the IPCC (2014; 2007), and more localised uses of scientific evidence (particularly in the case of China) are generally available to stakeholders in the native language, as well as in English. Second, the types of evidence drawn upon are less contentious than those highlighted by most political ecological approaches, primarily concerning land use change, landscapes, and so on, in which the 'writing out' of Indigenous and local peoples has been shown to be a significant consequence of numerous conservationist approaches, as well as in popular aesthetic representations of a 'wilderness' that existed prior to colonisation. As one notable environmental historian captured the problem, 'the definition of the environment as a natural field to be dominated for productive use, and the definition of the British as a distinctive colonial ruling class over alien peoples, went hand in hand' (Gilmartin, 1995: 211).

Overall, then, I return to Forsyth and Harraway by arguing that the *ideals* of scientific objectivity should serve as a guiding principle for *more accurate* reflections of the social world, while a purely unadulterated access to it remains impossible if only for the simple fact that the scientific enterprise occurs and works within a social world. This has the outcome that the scientific method can represent a *less* ideological means of understanding provided, in the cases of land use science, ecology, and other Earth sciences, the assumptions made are transparent and incorporated into the subjectivity of the researcher, and thus the conclusions.

On a practical level, Mouffe identifies 'employing the symbolic resources of that very tradition' as a form of imminent critique (e.g. Mouffe 1995: 1), however, I instead articulate such a mode of critique as *discourse-internal*, following more in the lines of Wodak's *discourse-immanent* critique (e.g. Wodak, 2008; Reisigl and Wodak, 2001: 32-35). Wodak defines the *discourse-immanent* concept as a practice of 'discovering inconsistencies, self-contradictions, paradoxes and dilemmas in the text-internal or discourse-internal structures' (2008: 88). I use *discourse-internal* to distinguish between this approach and that of *immanent critique* that re-engages with society *beyond* the

singular discourse (that is, identifying continuity within the field of discursivity, or order of discourse, rather than within the discourse). Such a mode of critique is of benefit to revealing a discourse's consistency – the extent to which its own practices match or deviate from its own aims. In the case of sustainability, this creates the basic mode of critique for the neoliberal sustainable development discourse. Here, the 'aims', that is, *what is being sustained*, are articulated through policy at global, national, and local levels but also aesthetics and ideals of 'wilderness', 'nature', and so on. The latter of these is of particular importance for the discourse of sustainable consumerism. The 'aims' of the consumer act are to contribute to this image of sustainability – the chain of equivalence between the consumer act and the sustainable act. The revelation of the practice as inherently unsustainable therefore represents the basic form of critique: the action has failed by its own criteria.

However, a discourse-internal critique is limited. To illustrate this, the neoliberal sustainable development discourse can be critiqued from the perspective of whether the outcomes match the agenda, but ultimately distinguishing whether an act is or is not sustainable requires recourse to an external discourse. Maintaining, for instance, that the hybrid car industry is inherently unsustainable requires reorganising the network of meaning around sustainability, involving appeals to moments outside of the discourse-internal structure – the field of discursivity (or, more specifically, Fairclough's order of discourse). More succinctly, imagining an incoherent, racist discourse, a purely internal critique would highlight only the incoherence; a grounded critique of racism requires recourse to other discourses. It is therefore essential to also outline both the role and the specific nature of an external critique in this study.

Scientific consensus is both problematic and ultimately essential. For this reason, appeals to more bioenvironmental discourses (following Clapp's and Dauvergne's (2012) distinction of environmental discourses) is used as an external critique for globalised discourses of sustainability. I argue this is necessary and justified for three related reasons: first, the globalised discourse of sustainable development (broadly interpreted) has appealed directly to the natural sciences and scientific consensus. The discourse is promoted as being the natural response to the given evidence; it is depoliticised in this way, but this also makes the scientific consensus a part of the discourse – it is a part of the network of meaning that creates the discourse. More specific examples exist in sustainable consumerism, where, to use the same examples highlighted earlier in this

chapter, hybrid vehicle manufacturers justify their 'green' credentials by reference to scientific vocabulary, scientific testing, and the presentation of their (brand-distinguishing) technologies as a natural outcome of this. Second, the scientific consensus on a variety of topics from climate change to biodiversity loss is available through IGOs (particularly the UNEP, IFCC, WHO, and World Meteorological Organisation) in a variety of languages and access formats, greatly increasing the number of people with access to such information. Nevertheless, education on such matters remains problematic, not least in many global-South countries, and so caution is necessary in appeals to largely Western epistemic communities on local and Indigenous issues. Third, the scientific consensus has been paramount in achieving the first element of the paradox I outline; that ecological sustainability is at the centre of global efforts and politics. Whilst this success is offset by the failure of significant action, this should not mean the rejection of the epistemic paradigm that has provided the understanding necessary to highlight instances of unsustainability.

As such, the two modes of critique represent a broad but coherent framework for a consistent analysis of discourse. Grounded in Laclau and Mouffe's discourse theory, social ontology, and normative framework of radical democracy, it also borrows from elsewhere in the broader discourse studies to fill conceptual gaps. Having outlined the some of the commonality and mutual problems of political ecology and discourse theory, then, it is necessary to fill that space with a more consolidated conceptual framework that draws together the disparate threads.

3.2. Ecogovernmentality and the Consumer Subject

Robbins, surmising the 'environmental subjects and identity thesis', highlights the basic premise that animates this chapter directly and the research project generally:

people's beliefs and attitudes do not lead to new environmental actions, behaviours, or rules systems; instead, new environmental actions, behaviours, or rules systems lead to new kinds of people (Robbins, 2012: 23).

This assumption underlies the critical-discursive, or post-structuralist, approach; the kinds of narratives that are built around nature, sustainability, crises or consumption, as well as the aesthetic ideals, economic rationalities, and everyday experiences of what it means to be, and act, sustainably are fundamental to understanding the modes by which we relate, exploit, protect, identify, or otherwise experience a 'natural world'. In this way,

the ecological subject is a product of the hegemonic discourse which organises consent and gives meaning to social reality. Sustainable development broadly, and sustainable consumerism more specifically, represent discourses through which radically contingent constructions of nature are taken for granted.

Ecogovernmentality, an application of Foucault's concepts of governmentality and biopower, is a fundamental conceptual framework for understanding the creation of environmental subjects. As Foucault first articulated the concept of biopower in a series of lectures between 1977 and 1978, it refers to the 'set of mechanisms through which the basic biological features of the human species became the object of a political strategy, of a general strategy of power' (Foucault, 2007: 1). For political ecology, the implications of this line of thought have been discussed by scholars such as Robbins (2007) who draw on Althusser's (1973) theory of interpellation and the subject. Robbins, nevertheless, also challenges hierarchical social theories and instead points out how everyday ecological relations (such as lawns) construct subjects through an interplay between the Althusserian hailing and the ecological necessities required to realise the subject position. More directly, Wainwright and Mercer (2009), who draw on biopower and how hegemony implicates ecological relations, advocates for incorporating Gramsci into the political ecological project. And, as Mann (2009), highlights, a Gramscian historical materialism is an unavoidable consideration in political ecological research for historicising Foucauldian concepts (see also Robertson, 2015). This provides a greater space for discourse theory and a post-structuralist political ecology (which I expand on in more detail in section 3.4).

Revisiting Foucault's concept, then, the sustainable-consumer subject can be viewed as a product of discourse, with the addition of 'a certain kind of nature as an external referent' (Robertson, 2015; see also Agrawal, 2005). In the discourse-theoretical approach I detail later, however, it is problematic to reflect on a 'nature' external to the social. This reflects the tendency for political ecology to represent 'softer' forms of constructionism; for 'most practitioners in political ecology dwell somewhere in between' constructivism and realism (Robbins, 2012: 125). Discourse theory, by contrast, represents a more ardently social constructionist agenda. Though this is not, as some have claimed, to the exclusion of material realities. (The implications of this and finding a space for the sciences in a discourse theory of ecological relations is tackled in section 3.3.2.) For this reason, the 'political' project of political ecology is more radicalised and

questions of the post-political are intrinsic to understanding how sustainability has become an issue of preserving a dominant economic system. *What* is being sustained is therefore an overarching concern, and in terms of political ecology the ways in which humans relate with and within 'nature' are a part of this puzzle.

Consumer subjects arise out of the politics of ecogovernmentality and biopower as it determines the modes of relating to sustainability, and thus nature generally. In the act of 'greening' the consumer, the sustainable development discourse calls on a variety of actors, institutions, and discursive resources to articulate a given action as being not merely ecologically neutral, but a positive contribution to the sustainability effort. As explored in detail in Chapter Four, the concentration by IGOs and national governments on 'innovation', and the role of the consumer in driving innovation, places the consumer at the centre of sustainability efforts. In such discourses, it becomes an inherent duty of the 'environmental citizen' to partake in consumerism. This constructs consumerism as a privileged mode of environmental action: consumption must become sustainable in order for society to be sustainable. The sustainable identity is therefore articulated through engagement in the private sphere. Whilst these specific features are outlined in respect of the sustainable consumerism discourse, as Swanson has argued (2008), in more general terms depoliticization through economic 'common sense' also contains at least two broader considerations: the naturalizing and essentializing of a particular mode of behaviour, and the limitations of political agency or control. I argue these broader features are also essential elements of the sustainable consumer discourse. However, I argue naturalisation discourses still afford an amount of political agency and control, but specifically that which is curated and regulated by the discourse, which is captured here as part of the overall performance of instigating change through the simulation of political engagement, while partaking in a limited field of consumer choice legitimised by the hegemonic discourse.

Section 3.3. furthers this discussion through the lens of the *post-ecological era* wherein the movement from the radical implications of ecologism to the status-quo maintenance of technical-managerialism and economic rationalisation are central to understanding the depoliticization of sustainability. In order to ground this particular approach to political ecology it is necessary to turn the discussion to discourse theory, before finally reconciling these two broad areas in the more specific conceptual framework of *discursive post-ecologism*.

3.3. Discursive Post-Ecologism

Having outlined the theoretical framework of Laclau and Mouffe, and indicated how this can be operationalised and applied to political ecological research, the discussion now turns to what I refer to as *discursive post-ecologism* which aims to draw attention to the inherently discursive features of the depoliticization of sustainability that has shaped eco-politics since the 1980s. This section grounds the post-ecological in a broader discursive approach in which the discursive resources that the contemporary sustainability imaginary draws upon are continually open to struggle. This provides a normative agenda for the *re-politicisation* of sustainability, and in doing so changes the focus from contemporary Eurocentric ecopolitics (Blühdorn's *politics of unsustainability*) to the sites of ecopolitical struggle elsewhere in the world in which counter-articulations of 'sustainability' represent the political frontier.

While the distinction of an 'era' defined by a prevalent discourse risks reflecting Foucault's conception in his *archaeological* body of work of an 'epoch' as determined by the domination of a given knowledge regime (Foucault, 1972: 117), it departs from this position insofar as the displacement of this discourse is an ongoing process of struggle and contestation between a number of extant discourses. Indeed, the central research questions of this project focus on the struggle over investing 'sustainability' with meaning by competing discourses. Blühdorn and Welsh identify this struggle between discourses early in their work as an important area of the new research agenda when they ask '[w]hy are both discourses [of unsustainability and sustainability] being sustained at the same time, and who benefits?' (Blühdorn and Welsh, 2007). Post-ecologism more generally, however, has been interpreted variously as a contained discourse, the outcome of a separate, specific discourse, and the dialectic synthesis of contending discourses. In part, this might be attributed to the fluidity of the term 'discourse' itself and its application across different theoretical paradigms with a loose commonality via Foucault. It is therefore a lost cause to aim for an application of the term consistent with all users; but for internal consistency it is essential to define post-ecologism and its relationship to 'discourse(s)' in this research project. This subchapter therefore grounds a discursive consideration of post-ecologism in discourse theory.

Reflecting these considerations, this project concentrates on the antagonisms manifest in the post-ecological era. The social production of what is termed the post-ecological era mobilises a set of discursive resources that, according to discourse theory,

necessarily invite challenge as a function of their existence. China, in particular, has emerged as a key actor in global environmental politics, especially in a post-Copenhagen and post-Trump atmosphere of reduced EU and US leadership. Historically, China has mobilised similar discursive resources and played a studious role in (particularly climate) relations with the EU, going so far as referring to the EU as 'our teachers' in the area of carbon trading at the COP21 in Paris (Carbon Pulse, 2015). More recently, however, China has played a considerably more autonomous role; increased domestic resources, both discursive and material, have been mobilised in support of 'ecological civilisation' and to increase China's contributions to global fora in attempt to rebalance environmental agreements in terms of blame, responsibility, and provision.

As such, this research project broadens the agenda of post-ecological research. A more nuanced understanding of its globality and of its application to emerging economies is vital: as China's role is increasingly fundamental to any 'solution(s)' to climate change and other ecological crises, a paradigm that is poorly equipped conceptually to tackle what is and is not unique about its form of eco-politics and therefore relies on its application to post-industrial societies risks being obsolete. What follows, therefore, is an outline of how this important concept is adapted for use in an interpretive study that focuses on more globalised discourses and their interaction with emerging sustainability discourses that shape the realities of an increasing number of people.

Post-ecologism, in this research project, is therefore understood as a conceptual framework that provides a grounded way of talking about the depoliticization of sustainability. In order to better operationalise this within the terms permitted by discourse theory, I depart marginally from Blühdorn's (2007) concept of the *politics of unsustainability*. The *politics of unsustainability* is determined by Blühdorn and Welsh to be the 'particular mode of eco-politics' that contributes to defining the 'era of post-ecologism' (Blühdorn and Welsh, 2007). In their constitution of the problem at the heart of late-modern society and its sustainability, *the post-ecological era* and *the politics of unsustainability* go hand-in-hand. The *politics of unsustainability* therefore delineates the form of politics that enables the continuation of unsustainable practices, especially hegemonic practices heavily sedimented in everyday social and economic life.

This is a key area of investigation for this research project, and more generally in the political ecology project. However, Blühdorn's concept implies the paradigm of

sustainability no longer captures the unfolding mainstreaming and depoliticising of the term itself. Blühdorn argues that '[f]or their politics of unsustainability, so the theory of post-ecologist politics suggests, advanced post-industrial societies are relying, in particular, on strategies of *simulation*' (Blühdorn, 2012, emphasis original). 'Simulation' here denotes a number of performative and discursive actions that 'entail the production and maintenance of societal self-descriptions in which modern societies portray themselves as having fully recognised the seriousness and urgency of the sustainability crisis' and contribute broadly to a sense of taking up the necessary actions to combat it (*ibid.*). This articulation implies an attempt to *get behind* the mainstream discourse of sustainability and reveal the 'reality' of its *unsustainability*. While representing an urgently necessary critique of the prevailing discourse of sustainability, this view fails to understand sustainability as a political frontier whereby differing discourses struggle to invest the signifier with meaning. *What* is signified, therefore, by sustainability remains the object of political inquiry. In discourse theoretical terms, the floating signifier of 'sustainability' does not contain an objective meaning. The political project is thus not to elaborate a politics of *unsustainability*, but to better understand the ostensible appropriation and mainstreaming of more radical eco-politics into a discourse of sustainability in which hegemonic modes of production, exploitation, and degradation are maintained.

Therefore, I posit two weaknesses in the concept of the *politics of unsustainability* as the groundwork for articulating a new concept. First, the issue of agency is underdeveloped. Blühdorn's concept implies a co-option of the sustainability agenda in terms that allow the continuation of unsustainable practices *alongside* an awareness of the crisis in which those practices are complicit: it is unclear in Blühdorn's concept who is involved in this and how 'aware' those actors are that they are reproducing an unsustainable discourse. Moreover, it is unclear what agency this permits to dissenting actors – are these to exist outside of the eco-politics of unsustainability, and if so, is a separate mode of eco-politics required for this? Second, it is unclear where Blühdorn situates his critique of what is deemed 'unsustainable'. While there are frequent appeals to ecological sustainability, these are non-specific and fail to account for how sustainability itself is political: *whose* sustainability, *what* is sustained, and how these questions are also dependent on power-laden representations of nature (see, for example, Leff, 2015). While the IPCC's findings are mentioned numerous times (and this research

project utilises these too), the wider problem of contradictory sustainability agendas and claims is ignored. In other words, the concept relies on an external critique that is not well defined in order to judge what is or is not sustainable. While the problem of ideological assumptions in discourses that contribute to the *politics of unsustainability* is detailed, this critical position is not maintained and considered in the production of knowledge about what is *unsustainable*.

In place of this, I propose a distinction between sustainability *agendas* and sustainability *outcomes* as a conceptual framework for understanding the phenomenon of post-ecologism to overcome the highlighted weaknesses above, that also considers a post-structuralist orientation. Discourse theory does not try to *get behind* a discourse to reveal what's 'really' happening. This helps solve the agency problem as sustainability discourses reveal their agency in clear ways: who produces, disseminates, and interprets the discourse is normally a recorded factor in the kinds of materials analysed here. Because I contain this within the paradigm of sustainability, a key difference is that the continuation of unsustainable practices occurs *as if* those practices were sustainable. *Acting* sustainably is therefore possible even in the absence of *ecological* sustainability. On the second problem, the differentiated agendas and outcomes concept provides a clearer frame of reference for investigating the discourses of sustainability according to an internal critique in which a discourse's own stated aims and ideals are used as the basis (Wodak, 2008).

Sustainability agendas therefore represent discourses where 'sustainability' is held as an ideal, and a series of behaviours, regulations, norms, values, and other politically-contingent discursive resources are mobilised to achieve those ends. Agendas are thus about process. In the production of the (Western) *post-ecological era*, the outcome-oriented sustainability discourses of the 1970s and 1980s, marked most prominently by the publication of the Brundtland Report (1987), are displaced by the rationalisation of ecological crises in economic terms and techno-managerial fixes in which a privileged and taken-for-granted system represents the confines of political deliberation.

Market-liberal sustainability approaches focus on the continuity of the given system; the status quo answers the question of *what* is sustained. In this sense, the *sustainability agenda* of market-liberal sustainability merely articulates the ability to continue an already established system; it imagines a future of the least possible change required for its continued reproduction. This constructs consumerism as part of the

solution to ecological crisis, rather than part of the cause. The obstacle to sustainability is thus problematised as a failure to innovate, to which the solution is technological advancement and ecological modernisation; a discourse in which the consumer subject participates in the process of innovation.

Sustainability outcomes represent the external discourses of ecological sustainability – grounded in biophysical sciences such as the planetary boundaries framework, for example, they provide a grounded, normative critique of *sustainability agendas*. Outcomes are about the results of a given sustainability transition framework; they might also be judged by experiences of local groups, for example the visible reductions of air pollution observed in the case study of Shenyang (Chapter 6). The *outcomes* concept is used to provide a transparent means of critique, and organises the critical tools of analysis outlined earlier in the chapter (internal and imminent critique), as well as appeals to the external discourses of consensus-based science in the form of the IPCC and other bodies. In this project, I employ both localised experiences of outcomes in the case study of Shenyang, as well as well as appeals to the external discourses as outlined earlier in the chapter.

With regards the post-ecological era, the key point is that *sustainability outcomes*, that is, tangible, measurable successes of an *agenda*, are not required in the production of a sustainability discourse. Because an *agenda* can represent an organised way of 'doing' and 'acting', that is, the *performance* of sustainability, in a discourse-internal logic, *outcomes* are taken as arising from the act of doing. This incorporates the post-structuralist concentration on language and communication, and more specifically the importance of speech-acts in social creation and the bringing into being of the object. In the context of this research project, then, the act of sustainable consumption *performs* sustainability; the discursive repertoires of the consumerist act construct the notion of sustainability.

Building on Laclau and Mouffe's (2014 [1985]) discourse theory, I posit that a reconciling of the green-consumer paradox and overdetermination is attained only through a construction of fantasy; a sustainability agenda in which the pursuit of sustainability outcomes is both implausible and, in any case, secondary to the sustainability of an economic and social status quo. The hegemonized discourse of consuming sustainably thus depoliticises sustainability as a concept and practice. This is facilitated by green marketing discourse which provides a temporary stabilisation of a

system of meaning that invests a particular action with the notion of sustainability; providing a subject position whereby *acting* sustainably is possible even in the absence of *ecological* sustainability. This allows for the pursuit of sustainability *agendas* without sustainability *outcomes*.

'Sustainable consumption', as mentioned in the various IGO literatures above, assumes an essentialist position on behalf of the subject: an *a priori* identity for whom consuming forms an inherent part of living in modernity. The focus thus becomes on rationalising and enabling this behaviour in the face of a multitude of crises in which precisely this behaviour is complicit. The naturalisation of such a concept removes it from deliberation with the consequence that consumerism occupies a privileged position so that crisis mitigation is organised around, and in service of, this hierarchy. Put simply, 'sustainable consumption' emerges and serves to reproduce and legitimise the dominant economic order at precisely the point of its greatest failure. 'Sustainable consumption' therefore becomes an issue of hegemony because the conditions of its existence occlude alternatives from being. The legitimacy of the discourse, 'truth' in the Foucauldian sense, is attained not through an inevitable and exclusive response to scientific fact, but the radically contingent outcome of prevailing power relations. The market-focused response to ecological crisis is not an inherent element of the crisis, but it has been articulated as such. To frame this in discourse theory, then, the consumer-focused response is radically contingent; it is possible but not necessary. The focal point of this mode of eco-politics is thus how it becomes established in common sense.

Aesthetics and cultural productions can therefore reinforce the post-ecological paradox; disaster movies, dystopian futures, among others, reinforce the notion of environmental catastrophe as contributing to an end of civilisation. The narrative is simultaneously part of and critical of late-modern consumer capitalism. It alludes to the dangers of ecological catastrophe whilst participating in and relying on its essential causes as a means of capital accumulation. But beyond a political-economic critique, it is essential to understand these behaviours discursively.

In this sense, the post-ecological era doesn't represent a discourse in itself. Instead, the mainstream discourse of sustainable development makes sense of certain actions *as being* sustainable, and other actions as being unsustainable. The importance of subject positions is therefore fundamental to understanding the post-ecological era; following a social constructionist logic, the identity of a subject is a function of the

discourses available to them. In this way, the concept of the *politics of unsustainability* is replaced by a concept that re-engages with the discursive modes of social production, and therefore locates the political frontier in the ongoing struggle to invest *sustainability* (and, by implication, *unsustainability*) with meaning.

This provides a framework for understanding a broader array of struggles that attempt to (re)assert their autonomy or meaning on localised forms of ecology. Key literature in this area has approached the politics of ecology through engagement with gender (Carney, 2004), indigenous eco-movements (Murray Li, 2004; Bebbington, 2004; among many others), and race (Kosek, 2004), among others. The point here is that there exist multiple strands of eco-political thought and practice concerned with *the political*, especially in the global south and particularly where formal institutions have failed one way or another in the promise of representation. As such, the discursive, democratic, and counter-hegemonic struggles are key sites of the *re-politicisation* of sustainability; and this forms a key normative drive of this research.

Because of this, the framework of the *post-ecological era* is taken, as with any other system of meaning, to be transient and always in a state of challenge. More specifically, this research attempts to open up this question of *what challenges it* to the global discourses of sustainability and the emerging influence of China. In China, a new balance of agendas and outcomes is articulated, and, more pertinently, different discourses invest *sustainability* with different meanings. The post-ecological era is taken as a framework that has emerged within a particular context (the 'west') that serves as a much-needed critique of the process and of depoliticization and mainstreaming of sustainability; but the key question remains how does China reflect, rearticulate, and challenge this?

3.4. Methods: Discourse Theoretical Analysis in Practice

As is typical of research from a normative, critical theory perspective, theory and methodology are inseparable in practice. Discourse analytical tools are always embedded in a theory of discourse (Atkinson, Held, and Jeffares 2011). It is therefore incumbent on the researcher to articulate the links between the theoretical framework and the methodological tools used. Overall, the choice in methodology reflects the need to overcome linguistic barriers and the need for the data gathering process to reflect the theoretical framework epistemologically.

While discourse analysis *Qua* data gathering tool is relatively void of philosophical assumptions - or at least open to a number of approaches - discourse theory represents a set of philosophical assumptions and a broadly complete, if fragmented in Laclau and Mouffe's initial works, theory of the social. This distances it from methodologically similar approaches, such as critical discourse analysis (CDA), discursive psychology, or the discourse-historical approach (DHA) where discourse analysis, to different extents, is but one tool necessary for understanding the social. This grouping of critical discourses studies is in turn distinct from the more positivistic tools of corpus linguistics, conversational analysis, and so on. Discourse theory approached this is as part of the wider poststructuralist challenge to positivist modes of understanding, and, wider still, the communicative turn in social sciences. More specifically, it represented an answer to the 'crisis of the Left' (Laclau and Mouffe, 2014) rooted in the reductionism of Marxist economic determinism.

Discourse theory interprets more orthodox Marxism as a grand theory that predetermines the oppressed identity, continually implicates a materialist economic base, and reduces the function of ideology to that of false consciousness. In place of this, discourse theory insists social categories are unfixed, and the political frontier is located where a dominant organisation of consent comes up against alternative articulations. In doing so, post-structuralist discourse theory challenged a conventional wisdom that privileged a particular way of 'knowing' about the social world, specifically the monopoly that positivism and essentialism held on the right to interpret the world and produce knowledge.

Discourse theory (Laclau and Mouffe, 2014; Howarth, Norval and Stavrakakis, 2000) represented the most obvious means by which to pursue constructionist research where rhetoric and narrative played a key role not just in describing a natural state relating to 'the environment', but in constituting it and defining actors, relationships, and so forth. However, in practice, elements from the CDA approach and corpus linguistics were utilised to help articulate discourse analysis as a set of methodological procedures.

Discourse theory does not contain a consistently applied and generally agreed upon set of methodological procedures. The foundational text, *Hegemony and Socialist Strategy*, set forth a series of conceptual tools and grammars that facilitated the analysis of discourse and policy, but did not articulate a specific process by which the analysis

could or should be conducted. Subsequent work in the 'Essex School' (e.g. Howarth, Norval, Stavrakakis, 2000; Laclau, 1994) of discourse analysis furthered these concepts through various theoretical and applied arguments and projects, presenting different ways in which empirical phenomena can be captured and understood. It is this body of work, therefore, that I draw on primarily for the interpretation and analysis of discourse.

Discourses on sustainability make numerous claims about the role of economic growth, innovation, technology, consumerism, the state, citizenship, and so on, in ways that are possible, but not necessary. The use of abductive logic avoids the apriorism of fixed categories as is seen with more grand-theory approaches and deductive studies. Abductive logic, instead, begins with a 'surprising empirical fact' (Watts and Stenner, 2012: 43) and this study employs works on a similar premise by incorporating discourse theory's preference for initially investigatory study. This initial investigatory phase explored various literatures, statements, and speeches across states and IGOs, as well as situated knowledges in China, conversations with experts (experts of particular disciplines, or experts by experience of environmental burdens such as air pollution). As such, data is collected in an initial phase before the determination of modes of representing it or choices about where to concentrate a detailed analysis.

Shenyang was chosen for this part of the exploratory research. Shenyang represents a particularly acute instance of the conflation of economic and environmental interests. As a large centre of heavy industry in China's northeast (Dōngběi), Shenyang has played a historical role in the development of Chinese industry. Petrochemicals, metallurgy (particularly steel), electronics and machinery are the pillar industries of the province, while Shenyang also plays a significant role in the defence industry. At the same time, the local climate necessitates substantial energy expense on heating during the winter, heavily derived from coal-powered plants. These broad factors combine to produce air and water pollution which, at the start of this research project, were the 'worst ever' seen in the country (BBC, 2015). At the time, state media blamed the local government (Global Times, 2015), whilst this study found that local government officials were limited by state government policy on the closure of polluting factories. Moreover, the air quality crisis occurred after local and state governments, as well as state and international medias, claimed a 'turning point' from 'gray to green' (e.g Larson, 2011).

As part of this initial exploration I compiled a corpus of English-language documents sourced primarily online from a variety of formal sources: Chinese

governmental agencies, EU agencies, various UN agencies, the OECD, IMF, World Bank, AIIB, among others. The aim here was to reflect a wide range of formal institutional discourses around sustainability. Next, a similar technique was used that focused on INGOs and NGOs. Texts were then selected for a close analysis. These were gathered through a mixed approach, combining stratified searches online and convenience sampling in person and online. The strata varied according to chapter. Chapter Four's contribution to the language of performative sustainability was developed from a sample of green advertising. This sample was chosen on the basis of the most commonly purchased electric and hybrid vehicles representing a sector, transport, that accounts for the largest GHG emissions in the UK. 'Sampling' for discourse theoretical analysis does not aim to find a comprehensive, representative sample of all possibilities of articulation (which is theoretically endless), but to represent those of hegemonic blocs where particular meanings are solidified through articulatory practices and enjoy a 'taken for granted', or sedimented, status. Chapters Five and Six searched records of various Chinese institutions relating to sustainability or development, such as the Ministry for Ecology. This included formal announcements made through or included in state-owned media. In the corpora record in Annex II, this is recorded as the named official making the comments, followed by the platform on which they appear.

Annex II (Figures 10 – 14) provides a breakdown of the texts selected for close analysis to inform the study, including content, date, author or origin, type of text, and source. It should be noted that, in addition to these corpora, in-person experiences inevitably informed the interpretative analysis. This included formal and informal discussions in China and engagements with numerous events during the two-week period of the UNFCCC COP23, including official events by China, the EU, IPCC, UNEP, and other states including the UK, Germany, France, and several 'host countries' of the BRI. Moreover, a substantial body of literature contributed to the development of concepts and themes in this thesis, which were further refined through presenting to conferences and workshops between 2016 and 2019. These have not been reproduced here but are reflected in the Literature Review and bibliography.

These corpora comprise 105 texts in total, broken down between Chapter 4 (41), Chapter 5 (20), and Chapter 6 (44). Chapter 4's second stage analysis contains more imagery given the focus on advertising and consumer-facing materials. Texts are grouped according to the chapter to which they relate most directly. This broadly reflects

the sequence by which they were first engaged with over the course of the research. Chapter 4 is further grouped into two subsections relating to IGO texts (Figure 10) and advertising texts (Figure 11). Chapter 5 is a single corpus (Figure 12). Chapter 6 is further grouped into two subsections relating to ecological civilization (EC) in Chinese external relations generally (Figure 13) and EC in the Belt and Road Initiative (BRI) specifically (Figure 14). Where possible, URLs that have ceased functioning or redirect since being analysed have been replaced by archived versions which reflect the content and format of online content at the time of the analysis. Following discourse theory, 'text' is given a wide definition to include multimedia formats and imagery, though in practice the majority of articulations were in text form in the narrow sense of the word given the concentration on speeches and state or IGO publications.

The inclusion criteria for close analysis of texts varied by chapter. For Chapter Four, concentrating on the social construction of environmental consciousness in sustainable consumerism, texts for close analysis from advertising had to be public-facing and offering a product or service reflecting allegedly 'green' qualities, values, or processes. In Chapter Five, it was necessary that the text be articulated or endorsed by the Chinese state, be articulated domestically (i.e. pertain to China's internal governing), and mention 'ecological civilization', or commonly associated terms, such as 'living in harmony with nature'. For Chapter Six, close readings of texts were conducted on those which specifically articulated ecological civilization in an international context outwith the Belt and Road Initiative (BRI). A second round focused on broader 'greening' language associated with the BRI, including articulations of ecological civilization. The choice to focus on the BRI reflected its unparalleled scope in terms of capital, the spaces it occupied within and outwith China, the emphasis placed on it by the Chinese state, and the engagement with it by IGOs and INGOs. Once texts were selected for close analysis, rather than focusing on the corpus-linguistic factors such as word frequency and collocation, the analysis followed a qualitative, interpretivist approach. Four related aspects are used for the qualitative analysis: content, context, actors, and specific procedures. While their use helps to make the critique a more transparent process, these are necessarily broad in order help alleviate *a priori* assumptions about what specifically is being looked for. This replaces the deductive tendency of hypothesis testing (the positivistic hypothetico-deductive model) in favour of an abductive approach. The steps for analysing a given text were therefore to question:

- What is the content of the text? How is meaning portrayed and solidified around key terms such as sustainability, consumer, or ecological civilization?
- What is the context of the text's emergence and its articulatory practices? Is it presented as a solution to a given issue? How is that issue constructed as a problem? What latent assumptions does the text lean on (e.g. reduced carbon emissions = 'green')? What knowledge is required and what knowledge(s) are obscured or omitted?
- What actors does the text articulate? What mode does agency take (e.g. a protestor? An investor? A consumer? A voter?)
- What specific practices does the text articulate, call on, or disregard? How does the text challenge or continue the hegemonic project of a particular meaning of a process or outcome? Does the text allude to a 'micro-discourse' of expert language, such as carbon trading or climate justice, within a broader discourse such as climate change?

These four lines of questioning relate, in order, to *content*, *context*, *actors*, and *specific procedures*.

Content, following the poststructuralist tradition, does not refer to an objective and universal description of a passage of text, image, or other sensible phenomena, but a range of possible articulations. The key focus here, therefore, is the investment of meaning in the floating signifiers between discourses, such as 'sustainability' as a master signifier, but also 'nature', 'wild', 'development' and so forth; terms without a fixed definition that appear fixed in context. The overall critical theory agenda of revealing such taken-for-granted terms and their contingency, in the Foucauldian sense, is central here. Following Wodak's (2008) Discourse Historical Approach (DHA), and drawing more on the Frankfurt School lineage in critical theory, an important consideration here is also of a 'discourse-immanent critique' which 'aims at discovering inconsistencies, self-contradictions, paradoxes and dilemmas in the text-internal or discourse-internal structures' (Wodak, 2008: 88).

Context, to relate again to the DHA, can be understood as '*Socio-diagnostic critique*', and 'is concerned with demystifying the - manifest or latent -persuasive or 'manipulative' character of discursive practices' (*ibid.*, italics original). However, whereas the DHA, following its CDA heritage, draws 'on social theories as well as other theoretical models from various disciplines to interpret the discursive events', discourse

theory contains its analysis entirely within the discursive; Laclau and Mouffe's theory of the social as *constituted by* rather than *constitutive of* language allows for this. Nevertheless, the importance of locating the text within the social is paramount to the discourse analysis, however the 'social' is conceived.

Actors refers to the importance of identifying agency in the discourse; with whom does power to do things lie and who is precluded from acting. This is an essential aspect for analysis where interpolation and subject positions, following discourse theory's radicalising of Althusser, are explored. In this sense, the analysis incorporates not just *who* is called upon but in *what ways*. Such a focus is particularly revealing, for example, in the sustainable consumer discourses where citizens are called upon to act through consumption in order to drive innovation to help solve the climate change problem. This raises a key question that is investigated in the close analysis stage: what forms of inclusion do sustainable discourses construct, and how are dominant social relations implicated in such an articulation?

Specific practices refer to the analysis of strategic actions within the text and is a way of identifying intertextual crossover. For example, carbon trading is alluded to frequently in EU-China dialogues of climate change, as well as in each region's internal documents. Specific practices can thus contain a type of 'micro discourse' whereby specific terms and phrases make sense in relation to the practice itself and what it enables or restricts. Within the 'global green new deal' discourse, for example, investment is understood as a particular ('green') type, enabling the creation of jobs and investment returns, but restricting which industries receive that investment. Within the context of the document, then, 'investment' has particular connotations and restrictions which aren't necessarily present in another.

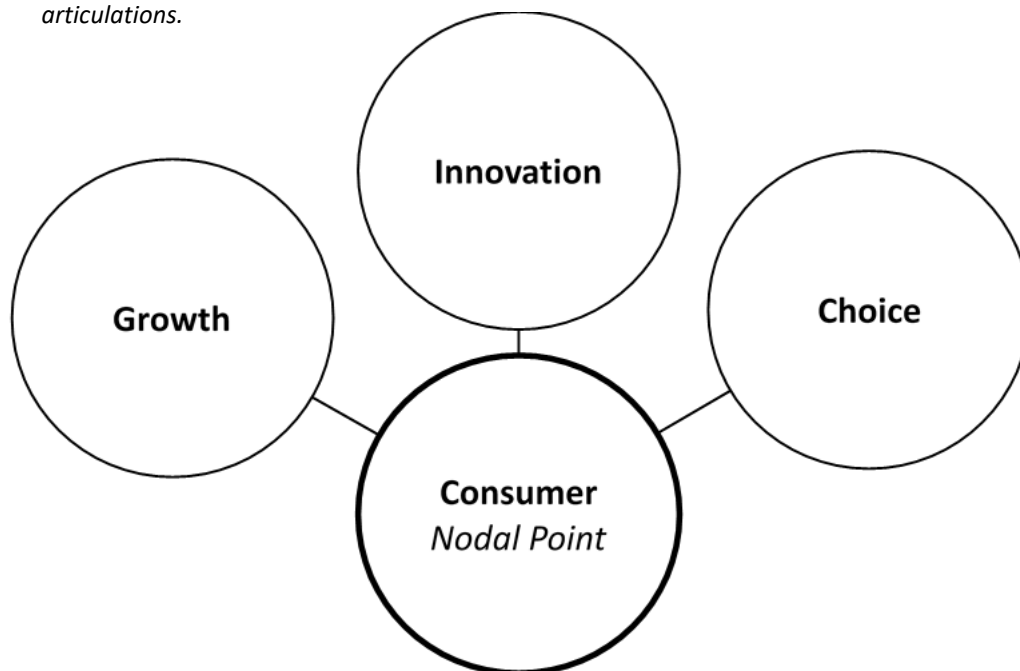
To put this in practice using a limited sample of the discursive resources, Figure 4 demonstrates this with an illustration of specific texts. Here, the *nodal point*, the consumer, is understood in relation to various *moments*. This represents a snapshot of one articulation of the consumer role in sustainability transformations, taken from the Organisation for Economic Co-Operation and Development (OECD) Green Growth agenda:

Consumers account for more than 60% of final consumption in the OECD area, and can have a major impact on green growth by purchasing products that have desirable environmental properties such as recyclability and energy efficiency, and by modifying their behaviour to support environmental goals. (OECD, 2018.)

Consumers are key to driving sustainable production and play a central role in sustainable development. (OECD, 2008.)

'Consumer' as an identity, or subject position in discourse theory, is equated with various elements: driving innovation in production; achieving development; growth; freedom; individual choice. This is typical of economic intergovernmental organisations, post-industrial states, and indeed similar to what can be seen in companies: consumers are the *agents of change*. These *elements* become *moments* within the *articulation* of the consumer. Similar articulations, calling on similar moments to give meaning to

Figure 4: Chains of equivalence between the nodal point 'consumer' and its signifiers in OECD articulations.



consumerism, represent *iterations* of this.

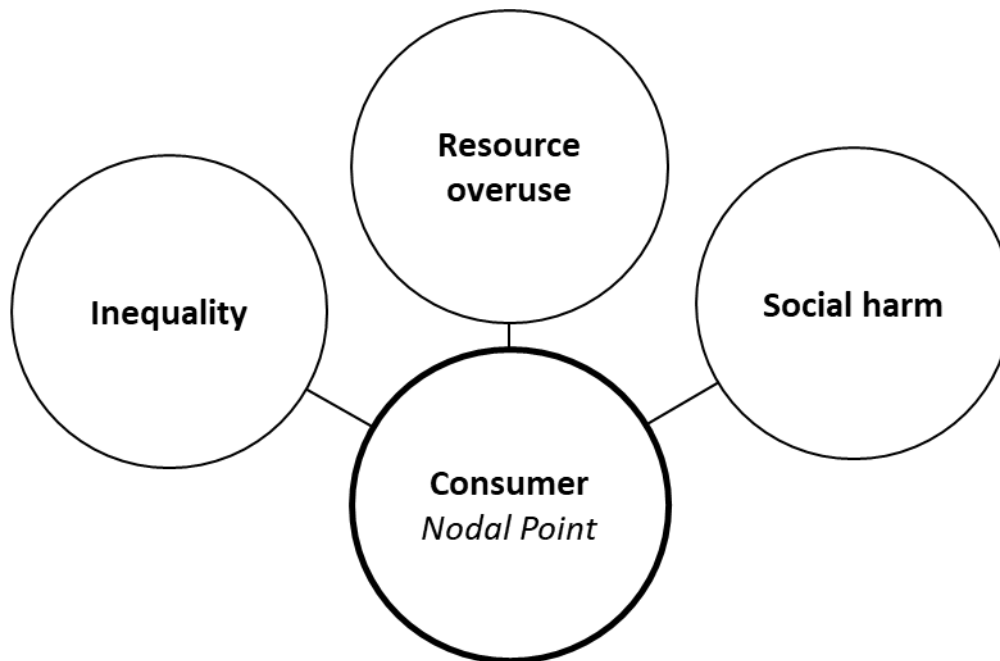
In contrast, Figure 5 shows the same nodal term, consumer, in a counter-discourse – a different way of articulating what is meant by consumerism, or what it ought to mean in a context of sustainability transition. It provides a very different subject position for individuals to occupy. From Friends of the Earth's (UK) position on consumption (FoE, 2018):

We often buy things not because we need them, but because it makes us feel good and expresses who we are. We do need to consume stuff to survive and enjoy life, but excessive consumption is damaging the environment and harming people. We need to reduce overconsumption by doing more with what we have (eg by

sharing, making better products, developing a circular economy), changing how we market and advertise, increasing empathy towards others to encourage more careful consumption, and supporting ways of expressing who we are that don't involve excessive consumption (eg through sports).

Here, the chains of equivalence drawn between consumerism as the nodal term and innovation, choice, development, growth, and so on, are replaced by more negative equivalences: excess, environmental damage, and social harm. The basic distinction between these two articulations of consumerism is that the latter seeks to limit the harm of consumerism, while the former understands consumerism as inherent to the fix. In the business-as-usual-friendly OECD articulation (fig. 2), consumers are powerful agents of change whose outcome-affecting power must be harnessed to achieve anything sustainable. In the environmental NGO example (fig. 4), consumers are a body to be limited, consumerism as a practice is problematised, and alternative modes of identification are encouraged, in this case, 'through sports'.

Figure 5: Counter-articulation of the 'consumer' in Friends of the Earth articulation.



When nodal points are articulated and re-articulated in this way, discourse theory refers to them as *floating signifiers*. This captures the political process: one group of people articulate a term in one way, opening up one set of regulatory criteria for subjects to

occupy, and another group take the same term and open a *different* set of criteria. Political struggle, essentially, comes down to the power of one set of socially available, regulatory criteria to be taken as 'common sense' (or 'sedimented discourse' in PDT) whereby it is simply accepted as the way things are.

In the poststructuralist tradition, the privileged role of consumerism in mainstream sustainability transitions can be viewed as a product of this necessary feature of language. Sedimented discourse is necessary for the communal understanding of meaning among a given social group – it accounts for the relative permanency and resilience in the relationship between signifier and signified. While resilient structures can appear fixed, poststructuralist accounts insist this sense of permanency is illusionary and resilient structures can and do change over time and space. This insistence that relationships between the signifier and signified change marks the key distinction between the structural linguistics of Saussure *et al* and poststructural linguistics.

Whilst these figures are intended only to illustrate the approach, the small samples are still revealing. For example, existing institutions are called upon in the OECD text. In the FoE text, existing institutions are problematised to a degree, but action is still individualised: the reader is called upon to assert their individuality in more sustainable ways. What's missing from both texts is the role of collective action. Both texts can be critiqued for incorporating a neoliberal drive whereby the individual is alienated, and social factors such as empathy become a condition of consumption, rather than of collective political action or solidarity in a more organised sense. The individual as the determined agent of change remains a more fundamental point of convergence between the two otherwise oppositional texts.

While it is important to not draw too wide a conclusion from limited texts (FoE articulate elsewhere the importance of collective action), the point here is the near limitless potential of consumerism demonstrated by two seemingly competing discourses. In FoE's text, consumption, whilst problematised, is still constructed as being capable of incorporating both care and empathy, and the need 'of expressing who we are' maintains the external locus of identity that drives consumerism as a performative act, or, following Marx, ([1844] 1972: 81) as a transformative act.

In practice, these criteria of analysis produced an array of factors relating to 'sustainable consumption' as a discourse, which became the focal point of the discourse analysis as a more specific manifestation of the hegemonic sustainability discourse. This

was adopted into the theoretical framework, and thus informed subsequent analysis of the 'sustainable consumer-subject' and to highlight the role of sustainability agendas versus sustainability outcomes in producing what I term *one-dimensional sustainability*. Specifically, these consisted of active-positive language, complexity reduction, economic rationalisation, representation and participation, problem construction, and open signification.

However, it should be reiterated that discourse theory represents a series of overarching concepts that inform the research project throughout. Critical analysis is not merely a specific device employed at a particular point, but an encompassing philosophy brought to bear continuously on not just 'data' *per se*, but in all aspects of carrying out research.

3.4.1. Research ethics

In addition to corpus discourse analysis, initially¹¹ the data collection aimed to conduct interviews and use Q-methodology in China with local stakeholders – this would have provided an insight into the ways in which extant networks interpreted and made sense of sustainability from an abductive logic approach. This 'departs from and represents a critique of hypothetico-deductive logic which typifies knowledge production in much mainstream research' (Capdevila and Lazard, 2008), opening up space for the study of marginalised perspectives. A comprehensive online programme was developed for this purpose, using a series of professionally translated statements gathered from focus groups of Chinese postgraduate students from Liaoning University, coded to their English translation. I considered ethics from several perspectives: participation, data security, researcher reflexivity, and lastly cross-cultural and postcolonial research. Ethics approval was awarded by De Montfort University for carrying out the research in China over a 3-year period. In addition to this, I held conversations with academics at Liaoning University on issues of ethics and data security in a Chinese context (June 2016 and June 2017). Overall, the Economic and Social Research Council (ESRC) Framework for Research Ethics (2015, updated January 2016)

¹¹ This is included briefly as a reflection on the eventual path the research took – whilst unused directly, it remained an important part of my approach to research in China due to the lessons learnt. Owing to the nature of interpretive research, the final analysis would have been different without these earlier exploratory paths.

provided the ethical framework for identity protection, data security, and researcher integrity.

The fieldwork coincided with a state crackdown on academic dissent and general difficulty in gaining access to NGOs, academics, and public officials. As Tran puts it, universities 'will be closely scrutinised, professors will be evaluated and the Party will punish those lacking ideological firmness...despite the undeniable international character of Chinese universities, higher education and research must tow the party line' (Tran, 2017; see also Foreign Correspondents' Club of China, 2016 for a detailed discussion of access to participants). In this context, I took ethical and security precautions that may have been unnecessary in a different research environment.

In terms of participation, a key concern was the political nature of the subject and the opening up of issues of dissent, particularly in a context where suppression of dissent is a widely used tool of state. Because of this, guarantees of anonymity and confidentiality were paramount to those I spoke with. In regard to the Q-methodology and interviews, I concluded that the hesitancy displayed to discuss potentially political issues, both in interviews and in informal situations, reduced the likelihood of gathering useful data and increased participants' unease in the setting. Whilst this was originally moved entirely online to help with this, that approach also failed to produce sufficient data. As such, it became impossible to gain a significant number of interviews and it was agreed collectively with the supervisory team to focus on discourse analysis and building a corpus of documents as the main means of data collection and analysis. Ethical considerations remained both in relation to the collection and analysis of documents and other discursive phenomena.

Issues of studies conducted by researchers based in the West on populations based in developing countries or other historically marginalised communities has gained traction in post-colonial research as an issue of ethics (see, for example, Jack and Westwood, 2006; Tikly and Bond, 2013; Robinson-Pant and Singal, 2013). Fundamentally, this tackles the discursive representations of post-colonial and developing countries in the West, as well as highlighting the role of power. Together, this brings to light the issue of 'voice' in the research. How are historically marginalised communities portrayed and emancipated? How can research in and on developing countries avoid replicating the 'colonial project in the way it appropriates the Other?' (Jack and Westwood, 2006).

While China has eluded some attempts to classify or categorise its state of development, official accounts have insisted on the 'developing country' status, and indeed scholars at the Chinese Academy of Sciences in their comprehensive *Chinese Modernisation Report, 2005* argue China could reach 'developed' status around 2080, and 'moderately developed' around 2050, concluding the Chinese economy was around 100 years behind that of the G7 states in 2001 (China.org.cn, 2005). In 2011, the same research consortium classified China as 'an elementary developed country' (CAS, 2011), and in 2009 ranked it 7th in an index of cultural influence, behind the US, Germany, UK, France, Italy, and Spain (CAS, 2009).

For the research pathway taken, it remained important to avoid projecting epistemic claims which reflected an historically Westernised, techno-managerial and empiricist approach to knowing about, in particular, nature. As such, the research project does not dismiss local and Indigenous knowledges on grounds of science – there is no objective 'truth' deployed to legitimise or illegitimise those discourses. In this sense, knowledge was not imposed to discredit representations of nature. This also speaks to the ethics underlying the data gathering: by engaging with local academics and researchers I aimed to gather what Holliday (2013) refers to as a 'decentred attitude to research ethics'. Throughout the thesis, there is a concern with avoiding the 'Othering' and homogenising of broad and varied cultures, societies, and communities, which formed an essential part of the research journey whilst in China, if not ultimately in a determinable aspect of the data.

3.5. Conclusion

Poststructuralist discourse theory (PDT) can show how discursive structures construct subject positions and power relations. Furthering Foucauldian theory, PDT develops the insights of how 'truth' emerges and represents a function of power. It is possible, and important, to distinguish the material 'existence' of a phenomenon from its social 'being' – PDT, as deployed here, focuses on the latter. For instance, the exploding volcano 'exists' but does not *contain* meaning. Instead, meaning is projected onto it as the moment is incorporated within a discourse of signs. Whether it is understood as an act of gods, or outcome of converging and diverging tectonic plates, depends on the available discursive resources with which to invest the phenomenon with meaning. This a function of power – the structuration of a discourse, what it includes and occludes.

A hegemonic discourse therefore wields the ability to supply meaning. In the case of the volcano, it might incorporate the eruption into a discourse of governance: the displeasure of gods serving as a regime for regulating behaviours, creating governable subjects and concentrating the right to knowledge production in an elite priesthood or similar. Absorbed into the meaning-making structure of scientific volcanology, it provides valuable insights into the reliability of models to predict hazards, but also occludes alternative knowledges and places 'objective' knowledge out of reach of the untrained. Discourse theory does not provide a clear means of making a judgement on which of these is 'best'. Instead, PDT points to the importance of radical democracy, of building alliances, and of exercising the political, formed of antagonisms, in public spaces.

Why does this matter for this study? Sustainable development represents a hegemonic discourse. Instead of an erupting volcano, it supplies meaning for other phenomena: climate disruption, the extinction of species, collapse of ecosystems, plastic pollution, and so on. To take the latter as an example, scientific discourses have invaluablely increased our knowledge of the extent of microscopic plastic pollution that is otherwise invisible to sensory experience. The *existence* of this plastic is a material reality. Sustainable development invests it with *meaning*. It is not the only discourse to do this, but it is the dominant narrative in policymaking. It is possible to articulate the ubiquitous presence of plastic throughout the world in grand discourses of the circular economy, or by the far more limited interventions into consumer behaviour through plastic bag charges. Even social phenomena, such as the airing of BBC's *Blue Planet II*, as covered earlier, become absorbed by the prevailing discourse of sustainable consumption.

The role of discourses in producing power and constructing subject positions is therefore central to an inquiry into the sustainable consumer subject, how it is constructed and governed, and what subject positions are constructed by opposing discourses. For this reason, the thesis turns to an exploration of these subject positions in the discourse of Western sustainable development transitions.

4. One-Dimensional Sustainability

In general, people are treated as consumers rather than citizens

UK Ministry of Defence, 2018

By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature

Sustainable Development Goal 12, Target 12.8. UN, 2015

This chapter details the construction of the 'sustainable consumer' in neoliberal sustainable development. As identified in the literature review, investigations of the 'subject' of sustainability transitions – who is brought into being as the agent of change, who is made governable – is underdeveloped in global political ecology. From this analysis, the sustainable consumer subject, the space created by discursive resources of sustainable development, is made comparable to the subjects that arise from Chinese discourses. For this reason, this chapter focuses on Western articulations of sustainable development and constructions of the environmental subject and the discursive conditions that mediate their access to nature. As highlighted by the quotes above, the key contradiction that drives this analysis is the construction of both the consumer and the sustainable citizen.

The UK Ministry of Defence in its Global Strategic Trends report (6th edition, October 2018) states that 'In general, people are treated as consumers rather than citizens', it goes on to observe that

there is a seller's market for loyalty and identity, which is led by non-state actors, including megacities and corporations. Most people have multilayered identities that not only reflect allegiances to non-state actors, but also a particular nation or region. (UK Ministry of Defence, 2018: 26).

The construction of people as consumers, and related issues of identity, have, at this small scale, been securitised in official defence literature before it is even acknowledged

in reports of environmental, development, or climate change departments and agencies as a category distinct from the needs of consumption.

This construction of consumers, in particular the sustainable consumer, is the main focus of this chapter. I argue that the ways in which environmental and climatic factors are problematised, and their solutions, agency, limits and opportunities articulated, are functions of a hegemonic consumerist discourse that privileges a performative sustainability which suppresses both environmental impacts and subaltern ways of knowing nature and crisis. Talk of 'sustainability' is primarily a performative practice where the continuation of consumerism with minimal reformation is the one of the 'sustained' activities. Sustainability in the ecological sense, here understood as a 'safe operating space' within planetary boundaries, is reduced to an aesthetic; a product-distinguishing quality whose sign-value as sustainable *identity* is divorced from its utility value as *functionally sustainable*. As Connolly and Prothero (2003) note, 'Consumers, even when they are environmentally concerned, are still consuming, only they consume perceived green products and recycle more. The actual level of consumption is not identified as a problem' (2003: 288).

Goal 12 of the UN Sustainable Development Goals, above, shows how this subject position is dependent on the handing down of the right information, while 'lifestyles in harmony with nature' are a function of sustainable consumption and production (Goal 12). Not only are consumers constructed as an agent of change and as form of citizen but are they one of only two subjects created by the discourse: the second is the opposition contained in the articulation of the sustainable consumer, the *unsustainable* consumer.

The chapter presents an interpretive analysis of globalised sustainable development narratives to develop an understanding of how (green) consumers are constructed. As such, it serves to ground the broader argument regarding the convergence and divergence between China's ecological civilization and Westernised sustainability discourse. The overall concept of 'one-dimensional sustainability' is developed with reference to institutionalised and elite discourses, and illustrative articulations of the sustainable consumer in marketing. Doing so enables subsequent analysis to proceed from a discussion of globalised sustainability discourses: the question becomes to what extent counter-discourses assert a multidimensional

sustainability, one that includes and articulates elements in transformational ways, and what forms this takes.

Marcuse's *One-Dimensional Man* (2002 [1991]) explores the tendency for a modern technocratic society to dominate the human experience, so that people live within and according to a single capitalist dimension. The link to the Marcusean canon largely begins and ends here, however. Unlike Marcuse's project, post-structuralist discourse theory (PDT) is not concerned with unravelling a system of oppression so that humanity's 'real' desires (or class, or other base identity) can be realised beneath it: there is no getting 'behind' discourse. Nevertheless, the concept of the one-dimensional experience is salient to the ways in which consumers are constructed as such in relation to sustainability. It serves to frame, for the purposes of this analysis, the singular, techno-managerial dimension in which agency is sanctioned and applied by elite and institutionalised sustainability discourses.

The one dimension through which sustainability-as-crisis is articulated depoliticises sustainability by the occlusion and co-option of alternatives. Equally importantly, it renders what *re-politicising* sustainability might look like: the understanding and pursuit of 'sustainability' in different dimensions beyond the consumer or commercial; beyond the governmentality of neoliberal economising. A counterhegemonic project, therefore, can be determined by the ways in which it forms new imaginaries by articulating different ways of living with and within nature – the *imagination au pouvoir* in Marcuse's vernacular¹². 'One-dimensional sustainability' is thus an overarching vocabulary for interpreting the more jargonistic concepts of green performativity and aesthetics developed in this chapter.

One dimensional sustainability does not represent a structurally determined inevitability. It is, in a post-structuralist sense, in a state of continual flux – responding dynamically to the challenges presented to it by the emergence of counterhegemonic discourses, in turn reflecting the categories of differentiation between competing discourses. Discourses that articulate broader and deeper connections between humans and nature, indeed that move beyond the anthropocentric 'human exceptionalism' of

¹² Though an orthodox interpretation of the Marcusean 'imagination of power' would place perhaps too much emphasis on the ability of the individual consciousness (the formerly-*One-Dimensional [Hu]Man*) to overthrow a systemic oppression.

late modernity (Dunlap and Catton, 1994) represent challenges to the Westernised hegemony, with both degrowth (and, to a lesser extent, post-growth) socioeconomics and Chinese *ecological civilization* articulating some elements in this way. The sustainable consumer aesthetic *calls on* the elements beyond this singular dimension. More appropriately, then, one-dimensional sustainability is a constantly evolving war of position in the Gramscian sense: it adapts to challenge. Other dimensions in which to realise citizen, community, and other forms of organised political agency exist insofar as they form discourses by which their actuality is articulated. As Howarth points out, drawing on Gramsci, 'the political aspects of a practice involve attempts to challenge and replace existing social structures, as well as attempts to neutralize such challenges in a transformist way' (Howarth, 2010: 328).

In PDT, the social arrangement is never finished, and as such one-dimensional sustainability, or any discourse, exists in a constant state of becoming; a detailed rendering of its discursive structuration is a snapshot of a system in flux. Arguably, very recent, and currently unfolding, events have done much to re-politicise what 'sustainability' means. Protests under the banner of Extinction Rebellion and the Youth Climate Strikes have, purposefully or not, built a wide alliance under broad signifiers of emergency. Though it cannot form a significant part of this study, the emergence of a broad alliance that rejects not just inaction on climate and ecological 'emergencies', but single-track sustainability agendas that occlude social justice or privilege economic 'sense', represents a strong emergent counter-hegemony, often in the same spaces where they interact and compete with the deeply sedimented discourses they challenge, such as London. A Gramscian war-of-position over floating signifiers, as would be expected, is evidenced, for example, by the declaration of a 'climate emergency' (representing the first of three demands of the group) by the United Kingdom. A later aim for a net-zero carbon economy by 2050 is reminiscent of Extinction Rebellion's second demand, albeit the latter demands a 2025 deadline.

With the continuation of business-as-usual in all significant respects, it remains unclear what actions and outcomes a climate emergency declaration and net-zero target have set in motion. Regardless, the declaration has, already in its short life, been used to disarm protestors of their legitimacy, as in the case of a Greenpeace UK protest in June 2019. Here, following the peaceful disruption (and violent reaction), the UK Foreign Secretary at the time, Jeremy Hunt, resumed his speech at the briefly interrupted event:

The irony of course is that this is the government that has just led the world by committing to a zero-carbon economy by 2050 [extended applause]. (The Guardian, 2019.)

The co-option of counterhegemonic demands as a pacification exercise, wherein the phrase coined loses its signification of radical, transformative change is especially significant in the context of 'finding sustainability' in a deeply consumerist culture. The tendency for language to be co-opted and rendered under a different meaning-giving structure of antagonisms, differentiation, equivalencies and agencies is a central point of analysis in PDT, and the central object of study in this chapter: articulation by consumer discourses of a 'sustainability' in which the consumer is constructed as the agent of change.

The chapter proceeds by first offering a post-structural discourse analysis of institutionalised sustainability discourse. It identifies and details a series of discursive characteristics of the sustainable consumer discourse, following, broadly, the self-interpretive approach detailed in the *Logics* method of PDT (Glynos and Howarth 2007; Howarth, Glynos and Griggs 2016) and detailed in Chapter 3. Following the steps of critique (*ibid.*; see also Chapter 3 of the thesis), this section applies and retroductively develops the theory.

The IGO literatures analysed represent two discernible discourses of consumption in sustainability transitions between which the role and agency of the consumer, and citizens as consumers, varies. In terms of PDT the equivalences and differentiations that serve to invest the 'consumer' with meaning, both as a governed subject and an agentic category, differ so as an antagonism is discernible between rival constructions of the consumer. A third discourse that challenges key equivalences in these discourses is then shown as an emergent counter-hegemony with increasing, though still fringe, institutionalisation.

From this, the second section identifies two related but distinguishable discourses of the consumer: as 'manageable' and as 'innovator'. A third discourse that goes beyond the consumer, in both post-growth and degrowth iterations, is briefly explored as a re-emergent discourse whose counterhegemonic challenge forms part of its self-identity.

In the 'manageable consumer', 'natural resources' are 'limited' and 'wise use' is necessary. Production and consumption must become 'responsible' and 'basic needs' are discernible from 'perceived' ones. These patterns are governable by the application of

appropriate policies by state governments. Sustainability is something done to consumers.

The 'innovative consumer', on the other hand, is a fundamental, privileged agent of change. The availability of choice in the system is the given condition for the consumer to 'drive innovation'. In this articulation, consumers act rationally according to the information they have.

For 'manageable consumer', sustainability is something *done to* consumers; in the latter, something *produced by* them. Producer and consumer are thus performed by the same overdetermined subject: individuals are called upon to produce the aesthetic they consume, that of the responsible, green consumer.

A final, counterhegemonic discourse of 'limits to growth', popularised by the Club of Rome's *Limits to Growth* report in 1973 but largely subsumed by the sustainable development discourse of the late 1980s onwards (Dryzek 2013: 147-160) has (re)emerged as a counter-articulatory practice to the growth-dependent economic paradigm (Daly, 1996; Jackson, 2009; Victor, 2008; Jackson 2013; Dietz and O'Neil, 2013). Cross-party groups on post-growth economics have, for example, formed in the EU and UK parliaments. While representing an antagonism over the signifier 'growth', among others, its articulation of the consumer is radicalised.

4.1. Logics of sustainable consumerism

The discourse analysis here and in subsequent chapters follows the poststructuralist tradition in the style of Laclau and Mouffe (2014 [1985]) and what has become the Essex School of discourse theory (Howarth, Norval, and Stavrakakis 2000; Laclau 2005; Howarth 2010; Jacobs 2018, among others). Jacobs (2018), arranges the grammar of poststructuralist discourse theory (PDT) thus:

"signification" is a product of the "articulation" of certain "elements" as "moments" that are "dispersed" in a specific pattern. When such "dispersions" become "regular" through continuous "iteration," the "discourses" they constitute become "hegemonic" "structurations." This implies that there are no "extra-discursive" structures beyond "hegemony." (Jacobs, 2018: 3-4.)

Through performance of the 'green consumer' the arbitrary connections between the consumer, the consumed, and notions of sustainability are created and affirmed. To Jacobs' (*ibid.*) arrangement it is necessary to add the concept of *nodal point* which

represents the privileged sign that centres the network of meaning and thus organises meaning (e.g. Laclau and Mouffe 2014: 112).

From a PDT analysis of governmental and intergovernmental literatures, as well as predominantly online marketing messaging of hybrid and electric vehicle manufacturers, I identify seven logics that sustainable consumer discourses build on. Each of these are identified by features of text and image use, contributing to an overall aesthetic. It is important to note, however, that they remain interrelated, and individually are insufficient as critique or explanation. Equally importantly, the archival material analysed, in particular marketing messaging, frequently displayed characteristics of seemingly oppositional logics, even within the same text. For example, both Toyota and Nissan on specific consumer product pages reduce environmental complexity to specific, narrow indicators by which a general 'sustainability' is articulated. Elsewhere, however, they each have rich stories of broader sustainability in which the consumer is welcomed to partake, albeit rarely with clear indicators.

As such, the discourse represents a richly textured sustainability agenda, wherein both simplifying the message for consumers, whilst also telling a wider story about 'build[ing] a more sustainable future' (Nissan 2019a) or creating a 'better Earth' (Toyota 2019d) are necessary. What follows is the application of this theoretical approach to the critical analysis of sustainable consumer discourse, while considering the extensive secondary literature that helps reveal a rendering of the discourse's object's *functional* sustainability.

4.1.1. Active-positive language

As opposed to limiting damage in certain categories of ecological impact (for example, driving an electric vehicle *reduces emissions*), active-positive language constructs the consumer performance as an active contribution to environmental protection. Purchasing the product 'produces' an active environmental benefit. The act of consumption must be a given in this scenario: the 'good' comes from *not* consuming a similar product without the 'green' credentials. For example, buying an electric vehicle is, in absolute terms, still contributing to carbon emissions, congestion, roadwork infrastructure, particulate matter pollution, and material drain. It is only 'green' in relative terms, where buying an electric vehicle *replaces* buying a conventional vehicle. This takes the latter act as a given in order to achieve a relative environmental good – it

perpetuates an inherently unsustainable practice by constructing relative gains as absolute gains.

For instance, Toyota's *Sustainable Mobility*¹³ agenda opens with the paragraph:

As one of the world's leading car manufacturers, we take our responsibility to help protect the environment seriously. We are creating vehicles which have as little impact as possible on the natural world around us. It is important to us to find cleaner, sustainable ways of making vehicles and disposing of them when they reach the end of their useful life. (Toyota 2019e.)

In helping to 'protect the environment', the discourse enables the consumer to signify Toyota with active protection, rather than merely reduced impacts. The second sentence helps confirm this. Vehicles with 'as little impact as possible' still have an impact which, as argued below, can be substantially higher than that of conventional vehicles, even at the point of use.

On the same page, Toyota's agenda claims 'We have spent decades researching how we can make vehicles that are kinder to the environment' (*Ibid.*). The identity of the 'sustainable' vehicle ('vehicles which have as little impact as possible on the natural world around us'; 'kinder' vehicles) is constituted by the existence of the 'unsustainable' vehicle - the reference point for finding 'cleaner' and 'kinder' ways of manufacture and disposal. The sustainability sign-value of hybrid and electric vehicles is much more questionable in the absence of conventional vehicles. This example is particularly salient given the evidence that electric vehicles have a higher material footprint than conventional vehicles, with the manufacturing phase dominating the life-cycle material footprint (Sen *et al* 2019). Similarly, Yu *et al.* (2018) found that a comparison between conventional vehicle and electric vehicle power systems in China showed resource depletion and environmental impacts of electric vehicles were significantly higher. Two types of electric vehicle power systems showed total environmental loads of 376% and 119% higher than that of conventional vehicles (Yu *et al.*, 2018.)

Most importantly for the consumer, the end-use of an electric vehicle is where the majority of the environmental potential is located. As numerous studies have found

¹³ The *Sustainable Mobility* landing page reflects the most comprehensive sustainable agenda quickly accessible on Toyota UK's website. On a desktop-optimised site, the pages are reached quickly in the online customer journey via the dropdown from the banner menu, the landing page is two clicks away under 'Environment'.

(Onat, Kucukvar and Tatari 2015; Casals *et al* 2016; Yu *et al* 2018; among others), this actual benefit varies significantly depending on the power-generation used to charge the electric vehicle. For example, Onat *et al* (2015) found that electric vehicles were the least carbon-intensive vehicle option in just 24 of 50 states in the US. In the majority of states, electric vehicles performed worse on the key indicator in which they are supposed to be leading the way.

This is pertinent to much of the advertising of electric and hybrid vehicles. One widely shared advert (e.g. Wired 2010; New York Times 2010a)

follows a solitary polar bear on a trek south from a warming Arctic, through forests, along highways and into the city, finally reaching a driveway in the suburbs. There, as a man prepares to open the door to his Nissan Leaf and set off on his morning commute, the massive bear rears up on its hind legs and – wait for it – gives him a big cuddly hug. (New York Times 2010a)

The Nissan Leaf is one of the most common electric vehicles in the US. Airing first in the coveted advertising space of a National Football League game, the advert constructs a direct cause-and-effect between buying the electric vehicle and protecting the Arctic from global warming. A separate New York Times article described a sound heard at the end of the advert as 'reminiscent of the so-called aural branding that Intel does in its commercials', about which vice president for Nissan marketing at Nissan North America said '[w]e're calling it the sound of innovation', to brand its 'innovation for all' theme (New York Times 2010b).

The advert, and similar calls-to-action, construct consumer action as central to a story of innovation that *actively* protects the 'environment', proxied by a polar bear or, in other cases, forests. Such discourses rely on the occlusion of environmental impacts that do not fit with the aesthetic. By suppressing both elite knowledge about environmental impacts, and the lived experience of those closer to, or involved in, mining and other distanced effects and processes, the discourse solidifies an aesthetic in which the sign-value of sustainability can contribute to a performativity of the green consumer wherein a particular purchase signifies a particular protection, and thus a particular identity. Consuming a functionally unsustainable vehicle is reconfigured as not merely a benign act, but an actively benevolent one.

As Jackson (2009) highlights, unit-level efficiency savings in vehicles cannot offset industry-wide exponential growth – i.e. without sufficient *negative* contributions (such as taking carbon dioxide (CO₂) *out* of the atmosphere), the unsustainability of an

industry that grows at an exponential rate is inevitable. Similarly, the review of SDG 12 ('Ensure sustainable consumption and production patterns') by the UN High-Level Political Forum 2018 found that

domestic material consumption (DMC) per unit of GDP changed globally from 1.2 to 1.1 kg per dollar of GDP from 2010 to 2015, indicating that fewer materials are required to produce a unit of output. However, DMC per capita and in absolute terms from 2000 to 2017 is steadily growing globally, with consequences in terms of both resource depletion and associated environmental impacts. (UN 2018.)

The material input into the global economy continues to grow, even as unit-level efficiencies are made. The same review outlines that

despite evident progress on the development of policies, knowledge resources and technical tools, the application and implementation of these to foster concrete and tangible changes in practices and impacts remains limited.

The manufactured benevolence of individual acts of consumerism, whose functional environmental load is worse in many respects, and in some locations worse in all respects, that the 'non-green' alternative, is a dominant practice among green marketing. In any case, the concentration on metrics such as CO₂ and nitrogen oxide (NO_x) emissions, whilst important, indicate another feature of sustainable consumerism discourse: complexity reduction.

4.1.2. Complexity reduction

Building partially on the key argument of Scott (1998), wherein 'seeing like a state' means simplifying complex problems in order to make them governable, 'seeing like a marketer' simplifies a complex problem in order to make it marketable. Correspondingly, 'seeing like a consumer' means identifying and operating on the basis of sign-values conveyed by the acts of obtaining and possession. Reducing 'environment', 'nature', 'planet', or other signifiers, to one category of ecological impact (e.g. climate change/CO₂ emissions) gives the impression of a more general sustainability. For example, limiting CO₂ emissions is a specific action that limits contribution to atmospheric radiative forcing (the greenhouse effect) thus reducing a specific negative. But this is discursively constructed as 'environmentally friendly' (contributing a general positive). This often occurs alongside expert-knowledge of a specific type that reinforces the legitimacy. Following the same example, claims of 'environmental kindness' (e.g. Toyota, 2017a) by

hybrid and electric vehicle manufacturers ignores the complex ecological impacts of electric and hybrid vehicles as outlined previously.

Toyota's *Sustainable Mobility* agenda claims that:

We have spent decades researching how we can make vehicles that are kinder to the environment, producing technologies such as hybrid that have already proved their value in reducing greenhouse gas emissions and helping us move towards a low carbon society. We are still on that journey and we want to reduce our vehicle CO2 emissions by 90% by 2050, compared to the level we were at in 2010. (*Ibid.*)

The text evokes a common signifier of care for the environment: kindness. But this is reduced to greenhouse gas emissions both within the paragraph and throughout the agenda, where the 'ultimate eco car' is determined purely by its fuel mix, rather than any consideration of its distributed material footprint or carbon footprint of production.

Government policy has similarly relied on reductionist constructions of environmental action. In a context of increasing protest and demonstration, the UK's declaration of a climate emergency and adoption of a target for net-zero greenhouse gas emissions by 2050 is an important example. In this narrative, achieving 'net-zero' is predicated on electrifying transport, largely as-is. The Committee on Climate Change report purposefully privileges 'greening' a status quo to the occlusion of radical intervention. In response, the UK light transport fleet should be made entirely electric by 2050, with the phaseout of new conventional vehicles by 2035. However, 'the further deployment of renewable energy and EVs will result in a dramatic increase in the demand for those materials' such as rare earth elements (Sen *et al*, 2019; see also US Department of Energy, 2015: 7)..

A letter from the Natural History Museum, signed by eight scientists of an interdisciplinary programme on world resources, sets out the functional sustainability issues with this approach:

To replace all UK-based vehicles today with electric vehicles (not including the LGV and HGV fleets), assuming they use the most resource-frugal next-generation NMC 811 batteries, would take 207,900 tonnes cobalt, 264,600 tonnes of lithium carbonate (LCE), at least 7,200 tonnes of neodymium and dysprosium, in addition to 2,362,500 tonnes copper. This represents, just under two times the total annual world cobalt production, nearly the entire world production of neodymium, three quarters the world's lithium production and at least half of the world's copper production during 2018. Even ensuring the annual supply of electric vehicles only, from 2035 as pledged, will require the UK to annually

import the equivalent of the entire annual cobalt needs of European industry. (Herrington, cited in Natural History Museum, 2019.)

Rather than being solved, environmental and social impacts (Ali, 2014) are simply moved around geographically. The letter, taken together with previously outlined evidence of distributed environmental impacts of electric vehicles, shows how the complexity reduction logic produces a range of unintended environmental consequences. The letter shows the exclusion of some forms of knowledge about nature from the sustainability transition: in reducing the question of sustainability to one of carbon dioxide emissions, the discourse draws a specific, narrow equivalence to one indicator of 'being green', and leaves the various questions of resource availability, ecological impacts from mining, and so on, outwith the structuration. By contrast, the letter's authors draw on a more holistic range of impacts that 'sustainability' signifies.

The greenhouse gas emission reduction strategy is thus a far more narrowed and limited agenda than it is portrayed as. The 2050 strategy represents a relatively strong rhetorical commitment to progress in one dimension: to reduce greenhouse gas emissions while sequestering or trading the equivalent of remaining emissions. Yet, in announcing the new strategy, the UK May government points out that

The UK has already reduced emissions by 42% while growing the economy by 72% and has put clean growth at the heart of our modern Industrial Strategy. This could see the number of "green collar jobs" grow to 2 million and the value of exports from the low carbon economy grow to £170 billion a year by 2030. (UK Government, 2019)

Challenging the *limits to growth* discourse (Meadows *et al* 1973; Daly 1996; Victor 2008; Jackson 2009; among others) the simplification logic signifies 'emissions' as the only externality of growth - once greenhouse gas emissions are sufficiently decoupled from GDP growth, 'clean growth' can drive the creation of two million 'green collar jobs' via a 'modern Industrial Strategy'. This reduces environmental limits to growth to a function of GHG emissions, suppressing both the material footprint of economic output and the role of exporting manufacturing in reducing the apparent emissions of consumption. The latter is made possible due to the territorial measurement of GHG emissions, legitimised by the Paris Agreement's nationally determined contribution model of assigning emissions to point of release, rather than point of demand.

In advertising, car manufacturers similarly employ a narrow measure of a particular environmental impact as a proxy for a general 'green' or 'eco-friendliness'. In

the case of Toyota's 'truly visionary car', the *Mirai* (Toyota 2019a), consumers are given the opening paragraph:

The Mirai is at the forefront of a new age of hydrogen fuel cell cars that allows you to enjoy long distance zero-emissions driving. As well as only producing water from its tailpipe – which means no impact on our planet when you're driving – the Mirai brings the unique Toyota Hybrid driving experience to a new level.

The consumer's purchase of the new car is constructed as entirely benign – a balance is presented between 'your driving' and 'our planet', wherein the consumer is empowered as a responsible member of the shared commons, *our planet*.

On a separate landing page of the same vehicle, accessed immediately under the car's name in the website menu, the *Mirai* is described under the title 'the ultimate eco car':

Mirai truly is a visionary car. By harnessing the power of hydrogen, it represents the next generation of electrically powered vehicles. With an energy conversion rate two-to-three times greater than conventional engines, Mirai's hydrogen fuel stack means you can go further on less fuel while completely eliminating emissions from your car. (Toyota 2019b)

Determining the 'ultimate eco car', then, is the *elimination* of greenhouse gas emissions from the consumer-use. Emissions released during the process of resource extraction, transport, manufacture, assemblage and, eventually, disassembly, are entirely excluded from the discourse.

This is accompanied by a series of images of the *Mirai* as a translucent silhouette among 'natural' landscapes of dense foliage, as shown in Image 1. The vehicle is constructed as something entirely passive to the natural world – its passage will go unnoticed by 'nature'. The consumer can reconcile a desire to be 'green', to not damage 'nature', with the desire to purchase the commodity.



Image 1: Toyota Mirai image accompaniment to online specification (Toyota 2019c).

The *Mirai* presents something of a novelty as the only industrially produced hydrogen fuel cell car. Hydrogen-powered electric vehicles have been shown to have less impact than conventional electric vehicles in GHG emissions and air pollution, which depend on the energy production in the local area. However, requiring batteries and other advanced electronics, together with conventional materials, means there remains a material footprint comparable to other vehicle types, with comparable supply chain emissions to electric vehicles.

Similarly, the Nissan Leaf, one of the most widely used electric cars, offers the headline to consumers 'zero emissions whilst driving', captioned with 'sustainable driving' (Nissan 2019a). Further down the same page, a page-spread image features the wording (accompanying a clickthrough to 'savings & benefits'):

SPEND LESS, GO FURTHER

LOWER RUNNING COSTS AND MAINTENANCE

Spend less and gain more. A sustainable future starts here, in the Nissan LEAF.

(*ibid.*, emphasis original)

With the phrase 'zero emissions while driving' repeated throughout the advertising for Nissan's electric fleet, a still implicit but less secretive acknowledgement is made of the remaining impacts of electric vehicles beyond the consumer's immediate use. Yet, 'sustainable driving' remains accessible to the consumer with the purchase of the vehicle: sustainability remains a function of greenhouse gas emissions at the point of use.

By the continual reduction of 'sustainability' to narrow measurements of impacts which, whilst important, are insufficient indicators of environmental load, the consumer is able to understand their contribution to sustainability. It presents a simplified measure by which consumers can make choices on a simple scale from conventional vehicles with the highest GHG emissions (least sustainable), to hybrid vehicles with reduced emissions (more sustainable), and finally to zero-emissions with electric vehicles (most sustainable). The simple projection of consumer impact on the environment renders the innate complexity of multiple environmental impacts intelligible to consumers. In doing so, the discourse suppresses information of broader, displaced impacts relating to the material footprint and the sourcing of energy for charging electric vehicles.

The logic of complexity reduction is pervasive among sustainable development discourses. This is significant because it individualises the sustainable identity: individuals can 'act' sustainably on an individual basis while contributing to an overall unsustainable system, whose fixes would require a more organised action. Impacts are moved away from the consumer purchase and consumer use; negative functional impacts are airbrushed to render a performative environmental sustainability¹⁴. Sustainable individual identities can thus be performed even within an unsustainable society. The sustainability aesthetic is consumed as sign-value, while the utility-value of a product operating within planetary limits remains rarely and/or poorly communicated to the consumer.

¹⁴ 'Environmental' is inserted into 'performative sustainability' to avoid comparisons to the use of 'performative sustainability' in the context of analyses on the performance (and thus social sustainability by reproduction) of racial discourses (e.g. Alexander, 2004; 2012), with a grounding in the works of Frantz Fanon (especially Fanon, 2008). Whilst this shares certain theoretical groundings, where 'performative sustainability' appears in this thesis, it is in reference to this environmental sustainability.

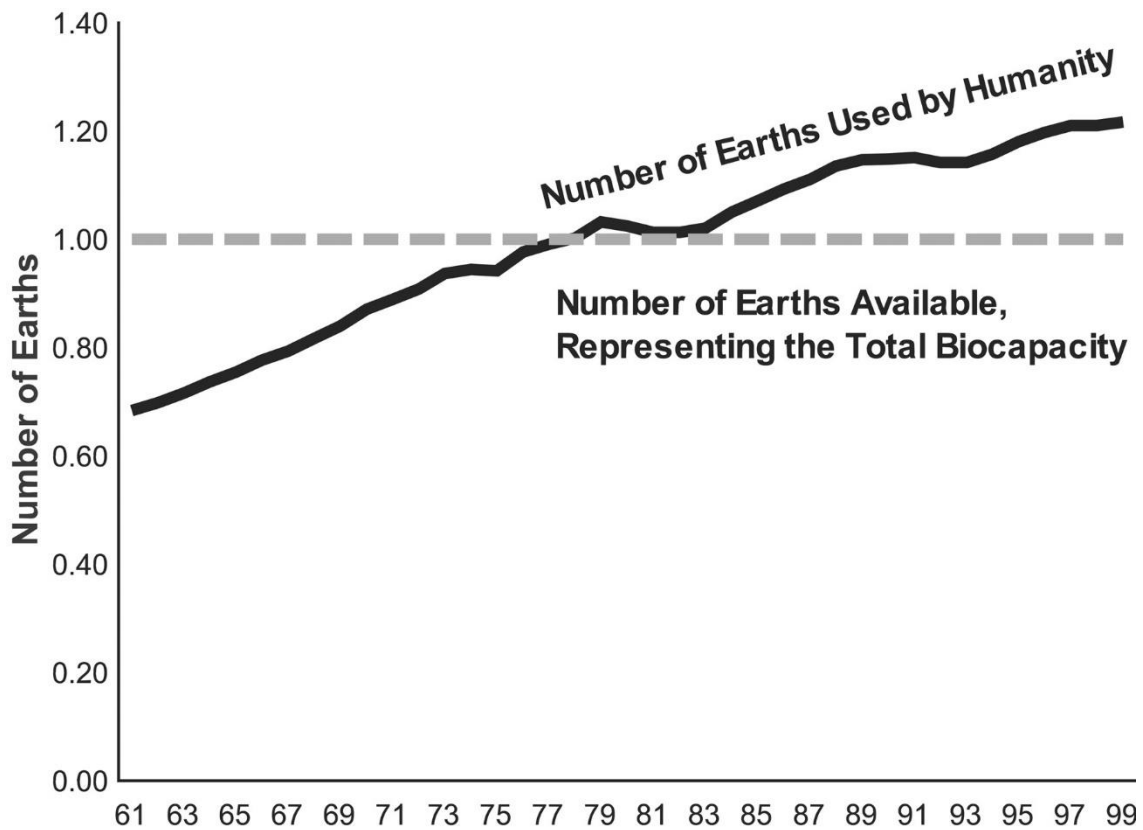
4.1.3. Economic rationalisation

The sustainable development discourse extends economic logics as a means of understanding the environment. In doing so, the discourse makes equivalences between nature and moments of (neoliberal) economic governance. The report of the Brundtland Commission, *Our Common Future*, in 1987 helped catalyse the discursive hegemonizing of 'green growth', 'green economy', and particularly 'sustainable development' over discourses of limits, distribution, and equity. The pursuit of development as *enabler* of sustainability – indeed, its necessary condition – rendered a new ecopolitics of economic rationalisation.

The report outlined that 'poverty reduces people's capacity to use the environment in a sustainable manner; it intensifies pressure on the environment', while the pressures on the environment resulting from (predominantly Western) development are occluded: only a lack of development is negatively impactful. Reconciling the paradox between this approach and the recognition of the 'ultimate limits' of the biosphere is the need to ensure 'equitable access to resources and reorienting technological efforts to relieve the pressure'. Equity is thus problematised, but its solution is greater growth and a reliance on technology; a larger pie, rather than a redistribution of its slices.

In 1987, the report's recommendations were made a few years after world demand outstripped the planet's carrying capacity (Figure 6), according to Wackernagel's *et al* (2002) famous analysis (see also Ch. 3 of this thesis). Going by this global aggregate, the argument that continued development, with its concomitant requirements of greater material throughput, could solve the problem of resource overuse was problematic even before it was fully articulated.

Figure 6: Time trend of humanity's ecological demand. Source: Wackernagel et al., 2002



The hegemonizing of the sustainable development agenda from the 1980s was not a function of its appropriateness as an agenda to confront the undeniable problems of poverty and unsustainability. Instead, it emerged to establish a new political alliance whose hegemony was a function of 'truth' in the Foucauldian sense: a radically contingent articulation of dominant power relations that produced a common sense.

Increasingly pervasive inequality is understood as a major obstacle to achieving the Sustainable Development Goals and the 2030 Agenda (UN, 2015b). The UNDP, in its 'new focus' on 'inequality' claims that:

Inequality is a paradox of our times; in recent decades innovation has exploded, poverty has gone down in every region of the world and emerging markets are booming.

Yet inequalities persist and grow, intersecting and reinforcing each other and perpetuating intergenerational poverty and exclusion.

Inequality has jeopardized economic growth and created a serious barrier to eradicating poverty, the bedrock of the 2030 Agenda. (UNDP 2019.)

Inequality is articulated as not merely a factor distinct from economic development, but one whose increase and persistence are a 'paradox of our times'. That greater development of an exploitative political economy might *explain* this increase is entirely absent. The economic orthodoxy of development cannot abide by the fact that quantitative expansion has occurred *without* inequality being addressed in the process – indeed, that it has been worsened at the same time.

As with the Brundtland Report, 'eradicating poverty' is the 'bedrock' of sustainable development. The material and energy requirements of sustained exponential growth are absent from the articulation of sustainability. The capacity for development is not problematised. Moreover, poverty is articulated as a distinct element from inequality. Rather than related concepts that, while non-reducible to one or the other, remain bound up in one another, inequality is a 'serious barrier' to poverty alleviation. The articulation suppresses means of defining poverty *in relation to* inequality. Whilst inequality and inequalities concern important factors beyond poverty, that inequality exists *at least to the same extent* as does poverty, is suppressed. This approach, that poverty is also a relative experience, would identify the opposite of relative poverty: the greater accumulation of wealth in a decreasing proportion of civil society (Alvaredo *et al.* 2018).

Whilst understood as a 'paradox', signifying the incredulity of the failure of inequality to follow the requirements of the economic growth discourse rather than vice versa, the UNDP text insists inequality remains both intelligible and manageable:

But inequality is not natural or inevitable.

It stems from policies, laws, cultural norms, corruption, and other issues that can be addressed. (*ibid.*)

This final part of the text's articulation of inequality reconfirms the fantasmatic logic that inequality can be reduced to its symptoms and its most proximate condition. Inequality is thus rendered governable by reformist, managerialist interventions. Inequality as a systemic phenomenon whose solution requires transformative change along multiple dimensions is suppressed. The text fails to detail how, given the apparent knowledge of inequality and its drivers, even its unnaturalness, conditions that increased inequality might be transcended and conditions facilitating its decrease established – or why this seemingly manageable problem has not hitherto been managed.

Nevertheless, referring back to the OECD articulation of the consumer (fig. 1), 'growth' is still taken as an inalienable characteristic of the economy in the 'green growth' discourse. This forms a relation of domination wherein the consumer-subject is called on as a facilitator of 'green growth': the consumer is unable to see their participation in the economy in terms outside of the growth paradigm, despite the slow emergence of post-growth economics, including in political fora, such as the EU (at the Post-Growth 2018 Conference) and the emphasis placed elsewhere on 'overconsumption'.

Consequentially, the subordination and occlusion of the *quantity of consumption* in articulations of green consumers as economic rationalists poses a significant problem for finding functional sustainability (Conolly and Prothero 2003). This helps identify an important political moment that permeates sustainable development narratives at multiple scales. The review of Sustainable Development Goal 12 at the UN High Level Political Forum recommends that:

There needs to be a shift away from economic models that value growth for growth's sake, toward a new mind-set that respects planetary boundaries, recognizes the economy as a subset of nature, and supports the concept of living in harmony with nature.

At the same time, SDG 12 is a significant tool for even highly developed economies to justify the pursuit of growth in itself as a fundamental objective of governing.

For instance, the Scottish Government backs its consumer-focused messaging highlighted earlier in its transport strategy (Transport Scotland, 2018) and predicts that, by 2037, its own policies will lead to: 25% increase in car trips; 44% increase in goods trips; 37% increase in congestion (measured as time wasted per mile); 7% decrease in urban bus usage (5% for inter-urban) (measured as bus passenger miles); 11 second increase in the average travel time per mile; 42% increase in rail usage (rail passenger miles) (rail currently only accounts for 2% of journeys made, however). No forecasts are provided for cycling or walking, but cycling currently accounts for 1% of journeys made, while walking accounts for 22%.

The same report highlights the importance of transport vis-à-vis growth:

Transport demand is an indicator of economic growth. Whilst the provision of transport infrastructure does not generate, by itself, economic growth; a lack of transport infrastructure can hamper economic growth and impose economic welfare costs through travel delays. (Ibid. p.7.)

This correlates with the Scottish Government's 'central purpose' which 'has been to create a more successful country, with opportunities for all of Scotland to flourish, through increasing sustainable economic growth' (Scottish Government, 2015).

This systemic inertia reflects the sedimented discourse – the establishment of a common sense whose reproduction is habitual. The pervasive idea that economic growth is 'hugely important' and is capable of reflecting or indicating sustainability, inclusivity, or other forms of progress, creates little space for the use of alternative indicators that might better reflect these policy objectives. More problematically, the continual framing of environmental objectives in economic terms, and specifically growth economic terms, necessitates privileging existing constellations of power relations and existing modes of production and consumerism. Economic growth and the protection of consumer choice are repeated throughout the policy landscape alongside environmental objectives. As such, Scottish climate and environmental policy represents a significant area where the line between public and private messaging is increasingly blurred.

The economic rationalisation and subsequent mainstreaming of ecological claims is fundamental to understanding the post-political eco-politics of sustainability (Blühdorn, 2007; 2011; 2013). To a significant extent this represents the cornerstone of the market-liberal discourse on sustainability, with car manufacturers more commonly resorting to the economic rather than *explicit* environmental logic (De Burgh-Woodman & King 2013).

Similar equivalences, then, are made in advertising. The Toyota UK website specifies the following 'fact about hybrids' (number five of five total): 'Easy on your wallet and the environment', with the caption:

Not only will you love being behind the wheel of a Hybrid, you'll really appreciate just how much they save. Our best-selling Hybrid cars feel right at home in the city – switching off their engines as often as they can to save you fuel and money. And with low fuel-consumption comes low emissions; our Hybrid cars boast some of the lowest CO2 emissions in their classes and very low levels of harmful nitrogen oxides (NOx). (Toyota, 2017b.)

This does not, however, simply represent a new trend whereby financial and environmental considerations are reconciled together post-2007. An American advert from 2002a leads with the headline 'more green for less green'; the entire advert is hued green (Toyota, 2002a).

Another advert from the same year claims, 'the real winner is the planet' and offers a click-through titled 'get the feeling' (Toyota 2002b). The economic rationalisation logic of sustainable consumer discourse therefore opens up space for involvement of the subject through the act of purchasing. Responding to the 'hailing' of so-called green advertising, the consumer subject is interpolated by the discourse of sustainable consumerism.

The Toyota (2017b) text's sentence on 'feeling at home in the city' further distances the commodity from its use-value as a low-impact mode of transport. Taken together with the projected (and actively encouraged) growth in private car ownership, the construction of hybrid and electric vehicles as a sustainable transport solution in an urban context requires occluding all other forms of public transport from the horizon of possibility. Against these options, the material and greenhouse gas footprints of the life-chain are substantially higher in electric and hybrid vehicles. It challenges the emerging trends for urban centres to be thought of as places and spaces of radical change and requires the continuation of the city as an architecture designed for drivers. This is furthered by the need for charging points to be incorporated into urban spaces. Electric vehicles are thus not merely permitted but encouraged and supported by public funds to continue their colonising of the urban under the 'win-win' logic of economic rationalisation.

4.1.4. Representation and Participation

The creation of the sustainable or green consumer subject position creates a space for participation in the sustainability discourse through identification. The sustainability aesthetic of a given product means that all that remains is for the consumer to make the purchase. Simple calls such as 'get the feeling' combined with assurances that the hard work and thought has already been completed create minimal barriers to 'acting sustainably'. This puts the focus on *ways* of consuming rather than *amounts*.

In UN General Assembly Resolution A/RES/70/1, *Transforming our world: the 2030 Agenda for Sustainable Development*, the Assembly outlines the ways in which the planet will be protected:

We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.

Here, sustainable consumption is a tool with which to protect. Consumption is the only activity specified in which most people are able to participate – the vacuous terms of 'managing' and 'taking urgent action' are absent any forms of inclusion for citizens, or any other formulation of people.

The 2030 Agenda identifies three categories of people: the 'we', the 'present' generation(s) and the 'future generations'. The agency of the 'we' is vast: able to 'protect the planet from degradation' and manage 'its natural resources' while 'taking urgent action'. This agency ensures the needs of the other two categories can be met. As a precursor to this, their needs are *known*. The 'needs of future generations', a key defining criteria of sustainability, seem reduced to needs placed on natural resources by processes of consumption.

The social construction of future generations as a category represents a uniquely extreme case of inclusion without any agency over their representation: the ability for unborn future generations to have a say in their representation is evidently non-existent. Future generations are rendered governable by the sustainable development discourse as their needs are assumed to be known and assumed to be the same as those of current generations; the variable is not what those needs are but how they might continue to be serviced. Despite the inability to know the needs to future generations, not least in the context of worsening ecological and climatic conditions whose resultant impacts on human flourishing remain subject to speculation, sustainable development presents these as both knowable and supportable in the present.

The lack of current agency in future generations was well recognised and articulated in the 1987 Brundtland Commission's report:

We act as we do because we can get away with it: future generations do not vote; they have no political or financial power; they cannot challenge our decisions. (WCED 1987: 16)

Despite this early recognition of the deficit in participation, then-existing power relations, distributions of access and processes of oppression that prevented participation in the *present* (see, for example, the testimony of Bruyere in *ibid.*: 54), have continued, while the sustainable development discourse has championed the economic managerialist and reformist approaches of ecological modernisation and green growth. The discourse has excluded transformational changes in systemic processes of exploitation. By doing so, the needs of future generations are assumed to be met according to the same conditions

that have imperilled them. Thus, the same conditions that have increased inequality *within* generations (UNDP 2019) are still assumed to decrease inequality *between* them.

In addition to their 'needs', future generations are similarly known to the market as consumers, as the UNDP review of sustainable development interpolates¹⁵ future generations:

billions of under-served consumers can be brought into the global market place, and business- and employment creation could accelerate— particularly in rural areas where such energy supplies are most likely to be lacking. (UNDP 2012: 20.)

Future generations are consumers of the future, whose needs of sustainable energy supplies are understood in relation to their service to the market. It is insufficient, in the UNDP articulation, to require energy to prevent, for example, the highly gendered impacts of indoor air pollution from dirty fuel use for cooking, a leading cause of non-communicable disease in the Global South (WHO 2014). In the 'triple win' of environmental, economic, and social wins (UNDP 2012: 5), the 'wins' resemble more criteria to be met: only when a given activity contributes to all three areas does it have most value.

Future generations, and the future generation of consumers, in terms of agency, are not afforded an infinite horizon of possibility to forge radically different relations with and/or within nature, where different needs might be constructed through different social and cultural determinations of what is important. One-dimensional sustainability thus expands laterally through a self-recognised period of change, while the basic premise of natural resource extraction in the service of consumption remains a constant in how the discourse makes environmental subjects of populations. The needs of future generations are understood through the power-laden needs of the present.

Some variation in the representation of future generations exists, for instance, in alternative social epistemologies, such as the 'visioneering' approach of Whitaker (2014) and others: 'confronting oneself with a range of future potentialities reconstituted from an interwoven cloth of ideas, experiences and senses' (Whitaker, 2014: 67). Such

¹⁵ Though it should be noted Althusser did not explicitly include the unborn subject in his theory of interpolation. Though the subject is clearly unable to respond to the hailing, this has not prevented the political regime's ability to call upon, and call into being, the subject as a consumer of the future.

discourses help reveal the contingency of hegemonized articulations of future generations in which their needs are known; indeed, pre-ordained as a production of the present distribution of power.

For the 'present generations', their participation and representation in discourses of sustainability is similarly one dimensional. The generalising of peoples as a 'present generation(s)' renders the globally complex differences of responsibility, affectivity, agency, risk, exposure, and so on, universally governable under the political regime of sustainable development: the singular category universalises what 'needs' are.

Participation in this environmentality is regularly articulated solely in relation to consumers. The concentration by IGOs and national governments on 'innovation', and the role of the consumer in driving innovation, places the consumer at the centre of sustainability efforts. In such discourses, it becomes an inherent duty of the 'environmental citizen' to partake in consumerism. This constructs consumerism as a privileged mode of environmental action: consumption must become sustainable in order for society to be sustainable. In marketing, the sustainable identity is therefore articulated through engagement with the product sign-value – the status it occupies within the broader system of meaning that produces its *being* as not just an apparently sustainable commodity, but a commodity *of* the aesthetic of sustainability. For Baudrillard, it is this social relationship that is consumed.

For example, in BMW's hybrid and electric recycling process, whereby the purchase is the only action required to be part of this brand-distinguishing story of sustainability, the consumer's self-understanding as a pioneer driving the 'innovation' necessary for sustainability is furthered:

Sustainability and taking care of the environment is firmly embedded in BMW Group's culture and corporate strategy. We view it not just in our vehicles, but as a basic requirement for the individual mobility of tomorrow. It is therefore an integral part of every thought and action we take. (BMW 2019a.)

BMW is dedicated to leading a new generation of mobility and exploring what the future holds for the ultimate driving machine.

A BMW i3 is more than just the green option; it's an investment in the future. (BMW 2019b.)

Links between acts of consumption now are discursively tied to promises of a future that the consumer has helped to bring about. Their investment is in this transition to a 'new generation', the 'ultimate driving machine', rather than 'just the green option'.

As such, consumers become a privileged agent of change. In marketing, this is often by articulating consumers as 'rebels', or as conscientious consumers or activists – articulations of difference to an established norm. This differs in institutionalised discourses which articulate consumerism, and related elements like innovation and choice, as a process based on the rational consumer – sustainable choices are made on the basis of economic rationality and according to the need to be green. In such discourses, 'greening' *requires* consumer involvement in order to transition to a sustainable system. The contradiction between privileging 'choice' and the need for a universal transition to a 'green' economic state forms a key discourse-internal critique of the sustainable consumerism discourse.

Throughout the marketing of green commodities is the tacit assumption that consumerism is capable of absorbing care for the environment. Sustainable consumerism articulates a discourse of opportunities – even when 'planetary boundaries' are articulated as part of the discursive formation. For instance, the UNDP *Triple Wins for Sustainable Development* insists, in 2012, that '[c]urrent patterns of consumption and production risk breaching planetary boundaries', despite the evidence by the architects of the planetary boundaries framework that this had already occurred decades previously; at least three critical boundaries are already in overshoot (Steffen *et al.* 2015; Rockström *et al.* 2009). The appeal to consumers as partakers in the process of finding sustainability by innovation requires that environmental problems be solvable by increased economic demand.

4.1.5. Problem construction

The presentation of the 'problem' in sustainable development discourse works backwards from the necessary agency of consumers. As Edkins (2008) outlines:

Searches for solutions assume they know what the 'problem' is and focus on the need to solve it, not to engage with the results or implications of what is happening or has happened. They ignore the way in which it is often difficult even to describe fully or coherently what has in fact happened, let alone subsume it under a label (Edkins 2008: 29).

The ability to subsume the problematisation of unsustainability 'under a label' has a literal relevance to how consumerism and specific commodities and commoditisations are constructed as both able and necessary to manage the problem. Discursively, this works alongside complexity reduction to offer the consumer a simplified message that communicates both the problem and the fix.

Electric vehicles, for instance, demonstrate the ability for private electric car use to eliminate greenhouse gas emissions at the *immediate* point of use (while charging will often worsen the emissions burden depending on energy infrastructure) compared to conventional or hybrid cars. This is communicated as the fix to the emissions problem in both marketing and public discourse. As a result, the problem of climate change is reduced to a specific geography of impacts: the emissions produced by the consumer at their point and place of use, suppressing the importance of emissions produced along the supply chain and disposal chain, and potentially at the power station which ultimately charges the vehicle (Onat, Kucukvar and Tatari, 2015; Yu *et al.*, 2018). The embedded emissions of the car's construction, deconstruction, and the distributed emissions of its charging, are at best secondary to the problems of the immediate emissions of use.

The consumer's role as 'fixer' is reliant on the construction of the problem in this particular way. Both global institutional discourses of the sustainable consumer, and the hailing of the consumers in marketing, construct the problem as primarily one of innovation wherein the consumer plays a central role. In this construction, the problem is a hurdle to be vaulted by the rational application of capital and opening of new markets in which to cater to the environmentally concerned consumer.

James C. Scott's *Seeing Like a State* makes the broad point that '[c]ertain forms of knowledge and control require a narrowing of vision' (Scott, 1998: 11). The sense of erosion in the process of management is a prescient theme of the argument. Erasure of local knowledges, alternative epistemes and modalities by which nature might be understood, related to, expressed, and, perhaps, accounted for forms a metaphor through which Scott explores the tendency for centralised, authoritarian regimes to reduce and render governable something which, in its aggregate, is ungovernable.

The invention of scientific forestry, freehold tenure, planned cities, collective farms, ujamaa villages, and industrial agriculture, for all their ingenuity, represented fairly simple interventions into enormously natural and social systems. After being abstracted from systems whose interactions defied a total accounting, a few elements were then made the basis of an imposed order. (*Ibid.*: 352.)

Scott uses the state-imposed organising of land use, and with it the de facto management of a complex web of social and natural elements variously implicated in the question of land use, to inform his insights into technocratic, 'high-modernist' interventions of the

20th century. I argue, however, that whilst an essential contribution, the role of non-state actors and networked forms of consent-based governance are under-realised (though not ignored) in expanding the broader insight.

Seeing like a consumer involves an essentially similar process in the context of one-dimensional sustainability: the information provided to consumers renders an external nature governable via the deployment of particular elements that stand as proxies for a more general, total system. Ecolabels, often the stamp of approval differentiating 'sustainable' from 'unsustainable' consumerism, symbolise the ability of consumerism to absorb care for the environment. The process by which a complex system is streamlined into manageable bits assumes that the information necessary for its governing (according to given policy objectives) has survived that process. The abstracted information is to serve as a proxy for the wider system.

If consumers are to function as the 'drivers of innovation' through the choices they make, the information provided to them must be sufficient for the task. An economic rational consumer can still only act according to the information they are presented with. To help with this, ecolabeling has emerged to indicate this information - to, in theory, guide the consumer. Covering circular economy principles, such as Cradle to Cradle, to the Cruelty Free label guaranteeing no harm to animals, as well as statutory designations, ecolabels condense often a wide array of indicators into a particular symbol whose presence serves as both information and value-added for the product. Criticisms of the approach, however, have ranged from perverse impacts (Dosi and Moretto, 2001; Bougherara, Grolleau and Thiébaud, 2005; Grolleau, Ibanez and Mzoughi, 2015) to direct accusations of greenwash. One NGO alliance, for instance, awards the 'Prix Pinocchio' [Pinocchio prize] to the firm displaying the most flagrant misuse of ecolabeling - the 'Prix Pinocchio du Climat' for 2015 was awarded to a list dominated by energy companies (Prix Pinocchio, 2019).

The Carbon Trust outlines the supposed role ecolabeling plays in enabling sustainable consumerism:

At its simplest, if you give people better information then they are in a position to make better choices. And one of the most effective ways to give people meaningful information on a product is through a labelling scheme.

This is why industry groups and governments continue to push forward with ecolabelling schemes around the world, helping to drive sustainable choices and grow markets for greener products. (Carbon Trust 2014.)

Information, then, is key to unleashing the power of commodities markets to absorb care for the environment. Specifically, consumers must have the information necessary to 'drive sustainable choice' and 'grow markets for greener products'. The Foucauldian regime of truth comprises the sustainable versus unsustainable dichotomy, disaggregated to the level of the individualised consumer who is confronted by categories of differentiation, one understood in relation to the other, and signified by producer-controlled, frequently opaque signifiers of ecolabels and generalised green claims¹⁶.

The information made available to the consumer constructs the categories of differentiation by which understandings of sustainability arise. The 'problem' lies in the unsustainable category, while the solution lies in the diametrically opposed category of the 'sustainable', articulated by green aesthetics while reaffirming the existence and legitimacy of the category as a domain of activism, innovation, and awareness.

4.1.6. Open signification

Poststructuralist discourse theory (PDT), in radicalising Saussurian linguistics, effectively collapses the signifier-signified binary in their ontology. In a constructionist ontology, the signified has no social meaning without signification by a system of meaning; an object must be socially placed to have *being*. As outlined previously, this rejection of an objective social being does not totally collapse the physical, material existence of an object, or the properties of a volcanic eruption, and so on. How these phenomena are *brought into being* is the primary concern of PDT. The 'signified' might be better understood as a site of overlapping signifiers. Some of these determinations will enjoy a sedimented status wherein their signification is established as a wide common sense. One implication of the primacy of signifiers in determining an object's identity, especially where the signifier is widely but vacuously employed, is that a given signifier can denote a potentially endless number of phenomena.

For Laclau in particular (2007 [1996]), the ability to invest a suitably broad signifier with different meanings plays an important role in the forging of political

¹⁶ For instance, TerraChoice (now part of Underwriters Laboratories) produced a series of reports into ecolabeling and green claims by 4,744 products, arguing that, in 2010, 95% of products exhibited one or more signs of 'greenwash'. (Underwriters Laboratories 2010)

alliances. Doing so allies broad movements under eminent terms, such as 'freedom', 'justice', 'equality' rather than appeals to universal truths or grand narratives. Recently, climate change protests have, if tacitly, relied on this tendency to unite a broad a set of interests under shared banners. In the consumer's search for identity, however, it has different implications. In the same way 'healthy' might denote a near-endless series of products, processes, activities, means of production, and so on, 'green' has achieved a similar level of ubiquity in public vogue.

As Director of the UNDP Bureau for Development Policy says in his Foreword to 'Triple Wins for the Sustainable Development' (UNDP 2012):

Sustainable development is synonymous in the minds of many with the colour green – and for good reason.

'Green' is, as such, more than a narrowly linguistic signifier. The cultivated aesthetic of 'green' has emerged as a multimedia discourse wherein vastly differing practices and approaches are afforded a degree of commonality.

The UNDP's 'good reason' for the synonymity between sustainable development and the colour green is not fully articulated. Instead, the 'triple wins' of economic, social, and environmental development are detailed, while 'green' appears as the category that unites them, as does sustainable development. The interchangeability of 'green' with 'sustainable' and other broad signifiers is problematic as the term is employed without any degree of shared standards or criteria. Within transport discourse, walking and cycling are frequently presented as 'green options', while so too are hybrid and electric vehicle purchases. The broad social and cultural category of 'green' presents an equivalence between otherwise very different environmental impacts.

In contemporary hybrid and electric vehicles advertising, clues of sustainability are often entirely symbolic. Even though hybrids are recognised as symbolising 'greener' driving, brands like Toyota Prius leave much of their advertising free of direct sustainability claims (De Burgh-Woodman and King 2013). Instead, the focus is on technology, innovation, and distinction-making. Consumers are thus free to invest the marketing and potential purchase with their subjective meaning of sustainability. The marketing does not supply a meaning of sustainability but leaves it open to interpretation. In Suassurian language, the 'signified' is missing, while the 'signifiers' are subtly present, encouraging customers to draw their own conclusions of what is signified and how 'green' a purchase it is. Laclau (2007: 36-40) argues a signifier cannot

be thought of as 'empty' merely because it can be invested with different meaning in different contexts: such a structuration would still be signifying. Instead, 'open signification' refers to the strategy of enabling consumers to close the signifier-signified loop. Rather than foreclosing a subject's possibilities, the power of open signification is in achieving the opposite at an aesthetic level: the consumer subject can invest the performative act of the purchase with whatever latent 'green' credentials they feel the act congeals in material form – responsibility, ethics, sustainability, environmental friendliness, and so on.

With regards the hybrid and electric vehicle industry, this is particularly significant given the evidence of significant environmental impacts (life-cycle and supply chain analysis) – companies cannot claim substantial environmental positives beyond the narrow measures highlighted earlier, but allude to it through the use of other signifiers of sustainability – capitalising on the latent public perception of sustainability apparently inherent in the category of vehicle.

4.2. A global political ecology of the sustainable consumer subject

Political ecology frequently both begins and ends with a contradiction (Robbins 2012: 95-97). In this study, a contradiction can be reached via the two paradoxes detailed previously that drive both the identification of the research problem and, broadly, the approach taken in its analysis. The first paradox is the disparity between sustainability *agendas* and sustainability *outcomes*, while the second is the latent and often explicit assumption that sustainability can be attained alongside, indeed depending on, exponential economic growth in quantitative terms. What is here termed the construction of fantasies is a means of talking about the two irreconcilable pursuits of exponential growth and the establishment of an ecologically sustainable society *as if* a reconciliation were possible. In the context of the 'sustainable aviation' discourse, Howarth and Griggs (2007) argued the discourse 'was structured around the fantasy that these two elements do not contradict or cancel each other out, but can be equally desired and achieved'. The discourse of 'sustainable consumption' and green marketing, I argue, is similar.

Ultimately, the political ecology detailed here ends with a contradiction which in PDT terms forms a fantasmatic logic: the (un)sustainable consumer, whose role is brought into being and made governable by increasingly indistinguishable

intergovernmental organisation literatures and commodity marketing. The closing contradiction also represents the site of antagonisms – the sustainable consumer, already pulled in opposing ways, is also deconstructed by re-emergent discourses wherein the consumer is more directly problematised, and thus absent from their articulation of a sustainable transformation.

Rather than contributing to a critique of the consumer per se, this analysis considers the subject position constructed by hegemonic discourse, and the ways in which it is and might be contested. It is not, therefore, a behavioural analysis but one of the deployments of power in constructing particular types of agency while oppressing and excluding others. Secondary to this problem is that of the overdetermined subject whereby more than one identity, and frequently competing identities, exist. How are individuals (or groups) to act out and fulfil both *sustainability* and *consumer* identities? While this is open to a number of approaches (such as environmental psychology, ecological citizenship, ecological or environmental economics, among others), this analysis focuses on the power-political and discursive dimension of this question: how do certain possibilities emerge over others and foster a 'common sense'?

What follows, therefore, is an interpretive analysis conceived of as a situated ability of the researcher¹⁷. This considers the discursive construction of the sustainable consumer explored hitherto with reference to discourse-external processes with which this construction interacts.

As shown above, consumers drawn to narrowed green messaging still contribute to often hidden environmental impacts – some of which, as is the case in electric vehicles, to greater environmental impacts of different types. In this regard, the 'green consumer' emerges as a fantasmatic narrative. For Howarth *et al.* 'fantasmatic policy narratives ... structure the way different social subjects are attached to certain signifiers, and the different types of 'enjoyment' subjects procure in identifying with discourses and believing the things they do' (Howarth, Glynos, and Griggs, 2016: 100). For the consumer subject position, the act of consumption is distanced from environmental impacts and harm, while the act is immediate. In articulations of electric vehicles in marketing,

¹⁷ The situated ability of the researcher is explored in greater detail in Chapter 3. My critical self-reflection that provides a more transparent account as situated researcher is offered in Annex A

environmental benefits accrue locally, such as fewer air pollutants, as a result of the consumer's decision, while impacts are incurred elsewhere and, when articulated, are manageable within the consumer-producer unit.

When impacts do arise from the consumer's action these can be 'offset'. Carbon emissions, for instance, can be produced so long as the right to do so is purchased on the carbon market and embodied in the price of the product, or if a commensurate amount of the emissions produced are sequestered elsewhere by either 'natural' means, such as tree planting, or carbon capture and storage (CCS) solutions. In either case, the consumer act is legitimised by sustainability agendas. The actual emissions released remain able to contribute to other impacts, such as ocean acidification, while the activity undertaken to sequester carbon performs a neutralising duty, rather than a net-benefit to the emissions problem.

In such a scenario, the purchase of the product, assuming the carbon offsetting costs are internalised in the final price of the product, is necessary to mobilise the finance in the right place at the right time to enable the offsetting activities. The sequestering of carbon is not utilised *until* something is consumed. The necessity of carbon sequestration *alongside* drastic cuts in emissions to maintain a 1.5-degree Celsius pathway (IPCC, 2018; UK Committee on Climate Change, 2020: 98) is poorly realised by consumer offsetting.

As such, the discourse avoids questions of quantity in favour of articulations of innovation as a fix to the problem confronting the conscientious consumer. Through distancing, offsetting, and simplifying complex problems into narrow solutions, the discourse opens up a space in which the consumer is able to perform both sustainability and consumerism.

4.2.1. The manageable consumer

In 1994, the Oslo Symposium, chaired by Norwegian Minister of Environment Thorbjørn Berntsen for the UN Commission on Sustainable Development, offered a definition of sustainable consumption and production:

the use of goods and services that respond to basic needs and bring a better quality of life, while minimising the use of natural resources, toxic materials and emissions of waste and pollutants over the life cycle, so as not to jeopardise the needs of future generations (Berntsen quoted in Oslo Symposium, 1994)

The Roundtable took as its guiding insight Mahatma Gandhi, '[t]he Earth has enough for everyone's need but not for everyone's greed' (Gandhi quoted in *ibid.*). At least as far

back as the report from the Brundtland Commission, *Our Common Future*, (World Commission on Environment and Development 1987), global governance institutions have hinted at determining, and even problematising, the social construction of 'perceived needs' in sustainability discourse:

Living standards that go beyond the basic minimum are sustainable only if consumption standards everywhere have regard for long-term sustainability. Yet many of us live beyond the world's ecological means, for instance in our patterns of energy use. Perceived needs are socially and culturally determined, and sustainable development requires the promotion of values that encourage consumption standards that are within the bounds of the ecological possible and to which all can reasonably aspire. (WCED 1987: 42)

Here, the Brundtland Commission report identifies two categories of need: the 'basic minimum' and the 'perceived needs'.

In this discourse, a distinction is apparent between consumerism and consumption. While consumption refers to all manner of acquiring resources, including biological functions from breathing to eating, 'consumerism' can distinguish a 'defining trait of the modern social identity' (Brooks and Bryant, 2014: 80-81) as constituted by and through the consumption of goods, and the pursuit of aspirations defined as distinction-making. This semantic point is important because while 'necessities' are, and have historically been, subject to marketing discourses that create value through the construction of difference, the consumption of fresh water, for example, is an ecological and developmental issue of fundamentally different characteristics owing to its base biological necessity and potential scarcity.

While it is tempting to make this distinction on grounds of 'need vs. want', this doesn't fully grasp the role of consumerism and associated economic discourses in the contemporary imaginary as a means of 'getting on' in the world, such as economic growth, job creation, and so on. More pertinently, it ignores the role of consumerism in the reproduction of identity through performance. Put simply, 'unnecessary goods' is something of a misnomer given the fundamental utility of consumerism in contemporary mainstream economic, social, and cultural practice.

The critique of 'perceived needs' (or wants as distinct from needs) is not new. Siegfried Kracauer, writing in 1929 at, according to Bauman (2007), the turning point from producer to consumer society, notes:

The rush to the numerous beauty salons springs partly from existential concerns, and the use of cosmetic products is not always a luxury. For fear of being taken

out of use as obsolete, ladies and gentlemen dye their hair, while forty-year-olds take up sports to keep slim. 'How can I become beautiful?' runs the title of a booklet recently launched on to the market; the newspaper advertisements for it say that it shows ways 'to stay young and beautiful both now and for ever'. (*Ibid.*: 7.)

Kracauer identifies, before Habermas *et al* could offer their cultural thesis, the beginning of a long trend that, for Bauman, culminated in the emergence of the *Homo eligens* and their accommodating arrangements of social space and practice. However, for Bauman, as for Kracauer, this did not denote the emergence of a desire-driven hedonism at the level of the sovereign individual; or, at least, to the extent that it did denote this, it was a product of social demands rather than a collapse of puritanical morality at the level of the individual. Distinguishing consumerism from consumption on the basis of needs versus wants is thus problematic. Beyond base biological needs, like water and energy, all needs can be considered 'perceived', in the sense of arising from a given social configuration.

In its most widely articulated form, the iteration contained in Sustainable Development Goal 12 ('sustainable consumption and production'), the consumer will 'live in harmony with nature' at quite a specific point in time according to the achievement of Target 12.8:

By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature (UN 2015: 25.).

The Target constructs the possibility that the right information can be gathered at the right time, in the right place, in the right format, and in a form sufficiently intelligible to all, for 'lifestyles in harmony with nature' to be realised. In short, the Target assumes the existence of, if not perfect, then at least sufficient information. Consumers, when provided this information, can be relied on to rationalise their behaviour provided their awareness of 'sustainable development' is sufficiently elevated. The who, what, and how of these provisions are not articulated.

Target 12.6 of Goal 12 specifies the need to

[e]ncourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle. (UN, 2016.)

As a result, SDG Goal 12 assumes that behavioural change occurs with the deployment of information and awareness – indeed, that this occurrence is an event that takes place by 2030, rather than a social arrangement of continual development and redeployment of information. Most importantly, the marshalling and dissemination of information and the bringing into being of awareness take place within established institutions, within the existing configuration and distribution of power. In effect, Goal 12 calls upon institutions to volunteer the tools for their own dismantling.

As outlined in the previous section, this provisioning of information is deeply flawed in the pursuit of functional sustainability. What is instead deployed under the banner of 'Basic needs' becomes a continually shifting domain of human-nature exploitation. Beyond powerful but simplistic reductions to 'need' and 'greed', needs and the perceptions of them are indistinguishable at the point of access for individuals who are simultaneously consumers of society and consumed by it. 'Basic needs', as a category for understanding a minimum level of consumption, the minimum that must be sustained, cannot escape the social configurations that determine what basic needs are. The discourse of the 'innovative consumer', therefore, represents less a counter-hegemonic articulation of the managed, limited consumer than an already hegemonic discourse of consumerism expanding to accommodate this challenge.

4.2.2. The innovative consumer

In the innovative consumer, the consumer-subject is afforded the degree of sovereignty that enables them to affect the sustainability transition themselves. Indeed, it is the capacity to choose freely, in the context of a sufficiently competitive market, that drives the innovation necessary for overcoming the obstacles between unsustainability and sustainability. The OECD (2008), states that '[c]onsumers are key to driving sustainable production and play a central role in sustainable development'. Similarly, the UN's 'Goal 12' of the Sustainable Development Goals is to 'ensure sustainable consumption and production patterns' (United Nations, 2015). The OECD's overall aim of 'green growth' is defined as 'fostering economic growth and development while ensuring that natural assets continue to provide the resources and environmental services on which our well-being relies' (OECD, 2011: 9). Such attempts to operationalise sustainable consumption, as in the case of the OECD's Green Growth agenda, focus on the opportunities for capital, such as the 'creation of new markets by stimulating demand for green technologies' (*ibid.*). Here, 'weak sustainability', wherein natural, labour, and human-made capital are

mutually interchangeable (Neumayer, 2013: 22-25), is normalised in place of a deeper interpretation of sustainability, whereby human-made or labour capital cannot adequately substitute for 'core' natural capital without runaway environmental impacts. With weak sustainability, in order to substitute one type of 'capital' for another, the natural capital must be valued and reproduced efficiently. The concentration on such an approach necessarily captures 'value' as a market-determined feature and its sustainable increase is therefore a function of innovation.

The place of innovation, therefore, is always central: 'Innovation will play a key role ...[because] the ability of reproducible capital to substitute for (depleted) natural capital is limited in the absence of innovation' (OECD, 2011: 10). Similarly, the UN stresses that it is 'in businesses' interest to find new solutions that enable sustainable consumption' (UN n.d.). A key aspect of this, relative to ecological considerations, is the concentration on quantitative growth rather than qualitative 'progress'. This relates to the old problem of interpreting the Enlightenment's significance: science as innovation for the overcoming of obstacles (such as environmental obstacles to growth), or as enabling the transformation of economic and social practices. Adorno's *Dialectic of Enlightenment* helps to illustrate this, wherein the historical tendency for science and technology to further embed unequal social relations and means of production obscures the potential of science for *transforming* them. In the ecological sense, a quest for greater *understanding of nature* is displaced by ever-greater *domination over nature*.

By compounding notions of 'sustainability' with practices of consumerism, the discourse fails to create a new imaginary or ideal. 'Sustainable consumption' merely articulates the ability to continue an already established system - it imagines a future of the least possible change required for its continued reproduction. Sustainable consumption partakes in the historical process of commodification, individualisation, and alienation. Its framing by the sustainable development paradigm, an inherently industrialist and modernist discourse, places the consumer at the centre of the drive for sustainability (e.g. OECD, 2008). This constructs consumerism as part of the solution to ecological crisis, rather than part of the cause. The obstacle to sustainability is thus problematised as a failure to innovate, to which the solution is technological advancement and ecological modernisation; a discourse in which the consumer subject participates in the process of innovation.

The discourse at once empowers consumers as drivers of innovation and passivizes them as a rational body which will respond predictably to the right market signals, especially with respect to the economistic logic of environmental action. In the former, consumers transcend their role as manageable body in order to make demands of greater sustainability; in the latter, the market enlarges to encompass these demands, reconstituting the managed consumer through elite-sanctioned forms of environmental care whose aesthetic contributes a value-added benefit to 'green' commodities as the requirement to 'buy green' becomes socially normalised.

The discourse of the innovative consumer most clearly relays the ideas of the consumer as the ultimate sovereign, wielding power through the freedom of choice. In this capacity, consumer subjects are the privileged agents of change on whom a sustainable transition rest. Bureaucratic architectures are necessary to the extent that this consumer-driven change requires sufficient information.

4.2.3. Beyond the consumer

That growth has failed to reduce inequality (indeed, as highlighted previously, that inequality has increased despite growth), adds demand to already overexploited resources and sinks, and has failed to decouple itself from growth in energy and material throughput has enabled the *limits* discourse to enjoy something of a rebound. The UN's 2019 progress evaluation of Goal 12, for example, found that

[w]orldwide material consumption has expanded rapidly, as has material footprint per capita, seriously jeopardizing the achievement of Sustainable Development Goal 12 and the Goals more broadly. (UN, 2019a)

There appears an abject failure within the SDGs, according to the terms of the sustainable development discourse itself, to realise both economic growth and the sustainable management of 'natural resources', as per Target 12.2 and Indicators 12.2.1 and 12.2.2 of Goal 12.

Ten cross-party Members of the European Parliament (MEPs) organised the Post-Growth 2018 Conference in August 2018. The website, under *Why post-growth?* notes that:

Although we have greatly benefited from economic growth, the continuous pursuit of growth and ranking GDP as the primary measure of development are criticised even by top-rank economists. Climate scientists have suggested that even the Paris Agreement will not suffice to tackle climate change – we need to start thinking about a post-growth future. (Post-Growth 2018 Conference, 2018.)

The post-growth discourse thus situates itself in opposition to even widely championed symbols of progress in environmental governance (the Paris Agreement) as being insufficient. In this discourse, growth is the primary logic of differentiation; growth is equated with excess, with failing to meet social needs, and with the overexploitation of nature. Against this articulation of growth, the post-growth and degrowth discourses open space for new indicators.

The academic case for post- and de-growth economics has been extensively made. This takes the recent work in ecological economics on post-growth economies, degrowth, and steady-state economics (Daly, 1996; Jackson, 2013; Victor 2008; Dietz and O'Neil, 2013; D'Alisa, Demaria and Kallis, 2015; Wanner, 2015) as the groundwork for a normative approach that problematises the assumptions made by growth-dependent, market-liberal responses to ecological crises. In these latter responses, focusing on markets and consumption, ecological problems are not merely subordinated to the concerns of the economy, but also constructed as an enabler of them in marketing discourse through the maintenance and creation of value.

The campaign, led by, among others, the Centre for the Understanding of Sustainable Prosperity, to rescue the elements typically associated with the growth paradigm has a clear consciousness of the importance of language. Rescuing and redeploying the terms of prosperity forms a creative process of rearticulating 'the good life' (cf. Jackson 2013). Within the post-growth movement, however, different discourses open up. Degrowth, a network of academics and campaigners present at the EU conference, argued that bringing post-growth discussion 'to EU politics apparently also meant going along with rules of the game' (Treu, Mastini, Saey-Volckrick 2018). Commenting on Jackson's speech, the authors note it 'lacked the idea of degrowth to decolonize our imaginaries [sic]', arguing instead that degrowth is 'about questioning the very way we think about our society and economy' (*ibid.*).¹⁸

Nevertheless, there remains a jointly articulated need to move beyond a growth-dependent system and reopen to imaginations what a sustainable society and economy

¹⁸ The distinctions between post-growth and degrowth discourses should not be underestimated. A full account of their differences is not possible here, however. To the extent that discourses beyond growth have had success in affecting public debate and institutional governance, it is as a generalised 'post-growth' economics, and the intention of this section is to analyse what is articulated as possible in networks of global governance.

can and should resemble. The importance of this close grouping of discourses is that the role of the 'consumer' is not clearly discernible. The metaphors of freedom and agencies of choice as drivers of innovation and producers of identity are replaced by functions beyond the market. Though a decisive rejection of capitalism is not a common iteration. The narrative is, broadly, shifted from a focus on individuals finding sustainability to a social undertaking in which roles are reimagined. The sense that post-growth and degrowth perspectives are viewed with suspicion, that they, to enter particular spaces of politics, have had to adopt new 'rules of the game' is testament to the inertia in the system.

4.3. Conclusion

In sum, building on Laclau and Mouffe's (2014 [1985]) discourse theory, I posit, overall, that a reconciling of the green-consumer paradox and overdetermination is attained only through a construction of fantasy. The hegemonized discourse of consuming sustainably depoliticises sustainability as a concept and practice. This is facilitated by green marketing discourse which provides a temporary stabilisation of a system of meaning that invests a particular action with the notion of sustainability; providing a subject position whereby *acting* sustainably is possible even in the absence of ecological sustainability. This allows for the pursuit of sustainability *agendas* without sustainability *outcomes*.

Whilst discourse theory does not concern itself with identifying a fundamental 'truth' behind discourse, this is not to say that partaking in a discursive articulation does not have social and material repercussions beyond the immediate articulation. That is, buying a hybrid vehicle on sustainability grounds is partaking in green consumer discourse, but there remain non-apparent implications of this: the environmental and social conditions of production, sourcing, waste, and so on, in which the consumer equally partakes. Indeed, green advertisements frequently rely on the non-articulation of distributed impacts, and the articulation of a narrow, relative gain as a far broader 'greening'. Going beyond the discourse's internal structure (the single articulation or structuration) is necessary to ascertain its broader implications.

'Sustainable consumption', as mentioned in the various IGO literatures above, assumes an essentialist position on behalf of the subject: an *a priori* identity for whom consuming forms an inherent part of living in modernity. The focus thus becomes on

rationalising and enabling this behaviour in the face of a multitude of crises in which precisely this behaviour is complicit. The naturalisation of such a concept removes it from deliberation with the consequence that consumerism occupies a privileged position so that crisis mitigation is organised around, and in service of, this hierarchy. Put simply, 'sustainable consumption' emerges and serves to reproduce and legitimise the dominant economic order at precisely the point of its greatest failure.

The 'sustainable consumption' discourse is hegemonic to the extent that the conditions of its existence occlude alternative dimensions of sustainability from being. Consumerism needs to absorb and claim to reflect these dimensions. The legitimacy of the discourse, 'truth' in the Foucauldian sense, is attained not through an inevitable and exclusive response to scientific fact¹⁹, but the radically contingent outcome of prevailing power relations. The market-focused response to ecological crisis is not an inherent element of the crisis, but it has been articulated as such. To frame this in discourse theory, then, the consumer-focused response is radically contingent; it is possible but not necessary.

It is not the case that alternative means of realising agency and affecting change are often *explicitly* excluded from hegemonic discourses of neoliberal sustainable development. But specific forms are privileged. In this transition, consumers, as such, find themselves widely and comfortably accommodated by the existing social arrangements and distributions of power. Other subjectivities must be fought for. Looking beyond the discourse-internal structure, the sustainable consumer subject is situated within its broader context: the relations of subordination, oppression, and domination that characterise the neoliberal economising of an externalised nature. Four interrelated features of this ecopolitics, in which the sustainable consumer functions as both enabler and beneficiary, are identifiable and serve to summarise the political ecology of sustainable consumerism.

¹⁹ It is important to note that the 'scientific facts' themselves (around ecological crises) are not problematised here – this body of scientific evidence is taken as a given and understood through the planetary boundaries framework (itself a discourse nonetheless, signalling inclusions and exclusions) that in this case serves to organise our understanding of 'crisis' through tipping points, boundaries, horizons, imbalances, and so on that indicate an overstepping of biospherical limits. See, for example, Steffen *et al.*, 2015.

First, the production of a 'safe space' of consumerism, wherein the over-interpolated subject's ethical anxieties of exploitation are reconciled in a space of fantasy, and the act of consumerism enabled as a benign or even benevolent act.

Second, building especially on the discourse's simplification of complex, interrelated ecological and climatic impacts, 'seeing like a consumer' (cf. Scott's *Seeing Like a State*, 1998) denotes the need to simplify complex problems in order to render a product 'green', and thus 'consumable' as a sign. A broader implication of 'seeing like a consumer' is the construction of a governable agent of change to whom the problem is communicated and thus constructed.

Third, sustainable consumerism contributes to the removal of 'sustainability' from the realm of the political. Following similar arguments in post-political literatures, this section highlights the role commoditisation and consumerism play in locking modern society 'into a technocratic *politics of unsustainability*' (Blühdorn in Wilson and Swyngedouw, 2015: 146-166, emphasis original).

Finally, a so-called 'green' consumerism represents a key interface between humans and nature – it forms an intermediary through which signifiers of nature are adopted by the marketing of products. Anthropocentrism is further reinforced when human-nature relations are reduced to a dichotomous exploiter-exploited relationship. Consumers are called upon to 'solve' or otherwise actively contribute to fixing some environmental blight.

Overall, this chapter has argued that the sustainability aesthetic produces commodities; it is these signs that are consumed. This is distinct from the fantasmatic ideal of a commodity that *is* 'sustainable'. The sustainability of an object is socially constructed, and thus rendered intelligible by politically contingent discourse. Contrasted with this, and used here as a form of critique, is an object's *impact*, understood as the object's contribution to planetary system overshoot: a state more resembling *existence* (for instance, a volcanic eruption), rather than of *being* (for instance, the volcanic eruption being an 'act of G/god' or a 'natural disaster'). Townshend, in analysing Laclau and Mouffe's implicit acknowledgement of this differentiation, concludes:

[...] we have to distinguish between discourses that attempt scientifically to explain an 'external' reality, which require systematically organised data from, and often hypothetical reasoning about, that reality, and those such as aesthetic/imaginative or certain political discourses that have a clear symbolic dimension and do not require, or aspire to, agreed methods to demonstrate proof. (Townshend, 2004: 274.)

In application, for instance, when I buy an electric car, I might buy its service to me as sign-value – of being 'green' – but I also contribute to a plethora of measurable impacts. The former, capable of taking infinite form, is socially constructed, and capable of forming a site of political contestation when it is challenged. The latter is not. Whether the act – the plethora of impacts – is completable indefinitely, other things remaining equal, is deducible in ways *being* or *performing* 'green' is not.

As such, central to this chapter's critique of the sustainability aesthetic and the social construction of the sustainable consumer is the epistemological distinction between a sustainability of *existence* and a sustainability of *being*. I term these, respectively, 'functional sustainability' and 'aesthetic sustainability'. In clearer keeping with poststructural discourse theory, it is impossible to objectively access a pure 'functional sustainability', and as such an 'aesthetic sustainability' is always articulated when environmental sustainability is called upon.

Leading from this, the repeatability of an act must be understood both spatially and temporally: how many times, at the same time, the act is repeatable around the world; and how far into the future the act(s) are repeatable. For brevity, I term these, respectively, horizontal and vertical impacts.

This has important implications for the social construction of a sustainable act of consumption. For instance, one person might be able to fly every minute of their life – so long as the number of people doing so remains very low, the act is unlikely to send the planet into overshoot. But this activity is unlikely to be considered a sustainable or 'green' action. What is problematic is the articulation of any given singular act as sustainable or unsustainable, whether the use of a plastic straw or a private cross-Atlantic flight. Functional sustainability in terms of planetary overshoot is a function of the scalability of an activity according to a holistic set of impacts. For instance, a single electric car cannot send the planet into overshoot, but to convert the existing fleet of cars in the world to electric would quickly exhaust the planet's supply of a range of rare Earth metals (see in particular 4.1.1. of this chapter). In this way, while an individual action cannot be rendered unsustainable or sustainable, its impacts are, nonetheless, calculable. As such, at the level of the individual action and the individual commodity, there exists

no extra-discursive *sustainability*, but there exist extra-discursive material *impacts*; these are drawn from the significant literatures on life-cycle analysis²⁰.

The sustainable consumer discourse transcends these issues with the deployment of a range of fantasmatic logics that contribute to the social construction of an aesthetic sustainability incapable of realising a functional sustainability. The eco-governmentality of one-dimensional sustainability serves to disarm rather than to promote the efforts of citizens-as-consumers to turn environmental awareness into effective environmental action even according to the discourse's aims of sustainable development. The consumerist prism through which 'nature' or global environmental change is channelled splits the total into manageable fragments, neither one coordinated with the other, and each presenting to the consumer a broad, green aesthetic.

²⁰ I do not, however, present myself as an expert in the conduct of life-cycle assessment. I rely instead on the extensive secondary literature, such as in transport and other relevant areas.

5. Ecological Civilisation: Towards Multidimensional Sustainability?

"the pursuit of harmony between humans and nature is about having both gold mountains and green mountains"

PRC President Xi Jinping, 2015

Ecological civilization, as a key area of study, was not decided on prior to engagement with discursive resources in China and with Chinese texts on sustainability. It became apparent, over time, that this represented a particular ordering of meaning within the field of discursivity that tied subjects to nature in radical ways. In this quote, quoted in Communist Party of China (CPC)-owned *China Daily* (2015b) on Ecological Civilisation, President Xi Jinping was answering a question raised by students regarding growth and the environment at Kazakhstan's Nazarbayev University. The metaphor permeates statist discourse both domestically and in international fora, including at local levels to construct environmental protection and wealth accumulation as synergetic. As mentioned previously, political ecologies often begin with paradoxes or contradictions. The principle, though by no means only, contradiction highlighted here is that 'harmony'²¹, when it refers to humans and nature, means, rather than deconstructing boundaries, re-establishing them. The harmonising of the human-nature relationship, as Zhuang (2015) highlights, is reduced to a consumer-consumed relationship rationalised in economic terms. Gold mountains are the primary means of recognising the value of green ones. In this way, harmonisation is primarily the process of justifying existing modes of capital accumulation: 'green mountains' are essential as their base necessity is incorporated into the means of production by the process of being 'seen' in economic

²¹ Harmony, in Chinese statist discourse, has a long genesis with multiple applications whose full investigation is not possible here, encompassing human-nature relations, social relations, security (and particularly securitised social policy), and others.

decision making and, most importantly, by markets. This resembles similar processes such as natural capital valuation and accounting, where nature will be protected on the basis that, and *only so long as* its ecological function in the economy is irreplaceable, and the policy intervention is merely to make this contribution visible to market forces. In short, the analogy lacks the means of recognising green *as* gold, or vice versa.

Nevertheless, the metaphor does not imply a conversion: green mountains are not, in a direct sense, turned into gold ones, as a simple extractive analogy might suggest. In this sense the metaphor is not automatically aligned with a neoclassical economic imaginary of an extractive, linear economy reliant on 'natural resources'; that which is presented as in need of *reformation* in Western sustainable development, but not *transformation*. Historically, ecological modernisation, as detailed by Mol and Summers (2007), wherein these reformations take explicit form as means of recognising the 'win-win' of environmental action, has taken hold in the PRC from its beginnings in Europe.

This chapter builds on the logics and articulations of sustainable consumerism identified in the Western sustainable development imaginary detailed in the previous chapter. The extent to which characteristics of the domestic Chinese discourse of Ecological Civilisation converges on and diverges from a predominantly Westernised discourse of sustainable development is a necessary angle of analysis to inform the discussion on how an emergent discourse represents a potential re-imagining of socio-nature relations in what is increasingly a global imaginary.

As a statist discourse, Ecological Civilisation, and its genesis in other forms of 'harmonising' discourses, forms both a state-building and state-reinforcing discourse of governance, and a narrative with which the Chinese state presents its social-environmental visioning to the world; what is later presented as 'green power' – the ability to shape global imaginaries as existing socio-economic, political, and cultural systems contend with the need to adopt sustainable pathways. This chapter, therefore, presents a political ecology of the society-nature relations articulated by the statist discourse of Ecological Civilisation.

The chapter begins by outlining areas of convergence and divergence in policy between a historical leader in environmental and climate governance, the European Union (EU), and China. In the field of global environmental governance, the study of the relationship between the EU and China has emerged as a significant area of development, albeit one with substantial challenges. The provision of a wide variety of official

communiqués offers potential for looking at how the current environmental governance leader acts as a normative power towards a fast-emerging historic bloc which may overtake in important areas (for example, South-South cooperation and southern capacity building) in the coming years. This section outlines where this relationship finds common ground and assesses whether policy convergence represents a continuation of market-liberal orthodoxy in environmental policy making, or whether divergence in significant areas gives rise to a counter-hegemonic bloc.

The chapter goes on to more substantively detail the discursive resources that constitute the subject position for individuals to occupy or resist. In this sense, Ecological Civilisation is analysed as an ecogovernmentality that constructs a particular regulatory narrative. As outlined in previous chapters, the ecogovernmentality that emerges from the collision between late modernity and the biophysical limits of its material progress can be described, broadly, as a one-dimensional sustainability. Here, environmental relations are navigated by consumers and mediated through markets. Biospherical limits are re-cast as opportunities for capital, driven by consumer choice which produces the required innovation. Sustainability is depoliticised as a terrain of radical transformation and recast as one where consumers are the privileged agents of change, to the occlusion of other forms of agency and transformational change. As such, one-dimensional sustainability describes the regulatory narrative that, by processes of occlusion and commodification, assigns roles, constructs legitimate agency, and rationalises environmental action as a form of managerialist intervention for economic care.

A key question of this research is where a counterhegemonic multidimensional sustainability might arise from, how it might re-articulate elements of the discursive terrain, and what channels might it seek to assert itself at a global level. This section, therefore, offers a closer analysis of some of the discursive resources of Ecological Civilisation²², focusing in particular on the ways in which it transcends, or fails to transcend, a neoliberal orthodoxy conceived of as two interrelated paradoxes: the sustainable consumer-subject, and the growth of performative rhetoric at the same time

²² In focusing on central statist discourse, the analysis is limited to official English translations, though the original Chinese is consulted when claims are made about apparent differences between original and official translation, which in practice denote different articulations to domestic and international audiences.

as the growth of ecological and climatic impacts. This is predicated on the assumption that a counterhegemonic sustainability agenda that offers transformative change has transcended the irreconcilable pursuits of sustainability and endless exponential economic growth. This way, the analysis shifts from a mapping of contemporary dystopia(s) to a more outward search for articulations resembling a utopic alternative in the tradition of critical political ecology and critical geography (cf. Bromley, 2007: 57).

Whilst post-growth and, in particular, degrowth discourses have emerged in recent years to challenge latent assumptions of the necessity of material growth, and their relationship with patriarchal, colonial, and other forms of violence and oppression, less focus has been given to those alternatives expressed as such by (re)emergent global powers, including in spaces they seek to problematise, such as the United Nations. China's role as a leader in global South consolidation and as a powerful voice against the territorial determination of greenhouse gas emissions and other forms of pollution helps distinguish it as a subject of study in this regard. Coupled with its developing self-identity as an environmental leader, the discursive and spatialised articulations of Ecological Civilisation within China provide an important, albeit limited, understanding of the different ways in which agency, legitimacy, and subjectivity are constructed.

5.1. Policy Convergence

This section details those areas which, from an analysis of secondary literature and official documents, reveals substantial areas of convergence in climate change mitigation policy, and environmental governance more broadly.

5.1.1. Market-based instruments

The EU Emissions Trading System (EU-ETS) represents the most significant development of ecological modernisation as a norm (Braun, 2014: 114-115), and has provided a means for EU industry to pursue minimally invasive means of cutting emissions, while not just protecting existing economic structures, but providing new opportunities for them (Bailey, Gouldson and Newell, 2011). The project was characterised by the European Commission's Energy Commissioner, Andris Piebalgs, in a speech he gave in 2007 as 'nothing less than the EU taking global leadership in catalysing a **new industrial revolution**' (Piebalgs, 2007, emphasis original to EU Commission transcript).

MBIs represent a significant area of convergence between the EU and China in both bilateral and multilateral negotiations. Domestically, the Chinese leadership set out its strategy for placing a greater emphasis on MBIs at the Third Plenum of the 18th Central Committee of the Communist Party of China (Zhang, 2015). A key area of such expansion is in emissions trading systems (ETS). Both the EU and China pursue greater expansion in ETS, with China deciding to implement a national system in 2017, set to be operational in 2020 (see IEA, 2020 for a detailed analysis), and plans for an integrated EU-China ETS in the coming years voiced by UK special representative on climate change, David King in an interview with *BusinessGreen* (BusinessGreen, 2016). At the COP21 climate negotiations in Paris, China's special representative on climate change, Xie Zhenhua, indicated strengthening relations with the EU (China.org.cn, 2015a) over emissions trading, whom he described as 'our teachers' (Xie quoted in Garside, *Carbon-Pulse*, 2015). ETS as a policy area represents not just a significant area of convergence, but also of Chinese learning from EU actions (Zhang, Karplus, Cassica and Zhang, 2014), particularly via the three-year collaboration project launched by the EU Commission to assist with the 'design and implementation of emission trading in China' (European Commission, 2016).

Alongside emissions trading, the report by Moarif and Rostagi (2012), *Market-Based Climate Mitigation Policies in Emerging Economies*, highlights the role of subsidies to both business and consumers, and taxes as market instruments for encouraging particular behaviour. Financial incentives vary from encouraging private preferential financing, to feed-in tariffs for renewable electricity generation. De Cock (2011) makes a convincing case that the EU-China relationship fostered a particular approach to reconciling economics and environmental protection, facilitating the 'diffusion of the 'business case' for a low-carbon economy' by helping to 'overcome the traditional understanding in China of the environment and the economy as competing concerns'. At the Third Plenary Session of the 18th Central Committee of the Communist Party of China, the plenum stated that China 'must deepen economic system reform by centering (*sic*) on the decisive role of the market in allocating resources' (China.org.cn, 2014). It should also be noted, however, that while market-liberal developments are clear, the state maintains an interventionist approach in some areas, such as restricting private lending to companies with poor environmental records (*ibid.*: 13); an important area of divergence discussed in more detail in section 4.2.

By concentrating broadly on reformist approaches to market functions, China's approach corresponds closely with ecological modernisation in important ways as discussed in section 3.2. However, since 2005, academics instrumental in the emergence and mainstreaming of ecological modernisation in Europe have charted its trajectory in China as an organisational concept for combating climate change (cf. Zhang, Mol and Sonnenfeld, 2007). In doing so, the authors note the differentiation in China's adoption of the theory, concluding that, despite the use of the term ecological modernisation, actual understandings diverge in some significant ways from the mainstream approach in Europe; reflecting a unique Chinese version of modernisation. While the underlying logic of allowing for industrial flexibility while tackling emissions is mirrored in Chinese progress towards a single emissions trading system, the rhetoric surrounding ecological modernisation is different.

5.1.2. Economic development and 'weak sustainability'

'Weak' and 'strong' sustainability remains an important debate within development and environmental politics (see, for example, Neumayer, 2013 among others). 'Weak' sustainability posits that different kinds of capital (man-made, natural, and human) are mutually substitutable; what matters, therefore, is the total stock of capital. In principle, though rarely advocated, is Solow's (1974: 11) observation 'that the world can, in effect, *get along* without natural resources' assuming the stock of natural capital has been efficiently substituted for by stocks of man-made or human capital.

Conversely, strong sustainability argues that certain critical natural capital must remain as such and cannot be substituted for any other type of capital. Weak sustainability builds on the neoclassical economics view of distinct, though related, realms of activity. Strong sustainability departs from this and reveals how the economy is constituted by social relations, and how economic systems lack a direct access to natural 'resources' – processes of natural capital exploitation take place by and through society.

Rather than taking the pursuit of economic growth as an objective subordinated to sustainability, both the EU and China build economic growth into climate change mitigation and environmental governance mechanisms. This is shown by the opening point of the 2015 EU-China Joint Statement on Climate Change:

The seriousness of the challenge calls upon the two sides to work constructively together for the common good, in the context of sustainable economic and social development. (European Commission, 2015.)

With climate change mitigation 'work' taking place 'in the context of sustainable economic...development', climate change is thus subordinated to the wider, contextualising frame of economic development. The two sides also agree to 'cooperate on developing a cost-effective low-carbon economy while maintaining robust economic growth' (*ibid.*). This places economic instruments as the means through which climate change might be tackled, and the means of defining what is achievable, and what measures are not.

While this also plays an important role in global, multilateral responses to climate change, it takes explicit institutional form in EU-China bilateral relations. Convergence in this area is key in establishing market-liberal hegemony spatially across the north-south divide, and temporally as China increasingly emerges as a key player in global negotiations. This perpetuates the ideological assumptions made by market-liberal approaches: that economic and environmental considerations inhabit distinct realms, rather than the strong sustainability model insistence that the economy can only be a subset of the environment. Economic concerns are thus dis-embedded from environmental and social relations in orthodox interpretations. The given framework for action thus reproduces and strengthens the economic imperatives of market-liberalism, particularly the maintenance of 'robust economic growth' as a measure of wider social progress that also delineates the appropriate course of action.

This is linked to the market-liberal assumption that growth in gross domestic product (GDP) is automatically correlated with notions of progress and represents a legitimate metric of overall economic performance and development. Both China and the EU commit to GDP growth along these assumptions. China's proposals for the Thirteenth Five-Year Plan²³ remark that 'China has seen great progress in the past five years' with 'per capita GDP increasing to \$7,800' (XinhuaNet, 2015). China's growth forecast for 2016 remains high at 6.5-7% (XinhuaNet, 2016). Climate change policies are

²³ The Thirteenth Five-Year Plan was confirmed on the 16th March 2016 – at the time of writing, no full document was available. The source used here is a state-created outline of proposals in the form of an infographic, available at XinhuaNet, 2015.

viewed very much in the market-liberal tradition of contributing positively to GDP, providing new areas for investment (and investment returns), and providing a job-creation strategy. UNEP's update for the Pittsburgh Summit outlined that:

Chinese experts estimate that for every US\$ 100 billion of green investment, GDP would grow by US\$ 143 billion, tax revenues by US\$ 1 billion, and household consumption by US\$ 60 billion. In addition, it is estimated that 600,000 new jobs would be created. (UNEP, 2011.)

In particular, China's 'Green Stimulus' package topped the G20 in absolute terms at US\$ 218 billion under the 'Global Green New Deal' framework encouraged by UNEP, and the 11th Five-Year Plan, with an additional \$US 2.5 billion estimated for solar power subsidies (*ibid.*; see also HSBC Global Research, 2011). Such approaches to 'greening' economic structures reveal the anthropocentric philosophy that underlies 'weak' approaches to sustainability, and represents an important area of convergence that, perhaps due to the extent to which it is taken for granted, is often occluded from the literature as a basic area of agreement in global environmental governance, and from policymaking as an area of contestation.

5.1.3. Anthropocentrism

EU and Chinese climate change mitigation policies, and environmental governance generally, are based on further human-centred management of nature, constructing the environment as an area subject to an ever-expanding human agency. Anthropocentrism²⁴ places humans as the privileged interpreters of value in nature, such that the valuation of natural 'capital' is determined by its service to the human species, an important example being the valuation of ecosystem services (ESS) (cf. Costanza *et al.*, 1998; Costanza *et al.*, 2014). This contrasts with the eco-centric philosophy found in, for example, deep ecology perspectives that assume an intrinsic value in nature.

²⁴ It should be noted that there exist other challenges to anthropocentrism somewhat beyond the scope of this research project, but significant to the ongoing process of critical emancipation. Ecofeminism responds to the 'anthropocentric' philosophy by pointing out that historical environmental exploitation (or at least decision making relating to this) has been overwhelmingly *male*-centric, rather than representatively *human*-centric. Second, some ecofeminists argue that the patriarchal system fails to value the unique relationship between women and nature through shared experiences of exploitation. See particularly Ruth-Johnson, 2013, for a pertinent discussion on ecofeminism's contemporary contribution to political critique.

The latter of these philosophies can also be found in various religious systems, such as Buddhism and Daoism (Confucianism is discussed a little later), but also in localised knowledge-systems. Eco-centric or bio-centric approaches challenge the assumption that natural value is 'knowable' uniquely to humans; arguing instead that the natural world is intrinsically valuable in ways that cannot be exploited and substituted for. Market-liberal and social-green theories typically, though not always, imply an anthropocentric view, often incorporating a more 'prudential' element to account for valuing nature.

Salles (2011) demonstrates that the 'concepts and methods [used] to value ecosystems and biodiversity have progressively emerged with roots in the core of economic theory of value'. As an example, while market functions might determine the economic value of timber, there is no function for accounting for the symbolic meaning or cultural value of the particular woodland from which the timber is sourced. Offsetting loss of that woodland by planting elsewhere the number and species of trees destroyed cannot offset the subjective value attributed by local communities, nor account for the intrinsic value. In recent years, Ecosystem Marketplace, a non-profit organisation²⁵, has charted the growth of biodiversity offset markets, aiming to increase their transparency and as such their functionality (Ecosystem Marketplace, 2016; see also Madsen, Carroll, and Moore Brands (Ecosystem Marketplace) 2010). The approach aims to better operationalise systems such as biodiversity offsetting and habitat banking by standardising value attribution, including in inherently subjective 'services' such as 'cultural values' (*ibid.*: 4, see also Daily *et al.*, 2000). However, as Kirchhoff (2012) argues, 'many cultural values attaching to the natural/cultivated environment cannot be addressed in this way'.

In this area, China has taken steps to reflect such valuation by internalising subjective losses into environmental auditing, but ultimately puts such responsibilities at the behest of market instruments. As an example, Brandt *et al.* (2015) showed that tree logging accelerated in Tibetan sacred forests and old-growth forests, in spite of an official logging ban, which 'suggests that the implementation of official policies may displace local forms of protection'. In terms of climate change, this is pertinent as '[f]orests

²⁵ Ecosystem Marketplace aims to facilitate the growth of MBIs in environmental management, and is supported by organisations including UNDP, the Global Environment Facility, and the Grantham Foundation, among many others.

provide indispensable ecosystem services, including carbon sequestration, climate regulation and recreation, and are essential for biodiversity conservation' (*ibid.*, see also Kinzig *et al.*, 2011).

Similarly, some ecologists have argued that as biodiversity represents a considerable area of doubt (Stork, 1997) in terms of known species, known interactions between these, and how different species and systems might provide services to humanity in areas such as carbon sequestration, it is impossible to accurately value. It has been estimated that the number of known species represents as little as 10% of the total number of species in the world (UNEP, 2001: 61; Oldham, 2002: 13-15). Moreover, of the 1.7 million species believed to be accounted for, 'we know virtually nothing'; and there are 'enormous gaps in western scientific knowledge of global biodiversity and the ecological processes that shape our world' (*ibid.*; see also Stork, 1997: 45). In an introduction to a special biodiversity issue of the *American Journal of Botany*, Raven *et al.* (2011) point out that 'Earth's biodiversity...is declining at an alarming rate, even faster than the last mass extinction 65 million years ago' and that humans 'impact biodiversity via rapidly expanding human population growth, consumption of resources, and spread of disease'. In this light, market-liberal approaches cannot account for biodiversity if our knowledge of such systems is so lacking to begin with. As such, the convergence between the EU and China on anthropocentrism, while representing a widely held philosophical ethic, also provides challenges to current and future climate change policies to account for the intrinsic and/or unknown value of nature.

Within this area, Confucianism manifests as a potential divergence insofar as it is held as an ideal-type in official communications. Confucianism offers an alternative epistemology²⁶ which 'values' nature without market forces, and the rhetorical adoption of Confucian ideas represents an important departure from the rhetorical devices of most Western policy documents. As such, 'living in harmony with nature' has become a common phrase among governmental communiqués regarding environmental crisis management. In the Communiqué of the Third Plenary Session of the 18th Central

²⁶ This is not to confuse such a broad philosophy as representing a homogenous set of assumptions; Confucianism, neo-Confucianism and (to a lesser extent) the 'New Confucianism' represent a long history of philosophical tradition, but in this capacity the basic tenets of Confucianism from around the first century BCE until the ninth century are employed.

Committee of the Communist Party of China, the plenum committed to the 'harmonious development between Man and Nature' (China.org.cn, 2014). Within the same communiqué, however, it is stated that China 'should adhere to the major strategic judgment that development is still the key to solving *all* problems in China [and] take economic construction as our central task' (*ibid.*, emphasis added). This necessarily submits environmental crisis management to economic concerns, and represents a notable departure from the holistic, integrated knowledge-systems of traditional Confucian philosophy.

Moreover, as Zhuang (2015) illustrates with the analysis of Confucian rhetoric in the Chinese eco-city movement, the human-nature relationship implied by Confucianism is effectively reduced to a consumer-commodity relationship. As such, Confucian philosophy appears to play a significant part in Chinese rhetoric but remains essentially indistinct from an anthropocentric philosophy to the extent that increasing human agency in the environment at the behest of market forces is stipulated alongside, and even in service of, this ideal.

Nevertheless, more research is needed on this potential area of divergence that analyses how such discursive practices are interpreted among civil society, and whether or how the rhetorical use of Confucianism is implicated in maintaining exploitative processes by merely re-framing such processes.

5.2. Policy Divergence

China and the EU have also diverged in significant ways. This section looks in more detail at a selection of these areas, the criteria for selecting which lies in their capacity to challenge assumptions made by market-liberal approaches. This is in order to gauge the extent to which China might be viewed as a substantive counter-hegemonic bloc in global climate change governance.

5.2.1. Differentiated responsibility

The issue of differentiated responsibility is deserving of a detailed analysis in its own right from a critical perspective, which lies somewhat beyond the scope of this research; as such, a brief overview of the temporal and geographic elements is included in order to contextualise the main discussion of divergence. In global climate change negotiations, responsibility plays an important role both in challenging cooperation between, broadly

speaking, the economically developed countries (generally Annex 1 Parties to the UNFCCC) and developing countries (non-Annex 1 Parties); but also in fostering collaboration within these two broad categories, if only in the enlightened self-interest sense of a shared interest in promoting a particular framework for judging responsibility. The debate focuses on how to gauge responsibility for GHG emissions, particularly carbon dioxide (CO₂), and comes down to two competing views: historical/accumulated emissions, and current/predicted emissions. Cumulative measuring takes account of the production of GHGs during the historical course of industrial development since the 19th century, given the longevity of the CO₂ greenhouse effect of between 200 and 2,000 years (Archer *et al.*, 2009). Using current and predicted GHG emission levels largely ignores this accumulated build-up of GHGs in the atmosphere. These contrasting ways of measuring contributions to climate change have a substantive impact on global climate change politics.

For the period 1850-2002, the EU-25 member states contributed 26.5% of global CO₂ emissions, with China producing 7.6% over the same period (Torney, 2015: 82). Overall, currently industrialised countries contributed over three-quarters of cumulative CO₂ in 2002, with developing countries contributing the remainder (Baumert, Herzog and Pershing, 2005, cited in Torney, 2015: 82). For contemporary considerations, this is significant because the accepted wisdom of measuring CO₂ emissions places China as the largest contributor in absolute terms since 2006, and even having overtaken the EU in per capita emissions in 2014 (Friedlingstein *et al.*, 2014). Allowing for historical accumulation, however, pushes this figure forward to 2050, and overtaking EU emissions in 2021 in absolute terms (Botzen, Gowdy, and van den Bergh, 2008; Torney, 2015: 82). Given this, as Torney (2015: 82-83) argues, 'it is clearly in the interests of countries that have contributed significantly to past emissions to design a regime that concentrates on current and future emissions trends'. The ways in which climate change regimes account for GHG emissions geographically and assign responsibility typically in aggregate terms at the national level, encounters the same challenges and invites a similar critique.

This issue invites a critique of the orthodox assumption that GHG emissions, and environmental impacts in general, should be accounted for in the geographic area they are produced, rather than at the point of demand and consumption. This is a particularly salient point given the huge trade deficit between the EU and China, as shown by Figure

7 In addition to the trade deficit, EU outward flows of foreign direct investment (FDI) are over 500% higher than inward flows of FDI from China: €127.7bn versus €25.5bn respectively in 2013 (EU Commission, 2015). In this sense, accounting for environmental damages and GHG emissions at the point of production is largely blind to a significant portion (though by no means all) of the causes of such processes: the outsourcing of manufacturing from industrialised to developing countries, whether by purposeful intent in line with the pollution haven hypothesis, or a by-product of other competition mechanisms which happen to concentrate environmental impacts in developing areas. This ties in with a feature of capitalism well described by David Harvey: 'capitalism does not solve its problems; it moves them around geographically' (Harvey, 2010). This presents a clear divergence and challenge for EU-China negotiations; Qin Gang, Foreign Ministry spokesperson for China puts it succinctly: 'On the one hand, you increase production

Figure 7: Table to show EU imports and exports with China, 2012-2014. Source: adapted from EU Commission, 2015

<i>EU-China trade in goods, 2012-2014, measured in € billions</i>			
Year	EU Imports	EU Exports	Balance
2012	292.1	144.2	-147.9
2013	280.1	148.2	-131.9
2014	302.0	164.8	-137.3

in China; on the other hand you criticize China on the emission reduction issue' (Qin Gang quoted in Scientific American, 2009).

Combined with the challenges of accumulated versus current GHG emissions, there is a clear gap between EU and China stances. Torney (2015: 83) questions whether such an argument is fair based on whether 'responsibility assumes intent'; that is, given the lack of knowledge of GHG emissions or their impact prior to the late 20th century, is it fair to assign responsibility for emissions that predate this understanding? However, this approach ignores what might be better understood with a more genealogical analysis. In this sense, the current capabilities and privileges of industrialised countries, in terms of financial provision, large low-energy-intensity services industries, technology, and infrastructure resilience, are largely products of an early industrialising process and the benefits that came along with this. As such, those who have historically contributed most detrimentally to the climate change crisis are also those who have

gained the most from the process and are those most capable of providing the financial and technical support for tackling it today. Moreover, Kreft *et al.* (2015) have shown that 'Of the ten most affected [by climate change] countries (1995–2014), nine were developing countries in the low income or lower-middle income country group, while only one (Thailand) was classified as an upper-middle income country'; a view also shown by the regional analyses from Working Group III of the Intergovernmental Panel on Climate Change (IPCC, 2014). This places all of the top-ten most at risk countries in the non-Annex 1 grouping of the UNFCCC. While contributing most emissions, and reaping the most rewards, developed countries are at the same time most isolated from the negative impacts of such actions²⁷, while conversely being best equipped to tackle them.

Divergence in this key area adds weight to the possibility of China acting as a counter-hegemonic bloc towards the dominant means of accounting for emissions and assigning responsibility. China has assumed a leading role in fostering south-south cooperation, institutionalised at the UN level in 2010 with China's South-South and Global Cooperation framework (see UNDP China, 2015), as well as a dominant place in southern multilateral negotiations on climate change, as shown by the South-South Cooperation on Climate Change Forum, which met for the second time at COP21 in Paris (China.org.cn, 2015b). Given this, the emergence of a key climate change and trade partner that directly challenges the assumptions in this area made by developed countries and regions might have a significant impact on future multilateral negotiations.

5.2.2. Role of markets and hierarchical governance

While this analysis has so far highlighted the significant and increasing role of MBIs in climate mitigation policy in China, there remains important inconsistency between the EU's and China's approach. In general, this is attributable to the ongoing desire to blend economic systems, producing a mixture of command-and-control resource governance, and market governance. This emerging market-focused consensus is captured well by

²⁷ This is not to say, however, that developed countries will not be significantly impacted by climate change – the 5th IPCC Assessment clarifies that each geographic region, given the innate complexity of the climate, but also of political and socio-economic relations, will experience dramatic upheavals; but the immediate impacts are disproportionately located in developing regions, such as much of Africa, Bangladesh, Vietnam, etc.

the Third Plenary Session of the 18th Central Committee of the Communist Party of China:

We must deepen economic system reform by centering on the decisive role of the market in allocating resources [and to achieve this by] greatly reducing the government's role in the direct allocation of resources, and promote resources allocation according to market rules, market prices and market competition, so as to maximize the benefits and optimize the efficiency (China.org.cn, 2014).

However, the Chinese leadership also confirmed that:

What is most important is to uphold the leadership of the Party, adhere to the Party's basic line, reject both the old and rigid closed-door policy and any attempt to abandon socialism and take an erroneous path, firmly take the socialist road and ensure that our reform is in the right direction. (*Ibid.*)

In addition, the same document stated that 'The underlying issue [for reform] is how to strike a balance between the role of the government and that of the market, and let the market play the decisive role in allocating resources' (*ibid.*). This blended approach shows the unique socioeconomic direction underpinned by the philosophy of 'socialism with Chinese characteristics' first outlined by Deng Xiaoping in the 1970s (see Chang, 1996 for a detailed discussion), and more recently affirmed in the most recent 5-Year Plan:

In line with the chief objectives of improving and developing socialism with Chinese characteristics and modernizing the country's governance system and capacity for governance, we need to improve the systems by which the market plays the decisive role in resource allocation and the government plays a more effective role. (Central Committee of the CPC, 2015: 14).

Since 2005, academics instrumental in the emergence and mainstreaming of ecological modernisation in Europe have charted its trajectory in China as an organisational concept for combating climate change (cf. Zhang, Mol and Sonnenfeld, 2007). In doing so, the authors note the differentiation in China's adoption of the theory, concluding that, despite the use of the term ecological modernisation, actual understandings diverge in some significant ways from the mainstream approach in Europe; again, reflecting a unique Chinese version of modernisation. Highlights of proposals for the Thirteenth Five-Year Plan also show that, while a greater role is given to markets in some contexts and 'modernisation' is referred to in relation to the economy and industry, alongside such commitments is the provision for 'responsibilities of the central government and other authorities to be strengthened' (XinhuaNet, 04-11-2015).

The focus on environmental authoritarianism has taken into consideration the lack of involvement of civil society and the non-participatory policy-making process (Kostka and Mol, 2013; Zhu *et al.*, 2015; among others). Typically, such studies have focused on the poor record of 'local implementation and civil society participation' of overly ambitious central policies (Kostka and Mol, 2013). Such studies show a clear divergence between EU and Chinese governance characteristics. However, Lo (2015) demonstrates convincingly that 'although China's national low-carbon policy appears highly authoritarian, the situation on the ground is much more ambiguous, displaying a mixture of authoritarian and liberal features in climate change policy' (*ibid.*: 158). In this sense, divergence on governance type is a less clear-cut picture. Central policymaking in China displays a continuation of the principles outlined by former-President and market reformist Deng Xiaoping, using a combination of market and command-and-control tools.

There is evidence, however, of a clear deviation from this ideal-type in local implementation with what has been 'described as de facto neoliberal environmentalism given the lack of control' in some local contexts (*ibid.*). Nevertheless, secondary literature reveals a clear divergence from the more fundamental role of markets in the late Western, neoliberal tradition, at the very least in the ideal-type communicated rhetorically from central government in China, which continues to place an emphasis on command-and-control instruments to work in parallel with market instruments. This is significant for a potential hegemon in climate change policy; retention of state intervention as a 'legitimate' economic function offers different instruments for providing sustainability rather than purely indirect consumer- and market-led interventions.

5.3. Ecological Civilisation as Statist Discourse

China has unambiguously signalled a departure from a discourse in which an unendingly expansive consumerism can absorb sufficient environmental care to halt and reverse ecological and climatic emergencies. A section of Xi's address²⁸ at the 19th National Congress of the Communist Party of China (henceforth CPC)(2017) entitled

²⁸ A full extract of this section of the speech is available in Appendix B

'Speeding up Reform of the System for Developing an Ecological Civilization, and Building a Beautiful China' begins with the observation that:

Man and nature form a community of life; we, as human beings, must respect nature, follow its ways, and protect it. Only by observing the laws of nature can mankind avoid costly blunders in its exploitation. Any harm we inflict on nature will eventually return to haunt us. This is a reality we have to face. (Xi, 2017)

Xi goes on to note that, within a context of 'promoting green development', 'we...will cut consumption of energy and materials ... We encourage simple, moderate, green, and low-carbon ways of life, and oppose extravagance and excessive consumption' (*Ibid.*). A discourse of limits, recognised as both externalised environmental limits and internalised self-limits in 'ways of life', is in stark contrast to Westernised discourses of greening consumerism as a means of transition.

However, within the same section of speech, Xi notes that:

In addition to creating more material and cultural wealth to meet people's ever-increasing needs for a better life, we need also to provide more quality ecological goods to meet people's ever-growing demands for a beautiful environment. (*Ibid.*)

There is, therefore, an internal contradiction in the discourse, indeed within the same text, that material consumption will at once be created and discouraged by the same 'we', and towards the same end of 'building a beautiful China'.

The competing requirements to create 'more material ... wealth' and to 'cut consumption of energy and materials'²⁹ is similar to the overdetermination confronting the sustainable consumer-subject, in which the subject is hailed by the competing messages of problematic overconsumption and consumption as driving green innovation.

It is this apparent paradox that this analysis begins with as the basis of locating a site of contestation. Whilst some scholars have argued that under Xi Jinping, and especially since its codification in Party and state architecture, Ecological Civilisation has

²⁹ Given the translation, it is worth noting that in the Chinese version of the speech (see Xinhuanet, 2017) the same rendering of 'material' is also used in both instances. Material wealth is 物质财 whereas in the context of cutting consumption, 物耗 is used for 'material consumption'. In each, the character 物 (similar to *objects* or *things*) indicates the same 'material' (that is, physical objects) is being discussed in each. In short, the contradiction is also apparent in its original Chinese.

emerged from a tumultuous genesis into a coherent framework for implementation. Instead, this analysis aims to show the inconsistencies in the discourse-internal structure, as well the highly contingent statist discourses with which it interacts domestically. This is done by analysing those documents at primarily the central governmental level, and particularly by Xi Jinping, that help to codify Ecological Civilisation as a central strand of 'socialism with Chinese characteristics' in the era of 'national rejuvenation'. Whilst accepting that these represent primarily political, frequently propagandistic documents, the point of analysis is not to distinguish between propaganda and 'reality'. For discourse theory, the analytical value is not a determination of an objective material reality either purposefully promoted or obscured, but an investigation of what forms of articulation have political legitimacy; in short, what stories are being told of how humans relate to nature in statist discourses, and how different is this to neoliberal sustainable development and sustainable consumerism?

The analysis proceeds according to three broad analytical categories that correlate to those explored in the previous chapter: development; consumerism and agency; and rationalisation. The three categories interrelate and build on an analysis of the same texts.

5.3.1. Development

Xi Jinping, in his report to the 19th CPC National Congress, commented that '[w]hat we now face is the contradiction between unbalanced and inadequate development and the people's ever-growing needs for a better life' (*ibid.*). The amendment³⁰ to the CPC constitution that followed the 19th National Congress confirmed that this 'principle contradiction facing Chinese society' would be adopted and serve 'as an important basis on which we formulate major policies and long-term strategies for the Party and the country' (Xinhua, 2017b). The amendment goes on to outline the contributing strands to the Party's official 'Thought':

The Congress unanimously agrees that, Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, in addition to Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, the Theory of Three Represents, and

³⁰ The full amendment resolution is included for reference in Appendix B.

the Scientific Outlook on Development, shall constitute the guides to action of the Party in the Party Constitution. (*Ibid.*)

Development in official CPC 'Thought' is highly codified as a seemingly unstructured system of references to previous developmental paradigms. Potential contradictions between, for instance, Marxism-Leninism and Deng Xiaoping Theory (the philosophy requiring and legitimising China's market-oriented reforms) are not addressed as potentially conflicting frameworks for action, but more in the tradition of Chinese dialectics wherein the many philosophies constitute several but united 'guides' that produce 'action'. In this sense, contradictions between the competing discourses (including differing roles for the state and markets, and differing concepts of the people, from rural peasants to the proletariat and, increasingly, as urbanised consumers) does not produce a polarisation or political stalemate, but a combined 'Socialism with Chinese Characteristics' that legitimises a particular approach at a particular time in Chinese development.

The 'new era' that 'Xi Jinping Thought' materialises in is one characterised by, as noted above, the contradiction between 'unbalanced and unequal development' and the 'ever-growing needs for a better life'. The Theory of the Three Represents, which served to mainstream three tenets in the CPC's constitution in the 16th National Congress (productive forces, advancing culture, and majority consensus) similarly enshrined in the constitution the need to build 'a well-off society in an all-round way and [speed] up the socialist modernization drive' (Communist Party of China, 2002). The modernisation of Chinese socialism follows the thought of Deng Xiaoping and the need to open up China's labour to international markets, contributing to significant economic growth and, consequently, severe environmental pollution. As Lewis and Litai argue, the Theory of Three Represents shows China 'has cast its lot with the beneficiaries [of economic growth] in the apparent belief that only development and expanding opportunities can ensure stability and mitigate the problems' (Lewis and Litai, 2003: 927). As then-President of the PRC, Jiang Zemin, reported, '[a]ll sectors of the economy can very well display their respective advantages in market competition and stimulate one another for common development' (Jiang, quoted in CCTV, 2002). The co-existence, indeed, the self-styled co-dependence, of socialism and market-driven reforms in China provide a unique context for the emergence of sustainability transition discourse.

The 'contradiction' of unequal development and the expanding needs of Chinese citizens was similarly recognised in the 17th CPC National Congress, in which the Scientific Theory of Development emerged as a core tenet. In the 2012 revision of the Constitution of the CPC, for instance, the General Program notes that:

At the present stage, the principal contradiction in Chinese society is one between the ever-growing material and cultural needs of the people and the low level of production. (CPC Central Committee, 2012.)

The same Report by then-President Hu Jintao said that:

Taking economic development as the central task is vital to national renewal, and development still holds the key to addressing all the problems we have in China. Only by promoting sustained and sound economic development can we lay a solid material foundation for enhancing the country's prosperity and strength, improving the people's wellbeing and ensuring social harmony and stability. We must unwaveringly adhere to the strategic thinking that only development counts. (Hu, 2012: section IV.)

Since 2012, therefore, the CPC has not wavered its insistence on the nature of the principle contradiction in China, nor the central policy that 'only development counts' to reconcile this contradiction. Moreover, as the same Report details, economic growth is taken as the main indicator of development, and a crux of the Scientific Theory of Development:

In contemporary China, pursuing development in a scientific way best embodies the thinking that only development counts. Taking the pursuit of development in a scientific way as the underlying guideline and accelerating the change of the growth model as a major task is a strategic choice we have made for promoting China's overall development. (*Ibid.*)

'China's overall development' is thus reduced to a function of the growth imperative. Here, development, defined as the process by which China enhances its 'prosperity and strength'³¹ is held by the CPC as central to achieving China's problems. As with Westernised articulations of sustainable development, environmental protection is both a requirement for and a function of development.

³¹ Military modernisation is similarly seen as largely a function of economic growth: from the 16th National Congress, '[China will] push forward the modernization of national defense and the army on the basis of economic growth' (CCTV, 2002).

Despite the tendency for the phrase 'sustainable development' to be abandoned in place of 'ecological civilisation' and, to a lesser extent 'scientific development' (Goron, 2018, see particularly p.46), the 13th 5-Year Plan, 2016-2020, out of keeping with other high-level strategies of the PRS since 2012, does not mention 'ecological civilization'³². Instead, 'sustainable development' is employed five times (see Appendix C, Figure 8 for word concordance analysis).

Here, sustainability, as in the case of Westernised articulations, is a lucid concept that at times shifts between noun and adjective; respectively, as a destination or as an aspirational process. As noun, it refers to a tangible thing there can, indeed should, be more of: 'bolstering sustainable development', and '[m]aintain a medium-high rate of growth [w]hile working to achieve more balanced, inclusive, and sustainable development'. Elsewhere it indicates a process; existing development becoming more sustainable, for instance 'more efficient, more equitable, and more sustainable development.' Here, it is likened to the adjectives *efficient* and *equitable* – development must become these things, and it must become sustainable. As adjective, 'sustainable' implies a moderating, regulating approach, as in its final usage where 'an appropriate intensity of development' is permitted by adopting the moniker of sustainability. As both noun and adjective, sustainable development legitimises rather than questions extractive, growth-dependent developmental pathways: it defines the transition and transformation of capitals between Xi's 'green mountains' and 'gold mountains'.

Despite these overtones of faith in the growth model of development, there are clear instances where this model is problematised, from the same 5-Year Plan:

...we must be soberly aware that China's development model is inefficient; uneven, uncoordinated, and unsustainable development continues to be a prominent problem; the change of pace in economic growth, structural adjustments, and the transformation of the drivers of growth present interwoven problems... (Communist Party of China, 2015a: 11)

This begins to imply a problem with growth, or at least its scalability. However, the critique does not go so far as to recognise that a 'change of pace' is an inherent function

³² Analysis performed on official English translation by author using Word Sketch, March 2017. Includes variations and alternative anglicisations ('civilisation'). Analysis also performed on official Chinese version, using '生态文明' as the query. Zero results shown for any query.

of exponential growth³³. China's economy in GDP terms, in constant 2010 USD, grew from 827.7 billion in 1990 to 2.23 trillion in 2000, and to 6.08 trillion in 2010 (World Bank, n.d.). The era of unprecedented growth helped establish the 'opening up' policy of Deng Xiaoping Thought as fundamental Party ideology and reinforce the Party's promise, tied to its legitimacy, of modernising China. In 2018, the Chinese economy was 13.6 billion USD in GDP terms. At an annual growth rate of 6%, achieved in 2018, the economy will double in under 12 years³⁴. The CPC-owned China Daily takes this further in a rare direct problematisation of the growth model by a Party mouthpiece:

After more than three decades of economic success, environmental degradation and other adverse effects of the scale-based mode of growth have become an obstacle for economic and social development.

As the Chinese government has shifted from its long-held GDP-obsessed development to a comprehensive social and economic development evaluation system that balances GDP growth with its impact on the environment, the pursuit of an ecological civilization has naturally become the choice of the nation. (China Daily, 2015.)

As with sustainable development in Western and global discourses, there remain articulations where growth is problematised. 'GDP-obsessed development' mimics other discourses of degrowth and post-growth wherein GDP is a commonly problematised indicator of harm, and a key intervention is to destabilise its widely-established equivalence with progress, wellbeing, opportunity, job provision, wage growth, and others. Such critique is rare in the mainstream of economic orthodoxy, however, and this is particularly true in China.

Even here, a rare case of direct criticism of the central government's strategy, the growth model itself is not problematised. The criticism levelled at the historic strategy of the central government is legitimised because the fix has also been found there: the 'comprehensive social and economic development evaluation system' that successfully 'balances GDP growth with its impact on the environment'. Neither GDP, nor the model

³³ China's original target of 10% annual GDP growth would more than double the size of the economy in 10 years compared to the original value, as indeed happened between 1990 and 2000, almost tripling in the next decade. A sudden growth in scale was inevitable with a 10% ambition.

³⁴ Using growth/decay formula: $x(t) = x_0 \times (1 + r)^t$ where x_0 is the initial value, r is the growth rate, and $x(t)$ is the value after the time interval t . This assumes other conditions remain equal.

of growth it measures, are beyond salvation as long as harmony is found between the positives they are assumed to entail and the negatives they clearly inflict. This harmony is at once a new solution to a new problem, and a continuation of a long-established process of harmony in Chinese discourse.

5.3.2. Consumers and agency

Western discourses of sustainability transitions generally, as argued in the previous chapter, articulate three distinguishable, though sometimes overlapping, iterations of the consumer-subject: 'manageable consumer', 'innovative consumer', and, less commonly, 'over-consumer' (though the latter is often generalised as overconsumption to indicate a move beyond individualising responsibility). Innovative consumer represents a hegemonic discourse in mainstream, market-liberal sustainability transitions: the sustainable consumer-subject is not merely a managed (and manageable) element, but a driving force of transition. The economic rationalising furthers the neoliberal imaginary of markets as the optimal delivery mechanisms for needs which are, as discussed previously, broadly indistinguishable from wants. The key intervention, if there is any, is that consumers require greater information to ensure their choices have the necessary impact of driving 'green' innovation.

The pursuit of innovation in China as both economic strategy (wherein moving from manufacturer of foreign-owned technology to driver of high technology is a key domestic agenda) and as part of social and environmental strategy is central. This section highlights, however, that Chinese consumers are rarely so afforded this transformative agency. Instead, the potential for Chinese consumers is the aggregate of their spending as an emerging series of increasingly specialised markets to solve China's industrial oversupply. As then-President Hu Jintao stated in 2012:

We should firmly maintain the strategic focus of boosting domestic demand, speed up the establishment of a long-term mechanism for increasing consumer demand, unleash the potential of individual consumption, increase investment at a proper pace, and expand the domestic market. (Hu, 2012: section IV.)

The requirement for a fast-expanding domestic market has remained a key policy under President Xi Jinping. (See Appendix C, Figure 9 for the results of a concordance analysis of the PRC's 13th Five-Year Plan.) At the same time as increases in the quantity of consumerism, the Plan highlights also the need for an increase in the quality, value, and scope of consumer goods; an increase in consumer rights and protections; a greater

degree of specialisation; and an increase in the integration of online and offline consumption.

Consumerism, therefore, is intended to increase across a range of quantities, qualities, spaces, and practices. It is intended, in short, to drive material economic growth and bring per capita spending and accumulation of material goods in line with those in the West. An increase in consumerism is explicitly a goal in itself. The implications for this central policy for a sustainability transition are significant: a transition capable of transforming the socio-economy so that planetary (and more local) environmental limits are not breached would need to be capable of not only reducing the existing ecological footprint, but a vastly enlarged one. As the previous section indicated, development is assumed to be key to solving this, and any other, problem:

...we will work to improve the environment in which the potential of consumption is unleashed, better satisfy and create consumer demand through improved and innovative supply, and constantly strengthen the fundamental role that consumption plays in fueling [sic] economic growth. We will channel great energy into expanding spending by increasing consumer buying power, improving consumer expectations, and tapping rural potential for consumption. (CPC, 2015a: 32)

If development is key to solving all of China's problems, then, as the fuel for economic growth, consumerism is inherently key, too. Nevertheless, it is the *supply* that is innovated which *then* creates consumer demand. Chapter Four of the CPC the *Development Philosophy* similarly insists innovation 'should permeate the work of the Party and the country' but leaves out any room for an inherently 'innovative consumer' as Western articulations of innovations construct (CPC, 2015a: 20).

In a document entitled 'Opinions of the CPC Central Committee and the State Council on Further Promoting the Development of Ecological Civilization' (often referred to as 'Central Document Number 12'), the CPC provides a nine-section strategy for the implementation of Ecological Civilisation. Here, the CPC refers directly to the role of consumers in the realisation of this goal:

We will actively guide consumers to buy energy-efficient, environmentally-friendly and low-carbon products, such as energy-efficient and new energy vehicles, energy-efficient home appliances and water-saving devices, reduce the use of disposable goods, and restrict excessive packaging. (Communist Party of China, 2015b: 19.)

The passage indicates a contrasting role for consumers than is typical of Western sustainability narratives. Here, the only reference to consumers in the strategy is as a passivized body regulated by the state. Whilst the purchasing power of the individual is recognised as a core constituent of a sustainability transition, their role as choosers (the 'innovative consumer' of Western sustainable development) is absent. In this articulation, the sustainable consumer subject is constructed as a manageable consumer whose material consumption is a given, and whose consumption has the capacity to reflect, but not alone produce, the desired transition.

But this passivizing is not universal. For instance, as Chinese Vice-President Wang Qishan has articulated:

By embracing economic globalization, China has achieved faster development and contributed to the progress of the world. Market economy is driven by the demands of willing consumers. China has a big market of 1.4 billion people and the largest middle-income population in the world. The deepening of reform and opening-up will unleash still greater potential of the Chinese market. (Wang, speech quoted in Ministry of Foreign Affairs of the PRC, 2019.)

The 'demands of willing consumers' relocates this agency – consumers are afforded a degree of willpower. At face value, the market economy of Wang's imaginary is responsive only to *willing* consumers. The oppositional identify of the 'unwilling' is not articulated: whether a category of 'unwilling consumer' arises, or whether a 'consumer' is assumed to be inherently willing is indeterminable from Wang's speech. Located alongside the other elements of consumerist discourse, however, consumerism is afforded the same place as Western developmental narratives: to achieve broad social goals, consumerism is essential. As outlined previously in this respect, a consumer 'want' from an economic 'need' is a crude and reductionist distinction. Similarly, the will, or not, to *be* a consumer is removed from Chinese statist rhetoric. The 'willing consumer' begins, instead, to look more like the articulation of the innovative consumer: will is exercised as choice within the marketplace, and the right will (that of protecting the environment, for instance) is the driver of the market economy. However, the 13th Five-Year Plan outlines a strategy in which, again, the consumer subject is passive to the regulation of the state:

We will pursue innovation-driven development, ensure that business startups and innovation flourish, and see that total factor productivity is markedly improved. Science and technology will become more deeply embedded in the economy, the ingredients needed for innovation will be allocated to greater effect,

major breakthroughs will be made in core technologies in key sectors, and China's capacity for innovation will see an all-around improvement. Fulfillment [sic] of these goals will help China become a talent-rich country of innovation. (CPC, 2015: 15-16.)

As such, the tendency remains in the RPC for statist discourse to articulate a category more resembling the manageable consumer. But, in some specific cases, the emergence of a potentially self-willed *discerning* consumer is evident. With such an analysis, the need arises for a focus on what constitutes the drivers of consumer choice, and what power-laden constellations of interest are apparent in these.

In the statist resources of the Ecological Civilisation discourse, the Communist Party and state maintain a monopoly in the development of a civilised development path. The centralising and legitimising of the state as the legitimate actor in this transition further strengthens the Communist Party's legitimacy as guarantor of the people's fundamental wellbeing, as emphasised in the 13th Five-year Plan:

The Party's leadership is the greatest strength of socialism with Chinese characteristics, and provides the fundamental political guarantee for sustained, healthy economic and social development. (CPC 2015: 15.)

The people are the basic force behind development, and realizing, safeguarding, and developing the fundamental interests of the largest possible majority of people is the fundamental purpose of development. We must remain dedicated to a people-centered notion of development, make improving wellbeing and promoting people's well-rounded development the starting point and ultimate goal of development, develop people's democracy, safeguard social equity and justice, protect people's rights to equal participation and equal development, and give full rein to their enthusiasm, initiative, and creativity. (CPC 2015: 13-14.)

Outside of the lens of consumer subject positions, this highlights a strongly pluralistic interpretation of development, significantly beyond reductionist econometrics, albeit with the continued, indeed increased, centrality of the Party. Nevertheless, it contradicts other articulations of development, such as Wang's (2019) speech in which development has been accelerated by economic globalisation and opening up to global markets, and will be furthered in the future by greater opening up - in this articulation, 'people' is reduced to 1.4 billion consumers within which the large middle-income market place is the most important.

Taken together with the dominant forms of subjectivizing citizens in China's sustainability transition discourse, both the principle propellant and endpoint for development remains increased per capita consumption. This is true domestically,

where increasing markets help absorb domestic oversupply, as well as internationally, where particularly middle-income earners in China are a key emerging market. As with sustainability, the discursive construction of agency and legitimacy remains the key lens through which a departure from Westernised narratives of development is determined. In this sense, development of 'the people' is realised primarily in the singular dimension of consumerism: it is both the means and the indicator of achieving greater development.

Ecological Civilisation differs to the extent that this emergent consumer body must be regulated by the state: the Foucauldian governmentality arises as existing and additional state architecture is legitimised by the emergency represented by global/local environmental change. The protection and legitimisation of the status quo resembles that of Westernised sustainability narratives, in which particular constellations of meaning emerge, via state and consumer messages, to satisfy environmental awareness while maintaining the pursuit of a neoliberal imaginary founded on the ideal of perpetual growth. Merely the architecture being sustained has changed, and the particular discursive resources of the two agendas has created different governmentalities: in the PRC, the state and Party retain the monopoly on legitimate agency – it is they who know best, and they who wield the authority and power to bring about a 'civilised' transition. In the West, the sovereign 'innovative consumer' knows best. Regardless of which panopticon the consumer-subject enters, the *functional* sustainability of consumerism remains a detached, and thus-far unattained, assumption inherent in, and constructed by, a performative sustainability agenda in which the growth paradox is reconciled by the fantasmatic logic of greater economic growth which creates the conditions for less environmental impact. This base assumption is consistent across the two discourses.

5.4. Conclusion: Towards Multidimensional Sustainability?

Ecological Civilisation is not merely rationalised as good economic sense, as in reductionist logics driving the emergence of Chinese variants of ecological modernisation (e.g. Mol and Summers, 2007). Whilst economic rationalising, particularly in reference to development and the material growth of the economy, are central to the discourse, the term also draws chains of equivalence to a romanticised history of Chinese-environmental relations, as well as to a people-centred philosophy of

development. The term is employed not simply to imagine a future, but to historicise the present and rescue Chinese history from its long association with environmental damage.

Hansen *et al* (2018) argue that Ecological Civilisation draws on biased and reductionist 'interpretations of philosophical and religious traditions in China's ancient past in order to make claims to a fundamental difference between humankind and nature, and between Western and Chinese thought' (*ibid.*: 197). This is apparent also in the statist discourse's rationale for environmental protection:

We need to uphold the fundamental state policy of conserving resources and protecting the environment as we pursue sustainable development, and keep to a civilized development path that ensures increased levels of production, better living standards and sound ecosystems (CPC, 2015: 20).

The impression arises that nature is so distanced from economic activity that the latter will march inexorably forward, unaltered in substance, and nature can keep up or fall behind; nice to have but inessential.

More pertinent, however, is the 'need to uphold the fundamental state policy of conserving resources and protecting the environment' (*ibid.*), which reinforces Hansen's *et al* argument (2018). Whereas neoliberal sustainable development transitions, particularly in the ways the subject position of the sustainable consumer mediates human-nature relations, place the solution continually on the horizon, Ecological Civilisation finds the solution by looking, partly, back – it is not a continual 'new'. Whilst, in its existing statist discourse, this amounts to little more than a propagandistic historicising and retrospective legitimizing of China's development pathway, it represents a crucial logic whose meaning could be radical in the modern context where sustainability is typically a function of progress. This latter possibility is realised in limited but important ways at the state level.

However, in terms of issue-framing, there is a clear departure from a Westernised and globalised framing. At the same time as China, domestically and globally, confronts the multifaceted problems of global environmental change, the state's 'rejuvenation' under Xi Jinping appears to carry with it potential for upscaling the framing of issues; indeed, framing problems according to Marxian structures. In 2018, during the celebrations marking two-hundred years since Marx's birth, Xi notes that

Writing Marxism onto the flag of the Chinese Communist Party was totally correct ... Unceasingly promoting the sinification and modernisation of Marxism is totally correct. (Xi, quoted in South China Morning Post, 2018.)

Marxism has enjoyed a return to the centre of Chinese state rhetoric, even as it enters a new genesis by its continued 'Sinification' under Xi Jinping Thought. Xi further says that China 'must continuously improve the ability to use Marxism to analyse and solve practical problems' (*ibid.*). Taken amidst the claims of the 'scientific truth of Marxism' and the requirement for Marx's works, rather than simply a 'Sinification' of these works, to be central in party members' 'way of life' and 'spiritual pursuit' (*ibid.*), there is an apparent emergence in China of a counterhegemonic articulation of the problems China, and the world, confronts.

Ultimately this chapter argues, however, that harmonisation represents two processes: the suppression of alternative means of valuing nature, including local subjectivities, and the emergence of an authoritarian eco-governmentality whose, albeit particular, construction of consumer-subjects is enabled by discourses emanating in Western sustainability narratives. Not only, therefore, does Ecological Civilisation fail to offer a radical, multidimensional imaginary alternative to Western sustainable development, but the latter's discursive resources are implicated in the totalising, statist discourse of the former. A mixture of neoliberal economic orthodoxy and selective historicising of modern regulatory practices, namely 'harmonising' and 'civilisation', produce an ecogovernmentality discursively rooted in a uniquely Chinese mode of progress (referred to in the statist discourses as 'Sinification'). The resulting articulation of Ecological Civilisation makes similar chains of equivalence between, for instance, progress, development, growth, and innovation, with a more 'managed-consumer' articulation of consumerism.

Despite the similarities, the discourse presents its sustainability transition as something unique to China - grounded in, and emerging from, a selective and highly curated rendering of progress in Chinese history and philosophy, even as these terms are reinvested with different meaning-making equivalences that largely reinforce rather than challenge Western sustainable development discourse. This is except, arguably, in the constructed agency of the consumer, whose sovereign act as 'chooser' and arbiter of the market place (and thus driver of the innovation necessary for technological 'fixes') is displaced by the 'manageable consumer' whose presence is noticeable in Western articulations, but subordinate to that of the 'innovative consumer'.

Ultimately, this Chapter has shown that Ecological Civilisation does not emerge as a radical re-imaginary of human-nature relations. Nevertheless, whilst its political

project remains the consolidation of state power under the Communist Party, the agenda does rearticulate the consumer subject position. Whereas in Westernised sustainability transitions, both in state and non-state advertising discourses, consumers are called on as sovereign choosers whose actions drive the innovation essential to sustainability, Chinese Ecological Civilisation tends to pacify consumers as a manageable bloc. Similar rhetoric (re)constructs the power of consumerism, but not of individualised consumer subjects – the role of 'chooser' is monopolised by the state which 'actively guides' supposedly sustainable options while 'restricting' those which are less so. The state in this sense contributes to the regulation of consumers via the ecogovernmentality of Ecological Civilisation.

Whilst more explicit in Chinese articulations, the practice resembles that of the promotion of particular varieties of consumerism in the West: both forms of state involvement promote consumerism as a fix to the sustainability crisis. Both, as such, promote the fantasmatic ideal that increased per capita consumption will provide the framework for reduced environmental impacts. In each case, the contradiction is resolved by the apparent ability of material consumption to transcend its present conditions, to withdraw the economy from the environment by circularising its material footprint, despite the lack of evidence in both cases that decoupling has occurred at a sufficient pace or scale³⁵, and the continued failure to contend with the growth imperative that overrides these moderate relative gains. Discursively, the framework of signifiers differs – civilisation, modernisation, harmonisation, among others, have particular equivalences with broader statist discourse. Nevertheless, a consistency between Western and Chinese sustainability transition is evident in the way in which the status quo is afforded considerable legitimacy, even as the socio-economic order it engenders remains ecologically unsustainable.

³⁵ The CPC's 2016-2020 5-Year Plan includes the relative decoupling for water, energy, and carbon (per unit of economic output), providing a column for the 2015 baseline and the 2020 goal – but these sections of the table are not populated by data. However, Wang and Jiang (2019) showed that China maintained only weak decoupling for CO₂ between 2005 and 2014. Between 2002-2005, strong negative decoupling prevailed – where CO₂ emissions growth outpaced economic growth. These figures, however, only contend with one metric of environmental impact, ignoring the broader ecological footprint. See Jackson (2019) for further discussion of the global economy and its relative versus absolute decoupling.

With the PRC, what is being sustained differs to what is being sustained by neoliberal sustainable development. In the PRC, consumerism contains the potential for driving sustainability because it is governed appropriately, with the legitimate actor for doing so being the state, and the particular formations of Chinese statist discourse. Ecological Civilisation, therefore, emerges to maintain the legitimacy of the Party and state system, with whom the 'people' are 'harmonised'. By maintaining the monopoly on 'civilised development', 'environmental protection', 'conservation of resources', and other indicators of 'nature', living in harmony with nature necessitates harmonisation with the state. In both ecological civilisation and neoliberal sustainable development, the political agenda remains the foreclosure of radical alternatives to a system at the point of its failure. Discursively, both employ terms with a general equivalence to 'nature' and the 'environment' as a means of disarming alternatives; 'sustainable consumerism' emerges in both discourses according to this pattern and reflects the performativity of sustainability agendas that obscure the ecological unsustainability of the practices.

Overall, therefore, the discourse reproduces a knowledge-power structure that legitimises the State's authority and authoritarianism. The consumer-subject is present – indeed, as with neoliberal sustainable development, it is the central subject position – but their sovereignty is removed as 'chooser' and 'driver of innovation'. The latter is reserved to the State and the logics of harmonisation. We do not arrive, therefore, at a discourse where sustainability is recognised across different dimensions than the market and the consumer. What is different, however, is the embeddedness of 'nature' within (revised) historical narratives of China. Living in harmony with nature is presented as arising from the 'character' of Chinese culture and people. As such, the discourse draws equivalences between a liveable future and a mythical past: it is possible for people to act sustainably not just by consuming but also by revisiting Chinese history, even as that history is disseminated, in revised form, as a tool of state. This context of the ecological civilization discourse is unique, predictably, to China. As identified in the literature review, it is here that too many analyses have stopped, and searched for this particular deployment. Instead, this thesis turns to a deep analysis of the particularities of the internationally deployed ecological civilization discourse.

6. Ecological Civilisation as 'Green Power'

We will move forward with building a Beautiful China and make new contributions toward ensuring global eco-security.

13th Five-Year Plan, Communist Party of China (2015)

We hope that China becomes a new leading power to increase ambition and save our Earth.

Jean-Paul Paddack, Executive Director for Network Development, WWF (in Xinhua, 2019)

As seen in Chapter 4, the securitisation of the environment is not especially new (see, for instance, Trombetta, 2009; 2014). However, the role of China in bringing about a state of 'global eco-security' has seen relatively little attention in Western literature, and the same is true of the unique spatialisations and institutionalisations of China's securitisation of environmental issues. This is the more surprising for the focus throughout China's recent international engagement on the need for a new global 'vision' of international relations in which the human-nature antagonism has been reconciled at the same time as (growth-based) development has been achieved. In its 13th Five-Year Plan, the Communist Party of China (CPC) outlines the process by which this vision might be realised:

We will move faster to build a resource-conserving, environmentally friendly society and bring about a new model of modernization whereby humankind develops in harmony with nature. We will move forward with building a Beautiful China and make new contributions toward ensuring global eco-security. (CPC, 2015: 20-21.)

The benefits of a 'new leading power' for 'sav[ing] our Earth' have even been encouraged and welcomed by leading international conservation organisations (Xinhua, 2019): the assumption makes clear that saving the Earth is dependent on the emergence of a new, inherently different type of global power. Yet elsewhere, this view is challenged by IGO

and NGO analyses that depoliticise the (re)emergence of Chinese power and depoliticise it by accommodating it within existing norms.

This chapter argues that the pursuit of 'global eco-security' is not reducible to the institutional apparatus that engenders global governance of the commons, provides fora for communal and individual state goal-setting, and a transparent framework for accounting for this. Global eco-security is firstly an imaginary; secondly an informal and contestable regime of governance in which actors are made visible or invisible, legitimacy is set, and power reflected; and lastly the formalised architecture and spatialisations of this mode of governance. This chapter details how Ecological Civilisation permeates China's engagement with these, with particular emphasis on the ways in which this discourse imagines possible, but not inevitable, futures; how it forecloses radical and alternative political ecologies; and ultimately how it depoliticised performative sustainability to reinforce a market-liberal hegemony. With respect to the overall research project, it answers three questions: Does the potentially radical imaginary of ecological civilization survive in discursive resources outside the Party and statist context of domestic China? To the extent that ecological civilization articulated alternative forms of environmental citizenship and community (i.e. beyond the consumer), how does this apply externally? Finally, is there a noticeable difference in the articulation of agency between domestic ecological civilization and external ecological civilisation?

It is tempting to take state articulations of China's Ecological Civilisation as evidence that, at present, it is merely a process of imagining: the 'we will...' from the previous-quoted Five-Year Plan. Construction has yet to occur; when it does, it will happen as a collective whole: the 'humankind' and the 'friendly society'. This chapter contends, however, that the discourse is at once imagining, constructing, and reflecting social reality and relations of power. Much of what is imagined in the 'we will' exists as contingent power in the present, where it is made sense of, and the past, whose environmentally destructive and politically violent history it helps legitimise. This contingency is redecorated rather than rebuilt: 'Beautiful China' emerges as a state-driven brand whose promise is conditioned by, and conditional on, existing power relations.

In analysing global (environmental) sustainability transitions, this chapter's key contribution is in articulating this process of visioning, of claiming the institutional

legitimacy of global leadership and the legitimacy to lead, as an expression of 'green power'. Whereas Nye's (2005) terminology of soft power (and hard power) claims a broad applicability across the field of global power politics, *green power* is of purposefully limited scope, and serves here to demarcate the contested territory of competing green imaginations. The comparison is more than semantic, however: it is argued that the more traditional concerns of the hard and soft power categories are increasingly implicated in an actor's ability to deploy a vision of a liveable future. Whilst the securitisation of 'environmental issues', such as climate refugees (Trombetta, 2014; Baldwin, Methmann and Rothe, 2014), has helped establish sustainability as a category of concern for hard state power, less has been said of the *value* to hard, especially economic, power of a coherent, if not functional, sustainability imaginary (with energy sovereignty potentially an exception at a domestic level). Whilst the analytical category of soft power has burgeoned under consideration of, for example, the diplomatic success and complexity of the Paris Agreement, it too has failed to assess what benefit flows from the ability to deploy a narrative in which development of the 'good life', with its consumable markers of arrival, is reconciled with the social and environmental crises of sustaining that life or, more specifically, those markers. As argued in previous chapters, the successful deployment of a sustainability discourse is not conditional on any functional sustainability, but merely an aesthetic sustainability.

Throughout, therefore, this chapter builds on Derrida's assertion of power, which he summarises: 'the dominant power is the one that manages to impose and, thus, to legitimate, indeed to legalize ... on a national or world stage, the terminology and thus the interpretation that best suits it in a given situation' (Derrida quoted in Borradori, 2003). The chapter concludes by articulating China's green power as a performative sustainability. 'Beautiful China', ultimately, is aesthetic; the metaphors of ecological civilization permeate China's conduct on the world stage, in its legitimation of new, larger, more globalised, more disconnected markets; in its promotion of global eco-security; and in its promises of development to the 'friendly society' of 'humankind'.

Despite the seemingly clear journey the articulation of Beautiful China puts the country on, the role of China in 'ensuring global eco-security' is unclear. Speaking at the 19th CPC National Congress, Xi noted China's role in bringing about this change:

Taking a driving seat in international cooperation to respond to climate change, China has become an important participant, contributor, and torchbearer in the global endeavor for ecological civilization. (Xi Jinping, 2017.)

The use of four metaphors here insists China will at once lead (a 'driving seat'; a 'torchbearer') and merely partake (the 'participant'; 'contributor'). Depending on the prevailing metaphor with which the audience makes sense of China's approach to 'international cooperation', it will either be leading the pursuit of ecological civilization or simply there as it happens. In either case, the 'endeavor for ecological civilization' is articulated as that of the world, not just of China. Here, Xi does not own and present China's vision of ecological civilization but projects it onto the world stage. In this worldview, neoliberal sustainable development is not absent, as argued previously, but redrawn in a way that mutes Western-centric notions of development – the liveable future for humankind is founded on principles that emerge from China, and this includes the complex, dialectic development of China's market economy. As such, an analysis relying on simplistic Western-versus-Chinese competition fails to reflect either the philosophical convergence or global-political divergences in these hegemonic blocs.

Yet in articulating these visions, China's discourse seeks to externalise their development. The effect is that China emerges to fill a vacuum of leadership: it is pulled in by the pressure of departing leaderships of the US and EU, rather than pushed by expansionist logics domestically. Ecological civilization, in China's outward articulation, exists already and is merely waiting for its potential to be realised. Whilst much has been written on the domestic drivers, such as oversupply, in 'really' pushing this agenda (or a detailed analysis see Cai, 2017), this chapter is principally concerned with the projection of ecological civilization ahead of China's expansion of influence into spaces previously led by actors such as the EU and the US. In this sense it mirrors the promotion of sustainable development rhetoric whilst seeking to replace it as the de facto language of sustainability transition. Yet it is a distinct articulation to the extent that its international audiences are less exposed to the contingent meanings of civilization and harmonisation which further embed state authority in domestic articulations of ecological civilisation. This insertion of ecological civilization into international economic expansion policy and global fora provides the discursive resources analysed in this chapter, which is subsequently divided into examples of each. The first explores the Belt and Road Initiative, the major economic and diplomatic policy of Xi's leadership. The second discusses less expansive but equally significant moments of leadership, with a focus on the lead up to China's chairing and hosting of the United Nations Convention on Biological Diversity (Fifteenth Conference of the Parties), set to take place in 2020.

6.1. Belt and Road Initiative

China's 'Belt and Road Initiative' (BRI)³⁶ forms the keystone of President Xi Jinping's development strategy. Announced in 2013, the BRI directly covers 71 countries, two-thirds of the world population, and a third of the world's GDP. Around 900 billion USD is expected to be spent, with an estimated US\$575 billion 'executed, in implementation, or planned' outside of China (World Bank, 2018). More than this, however, the BRI represents an expression of how China articulates its philosophy of international relations, as Vice President Wang Qishan highlights at the Second Paris Peace Forum:

We adhere to the independent foreign policy of peace, and respect the right of all peoples to choose their own development paths. [...] Through concrete actions, such as promoting Belt and Road cooperation ... China is sharing with the world the vast opportunities of its development (Wang, 2019).

In Wang's speech, the reassertion of respecting the choices of other countries to choose their 'own development path' echoes similar articulations in which China's role is passivized. At the same time, as this section shows, the 'concrete action' of the BRI promotes a particular mode of market-based development as a 'sharing' of China's opportunities which gains legitimacy in global governance as it does so.

The initiative, however, has received a mixed reception internationally. On one hand, there is a need for infrastructure development and investment on a regional level and increasingly global level, plus the desire for China to cooperate on international security issues, such as the questions over North Korea, global terrorism, and climate change. These combine to produce a recognition of the necessity of China on the world stage, including over climate change and species loss. On the other hand, China's increasing global role in investment and development are viewed with suspicion, both in the West and central Asia (Shattuck, 2019; Kyzy, 2019). On a regional level, for example, this has produced a discourse in India that gains power as investments increase

³⁶ The Belt and Road Initiative is frequently called the New Silk Road, and the One Belt, One Road (OBOR) initiative, both outside and inside China. The latter is still common in the original Chinese, though Anglicisations tend to employ Belt and Road. I use Belt and Road Initiative (BRI) here for the most consistency with the translated sources quoted. China officially renamed the initiative outside of China for the purpose of clarifying the initiative is not only *one* road but many channels. Additionally, the *belt* refers to the land portion (the Silk Road Economic Belt) while the *road* refers to the sea channels to East Africa and the Mediterranean (the 21st Century Maritime Silk Road).

under the China-ASEAN (since 2003) and Maritime Silk Road strategies (Yunsong, 2015). Globally, political opposition has manifested as outright bans, such as on Chinese investment in the US energy sector in 2015 (on Chinese ownership of wind turbine farms) due to the US security review process on inward investments. Contributing to the complex picture emerging on the global stage, the US ban in Chinese investments in the renewable energy sector coincided with the allowance of a large investment in the UK's nuclear energy sector (The Guardian, 2016); the latter being met with some political and popular opposition.

China's BRI initiative was initially developed against a background of significant global suspicion of the political motivations that lie behind economic policies. Regional and global actors fear particularly an increase of what is seen as an adversary's influence. On a global basis, this has been led by US calls against increasing Chinese influence in what is viewed as the American sphere of influence, as one US congressperson mentions:

We're concerned about the [Latin American] countries dealing with China. It's extremely important that we don't let a potential enemy of the US become a dominant force here. (US Congressperson Dan Burton, 2007.)

Such rhetoric constructs US and Chinese interests as automatically oppositional. In the past ten years, antagonistic rhetoric has continued to dominate US mainstream politics, yet changes are clear in intergovernmental literature and in engagement with many of the seventy countries involved in the BRI. In the case of both, endorsements of the Initiative, including specifically its approach to environmental issues, have increased since the first BRI forum in 2017. This section details how the BRI has gained legitimacy as a sustainability transition narrative among such actors, as well as environmental INGOs, and how this process is primarily one of investing the BRI's and ecological civilizations floating signifiers with meanings established initially in the neoliberal sustainable development discourse.

The emphasis on the BRI to support diplomatic engagement is clear in articulations of China's role in its establishment:

We have jointly pursued the Belt and Road Initiative [...]

China champions the development of a community with a shared future for mankind, and has encouraged the evolution of the global governance system. With this we have seen a further rise in China's international influence, ability to inspire, and power to shape; and China has made great new contributions to global peace and development. (Xi, 2017.)

Here, similar language to that highlighted previously helps externalise the BRI as a 'jointly pursued' project. More clearly, it constructs a dichotomy between a community of a 'shared future for mankind' and those excluded from such a community. What this resembles in terms of the networks facilitating this community are touched upon by Xi:

China will actively promote international cooperation through the Belt and Road Initiative. In doing so, we hope to achieve policy, infrastructure, trade, financial, and people-to-people connectivity and thus build a new platform for international cooperation to create new drivers of shared development. (Xi, 2017.)

This helps explain the seemingly conflicted role of China outlined in the introduction to this chapter, where China's role is both active and passive. Xi's stance indicates an awareness of the dangers of being seen to aggressively lead, and an acceptance of the discontent towards the overt impositions of particular developmental logics under neoliberal globalisation.

Despite the attempted placation of potentially contradictory developmental pathways, however, such as moves towards inclusive governance, there remains a Western perception of a lack of regulatory oversight. As Jörg Wuttke (EU Chamber of Commerce in China) remarked in 2017, the BRI has 'been hijacked by Chinese companies, which have used it as an excuse to evade capital controls, smuggling money out of the country'. Such open confrontation points to an existential challenge of building trust in new regulatory frameworks and puts the blame squarely on (almost entirely state-owned) companies. Wuttke's language is reminiscent of the ongoing calls from the EU and US Chambers of Commerce for an increased role for open market competition and an end to subsidies of SOEs as 'market distortions'. This type of rhetoric constructs Western and Chinese interests as oppositional. The BRI is seen to confer advantage on Chinese SOEs at the same time as 'Chinese companies' are constructed as a distinct entity that has 'taken over' a supposedly separate initiative.

The ongoing trade debates, in which the EU and US Chambers of Commerce have played a central role, revolve around the 'market distortions' of SOE subsidies creating a business environment in which foreign (and even domestic-private) enterprises cannot compete. Such arguments construct China as failing to evolve its political economy sufficiently along a preordained path of market liberalisation, beginning with 'opening up' in the 1970s, systemic reforms of the 1980s and 1990s, and in which assent to the World Trade Organisation marked a significant step. Chinese modernisation, particularly the embeddedness of the 'Ecological Civilisation' model of

development, represents a potentially different trajectory for development, and a different imaginary for globalisation. However, the question remains about the extent to which this represents a different mode of society-nature relations.

The 'community' fostered by this engagement is fundamentally an epistemic one – one that reproduces and recreates knowledge about the appropriate governance of the political economy, and, through the BRI, the spaces this imposes on. This is key to understanding the role of both ecological civilization and the BRI as respectively the ecogovernmentality and spatialization of that governmentality through the construction of 'corridor countries', whose relationship to China is framed by both financial debt and as part of the 'community' of China's international relations philosophy.

6.2. Ecological civilisation embedded in the BRI

The analysis of statist articulations of ecological civilization here primarily draws on the Chinese Ministry of Ecology and Environment's 'Belt and Road Ecological and Environmental Cooperation Plan' (Chinese Government, 2017), together with remarks by Xi Jinping and other members of the CPC. This is contrasted with perceptions of the BRI's environmental agenda in IGO and other literatures.

The Chinese Ministry of Ecology and Environment's (MEE) document sets out how China will 'strengthen cooperation on eco-environmental protection and enable eco-environmental protection to serve, support and guarantee the Belt and Road construction towards environment-friendly routes' (*ibid.*). This ambition introduces the Belt and Road Ecological and Environmental Cooperation Plan (*ibid.*) in which an 'environment-friendly Belt and Road' is a 'fundamental requirement'. The use of active-positive language, as detailed in Chapter 4, represents a particular logic of performative sustainability: the representation of managing impacts as an active good for the environment. Moreover, the protection of the environment ('eco-environmental protection'³⁷) is mobilised to 'serve, support and guarantee' the interests of economic

³⁷ Chinese discourse frequently, though not consistently, refers to the "eco-environment" when indicating the ecological environment, as distinct from other uses of the term which often appear in the same document, for instance the "innovation environment" or "financial environment".

development, defined as 'environment-friendly routes' of new construction. In such a rendering the environment is afforded no value in itself. This is especially important in relation to the insistence that different developmental pathways, different cultures, and different civilizations are recognised and accommodated in the BRI. The potential for different communities to associate with nature according to place-specific and historical political ecologies is occluded from the envelopment of nature as merely a market which supports performatively green construction.

The ecological civilization discourse fails to make the same equivalences to 'green mountains' as explored in domestic articulations. This is tied directly to ecological civilization later in the plan:

Guided by the philosophies of ecological civilization and green development, the Belt and Road Initiative will be advanced in an environment-friendly way to improve green competitiveness, covering policy coordination, facilities connectivity, unimpeded trade, financial integration and people-to-people bonds. (Chinese Government, 2017: Section II.)

Ecological civilization in internationalised articulations begins to take a clearer form from Section II. The active-positive language of being 'environment-friendly' is seen as a 'way' - a coherent programme rather than an outcome or descriptor - while free trade and the means of facilitating this are constructed as enablers of 'green competitiveness', which forms the ultimate vision for the BRI's green credentials. The BRI facilitates the extension of ecological civilization through the increase of material goods that flow from China; produced, transmitted, and consumed within the empty signifier of environmental friendliness.

This is furthered in Section V, which concentrates on the need to 'Promote Sustainable Production and Consumption and Boost Green Trade'. Here, the Plan says that China will:

conduct researches on environmental protection's role in optimizing trade and investment and explore the feasibility of including environmental considerations into free trade agreements with major countries along the Belt and Road. (*Ibid.* Section V.)

This confirms the articulation of environmental protection as something in service of capital and trade, the wider frame of 'green trade' is quickly being reduced to free trade with other signifiers. Moreover, the extension of this mode of relating to protecting nature, what is argued here as representing a political ecology that brings the

environment into tangible and social being, is considered as part of free trade agreements along the Belt and Road, bringing more countries inside this ecogovernmentality in which consumer goods signify the protection of nature, and consumer subjects behave as its guardians.

Taken together with Section II's aims to 'improve green competitiveness', the manageable consumer of domestic articulations of ecological civilization begins to be replaced by an implied sovereign consumer. The Plan covers how this will occur under the same section:

We will carry out eco-label exchange and cooperation projects and share experience in eco-label certification system. Countries along the Belt and Road will be recommended to include more eco-labelled products into government procurement. (*Ibid.*)

The eco-labelling of products both delineates a category of consumer product that competes with non-green products and reduces environmental impacts to simplified, measurable units. As discussed previously, this tends to obscure environmental harm by focusing on a particular indicator and generalising this under a frame of 'eco-friendliness', even as other indicators of harm may be worsened. The BRI, therefore, seeks to further legitimise rather to challenge the market-liberal mainstays of sustainability transitions but maintaining the sovereignty of the consumer and placing them centrally as the agents of change and the ultimate subject of green competitiveness – deciding which products prevail. In highlighting the 'concept of ecological civilization' in the BRI, the Plan notes that:

The practical experience of green development will be summarized and environment-friendly technologies and products advocated to meet green development needs.

Here, the pursuit of green development needs is again reduced to the performative sustainability of technologies and products, which are assumed to accommodate whatever 'needs' this may entail across the cultures impacted along the BRI.

Throughout the Plan, ecological civilization, environmental-friendliness, and eco-environment protection serve as new frames for the same processes. By merely serving as decoration, they fail to offer a radical approach to 'green development' capable of recognising the multiple and varied ways in which people might relate to nature. Instead, what space is created for people is as new consumer-subjects of the

extending ecogovernmentality which, through the BRI, takes explicit and spatialised form.

6.2.1. Neoliberal consensus in external analyses of BRI greening

The World Bank has engaged extensively in analysis of the BRI from October 2018 through 2019 with a total of nineteen research papers (of most relevance, see Bird *et al*, 2019; Maliszewska *et al*, 2019; Lall *et al*, 2019; and Losos *et al*, 2019) and an overall summary (World Bank, 2019). Despite this abundance of scrutiny, nothing has concentrated on the green promises of the discourse. 'Infrastructure megaprojects', as the World Bank defines projects costing US\$1 billion or more, are assumed to 'improve the environment' inherently due to the renewal of aging infrastructure, while 'consumers' are assumed to benefit 'through higher quality services' (World Bank, 2019: 101). Moreover, the World Bank's analysis starkly assumes that 'broad income growth can reduce the environmental impacts of production and consumption through Environmental Kuznets Curve effects' (*ibid.* 112).

At the same time, however, the World Bank also point out that, accounting only for fossil-fuel burning (therefore excluding the emissions from land use change or process emissions, such as deforestation or cement manufacturing), 'CO2 emissions go up worldwide by around 0.3 percent' as a result of the BRI's implementation (*ibid.* 116). The distribution of these emissions can have significant impacts on participating countries' greenhouse gas inventories, for instance the Lao transport sector emissions increase 5%. Though unrecognised in the World Bank's analysis, under the Paris Agreement these emissions are accounted for territorially regardless of the point of demand or where any profit might accumulate. As such, participating countries receive a greater GHG burden by hosting the infrastructure and transport required for Chinese economic expansion, while 'China, on the other end of the spectrum, sees modest output declines in a number of sectors including air transport, chemicals, rubber, and plastics, and pulp and paper' (*ibid.*). Significant sectors of China's economy, including persistent high emitters such as air transport, will see their emissions decline as a result of their increase elsewhere, yet this inequity is unrealised by the World Bank's analysis.

In a separate analysis covering 'economic, poverty and environmental impacts' (World Bank, 2019), the analysis concludes that 'findings indicate that the Belt and Road Initiative would be largely beneficial', despite also concluding that 'the initiative would lead to a modest increase in global carbon dioxide emissions' (*ibid.*:) and that 'there are

no explicit policies that are targeting emissions' (*ibid.*: 11). This is mirrored too in an OECD report, which in its only significant mention of climate change suggests:

investments in sustainable and quality infrastructure in the region are needed to allow Asia to maintain its growth momentum, adequately address climate change and bring down high levels of persistent poverty. (OECD, 2018: 6.)

Whilst it is important to not problematise, in itself, the need for infrastructure in impoverished areas, the assumption remains that climate action is inherent in the process of debt-based infrastructure finance and construction.

Contained in this analysis is the assumption that material growth is a necessary precursor to better environmental outcomes. The reliance on environmental Kuznet curves (EKZ) makes this clear, where economies are assumed to move along an inverted U curve with the curve's peak representing the most damage to the environment, propelled by GDP growth. However, while the 'curve may hold for obvious, local environmental problems such as urban air quality, it is far less robust and probably non-existent for global, less obvious problems such as climate change and species extinction' (Victor, 2008: 165). Stern similarly attests that 'there is little evidence for a common inverted U-shaped pathway that countries follow as their income rises' (Stern, 2004: 1435). Even at a country level, Ozturk and Al-Mulali found that Cambodia, a host country of Belt and Road initiatives apparently standing to 'benefit enormously from this highly ambitious Chinese initiative' (Heng and Po, 2017: 1), shows no evidence of the environmental Kuznets curve hypothesis as GDP increases (Ozturk and Al-Mulali, 2015).

Despite the poor evidence base for these assumptions, it is at the level of discourse, specifically the meaning creation between nature and the socio-economy that these assumptions perpetuate, that is of most importance. The World Bank's deployment of EKC as a macroeconomic tool that justifies increasing levels of consumption and growth as a market solution to the problems of overconsumption applies also to the individual consumer. With the assumption that marginal gains in consumerism decline overtime whilst the marginal gains of intact nature increase, the World Bank posits that this

could motivate changes in individual behaviors and could lead to support for public environmental regulation that would increase environmental quality even if at the expense of consumption. (Losos *et al*, 2019: 13-14.)

The EKC, and GDP growth as a feature of protection, occur here according to the appropriate behaviour of consumers, whose environmental consciousness is a function of their greater wealth: poorer individuals simply lack the means to care for the environment. To resolve this, the market equips consumers with an understanding of nature as a construct of leisure-time. Nature enters the category of protection because the case now exists for the consumer's enjoyment of it as commodity, rather than the society's reliance on it as the provider of life and livelihoods. In the context of the BRI, this consumer individualisation has additional implications: the sustainable consumer-subject becomes responsible for greening China's economic expansion as they are brought under its influence. Newly constituted subjects of ecological civilization drive the 'greening' they are promised as an inherent feature of the BRI. In effect, a new social contract exists between the sustainable consumer-subject, who behaves appropriately within elite-sanctioned, market-provided forms of 'being green', and the ecogovernmentality of China's ecological civilisation, deployed within a framework of debt between the host country and China (as warned about by IMF Managing Director Christine Lagarde (Lagarde, 2018)).

More broadly, the capture of nature as a construct of leisure-time and of commodification serves to foreclose alternative political ecologies in which human-nature relations exist outside the market. Under assumptions about the inherent requirement of growth to deliver desirable environmental outcomes, local environmental protections are reliant on the provision of capital, further establishing the power of capital providers. Within the BRI infrastructure corridors, this has special importance for semi-autonomous regions with particular, historical political ecologies, such as Tibetan communities, whose indigenous territorial identities are already 'increasingly circumscribed by state and global nature conservation schemes' (Coggins and Hutchinson, 2011) while global commodity markets have already become embedded (Yeh, 2000).

The external analyses of the BRI's environmental credentials, therefore, seem rested on the assumption that greater GDP, delivered by higher levels of consumerism, will deliver greater environmental benefits. Sustainability, in this view, is achieved as new consumers are brought into being by the expansionist economic policy of a regional hegemon. To achieve this necessary growth, host countries are required to provide favourable conditions for private and foreign investment. The World Bank's analysis

makes clear that the responsibilities for receiving this fall on host countries, who, like new sustainable consumer-subjects, are required to act appropriately:

To increase private participation in the BRI, countries need to adopt complementary reforms to improve the business and investment climate facing potential investors (World Bank, 2019: 81).

Here, the requirement is explicit and driven by the assumption that private participation in infrastructure, via provision, is beneficial. Host countries' regulatory and legal frameworks 'need' to change to accommodate the needs of capital within the BRI; whether or not this is desirable is unquestioned. As with environmental issues, managing economic risk is the responsibility of host countries who achieve this by providing low-risk conditions for capital.

Under growth dependent and EKC assumptions, therefore, environmental outcomes as a function of growth in turn rely on the acquiescence of the indebted host countries to conditions preferable to capital. Despite this, support for the potential of the BRI to help the world achieve Agenda 30 and the associated Sustainable Development Goals (SDGs) is widespread. For instance, the then-President of the UN General Assembly, Miroslav Lajčák, remarked in 2018 that the BRI 'represents a commitment to the SDGs, to climate action and to multilateralism' (Lajčák quoted in China Daily USA, 2018). Nor is the potential for 'debt-trap diplomacy' (Shattuck, 2019) seen as a concern:

In just its first year, it lent \$1.73 billion to support sustainable infrastructure and other projects. It will no doubt help to close the \$5 to 7 trillion gap we face in financing the SDGs (Lajčák quoted in China Daily USA, 2018)

Lajčák's comments indicate an acceptance that China's BRI is aligned to the goals of Agenda 30 and sustainable development. This is further reflected in the framing of the BRI as a common endeavour, reflecting the Chinese articulations of the BRI as an externalised entity whose progress is merely furthered and greened by China's involvement:

This is not only China's development strategy, rather, it is globally rooted in cooperation, trade and geography (*ibid.*).

Lajčák's articulation of the BRI as part of Agenda 30, and as an initiative in common with established international norms in trade and cooperation serves to depoliticise China's policy. Given the importance of the BRI as a vessel of ecological civilization, it becomes clear that the emergent discourse does little to challenge existing norms of practice and

values in the international community. The reliance on, and contribution towards, material growth mediated by an increasingly free market as a condition of environmental protection and an indicator of development helps legitimise both the BRI and ecological civilization by articulating that it is, in effect, unchallenging to the existing neoliberal hegemony.

In addition to IGO literatures, the acceptance of the BRI, in principle, and the metaphors by which it represents its connection to environmental and climatic action is present even with international non-governmental organisations (INGOs). A key analysis of the environmental impact of the BRI by the World Wildlife Fund for Nature (WWF) (2018) focuses on how China's BRI can exist within the current structures, laws, and norms of global environmental governance, while welcoming the 'Guidance on Building the Green Belt and Road' analysed in this chapter (*ibid.*: 9). Across nine recommendations (*ibid.*: 10-13), the report suggests the use of a series of established tools, including natural capital approaches, strategic environmental assessments, 'opportunities for investments in ecological infrastructure', and protected sites and national parks. Overall, to 'mitigate the potential negative impacts', the report suggests all BRI projects should:

follow the highest environmental and social standards and safeguards (such as the ones applied by international finance institutions such as the World Bank/International Finance Corporation);

be consistent and comply with relevant international law and standards;

apply a fair and level playing field in procurement procedures. (*Ibid.*: 12).

Overall, the report's nine recommendations seek to manage the risk of the BRI by holding it to existing standards and norms and suggesting a series of established practices. Despite a context of unprecedented worldwide deterioration of nature (IPBES, 2019³⁸) and a widely-referenced 'sixth mass extinction' (Wagler, 2011 see also Ceballos, Ehrlich, and Dirzo, 2017), the report encourages the BRI's adoption of existing tools and norms as a satisfactory mitigation of the risks posed.

³⁸ The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) attempts to also account for highly relational human-nature interaction, local knowledges, and Indigenous knowledges and is considered here as an optimal if inherently incomplete global assessment.

The report also recommends that the BRI 'be formulated, planned and implemented within the framework' of ecological civilization and the SDGs, both of which 'address pressing sustainable development challenges in China and the rest of the world' (*ibid.*: 10). Similarly, this constructs existing governance practice as sufficient for mitigating environmental risks and helps process the BRI as business-as-usual in the global economy. Any radical futures imaginable through the discursive resources of ecological civilization are foreclosed by its encompassing within the existing set of practices. The report forgoes any opportunity of encouraging the discourse of ecological civilization to challenge existing correlations of power, narrative, and representation of nature.

This is the more surprising when considering the remarks made elsewhere by the WWF on the topic of ecological civilization. Jean-Paul Paddack, Executive Director for Network Development, WWF, has said "we hope that China becomes a new leading power to increase ambition and save our Earth" (Paddack quoted in Xinhua, 2019), with the clear implication that the existing power structuration is insufficient, and new alignment is necessary to 'save our Earth'. The message is fundamentally different: in one treatment of ecological civilization and the BRI, WWF manages the risks associated with the rise of China, whilst welcoming its approach, within the demonstrably failing standards of the present. In the other, indicated by Paddack's comments, the rise of China is seen as instrumental in disrupting the existing system in order to bring about a state of power politics in which ecological civilization forms a *new* sustainability transition.

Nevertheless, Paddack also reiterates the depoliticised, consumer-focused changes that ought to be taken. The state-owned news agency, Xinhua, reports from the interview with Paddack that

Exploding human consumption is the driving force behind the unprecedented planetary change that humans are witnessing, through the increased demand for energy, land and water. (*ibid.*)

Which is followed by Paddack quoted as:

"There are many actions we can take, from sustainable consumption to sustainable production and reducing energy use to avoiding the use of disposable plastic". (Paddack quoted in *ibid.*).

Marginal gains in efficiency, avoidance of particular substances, and the categories of sustainable consumption and production once again are presented as solutions, at least partially, to the 'explosion' of consumption and the functional overuse of planetary resources. Ultimately, a problem of consumption is constructed as solvable by it. Despite the fact that, were China to lead a new sustainability transition encompassing these actions, it would not actually be replacing the already dominant approach, the seeming difference in approach within a particular organisation is still reconciled through a lens of one-dimensional sustainability. Consumerism remains the interface between new subjects of sustainability, whether transitions or futures, and nature.

The tension between China's pursuit of a new model of development, and the perceived need to gain legitimacy by presenting this as part of achieving existing models is clear even within China's own articulation. President Xi, speaking at the opening of the Belt and Road Forum for International Cooperation, insists that:

We should pursue the new vision of green development and a way of life and work that is green, low-carbon, circular and sustainable. Efforts should be made to strengthen cooperation in ecological and environmental protection and build a sound ecosystem so as to realize the goals set by the 2030 Agenda for Sustainable Development.

Even within Xi's speech, indeed a single paragraph, the articulation represents a paradox – that China will at once pursue something new whilst holding it to the standards of what exists already. As seen in WWF's response to this, it is capable of eliciting different reactions even within a single organisation: on one hand a welcoming and encouraging of China's expanding influence in terms of hard power as a means to change a flawed system of environmental governance (Xinhua, 2019), and on the other an insistence that China must obey the laws and norms of that flawed system (WWF, 2017). This contradiction allows the floating signifiers of development and sustainability to be invested with different meanings: at once a legitimising discourse for its framing within Agenda 30, and a counter-hegemonic articulation of a new pathway beyond it. To analyse this in greater detail, it is necessary to consider how the discourse interacts with established global fora in environmental governance.

6.3. Ecological Civilisation in Global Fora

A key tenet of *The Thought on Socialism with Chinese Characteristics for a New Era and the Basic Policy*, the area of thought outlined by President Xi Jinping at the 19th CPC National Congress as the guide for China until the mid-century, is that

major country diplomacy with Chinese characteristics aims to foster a new type of international relations and build a community with a shared future for mankind. (Xi in China Daily, 2017)

Wherein 'harmony between human and nature' helps ensure 'global ecological security' and ecological civilization provides an essential logic for 'speeding up reform of the system' domestically. Nevertheless, the capacity for ecological civilization and living in harmony with nature to represent discursively different pathways in global fora is limited.

Early mentions of ecological civilization have tended to occur alongside market-based mechanisms and approaches in economic and environmental governance. For instance, a UNEP Governing Council in 2012 took 'note with appreciation' of those countries promoting 'the green economy in the context of sustainable development' including ideas 'of ecological civilization, natural capital accounting, payment for ecosystem services, low-carbon economy and resource efficiency' (UNEP, 2012). As at other times, the representation of ecological civilization as simply another tool in the greening of an otherwise unchanged developmental pathway serves to depoliticise the agenda by accommodating it within established, market-based instruments.

However, at a time that China has become the second largest financial contributor to the UN (United Nations Secretariat, 2018) and increased its presence in UN spaces (Farand, 2019), China has successfully bid to host the 15th Conference of the Parties for the UN Convention on Biological Diversity. These talks are critical to determining the post-2020 framework for protecting and restoring biodiversity after the failure of the previous framework, the Aichi Targets, to address the challenges facing ecosystems. The BRI greening plan briefly mentions that China would seek to help BRI countries to meet commitments under multinational agreements, including the CBD (Chinese Government 2017: Section VII). Since being announced as the host for the 2020 talks, however, ecological civilization has emerged as the key frame for both China's involvement and the CBD's eventual framework in three key ways: its announcement as the 'theme' of the 'landmark' 2020 event (CBD, 2019), its centrality to the initial aspects

of the scope and content of the post-2020 framework, and its subsequent strong presence in the Zero Draft. Together, the CBD-specific discursive resources of ecological civilization indicate a growing confidence not just of China's engagement on the international stage, but of its homegrown narratives for envisioning a sustainable future.

The Zero Draft of the Post-2020 Global Biodiversity Framework produced by the Open-ended Working Group within the UN Convention on Biological Diversity (CBD) makes clear the extent of transformation necessary:

urgent policy action globally, regionally and nationally is required to transform economic, social and financial models so that the trends that have exacerbated biodiversity loss will stabilize in the next 10 years (by 2030) and allow for the recovery of natural ecosystems in the following 20 years, with net improvements by 2050 to achieve the Convention's vision of "living in harmony with nature by 2050". (CBD, 2020.)

Here, the 'urgent policy action' is compared with the sustainable future envisioned by China's narrative, projected onto the 'Convention's vision'. 'Living in harmony with nature', whilst not exclusive to China's discourse, represents a continually deployed proxy for ecological civilization in both domestic and international articulations. More importantly, in articulating the problem and, in broad terms, what the fix will resemble (that of a stabilisation of trends followed by recovery), the Zero Draft leans on an anthropocentric epistemology in which a series of indicators is sufficient to judge arrival at state of 'living in harmony with nature'. Such indicators are necessarily abstracted from the subjectivities and local and Indigenous knowledges that form diverse and place-based connections to, with, and within 'nature'. The means of identifying the problem and the solution foreclose the understanding of either in languages other than the techno-scientific which remains fully accessible to only a few.

This contrasts with the announced theme of the 2020 talks, 'Ecological Civilization: Building a Shared Future for All Life on Earth'. Here, China's Ministry of Ecology and Environment suggests that

the theme of the 2020 UN Biodiversity Conference gives voice to the aspirations of people around the world to build a global society in which economic, social, cultural and environmental concerns are addressed in a truly holistic way, by recognizing that nature is the fundamental infrastructure supporting life on earth, and that the UN CBD Vision of Living in Harmony with Nature by 2050 can be achieved through a renewed relationship between humans and nature.

Predating the Zero Draft, it remains unclear how the 'renewed relationship between humans and nature' is understood. In between the two documents, the radical potential of achieving a 'renewed relationship' is supplanted by the hegemonic epistemology of highly abstract empiricism. On the other hand, in constructing the possibility of a renewed relationship the theme announcement forecloses the existence of multiple knowable relationships: it is a singular relationship that is problematised, and a singular one that is suggested. As such, the question of finding a new relationship is answered in the presentation of 'living in harmony with nature', which in its presentation reduces human and nature to consumer and commodity by its articulation as a market-based relationship. The 'renewed relationship' is different to the extent that it is understood by the ever-increasing quantity of performatively 'green' goods provided by China's economic expansion. Inherently, it is a relationship to nature that China, as an increasingly central actor in global environmental governance, sets the legitimate parameters of. In the stage of gaining legitimacy on the world stage, the language is shaped by the dominant technocratic, anthropogenic logic of human-nature relations. This tension is clearer in the ways in which language is purposefully amended in being presented in such spaces.

China's articulation of ecological civilization has been sometimes specifically adapted for international audiences. In at least one key address by then-President Hu Jintao on Ecological Civilisation, for the 18th Party Congress in 2012, the original Chinese (*shēngtài wénmíng* 生态文明) that directly translates as 'ecological [*shēngtài* 生态] civilisation [*wénmíng* 文明]³⁹ was translated in the official English version as 'ecological progress' (Hansen, Li, Svarverud, 2018: 195). As such, *ecological civilization* specifically does not appear anywhere in the English text but is throughout the Chinese version. Hansen *et al* point out this is possibly an attempt to make the paradigm resonate more with a Western and global audience (*ibid.*). Though they make little of the point, the implications of this are substantial, while the speech by then-President Hu is not unique.

³⁹ This word, *wénmíng* (文明), is hard to associate with any Chinese words for progress (most commonly *jìnzhǎn* 进展 or *Yǎnbiàn* 演变) or development (*Fāzhǎn* 发展), as typically used in reference to sustainable development.

The differentiated articulation has in fact been made as recently as 2019. During a speech at the Second Paris Peace Forum, in the original Chinese Vice-President Wang Qishan remarks that China will '大力推进生态文明建设 [dàlì tuījìn shēngtài wénmíng de jiànshè]' (*vigorously promote the construction of ecological civilization*) (Chinese Ministry of Foreign Affairs, 2019a). In the official English translation appearing, for instance, on the English-language website of the Ministry of Foreign Affairs and anglophone embassies (Chinese UK Embassy, 2019; Chinese New Zealand Embassy, 2019), Wang is quoted as saying 'we are vigorously promoting ecological *progress*' (Chinese Ministry of Foreign Affairs, 2019b, emphasis added). While a single change in 2012 might be attributed to an error, or otherwise a one-off, the same change repeated suggests a more coordinated effort to adapt the language so as to be appropriate to particular audiences.

In addition to the change of 'civilization' [文明] to 'progress', the word 'construction' (*de jiànshè* 的建设) is also removed from the official English translation. In the English version, nothing new is needed in order to achieve the goal of living in harmony with nature; in the Chinese articulation a new paradigm is *constructed*: something new is required to achieve the goal. The distinction further reveals the key tension in China's international pursuit of establishing ecological civilization: Chinese speakers are informed of the 'vigour' with which ecological civilization will be constructed, whereas English speakers are informed of how China pursues the empty signifier 'progress'. The former helps further the image of China as a challenge to the existing system of governance where the latter helps establish China as a rule-taker within international governance.

Therefore, on occasions spanning the crucial development years of the China's ecological civilization and BRI, non-Chinese speakers have not so much a window into Chinese domestic policy as a mirror that deliberately reflects Western metaphors. In this possibility, Westernised narratives tend to dominate the politics of appropriateness: to legitimately occupy this space, Chinese domestic discourse is obscured so as to not challenge the economic orthodoxy. In this particular example, ecology, or, indeed, human understanding of it, must *progress* – innovate, improve, and move from a state in which it is incapable of sustaining the economy to one in which it is. To do so, 'ecology' is conceptually externalised from other human domains; it is not an inherent and indivisible aspect of the lived experience, but a manageable collection of ecosystem services.

In the context of sustainability, this ecology must fit the space required by the economy, not vice versa. The idea that ecology, so constituted, can progress or be improved is a necessary and inherent assumption of the growth paradigm, in which ever greater services, from carbon sinks to water, are demanded of a diminishing resource, from species and habitat distribution, connectivity, and diversity, to clean water and air. In this discourse continual progress is necessary to reconcile these fundamental contradictions in the growth paradigm, where absolute decoupling of materials, carbon emissions, and waste from production has failed to occur, despite modest gains in relative decoupling (Jackson and Victor, 2019; Jackson, 2017). *Civilisation*, however, implies a reciprocal and reflective relationship without an implied motion; whilst still externalised, *ecology* can stand still, or be recovered, or be otherwise reconstituted in human-nature relationships without an insistence on its 'progression' as part of a modernist discourse.

6.4. 'Green Power' and Performative Sustainability

Having assessed the discourse of ecological civilization in key areas of China's engagement in international spaces, three features are apparent that I consider essential to understanding China's *green power*:

1. The extent to which an emergent discourse can destabilise what is legitimate and reconstruct, dialectically, a new form of legitimacy and appropriateness in the structures of global environmental governance.
2. The extent to which a discourse can construct and project a desirable and liveable future whereby a hegemonic ecogovernmentality determines, and governs, subject positions and human-nature relations, including the ontological and epistemic claims made of n/Nature and on behalf of marginalised and oppressed peoples.
3. The extent to which performative utterances construct a sufficient sense of sustainability so as to constitute a holistic framework of transition and enable subjects to imagine a liveable future through the aesthetics of arrival in that future, such as the purchase of an electric car.

This is not to render a normative framework for action that actors might 'use', nor one assumed to be already in 'use' per se, but to present an analysis of the extant discourse.

An analysis of 'green power' in this sense is beneficial as it helps identify three possible, interacting struggles internationally where sustainability might be re-politicised, and thus help see it as a political project:

1. Legitimacy: the struggle to exert, and subsequently appeal to, legitimacy in global environmental governance.
2. Anthropocentrism and subjects: The struggle over claims of knowing and representing n/Nature, and of identity in relation to it.
3. Performativity: The struggle over how functional sustainability, (living within an indefinitely reproducible operating space) can be signified and lived materially without being reduced to performative sustainability.

I below highlight the state of this struggle as apparent from the discursive resources highlighted previously.

Both push and pull factors impact on China's engagement in global fora and on the international stage. Domestically, economic oversupply pushes the agenda for expanding and deepening regional markets, whilst industries such as photovoltaic cells are particularly impacted, encouraging a 'green' focus. Internationally, the perceived need for global leadership, especially in terms of global South-South cooperation and organisation and in the absence of US leadership create a vacuum in global governance leadership. At the same time, the push and pull factors interact with a latent mistrust in particularly Western international spheres, though also in India with regards the China-centrism of the BRI in the South Asia region, resulting in a refusal to join (Times of India, 2018). Compounding this is the strong desire of the CPC for China to adopt greater responsibility in select areas of international governance, even to articulate a 'Chinese World Order' (Waldron, 2018). Amidst this, climate breakdown, biodiversity loss, desertification, and air and water pollution threaten fundamentally the ability for China's economy to grow and to bring increasing numbers out of poverty and to construct a 'moderately-prosperous' country by mid-century. These factors interact with the CPC's legitimacy domestically, tied strongly to the ability to deliver moderate prosperity, as well as China's perceived legitimacy in international spheres. As Waldron points out, China lacks the economic and political resilience to fundamentally transform the global economic system by hard power (*ibid.*).

In this context, it is unsurprising that paradoxes develop in China's discourse. In effect, it wants the world to be different but is cautious to be seen as trying to change it

internationally, while needing to represent Chinese power as able to do just that domestically in nationalist discourses. This is clear in the representation of sustainable development pathways. Articulations of an alternative 'Chinese way' in international community building is common ('[China] will demonstrate the country's readiness to take on responsibility for building a community of shared future for mankind' (Xinhua, 2017)), alongside the need to respect the developmental pathways of different nation states. A heterodox development pathway (including a counterhegemonic political ecology, sustainability transition, and future imaginary) beyond the Chinese state is idealised but ultimately unrealised as the discourse interacts dialectically with established market logics, whose re-articulation helps legitimise China's economic expansion.

As seen in the BRI's green plan and the insertion of ecological civilization, consumers form a subject position of China's ecogovernmentality as it is articulated internationally. Crucially, without the signification of its (highly contingent) domestic context, principally harmonisation and the CPC's 'leadership', the 'managed consumer' subject of domestic ecological civilization is afforded greater sovereignty: the subject position more resembles the agent of change that the 'innovative consumer' subject enjoys in Western sustainability logics. Ecological civilization in this sense is really two discourses: the domestic 'sinofication' (as it has emerged as a more codified framework for action under Xi Jinping) and the external language of sustainable development in which potentially radical articulations are instead made sense of by hegemonic Westernised articulations - innovation, green consumerism, and green-growth economies. The latter are present domestically, but there the chains of equivalence to the floating signifiers form different meanings. The same signs are invested with alternative meanings by the different audiences with which they are intended to resonate, and by the different spaces in which they operate.

6.5. Conclusion

China demonstrates a commitment to furthering globalisation, equated with the expansion and liberalisation of trade, to the market in absorbing sufficient care for the environment, and to the ontological claims of technocratic, anthropocentric interventions to manage the environment as a series of risks. In doing so, China achieves legitimacy with key IGOs, including the OECD, the World Bank, and the UN. Ecological

civilization, understood by these three broad equivalences, is contained within the discourse of neoliberal sustainable development. China's projected development pathway is less a challenge to the model of Western sustainable development than an adoption of it, including the tendency for pollutions to accumulate in areas with weaker or weakened institutions and regulation, as shown along the BRI, in effect helping to solve the 'sustainability' issue by the transference of risk of newly indebted 'host' countries. This continuation of the pollution haven hypothesis marks a significant convergence with Westernised development pathways; both reinforce the growth dependency inherent in the environmental Kuznets curve hypothesis which, as seen, helps legitimise the BRI and its green credentials in the eyes of the World Bank.

The CBD 'Vision of Living in Harmony with Nature by 2050' (CBD, 2019) helps show this. The human-nature relationship, that of harmonious co-existence, is something 'achieved' at a particular point. Throughout the Zero Draft, abstracted and empirical indicators serve as the means for judging this achievement: the 'renewed relationship' (*ibid.*) is achieved at the point these indicators reach a particular level, where biological diversity can be said to be recovering. The point of arrival for this new human-nature relationship remains subject to the empiricism of technocratic governance. Meanwhile, the problems of the *existing* relationship are absent.

Throughout China's articulations of ecological civilization, and in particular the BRI, 'living in harmony with nature' has provided both the means and imagined future of a sustainability transition. But, as shown, it is reduced to the performative language of environmental 'friendliness', expressed through the adoption and promotion of ecolabeling and green consumer goods. It is not possible, however, to say that the performativity is inherent to the reliance on consumers given the reduced role of consumer choice in Chinese discourse. Instead, environmentalism and sustainability are performed, chiefly, by the state and the market within condoning international system where environmental benefits are assumed to flow as a result of GDP increases according to the myth of the environmental Kuznets curve.

Overall, I have shown that in each case China's discourse, in its current structuration, represents the one-dimensional sustainability that similarly defines Western sustainable development, more so than domestic articulations: there is little suggestive of a re-politicised struggle over these meanings, and in this sense ecological

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civilization fails to emerge as a counter-hegemonic bloc to neoliberal, one-dimensional sustainability.

7. Conclusions: Beyond One-Dimensional Sustainability?

The thesis began with the issue of depoliticised sustainability narratives as their reach into the ordering of socio-economic and socio-nature relations increases, propelled by urgency but confronted by contradictions and paradoxical claims on citizen subjects. It followed Mouffe's (2005) concept of the political as the 'dimension of antagonism' wherein the political is expressed in oppositional identities as hegemonic blocs (2005: 9). For this reason, the tendency for ecological civilization to be thought of, both in state declarations and in key literature, as oppositional and in place of neoliberal sustainable development set the basic question of this research: did ecological civilization and neoliberal sustainable development meet in a dimension of antagonism? Did China's growing role in global environmental governance amplify a dissenting counter-hegemonic narrative to neoliberal governmentality and, perhaps, open up space for the emancipation of subaltern political ecologies and ways of 'being' in relation to nature?

I have used 'one-dimensional sustainability' to describe the neoliberal hegemonic order that gives rise to an ecogovernmentality in which the consumer is the ultimate arbiter, the sovereign chooser and driver of innovation whose rationality will determine the transition to sustainability, if only they are confronted with a range of 'green' commodities and select information about them. Viewed in this way, the direct answer is no: whilst it is clear that domestic articulations of ecological civilization are engaged in an antagonism with a neoliberal sustainable development, as China's role has increased globally, it has articulated a second discourse of ecological civilization that reaffirms this hegemonic order. The concept of 'green power' is used to describe a situation in which a basic convergence on the Anthropocentric and market-centric ontology of nature, that of a series of packaged indicators exchangeable across space and time, is taken for granted whilst antagonistic relations are consumed by whose metaphors for extraction are central. Ultimately, this is far from a return to the political.

This research has offered an interpretive, poststructuralist analysis of the ecological civilization discourse as it is deployed in state-centred articulations of a sustainability transition and the (social) construction of a liveable future. To do so, it has focused on the bringing into being of particular agencies, knowledges, and stories. Through a critical political ecological lens, the broad question has been to what extent

has ecological civilization told a different story to neoliberal sustainable development? In considering this, it is necessary to revisit what a political ecological analysis of subjects involves.

Political ecology often begins, and ends, on contradictions (Robbins, 2012). At its beginning, the prevailing contradiction with this research grappled was the paradox of inaction. On one hand, knowledges and lived experiences of environmental degradation have increased in diversity and intensity, and this has been met, through political struggle, with the emergence of environmental issues at the heart of global governance. On the other hand, things have worsened in every metric of defining a liveable planet, and in local and Indigenous accounts of Nature.

The analysis primarily followed the tradition within political ecology that considers the social construction of a subject. Robbins (2007) for instance considers the specific instance of lawns in the United States: the prevalent narrative of a manicured, highly managed, high-input lawn and the subject this creates in relation to it. As he puts it,

Such a lawn only developed as a product of the economic growth conditions in suburban real estate development, tied to proselytizing that connected the lawn with a certain kind of desirable urban citizen and economic subject. (Robbins, 2007: 129.)

For political ecology, it is not sufficient to end an analysis at the proximate cause of a particular socio-ecological phenomenon. One contradiction Robbins notes is that, with regards the harmful impacts of the use of chemical products in the maintenance of lawns, 'increased consciousness of risks has coincided with increased input application' (*ibid.*). The contradiction encourages an analysis beyond a proximate answer to the question, why do we manage lawns in the ways we do? Whereas a proximate answer might even reveal important relationships between lawns and, for stance, societal expectations, house values, fertiliser adverts, and so on, ultimately the lawn subject is 'mediated by an aesthetic designed far away in space and time' which connects these. This research project has not aimed, however, to investigate the contradictions, anxieties, and performances of the subject per se, but that of the space open to them to occupy or to resist: the subject position. More directly, it has analysed what this faraway aesthetic consists of.

As an interpretive discourse analysis, the interpretation of the discursive resources has focused on what actors, what struggles, what events, and what storytellers

are constructed in this narrative. The analysis offers three interrelated contributions to this body of literature:

1. State-centric articulations of ecological civilization are at least two discourses, not one contiguous discourse as it is treated in the literature of Chinese 'greening'. The first is a domestic deployment of cultured metaphors that revisit Chinese modernisation to recast its environmental legacy and to embed state authority and legitimacy through the agenda of harmonisation. The second is the international deployment of ecological civilization as a means of galvanising China's commitment to free trade, providing a green narrative for its construction of economic pathways to accommodate its production oversupply crisis and bind corridor states to China through debt-based infrastructure projects. This discourse strongly converges on market-based solutions in sustainability transitions, gaining legitimacy in IGO and INGO literatures. In both cases, ecological civilization provides, in effect, a green social contract wherein the provision of specifically Chinese goods, technology, and philosophy will 'green' the subject as consumer. I also demonstrate how the literal re-articulation of 'ecological *civilisation*' as 'ecological *progress*' is more widespread and significantly more recent than previously outlined (Hansen *et al*, 2018), further complicating the emergence of ecological civilization as a terrain of competing articulations between domestic and international spaces.
2. The consumer-subject remains the privileged agent of change in China's contributions to global narratives of environmental governance, which is tied directly to the 'performance' of sustainability. 'Fixes' to environmental and climatic crises are as a result of the commodification of nature. But the sustainable consumer-subject has a different agency: in domestic ecological civilization articulations of the consumer, they are a managed, and manageable, subject called on by the state as much as markets – the 'manageable consumer'. In international articulations, the consumer-subject is afforded a greater degree of sovereignty more compliant with the 'innovative consumer' of neoliberal sustainable development: it is the consumer as sovereign chooser who will drive the innovation necessary to overcome obstacles in the path to sustainability.
3. China re-establishes the primacy of the Anthropocentric and economic epistemology of one-dimensional sustainability in its articulation of ecological

civilization. This is both in its international economic expansion policy and its increasing leadership in global environmental governance regimes. Rather than the holistic human-nature harmony argued by some (Pan 2016, Zhou, 2017), or the counter-capitalist imaginary hoped for by others (Foster 2017), the human-nature relationship is re-articulated as a consumer-commodity relationship, especially in international contexts. This serves to marginalise local, Indigenous, and other subaltern ways of 'knowing' n/Nature, even as the discourse claims to represent them. Knowing of n/Nature in a context of crisis continues to involve the reduction of it to manageable, governable, and crucially marketable 'bits': ecological civilization mimics the way neoliberal sustainable development sees like a market.

Here, I discuss the project's key arguments and contributions while reflecting on the original questions posed. The key concepts developed, namely one-dimensional sustainability, the sustainable consumer-subject, and green power, are brought to bear on these and the broader contradiction between sustainability agendas and sustainability outcomes, and whether China's emergent narrative disrupts or reproduces this. I begin with a discussion of one-dimensional sustainability and the extent to which China's ecological civilization, as an ecogovernmentality, determines subjects in dimensions beyond the consumer. I move on to consider the discourses of ecological civilization, highlighting the implications of its multiple articulations which occur simultaneously across different spaces. Following this, I discuss the implications of ecological civilization's maintenance of one-dimensional sustainability for the re-politicisation of sustainability transitions. Green power, as the mode of politics through this limited politicisation is best understood, is then considered in relation to the performativity of sustainability. I finish by offering reflections for the state and future of global environmental governance, and the deployment of utopian narratives of transitions and liveable futures.

7.1. Performative Sustainability

Chapter Four detailed features of what I term 'one-dimensional sustainability'. This borrows, rather than follows, from Marcuse's *one-dimensional [hu]man* (2002 [1964]), in

which Marcuse details the subject of late modernity reduced to a participant of the capitalist system, wherein a technocratic rationality produces the irrationality of pursuing ever greater quantities of material goods, waste, and damages, far beyond the needs basis or use value of those goods; categories which themselves become commodities. Writ large, one-dimensional sustainability is the form of neoliberal sustainable development as a narrative of transition, and as a story about the liveable future. It is one where the consumer-subject re-emerges as 'sustainable', 'green', 'eco-friendly', and so on, in order to re-legitimise the neoliberal hegemonic order at precisely the point it fails.

To make these connections, Chapter Four considered hybrid and electric vehicle advertising as well as the literatures of IGOs; the two functioning together to produce the consumer subject and reflecting Marcuse's concentration on the role of advertising to constitute the commodity as the signifier of the good life. In revisiting the Essex School of discourse analysis, the theoretical development in this chapter outlined the 'space for science' as discourse with an imperfect but optimal, for the sake of the research, view of functional, planetary sustainability. The planetary boundaries framework (Steffen *et al*, 2015; Rockström *et al*, 2009) served the purpose of defining the characteristics of a safe operating space: sustainability as *existing* phenomenon. More in keeping with discourse theory, however, the chapter detailed the *performativity* of sustainability that is always the social *being* of sustainability, that is, how one acts in the role of the sustainable consumer (in this instance) and the chains of equivalence that produce this understanding of the role. In analysing this performative sustainability, and its role in producing one-dimensional sustainability, I detailed six characteristics of the neoliberal sustainable development discourse in relation to the consumer-subject position from an interpretive analysis:

1. Active-positive language

As opposed to limiting damage in certain categories of ecological impact, active-positive language constructs the consumer performance as an active contribution to environmental protection. Purchasing the product 'produces' an active environmental benefit.

2. Complexity reduction

'Seeing like a marketer' simplifies a complex problem in order to make it marketable, governable, and exchangeable. Correspondingly, 'seeing like a

consumer' means identifying and operating on the basis of sign-values conveyed by the acts of obtaining and possession. Reducing 'environment', 'nature', 'planet', or other signifiers, to one category of ecological impact (e.g. climate change/CO₂ emissions) gives the impression of a more general sustainability. Epistemologically, nature is packaged and processed in manageable bits that occlude holistic and subjective ways of knowing, protecting, and valuing nature. As well as messaging to consumers from both states and advertising (and the increasingly blurred lines between them), this language constructs biodiversity offsetting as a legitimate management approach to environmental destruction.

3. Economic rationalisation

The consumer's constructed agency relies on the base assumptions of 'green economy' approaches wherein environmental degradation is understood as an externality capable of being reintegrated to the market. The problem is not with market logics per se, but with their reach. To the consumer, both state and advertising discourses construct 'green consumption' as financially beneficial; often as the leading rationale for the purchase. The sustainability transition in these cases does not so much create sustainable consumer-subjects as responsible spenders, with implications for the resilience of environmental citizenship when the least damaging path is not also the cheapest. The consumer-subject is firstly economically rational, not environmentally rational.

4. Representation and participation

The creation of the sustainable or green consumer subject position creates a space for participation in the sustainability discourse through identification. The sustainability aesthetic of a given product means that all that remains is for the consumer to make the purchase. As such, consumers become a privileged agent of change. In marketing, this is often by articulating consumers as 'rebels', or as conscientious consumers or activists - articulations of difference to an established norm. The category of 'consumer' operates across both space and time, tying together the producer in Bangladesh with the consumer in the US, the financier in London with the forester in Brazil. Across time, 'future generations' are future consumers: their needs reduced to the plentiful supply of commodities whose use-value are known in the present. One-dimensional sustainability makes a totalising claim over nature and what matters within it, preserving what

matters *now* to this Westernised discourse in different capital forms (natural, financial, human) that package nature for different types of markets (ecosystem markets, carbon markets, biodiversity offset markets, and traditional markets). In doing so it envelops future subjects within its governmentality and forecloses on the range of future potentialities by deciding in the present what will be valued in the future, and thus what will exist in the future.

5. Problem construction

Both global institutional discourses of the sustainable consumer, and the hailing of the consumers in marketing, construct the problem as primarily one of innovation wherein the consumer plays a central role. In this construction, the problem is a hurdle to be vaulted by the rational application of capital and opening of new markets in which to cater to the environmentally concerned consumer. The consumer's role as 'fixer' is reliant on the construction of the problem in this particular way. The information made available to the consumer constructs the categories of differentiation by which understandings of sustainability arise. The 'problem' lies in the unsustainable category, while the solution lies in the diametrically opposed category of the 'sustainable', articulated by green aesthetics while reaffirming the existence and legitimacy of the category as a domain of activism, innovation, and awareness.

6. Open signification

For Laclau and Mouffe, the ability to invest a suitably broad signifier with different meanings plays an important role in the forging of political alliances. Recently, climate change protests have, if tacitly, relied on this tendency to unite a broad a set of interests under shared banners. In the consumer's search for identity, however, it has different implications. In the same way 'healthy' might denote a near-endless series of products, processes, activities, means of production, and so on, 'green' has achieved a similar level of ubiquity in public vogue. 'Green' is, as such, more than a narrowly linguistic signifier. The cultivated aesthetic of 'green' has emerged as a multimedia discourse wherein vastly differing practices and approaches are afforded a degree of commonality. As has been shown, marketers often rely on the latent perception of environmental goodness in category of 'green good' (such as a hybrid car) to

obscure environmental harm and because direct claims of being green. Green aesthetics are used in place of challengeable green statements.

This performative sustainability characterises one-dimensional sustainability. In detailing this, the research project provides a framework for considering what a 'multi-dimensional' sustainability might resemble: the expansion of the horizon of possibilities and potentialities in sustainable transitions. For the subject, this is realisation of human-nature relations beyond the consumer-consumed duality, and beyond socio-nature relations as the organised mode of extraction and use of a commodified and marketised system of Anthropocentric services.

It is important to note this research project has not sought to problematise 'performativity' per se; the performance of a role is an inherent part of social being. Instead, it has shown that the conditions of the performance – the discursive resources available to people to identify with – are complicit in the production of environmental citizens, and as such are as politically contingent and deeply implicated in the (re)production of power relations. As has been shown elsewhere, the performance of environmental activism can also be revealing, political, radical, and emancipative. Indeed, a sustainability transition or green future of multidimensional sustainability would allow for a plurality of performances of the environmental and political subject to accommodate the diversity of knowledge and cultural systems.

7.2. Ecological Civilization Discourses: in Harmony or Inharmonious?

With this groundwork, Chapter Five could then detail the interpretive analysis of domestic ecological civilization, such as was accessible to the researcher, and the extent to which offered different forms of socio-nature relations, and different subject positions for citizens to occupy that did not require their reduction to consumers. From the analysis, it was clear the consumer remains integral in ecological civilization sustainability transitions and in how this discourse imagines a liveable future. But its articulation of the consumer differed principally in where the sovereign act of choosing, the place of innovation, occurred. In ecological civilization, this rests mainly with the state: sustainable consumer-subjects are passive in comparison to the active, innovation-driving consumer of sustainable development.

Thus, in determining the consumer, two subject positions are clear from the analysis. The 'innovative consumer' of neoliberal sustainable development drives the search for solutions to planetary crises through the sovereign act of choosing. This position is overdetermined by the discursive resources that construct the economic rationality of the consumer: green makes sense when it is the more affordable option. This represents a contradiction in the discourse whereby 'innovative consumers' will adjudicate the competition of environmentally friendly products to determine the more sustainable product, at the same time as their rationality as environmental subjects is replaced by an economic rationality of greatest individual financial benefit. Beyond this contradiction, which permeates transport advertising, 'innovative consumer' is constructed as the final agent of the sustainability transition and, as a result, a part of the collection of architects responsible for constructing a liveable future. In this fantasmatic logic, the consumer-subject is not fallible, all they need is the right information which can be provided by means of ecolabels and the proper incorporation of environmental information into decision making processes for externalities to be reflected in prices. Information, therefore, is the key obstacle to sustainability in this formulation: its provision empowers 'innovative consumer' to maintain an exponentially growing economy through the power of choice and markets.

Chapter Five showed how Chinese ecological civilization, on the other hand, calls on the 'manageable consumer'. This subject position lacks the sovereignty of 'innovative consumer' as the role of innovation as an inherent outcome of choice in the myth of the market logic is absent in domestic articulations. Instead, the consumer-subject is managed by a wider technocratic structure which retains the power to innovate. Nevertheless, it is the commodification of nature and its exchange value that is still required for this sustainability transition - environmental subjects are still consumers, they just lack the sovereign agency of the choosing, 'innovative consumer'.

Both subject positions are explicable from an analysis of their political context. In neoliberal sustainable development, the pursuit of freedom remains discursively tied to the provision of choice to the individualised consumer. In China, the consumer as environmental subject partakes in the State-sanctioned regime of environmental goods while it maintains for itself the role of innovator and chooser. In place of the 'freedom' of consumer choice, Chinese ecological civilization offers the 'harmonization' of the people, the state, and nature in the context of 'moderate prosperity'. Both consumer

subjects, then, reflect and reproduce the hegemonic discourses of citizenship offered by the respective governmentalities.

Chapter Six, by contrast, introduced a third discourse: the *global ecological civilization*. Whereas existing literature on ecological civilization in both Western (Goron, 2018; Hansen *et al*, 2018; Foster, 2012) and Chinese (Pan, 2016; Zhou 2017) canons has treated statist ecological civilization as a more or less coherent discourse across space, and others have pointed to unique local deployments, this research has shown the articulation of ecological civilization in global fora and China's flagship diplomatic and economic strategy, the Belt and Road Initiative (BRI), differs to that of domestic state articulations. The chains of equivalence that produce meaning in signifiers, particularly the consumer and the nodal point of sustainable development, are different in global articulations. The analysis of ecological civilization in the BRI reinforced the logic that consumerism will serve as the means by which we achieve and recognise a sustainability transition.

Despite this divergence in appeal to different forms of legitimacy, in both cases nature is brought into being by consumers and consumerism: this remains the common mode of exchange between society and nature. In both cases, the performance of the consumer, the act of buying, remains the essential act: whether this is a performative act of compliance, or one of supposed freedom and innovation. Subjects of sustainability transitions are created as sustainable or green consumers, whether this exchange is facilitated through the logic of technocratic management or through the logic of the sovereign, innovative consumer. This point of difference has repercussions for agency and for the location of the consumer-subject within an arena of politics (Michelletti and Stolle, 2007, 2013). However, in each, that agency is a reconstitution of existing power relations, while in neither are these power structures challenged. In the case of neoliberal sustainable development, the innovative consumer extends their power of choosing into newly constituted environmental markets, asserting themselves as sovereign agents and the final arbiters of sustainability rights and wrongs in the market economy. In the case of ecological civilisation, consumer subjects are managed by the technocratic state, which offers a comprehensive, liveable future as part of the social contract.

Market solutions to environmental problems are inherently an epistemic claim and process: for the purpose of market exchange, nature is reduced to tangible, governable, and exchangeable bits of knowledge, such as carbon, or the numerous

indicators of biodiversity. The complexity of nature is rendered as a simplified series of manageable parts, knowable objectively and to the exclusion of subjective, Indigenous, local, or other forms of knowing, valuing, protecting, or understanding. In essence, both neoliberal sustainable development and ecological civilization narratives articulate the logics of one-dimensional sustainability in which the performativity of 'being' green is the pursued aim. 'Sustainable' or 'green' consumerism remains at the heart of human-nature interchange. As such, both discourses perpetuate anthropocentric, and specifically capital-centric, worldviews in which consumerism is inherent to 'fixes' of sustainability crises, which serves to foreclose deep ecology and other radical renderings of socio-nature relations.

Nevertheless, the fundamental convergence on the commoditisation of nature and its use by consumers sees the continued reduction of nature to economic units of exchange, wherein the greater the threat, the greater the extension of market-liberal epistemology into nature, expressed in carbon markets, biodiversity offsets, natural capital, and other systems exerting a hegemonic claim over knowing nature. Politically, the contradiction provides advantage: ecological civilization allows China to speak to two different audiences who invest the term with different meanings. It allows the deployment of an overarching frame capable of earning legitimacy in the globalised governance of the World Bank, OECD, WTO, and others, as well reinforcing the legitimacy of CPC rule domestically. For the latter, it allows the state to indicate the global acceptance of Chinese terminology, products, and leadership to citizens which forms a part of the legitimising story of the CPC. Post-structuralist discourse theory helps to understand how this is possible. As seen between Chapters Five and Six, the discourse structure that imbues the metaphor with meaning is composed of different chains of equivalence between domestic and international articulations.

One-dimensional sustainability is ultimately firmly embedded in the fabric of global ecological civilization discourse. The key divergence between the global and domestic articulations of ecological civilization lies in the equivalence it draws with neoliberal sustainable development: within China, this frequently takes on an oppositional relationship, whereas globally, ecological civilization is reduced to the Sinification of sustainable development and the two are taken as mutually reinforcing strategies under the same paradigm.

This research has shown that ecological civilization has not challenged the basic assumptions of neoliberal sustainable development. Instead, it has been habituated into the paradigm and seen as an expression of it. Chapter Six showed that China is seen, from the World Bank to WWF, to be a leader in implementing the Sustainable Development Goals (SDGs), specifically in relation to its development of ecological civilization and despite the environmental impacts of the BRI. Even as it is confirmed as the central 'theme' of major international talks to determine how global governance will adapt⁴⁰ given its failure amid a sixth mass extinction, ecological civilization encourages business-as-usual in terms of our relations to nature. Rather than challenge it, ecological civilization emerges to re-legitimise the hegemonic order as it confronts a planet-wide failure by its own metrics.

This research has engaged with the performativity of sustainability: the way consumer-subjects are aesthetically greened and radical activism co-opted by the commodification of its symbols and terminology, which is sold back to consumers as drivers of change and deliverers of a radical, liveable future. In place of a radical antagonism in the emergence of ecological civilization and the hope of a 'harmony between humans and nature' as a basis of a liveable future of pluralistic accounts of nature, these possibilities are foreclosed on by both neoliberal sustainable development and Chinese ecological civilization. In Gramsci's terminology, each passivizes the revolution. On their own terms, however, they fail to achieve sufficient change: conditions worsen as the reach and intensity of discourse increases. This research has offered an explanation for a part of this contradiction: the environmental subject is, in Althusser's expression, overdetermined. They are asked to occupy competing conceptions of the good consumer – one who consumes in greater quantities to drive growth, and one who does so to solve environmental degradation. A reconciliation of this is possible only as a fantasmatic logic, the insistence that market logics and exponential growth will absorb care for the environment.

Though it has not been the focus of this study, the implications for the expansion of ecological civilization into new spaces and places will be substantial. Whereas some

⁴⁰ The post-Aichi framework from 2020 is to be developed in a context where the Aichi targets of the UN Convention on Biological Diversity have failed to be met, and species extinctions, habitat loss, and distribution loss have increased at the same time as greenhouse gas emissions.

have argued in favour of a fundamental shift in environmental governance potentially helping realise different developmental pathways (Foster 2017; Pan, 2016; Geall and Ely, 2015), and reflect and represent a plurality of political ecologies, this analysis shows this is misguided in application to ecological civilization. By adopting a political ecological and ecogovernmentality lens, the study shows how the bringing into being of new environmental subjects has required the continued market-liberal dominance of epistemic access to nature. Whether under conditions of innovation-led sustainable development, or more authoritative management of consumer interactions, environmental citizenship remains reduced to allegedly sustainable consumer-subjects in state-led discourses. In sum, it is demonstrable that at the point of its failure, neoliberal sustainable development remains unchallenged by the global deployment of ecological civilization. Instead, each serve to legitimise the other while the radical potentialities of living in harmony with nature continue to be foreclosed by a marketised, Anthropocentric domination over nature.

Overall, in the discourse of domestic ecological civilization, we see not so much an erasure of the *Spectacle* – the totalising and technocratic reign of the logics of market fundamentalism – but we do see small differences in articulations of the consumer. In this discourse the sustainable consumer subject is managed and manageable: their 'freedom' is not sufficient to drive the innovation necessary for sustainability as in Western articulations. Instead, that role is reserved to the state which, nonetheless, continues the expansion of the free market in new domains of the environment. 'Living in harmony with nature' is not simply reduced to a consumer-consumed human-nature relationship – any identification of the self and nature is a consumption of available signs – but nature is brought inside the *Spectacle*. Harmony and nature are invested with different meanings, their value equivalenced to the market exchange of ecosystem services or brought under the regulation of cost-benefit analyses. It is these epistemic claims over nature that contribute to the occlusion of alternative, subaltern, local, and Indigenous knowledges, that also serve to foreclose the possibilities of future generations though their incorporation into present forms of governance – what will be valued, needed, and available for the future consumer.

Ultimately, international articulations of ecological civilization reinforce the power-knowledge structures of neoliberal sustainable development. They contribute to the same common sense that arises to link objective science with policy outcomes,

embedding market logics as fixes to the sustainability crisis. Environmental subjects become the sustainable consumers who consume in greater quantities the 'environmentally friendly' and eco-labelled goods, increasingly transported through the conveyor belts of the Belt and Road Initiative, whose own articulations of the ecological civilization privilege and prioritise the myth of the sustainable consumer. Overall, the fantasmatic position of the sustainable consumer subject continues to be central to both established and emergent discourses of sustainability transitions. Both discourses contribute in fundamentally similar ways to foreclosing the possibilities of radical change to bring about a liveable future, and in suppressing local and Indigenous knowledges through the hegemonic imposition of the *Spectacle's* epistemic claims over nature.

Annex I – Researcher Reflections

Situating the Researcher

This study has been a situated, interpretive study of discourses. As researcher, it is impossible to step outside of such discourses, to stand apart and investigate outwards as one might study a bacterium in a petri dish. Quite aside from this representing an unusual and radical approach, all social researchers, including positivistic Polanyian empiricists, are complicit in the outcome of their research. The difference is the extent of acknowledgement. This addendum seeks to make that acknowledgement explicit, and thus the 'situation' of the situated researcher more transparent. In the absence of an objective exploration of social realities this represents an imperfect but optimal device. This section therefore proceeds without substantial recourse to academic literature, but as an outline of my journey in conducting the research, an exploration of my presumptions and those biases I am aware of, and a location of where 'I' am in the research. Ultimately, I attempt to hold myself to account on the ethical and normative positions I adopt (though this is an ongoing process), whilst thanking those who have provided this from their perspectives.

This was a fascinating, distracting, distressing time to do a PhD in political science from a critical, Left perspective (though I suspect any time might be). During this time: Brexit, the US elections, Xi Jinping's ascension to official *Thought*, his consolidation of power, far-right victories from Orbán to Bolsonaro, worsening climate disruption and extinctions, the emergence and disarming of new movements, and a global pandemic. These have not so much layered on top of each other as emmeshed themselves in a complex web that invites and rejects explanation. Each of these are discourses to a discourse analyst. They have similar features: they Other, they legitimise and illegitimise, reveal and conceal. They create subjects; some of them are consumers, all of them are constituted by signs that take on and imbue meaning, congeal the aggregate sense into a message: red hats, blue flags, hourglass logos, clapping at 8pm. In a world of signs, the *Spectacle* is overwhelming.

This is not an abstract problem in the research journey. As someone sensitive to overexposure of stimuli, there is an element of irony in the acquiring of skills that tease out stimuli in the most mundane of messages. If everything is not an *object* but a temporary, even if long-term, alignment of meaning, stimuli have layers that amplify their presence: the simplest can indicate something substantial. This has had two direct repercussions for the research.

First, discourse analysis has the comfort of well-worn clothes. For someone who has always read too deeply into stimuli, it is not a stretch to do so with a specific grammar.

Second, the inescapable conclusion that there is no objectively-reachable and knowable 'environment' that exists 'out there' collapses a familiar distinction between work and getting outside – for a walk, a hike, a run. In considering how 'nature' is socially constructed, the idea of accessing it to escape becomes problematic – it all resembles work with the process of thinking critically about my subjectivity. I was, in a sense, governed by the need to be self-critical, and the fact I have yet to learn where that off-switch is.

As such, I came to the research unaware of its wider significance in my everyday life, but with a clear preference for thinking about problems critically. One of the practical implications of this was picked up in the first year (2015-16) – the tendency to revert to theoretical language when asked about the research problem. I am thankful to those who pointed this out. Being encouraged to abandon that language and consider, in plain English, what the research problem was helped endlessly (the irony that discourse theory generally rejects the idea of an optimal language notwithstanding). Conscious of the ability for theory to obfuscate, and therefore exclude, I have attempted to foreground the 'plain-English' where possible in this thesis.

Subjects and subjectivities

The key theme that links the various threads of the research has been the *sustainable consumer subject*. It was not obvious, at the beginning, that this was the case. Sustainable consumerism became the ideal-type for investigating sustainable development – it

appeared that in every case, sustainable development was about the consumer. Whilst this was clear from the corpus of documents analysed, it was everywhere when I looked up from the page, too. The 3-minute walk between my flat and the university took in a large advert on a car-rental company located on St Nicholas Circle. The advert, around the size of a large car, is still visible in Leicester, and visible on Google Maps (Google Maps, n.d.):



Image 2: car rental advert; roadside in Leicester. Google Maps, 2020.

This was the initial inspiration for *active-positive language* – that consumers are confronted with messaging that constructs them as able to make a *positive* impact on the environment. The car was not even hybrid or electric – the actual environmental credentials of the standard combustion-engine vehicles on offer is seemingly no greater than the same model anywhere else. The aesthetics are, crucially, different.

Despite this critique, I would undeniably come under the category of the aesthetic sustainable consumer. When making buying decisions, the environment, together with other ethical considerations, has a determining impact on the outcome. My own conduct is, in this way, inseparable from the research. Whilst my exposure to life-cycle analyses likely instils a bleaker and more pessimistic narrative of the self, and always contained in the fact that green consumers are still consuming, it remains the case that being seen to be green is an increasingly important social marker.

One key limitation of the research has been the dead end in giving voice to the subject position. This is not unheard of in political ecology. Agrawal's highly influential *Environmentality* was a lesson in this, including for the author who noted that he

did not pay sufficient attention to the lives of people beyond what was necessary to make the argument in the book...to talk about people without really knowing them – a failure of nearly all social science research that claims to be about people – is quite unsatisfactory. (Agrawal quoted in Robbins, 2012: 218.)

To the extent that this is a key lesson in the canon of political ecology, it is regrettable that this thesis has failed to give a voice to those about whom it theorises.

Pathways and dead ends

Had I known in September 2015 that I were to end up at this destination I would have taken a very different path. However, this would have ignored the contribution of those dead ends. In reality, it more resembled a maze in which getting lost in order learn the contours of the puzzle is a part of the journey. Like a puzzle, the pathway is obvious when you work backwards.

This research began with an ambition to give direct voice to those it studied – an ambition well worth pursuing in future research. Inspired by a lecture by Erik Swyngedouw, in which he stated his desire to never again see a PhD that further detailed the problems of neoliberalism without contributing to a solution, I become hyperaware of the tendency of this research to do just that if it remained focused on the passive revolution of environmentalism. Given the concentration on China, literature on ecological civilization seemed the best way to investigate a discourse that seemed to challenge the neoliberal imaginary. As such, I decided to use Q Methodology to investigate what meanings people in China (specifically, the city of Shenyang where the paradox of the consumer and the sustainable citizen was so strong given its uniquely poor air quality, sluggish GDP growth (less than half China's average), and the lightening-fast development of spaces of consumerism and car infrastructure).

This was intended to provide a voice to the 'subject position', to humanise what would otherwise be no more than a cut out from the system of governance. This became, however, impractical: a gargantuan effort provided just 14 responses with no indication I had approached a point of data saturation. In addition, the tension in interviews was clear. More than once, an interviewee chased me down the hall to ask I scrub out my notes and not to use what they had provided. Despite clear assurances of anonymity, either the political risk was too high, or trust too low, or a combination. (All such requests

to be removed from the study were of course immediately acted on.) This set the project back – a particularly interesting line of inquiry about the contradictions in the rationale for closing local factories could not be pursued.

My inexperience of fieldwork in China likely contributed to this false start. Over the months spent in China, I learned a great deal about social and cultural customs, nearly always due to the unfailing kindness of strangers there. Practically, the importance of *guanxi* was underestimated – an encompassing concept about the network of relationships and social connection with a passing similarity to 'networking' – in gaining access to interviews. Politically, the timing of the PhD with a crackdown on academic dissent was unfortunate, but equally a predictable risk.

Nevertheless, the final thesis is a strong reflection of the development of my thinking with regards the consumer subject. After answering the research questions, it achieves the second most important thing research can do: it points to the development of future research.

Out of the potential lines of inquiry developed, I believe there are two related but distinct paths for investigating in the near future. One of these is the particular spatialisations of ecological civilization; a place-based political ecology of new subjects of the Belt and Road Initiative. Areas within the Tibetan plateau, as well as 'host countries' of the BRI could be important sites for this where local and Indigenous political ecologies react with a new environmentality. The second is outlined in this thesis, though I lacked the space to develop it fully: the regulation of future subjects who are brought into being in the present. The 'future generations' narrative seems at once an essential moral framework and a deeply problematic one. There is clearly no ability for the future subject to democratically participate in their governance in the present, yet the conditions of their potentiality are regulated now. Sustainability transitions seem trapped into narrowing the horizon of possibility for future generations, whether in the construction of them as future consumers, or in predetermining what will arise as important and socially or culturally valued. This temporal extension is likely not unique to sustainability discourses; I am unaware of applications of discourse theory and depoliticisation to similar contexts. Marcuse insisted the imagination *au pouvoir* was essential for the

emancipation of the one-dimensional subject: less has been said of the importance of imagining for the emancipation of future subjects.

Annex II – Corpora of closely analysed texts

Representing three corpora for each analytical chapter of the thesis: 4, 5, and 6. Corpora for Chapters 4 and 6 are each split into two to reflect the different analytical stages and corresponding to the chapter format, whereas Chapter 5 is a single corpus. Each corpus is sorted alphabetically by author/origin. URLs were functional at the time of review though this may change over time. Those marked 'online content' could maintain the same URL even if the content is removed or updated. Where this has already occurred, an archived version of the content has been supplied. Documents, articles, and speeches are reachable via their full bibliographic record.

105 texts total:

Chapter 4 (41 texts total)

Intergovernmental Organisations (27 texts).

Advertising (global car brands) (14 texts).

Chapter 5 (20 texts total)

Chapter 6 (44 texts total)

Ecological civilization in Chinese (non-BRI) external relations (20 texts).

Ecological civilization in the Belt and Road Initiative (BRI) (24 texts).

Chapter 4 Corpus – Figures 10 and 11

Intergovernmental Organisations (Figure 10).

No.	Text	Date	Author/origin	Type	URL if available
1	Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan {SEC(2008) 2110} {SEC(2008) 2111}	2008	EU	Published document	https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0397
2	Sustainable Development: European Sustainable	N.d.	EU	Online content	https://ec.europa.eu/environment/eussd/escp_en.htm

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	Consumption and Production Policies				
3	"Sustainable Development"	N.d.	EU	Online content	https://ec.europa.eu/environment/eussd/
4	Towards Green Growth	2011	OECD	Published document	https://doi.org/10.1787/9789264111318-en
5	Creating Incentives for Greener Products: A Policy Manual for Eastern Partnership Countries	2015	OECD (Green Growth Studies)	Published document	https://www.oecd-ilibrary.org/environment/creating-incentives-for-greener-products_9789264244542-en
6	Towards Green Growth? Tracking Progress	2015	OECD (Green Growth Studies)	Published document	https://www.oecd-ilibrary.org/environment/towards-green-growth_9789264234437-en
7	Material Resources, Productivity and the Environment	2015	OECD (Green Growth Studies)	Published document	https://www.oecd-ilibrary.org/environment/material-resources-productivity-and-the-environment_9789264190504-en
8	Towards Green Growth?	2011	OECD (Green Growth Studies)	Published document	https://www.oecd-ilibrary.org/environment/towards-green-growth_9789264111318-en
9	Oslo Roundtable on Sustainable Production and Consumption	1995	Oslo Symposium on Sustainable Consumption	Published document	https://enb.iisd.org/consumme/oslo000.html
10	UN General Assembly Resolution A/RES/70/1	2015	United Nations	Published document	https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
11	UN General Assembly Resolution A/RES/66/288	2012	United Nations	Published document	https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E
12	Report of the World Commission on Environment and Development: Our Common Future	1987	United Nations	Published document	http://www.un-documents.net/our-common-future.pdf
13	Sustainable Development Knowledge Platform: Sustainable Development Goal 12	2017	United Nations	Online content	https://web.archive.org/web/20180606100859/http://sustainabledevelopment.un.org/sdg12

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14	Sustainable Development Knowledge Platform: Sustainable consumption and production	n.d.	United Nations	Online content	https://sustainabledevelopment.un.org/topics/sustainableconsumptionandproduction
15	2018 HLPF Review of SDGs implementation: SDG 12 -Ensure sustainable consumption and production patterns	2018	United Nations	Published document	https://sustainabledevelopment.un.org/content/documents/196532018backgrounnotesSDG12.pdf
16	Sustainable tourism (SDG Knowledge Platform)	2017	United Nations	Online content (relating to A/RES/70/193)	https://sustainabledevelopment.un.org/topics/sustainabletourism
17	Transforming Our World: The 2030 Agenda for Sustainable Development	2015	United Nations	Published document	https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf
18	High-Level Political Forum on Sustainable Development. 2018 Review of SDGs implementation: SDG 12 - Ensure Sustainable Consumption and Production Patterns	2018	United Nations	Published document	https://sustainabledevelopment.un.org/content/documents/196532018backgrounnotesSDG12.pdf
19	Sustainable Development Goal 12: Ensure sustainable consumption and production patterns	2015	United Nations (Department of Economic and Social Affairs)	Online content	https://sdgs.un.org/goals/goal12
20	One Plan for One Planet: 5 Year Strategy 2018-2022	2017	United Nations / One Planet network	Published document	https://www.oneplanetnetwork.org/sites/default/files/strategy_one_planet.pdf
21	Triple Wins for Sustainable Development: Case Studies of Sustainable Development in Action	2012	United Nations Development Programme	Published document	https://www.undp.org/content/dam/undp/library/Cross-Practice%20generic%20theme/Triple-Wins-for-Sustainable-Development-web.pdf
22	Prosperity: Inclusive Sustainable Growth	n.d.	United Nations Development Programme	Online content	https://www.undp.org/content/undp/en/home/2030-agenda-for-sustainable-development/prosperity/development-planning-and-

					inclusive-sustainable-growth.html
23	Progress report on the 10-year framework of programmes on sustainable consumption and production patterns (E/2018/60)	2018	United Nations Economic and Social Council	Published document	https://undocs.org/E/2018/60
24	Sustainable Consumption and Production Indicators for the future SDGs: UNEP Discussion Paper	2016	United Nations Environment Programme	Published document	https://sustainabledevelopment.un.org/content/documents/2301SCP%20indicators.pdf
25	International Year of Sustainable Tourism for Development, 2017 (A/RES/70/193)	2016	United Nations General Assembly	Published document	https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/193&Lang=E
26	Resolution adopted by the General Assembly on 27 July 2012 (A/RES/66/288*)	2012	United Nations General Assembly	Published document	https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E
27	The 10 Year Framework of Programmes on Sustainable Consumption and Production Patterns (10YFP): Interim progress report	2015	United Nations: 10YFP Secretariat on behalf of the 10YFP Board for the High-Level Political Forum	Published document	https://sustainabledevelopment.un.org/content/documents/1444HLPF_10YFP_2.pdf

Advertising (global car brands) (Figure 11).

No.	Text	Date	Author/origin	Type	URL if available
28	The revolutionary BMW electric vehicle	2018	BMW Parklane, London	Online content	https://www.bmwparklane.com/news/2018/march/the-bmw-i3-the-revolutionary-bmw-electric-car/
29	Electric cars Model types	N.d.	BMW UK Ltd. "BMW"	Online content	https://www.bmw.co.uk/model-types/electric
30	Sustainability and the Environment. Shaping the Future of BMW.	N.d.	BMW UK Ltd. "BMW"	Online content (blog)	https://discover.bmw.co.uk/article/sustainability
31	Nissan Electric Vehicles: Get on the Road to Success	N.d.	Nissan Motor GB Ltd. "Nissan"	Online content	https://www.nissan.co.uk/range/electric-cars.html
32	Simply amazing new Nissan leaf 100% Electric Car	N.d.	Nissan Motor GB Ltd. "Nissan"	Online content	https://www.nissan.co.uk/vehicles/new-vehicles/leaf.html

33	Electrify the World	N.d.	Nissan Motor GB Ltd. "Nissan"	Online content	https://www.nissan.co.uk/experience-nissan/electric-vehicle-leadership/electrify-the-world.html
34	Nissan Leaf. The Tech Advanced, 100% Electric Car	N.d.	Nissan Motor GB Ltd. "Nissan"	Online content	https://www.nissan.co.uk/vehicles/new-vehicles/leaf.html
35	IMAGE: Toyota Mirai	2018	Toyota (Europe) Plc.	Image hosted online	https://t1-cms-3.images.toyota-europe.com/toyotaone/gben/toyota-mirai-2018-exterior-tme-002-a-full-tcm-3060-1142852.jpg
36	Toyota Sustainable Mobility	N.d.	Toyota (GB) Plc. "Toyota"	Online content	https://www.toyota.co.uk/world-of-toyota/environment/sustainable-mobility
37	Toyota Environmental Challenge 2050	N.d.	Toyota (GB) Plc. "Toyota"	Online content	https://www.toyota.co.uk/world-of-toyota/environment/environmental-challenge-2050
38	Toyota Better Earth	N.d.	Toyota (GB) Plc. "Toyota"	Online content	https://www.toyota.co.uk/world-of-toyota/environment/better-earth
39	Toyota Hydrogen-Powered Mirai	N.d.	Toyota (GB) Plc. "Toyota"	Online content	https://www.toyota.co.uk/new-cars/new-mirai/
40	Toyota Mirai	N.d.	Toyota (GB) Plc. "Toyota"	Online content	https://www.toyota.co.uk/new-cars/new-mirai/meet-mirai#1
41	IMAGE: 2002 Toyota Prius Advert	2002	Toyota, cited in Dunn, 2010 (p.1)	Published document	https://www.maxdunn.com/storage/www.maxdunn.com/PMBA:%20Presidio%20MBA%20Home/Prius_Marketing_Case_Study.pdf

Chapter 5 Corpus - Figure 12

No.	Text	Date	Author/origin	Type	URL or source
1	"New era, shared future"	2019	China Daily	Online article	https://www.chinadaily.com.cn/a/201909/30/WS5d915576a310cf3e3556e3f8_2.html

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2	"Everyone responsible for creating a healthy ecological civilization"	2015	China Daily	Online article	http://www.chinadaily.com.cn/opinion/2015-05/07/content_20642952.htm
3	"Decoding Xi's Report" [at 19th CPC nat. cong.]	2017	China Daily	Online article/interactive multimedia	http://www.chinadaily.com.cn/china/h5/decodingxireport/index.html
4	"Ecological civilization shapes nation's future"	2015	China Daily	Online article	http://www.chinadaily.com.cn/opinion/2015-03/26/content_19912323.htm
5	"China's voices at Paris climate conference"	2015	China.org.cn	Online article	http://www.china.org.cn/environment/2015-12/13/content_37303299.htm
6	The 13th Five-Year Plan for Economic and Social Development of the People's Republic of China (2016-2020)	2016	Communist Party of China	Publication	Compilation and Translation Bureau, Central Committee of the Communist Party of China. Beijing: Central Compilation and Translation Press
7	16th CPC National Congress: Full text of resolution on CPC Central Committee report (1)	2002	Communist Party of China (hosted by CCTV)	Publication hosted online	http://www.cctv.com/english/special/STmeeting/SP10180102/20021114100516.shtml
8	16th CPC National Congress: Full text of resolution on CPC Central Committee report (2)	2002	Communist Party of China (hosted by CCTV)	Publication hosted online	http://www.cctv.com/english/special/STmeeting/SP10180102/20021114100518.shtml
9	16th CPC National Congress: Jiang Zemin remarks	2002	Communist Party of China (hosted by CCTV)	Publication hosted online	http://www.cctv.com/english/special/STmeeting/SP10180103/20021108100309.shtml
10	{Third Plenary Session 18th Cen. Com. CPC) Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform	2014	Communist Party of China (hosted by China.org.cn)	Online publication	www.china.org.cn/china/t hird_plenary_session/2014-01/16/content_31212602.htm
11	Full text of resolution on amendment to CPC Constitution	2017	Communist Party of China	Online publication	http://www.xinhuanet.com/english/2017-10/24/c_136702726.htm

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			(hosted by Xinhuanet)		
12	Opinions of the CPC Central Committee and the State Council on Further Promoting the Development of Ecological Civilization	2015	CPC Central Committee, hosted by Sino-German Environmental Partnership	Publication hosted online	https://environmental-partnership.org/wp-content/uploads/download-folder/Eco-Guidelines_rev_Eng.pdf
13	"Evolution of an Ecological Civilization"	2006	Pan Yue, (then) Vice Director of the State Environmental Protection Administration / Beijing Review	(Expert) Online article	http://www.bjreview.com.cn/expert/txt/2006-12/15/content_50890_2.htm
14	"Stick to Karl Marx's true path, Xi Jinping tells China's communists in speech to mark 200th birthday of 'greatest thinker of modern times'"	2018	South China Morning Post	Online article	https://www.scmp.com/news/china/policies-politics/article/2144716/stick-karl-marxs-true-path-xi-jinping-tells-chinas
15	Full Text: Integrated Reform Plan for Promoting Ecological Progress	2015	State Council of the PRC	Online publication	http://english.www.gov.cn/policies/latest_releases/2015/09/22/content_281475195492066.htm
16	"The promising land with 'greenest' blueprint"	2016	State Council of the PRC	Online publication	http://english.www.gov.cn/news/video/2016/04/18/content_281475330147459.htm
17	"China to establish ecological civilization demonstration zones in Jiangxi, Guizhou"	2017	State Council of the PRC	Online publication	http://english.www.gov.cn/policies/latest_releases/2017/10/04/content_281475898093070.htm
18	Full text of Xi Jinping's report at 19th CPC National Congress	2017	Xi Jinping (hosted by China Daily)	Online publication	http://www.chinadaily.com.cn/china/19thcpcnationalcongress/2017-11/04/content_34115212.htm
19	Xi leads ecological civilization	2017	Xinhua / China Daily	Online article	http://www.chinadaily.com.cn/china/2017-03/22/content_28634915.htm

20	"习近平：决胜全面建成小康社会 夺取新时代中国特色社会主义伟大胜利 ——在中国共产党第十九次全国代表大会上的报告" (Xi Jinping: Secure a Decisive Victory in Building a Moderately Prosperous Society in All Respects and Strive for the Great Success of Socialism with Chinese Characteristics for a New Era)	2017	Xinhuanet	Online article	http://www.xinhuanet.com/politics/19cpcnc/2017-10/27/c_1121867529.htm
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Chapter 6 Corpus – Figures 13 and 14

Ecological civilization in Chinese (non-BRI) external relations (Figure 13).

No.	Text	Date	Author/origin	Type	URL if available
1	"China ready to deliver promises in full: top climate envoy"	2017	China Climate Envoy comments at Xinhuanet	Online article	http://www.xinhuanet.com/english/2017-11/17/c_136758666.htm
2	"Ecological civilization shapes nation's future"	2015	China Daily	Online article	http://www.chinadaily.com.cn/opinion/2015-03/26/content_19912323.htm
3	"Beijing expo to showcase China's ecological civilization progress"	2019	China Daily	Online article	https://www.chinadaily.com.cn/a/201904/23/WS5cbecaf0a3104842260b7d30.html
4	[Vice-president] "Wang sees multilateralism as 'inevitable'"	2019	China Daily	Online article	https://www.chinadaily.com.cn/a/201912/02/WS5de44e3fa310cf3e3557b32b.html
5	"China's ecological renewal model an inspiration to the world: UNEP chief"	2018	Eric Solheim (UNEP) comments in Xinhua	Online article	https://www.focac.org/eng/zfgx_4/jmhzt/1561764.htm
6	EU-China Joint Statement on Climate Change	2015	EU and China / hosted European Council	Online publication	https://www.consilium.europa.eu/en/press/press-releases/2015/06/29/eu-china-climate-statement/
7	EU and China Partnership on Climate Change	2005	European Commission	Memo	Memo/05/298. Brussels: EU Commission.

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8	Press conference: Premier Li Keqiang: Nation plays important role in global affairs"	2015	Li Keqiang Press Conference, China Daily	Online article	http://www.chinadaily.com.cn/china/2015twosession/2015-03/15/content_19815455.htm
9	Remarks by H. E. Wang Qishan Vice President of the People's Republic of China at the Second Paris Peace Forum	2019	Ministry of Foreign Affairs of the PRC	Online publication	https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1715473.shtml
10	Canada-China Joint Statement on Climate Change and Clean Growth	2017	Prime Minister Justin Trudeau and Premier Li Keqiang	Online publication	https://pm.gc.ca/en/news/statements/2017/12/04/canada-china-joint-statement-climate-change-and-clean-growth
11	"China-India Ties Beyond Bilateral, Have Far-Reaching Strategic Significance: Chinese Envoy Sun Weidong"	2019	Sun Weidong (Chinese Envoy) comments in NDTV	Online article	https://www.ndtv.com/india-news/china-india-ties-beyond-bilateral-have-far-reaching-strategic-significance-chinese-envoy-sun-weidong-2119310
12	Theme announced for landmark 2020 UN Biodiversity Conference: "Ecological Civilization: Building a Shared Future for All Life on Earth"	2019	UN Conference on Biological Diversity	Online press release	https://www.cbd.int/doc/press/2019/pr-2019-09-05-cop15-en.pdf
13	Zero Draft of the Post-2020 Global Biodiversity Framework	2020	UN Conference on Biological Diversity: Open-Ended Working Group on the post-2020 Global Biodiversity Framework (note by co-chairs)	Online publication	https://www.cbd.int/doc/c/cf51/57c8/0908ef199af5bfe2e236009e/wg2020-02-03-en.pdf
14	Outcomes From the UNEP FI 2013 Global Roundtable. Financing the future we want: China Emerging Markets & the World Economy	2013	UNEP Finance Initiative (Global Roundtable 2013)	Online publication	https://www.unepfi.org/grt/2013/wp-content/uploads/2013/12/GRT_Outcomes.pdf
15	China's Solution: Ecological Civilization and the Green Economy	2013	UNEP Finance Initiative (Global Roundtable	Online publication (agenda)	https://www.unepfi.org/grt/2013/programmes/ecological-civilization-and-the-green-economy/

			2013: moderated session)		
16	Introduction to Green Economy: UNEP Governing Council Decision (27/8)	2013	UNEP Governing Council	Online publication	https://europa.eu/capacity4dev/file/18081/download?token=86Lblv_w
17	Building an ecological civilization: Theme for 2020 UN Biodiversity Conference announced	2019	UNEP World Conservation Monitoring Centre	Online article	https://www.unep-wcmc.org/news/building-an-ecological-civilization--theme-for-2020-un-biodiversity-conference-announced
18	Remarks by H. E. Wang Qishan Vice President of the People's Republic of China At the Second Paris Peace Forum	2019	Wang Qishan speech / text at PRC embassy, UK	Online publication	http://www.chinese-embassy.org.uk/eng/zgyw/t1715473.htm
19	"China ready to deliver promises in full: top climate envoy"	2017	Xhuanet	Online article	http://www.xinhuanet.com/english/2017-11/17/c_136758666.htm
20	(Speech) Towards Win-Win Partnership for Sustainable Development	2015	Xi Jinping (hosted at UN)	Online publication	https://sustainabledevelopment.un.org/content/documents/20548china.pdf

Ecological civilization in the Belt and Road Initiative (BRI) (Figure 14).

No.	Text	Date	Author/origin	Type	URL if available
21	"Belt and Road Initiative can be win-win, says Australia's Northern Territory chief minister"	2019	Chief Minister Northern Territories, Australia comments / Xinhuanet	Online article	http://www.xinhuanet.com/english/2019-10/15/c_138472704.htm
22	Special Policy Study on Green Belt and Road and 2030 Agenda for Sustainable Development	2018	China Council for International Cooperation on Environment and Development	Online discussion paper	https://www.iisd.org/sites/default/files/publications/CCICED/engagement/2018/green-belt-and-road-and-2030-agenda.pdf
23	"EU's focus on cooperation not conflict"	2019	China Daily	Online article	http://global.chinadaily.com.cn/a/201910/11/WS5d9fcbeca310cf3e3556fce4.html
24	"UN chief praises Belt and Road Initiative"	2018	China Daily	Online article	http://www.chinadaily.com.cn/a/201806/14/WS5b228151a310010f8f59d08c.html

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25	Speech: Belt and Road Initiative: Strategies to Deliver in the Next Phase	2018	Christine Lagarde, managing director IMF / IMF-PBC Conference, Beijing	Online publication	https://www.imf.org/en/News/Articles/2018/04/11/sp041218-belt-and-road-initiative-strategies-to-deliver-in-the-next-phase
26	Wang Yi Holds Talks with Minister of Foreign and European Affairs Miroslav Lajčák of Slovakia	2019	Embassy of the People's Republic of China in the United Kingdom of Great Britain and Northern Ireland	Online statement	http://www.chinese-embassy.org.uk/eng/zgyw/t1680591.htm
27	"China's Belt and Road initiative to spur green, resilient growth in Africa: expert"	2017	Environment Working Group, EU Chamber of Commerce comments in Forum on China-Africa Cooperation	Online article	https://www.focac.org/eng/zfzs_1/t1518343.htm
28	"Digital Silk Road on path to sustainable development: expert"	2017	Expert interview with Forum on China-Africa Cooperation	Online article	https://www.focac.org/eng/zfgx_4/jmhzt1490785.htm
29	"Interview: BRI leads global battle against environmental challenges: conservationist"	2019	Interview: Jean-Paul Paddock, Executive Director for Network Development at WWF / Xinhuanet	Online article	http://www.xinhuanet.com/english/2019-04/10/c_137965745.htm
30	The Belt and Road Ecological and Environmental Cooperation Plan	2017	Ministry of Ecology and Environment of the PRC	Online publication	http://english.mee.gov.cn/Resources/Policies/policies/Frameworkp1/201706/t20170628_416869.shtml
31	The Belt and Road Ecological and Environmental Cooperation Plan	2017	Ministry of Ecology and Environment of the PRC	Online publication	http://english.mee.gov.cn/Resources/Policies/policies/Frameworkp1/201706/t20170628_416869.shtml

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32	B&R Initiative: Not a solo song, but a chorus	2017	State Council of the PRC (English language site)	Online multimedia	http://english.www.gov.cn/news/video/2017/05/08/content_281475648982893.htm
33	Strengthening national policy capacity for jointly building the Belt and Road towards the Sustainable Development Goals	2017	UN Department of Economic and Social Affairs (paid for by UN Peace and Development Trust Fund)	Online publication	https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/2017_cdas_belta_roadb.pdf
34	"China's Belt and Road initiatives not solo, but symphony"	2015	Wang Yi, PRC Foreign Minister comments in China Daily USA	Online article	http://usa.chinadaily.com.cn/us/2015-03/08/content_19752472.htm
35	Belt and Road Economics: Opportunities and Risks of Transport Corridors	2019	World Bank Group	Online publication	https://openknowledge.worldbank.org/bitstream/handle/10986/31878/9781464813924.pdf
36	Who Wins, Who Loses? Understanding the Spatially Differentiated Effects of the Belt and Road Initiative	2019	World Bank Group	Online publication	http://documents1.worldbank.org/curated/en/292161554727963020/pdf/Who-Wins-Who-Loses-Understanding-the-Spatially-Differentiated-Effects-of-the-Belt-and-Road-Initiative.pdf
37	The Belt and Road Initiative Economic, Poverty and Environmental Impacts	2019	World Bank Group	Online publication	http://documents1.worldbank.org/curated/en/126471554923176405/pdf/The-Belt-and-Road-Initiative-Economic-Poverty-and-Environmental-Impacts.pdf
38	Reducing Environmental Risks from Belt and Road Initiative Investments in Transportation Infrastructure	2019	World Bank Group	Online publication	http://documents1.worldbank.org/curated/en/700631548446492003/pdf/WPS8718.pdf
39	The Belt and Road Initiative: WWF Recommendations and Spatial Analysis	2017	WWF	Online publication	https://awsassets.panda.org/downloads/the_belt_and_road_initiative_wwf_recommendations_and_spatial_analysis_may_2017.pdf
40	Remarks by H.E. Xi Jinping President of the People's Republic of China At the Press Conference of The Second Belt	2019	Xi Jinping / Belt and Road Forum	Online publication	http://www.beltandroadforum.org/english/n100/2019/0429/c22-1397.html

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	and Road Forum for International Cooperation				
41	Full text of President Xi's speech at opening of Belt and Road forum	2017	Xi Jinping / Global Times (China)	Online publication	http://www.globaltimes.cn/content/1046925.shtml
42	"Initiative on Belt and Road digital economy cooperation launched"	2017	Xinhuanet	Online article	http://www.xinhuanet.com/english/2017-12/04/c_136797807.htm
43	"Economic Watch: Key forum to rally support for Belt and Road Initiative "	2017	Xinhuanet	Online article	http://www.xinhuanet.com/english/2017-04/18/c_136218567.htm
44	Greening the Belt and Road Projects in Central Asia: A Visual Synthesis	2019	Zoï Environment Network / Federal Office for the Environment, Swiss Confederation	Online publication	https://zoinet.org/wp-content/uploads/2018/01/BR-Layout-WEB.pdf

Appendix A

Section IX of Xi Jinping's address delivered at the 19th National Congress of the Communist Party of China, 18 October 2017.

Full text available at China Daily (2017)

(URL: http://www.chinadaily.com.cn/china/19thcpcnationalcongress/2017-11/04/content_34115212.htm)

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IX. Speeding up Reform of the System for Developing an Ecological Civilization, and Building a Beautiful China

Man and nature form a community of life; we, as human beings, must respect nature, follow its ways, and protect it. Only by observing the laws of nature can mankind avoid costly blunders in its exploitation. Any harm we inflict on nature will eventually return to haunt us. This is a reality we have to face.

The modernization that we pursue is one characterized by harmonious coexistence between man and nature. In addition to creating more material and cultural wealth to meet people's ever-increasing needs for a better life, we need also to provide more quality ecological goods to meet people's ever-growing demands for a beautiful environment. We should, acting on the principles of prioritizing resource conservation and environmental protection and letting nature restore itself, develop spatial layouts, industrial structures, and ways of work and life that help conserve resources and protect the environment. With this, we can restore the serenity, harmony, and beauty of nature.

1. Promoting green development

We will step up efforts to establish a legal and policy framework that promotes green production and consumption, and promote a sound economic structure that facilitates green, low-carbon, and circular development. We will create a market-based system for green technology innovation, develop green finance, and spur the development of energy-saving and environmental protection industries as well as clean production and clean energy industries. We will promote a revolution in energy production and consumption, and build an energy sector that is clean, low-carbon, safe, and efficient.

We will encourage conservation across the board and promote recycling, take action to get everyone conserving water, cut consumption of energy and materials, and establish linkages between the circular use of resources and

materials in industrial production and in everyday life. We encourage simple, moderate, green, and low-carbon ways of life, and oppose extravagance and excessive consumption. We will launch initiatives to make Party and government offices do better when it comes to conservation, and develop eco-friendly families, schools, communities, and transport services.

2. Solving prominent environmental problems

We will get everyone involved in improving the environment and address environmental issues at the root. We will continue our campaign to prevent and control air pollution to make our skies blue again. We will speed up prevention and control of water pollution, and take comprehensive measures to improve river basins and offshore areas. We will strengthen the control of soil pollution and the restoration of polluted soil, intensify the prevention and control of agricultural pollution from non-point sources, and take measures to improve rural living environments. We will improve the treatment of solid waste and garbage.

We will enforce stricter pollutants discharge standards and see to it that polluters are held accountable. We will improve our systems for credibility assessment based on environmental protection performance, for mandatory release of environmental information, and for imposing severe punishment for environmental violations. We will establish an environmental governance system in which government takes the lead, enterprises assume main responsibility, and social organizations and the public also participate. We will get actively involved in global environmental governance and fulfill our commitments on emissions reduction.

3. Intensifying the protection of ecosystems

We will carry out major projects to protect and restore key ecosystems, improve the system of shields for ecological security, and develop ecological corridors and biodiversity protection networks, so as to strengthen the quality and stability of our ecosystems. We will complete work on drawing redlines for protecting the ecosystems, designating permanent basic cropland, and delineating boundaries for urban development.

We will promote afforestation, take comprehensive steps to control desertification, stony deserts, and soil erosion, strengthen wetland conservation and restoration, and better prevent and control geological disasters. We will improve the system for protecting natural forests, and turn more marginal farmland into forests and grasslands. We will rigorously protect farmland and expand trials in crop rotation and keeping land fallow. We will improve systems for regeneration of croplands, grasslands, forests, rivers, and lakes, and set up diversified market-based mechanisms for ecological compensation.

4. Reforming the environmental regulation system

We will strengthen overall planning, organization, and leadership for building an ecological civilization. We will establish regulatory agencies to manage state-owned natural resource assets and monitor natural ecosystems, and improve environmental management systems. These agencies will, in a unified way, perform the duties of the owner of public-owned natural resource assets, the duties of regulating the use of all territorial space and protecting and restoring ecosystems, and the duties of monitoring the discharge of all pollutants in urban and rural areas and conducting administrative law enforcement.

We will establish systems for developing and protecting territorial space, improve supporting policies on functional zones, and develop a nature reserves system composed mainly of national parks. We will take tough steps to stop and punish all activities that damage the environment.

Comrades,

What we are doing today to build an ecological civilization will benefit generations to come. We should have a strong commitment to socialist ecological civilization and work to develop a new model of modernization with humans developing in harmony with nature. We must do our generation's share to protect the environment.

Appendix B

Full text of the Resolution of the 19th National Congress of the Communist Party of China on the Revised Constitution of the Communist Party of China. Retrieved from *Xinhua* at http://www.xinhuanet.com/english/2017-10/24/c_136702726.htm

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Resolution of the 19th National Congress of the Communist Party of China on the Revised Constitution of the Communist Party of China

October 24, 2017

The 19th National Congress of the Communist Party of China deliberated on and unanimously adopted the revised Constitution of the Communist Party of China proposed by the 18th Party Central Committee and decided that it shall come into effect as of the date of adoption.

The Congress notes that since the Party's 18th National Congress, Chinese Communists, with Comrade Xi Jinping as their chief representative, in response to contemporary developments and by integrating theory with practice, have systematically addressed the major question of our times—what kind of socialism with Chinese characteristics the new era requires us to uphold and develop and how we should uphold and develop it, thus giving shape to Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. The Thought is a continuation and development of Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, the Theory of Three Represents, and the Scientific Outlook on Development. It is the latest achievement in adapting Marxism to the Chinese context, a crystallization of the practical experience and collective wisdom of the Party and the people, an important component of the theoretical system of socialism with Chinese characteristics, and a guide to action for the entire Party and all the Chinese people to strive for the great rejuvenation of the Chinese nation, and must be upheld long term and constantly developed. Under the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, the Communist Party of China has led the Chinese people of all ethnic groups in a concerted effort to carry out a great struggle, develop a great project, advance a great cause, and realize a great dream, ushering in a new era of socialism with Chinese characteristics.

The Congress unanimously agrees that, Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, in addition to Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, the Theory of Three Represents, and the Scientific Outlook on Development, shall constitute the guides to action of

the Party in the Party Constitution. The Congress urges all Party members to use the Thought to achieve unity in thinking and action, be more purposeful and determined in studying and applying it, and put the Thought into action throughout the drive toward China's socialist modernization and in every dimension of Party building.

The Congress affirms that the culture of socialism with Chinese characteristics is a key part of socialism with Chinese characteristics and a powerful source of strength that inspires the entire Party and the Chinese people of all ethnic groups to forge ahead courageously. The Congress approves the incorporation of the culture of socialism with Chinese characteristics into the Party Constitution, along with the path of socialism with Chinese characteristics, the theoretical system of socialism with Chinese characteristics, and the system of socialism with Chinese characteristics. This addition will help all Party members deepen their understanding of socialism with Chinese characteristics and fully grasp its implications. The Congress stresses that all Party members must cherish deeply, uphold long term, and continue to develop this path, this theoretical system, this socialist system, and this culture, which the Party has developed through great hardship; hold high the great banner of socialism with Chinese characteristics; have firm confidence in the path, theory, system, and culture of socialism with Chinese characteristics; and implement the Party's basic theory, basic line, and basic policy.

The Congress holds that national rejuvenation has been the greatest dream of the Chinese people since modern times began, and that it is a solemn commitment our Party has made to our people and to history. The Congress endorses the inclusion of the two centenary goals and the Chinese Dream of national rejuvenation into the Party Constitution.

The Congress holds that a major political conclusion is drawn in the political report to the 19th Party Congress that the principal contradiction facing Chinese society has evolved and is now that between the people's ever-growing needs for a better life and unbalanced and inadequate development; it reflects the realities of the development of Chinese society, and serves as an important basis on which we formulate major policies and long-term strategies for the Party and the country. The Party Constitution is revised accordingly to provide important guidance for us to better understand the new historic juncture in China's development and its particular features in the current stage and to further advance the cause of the Party and the country.

The Congress holds that statements on our people-centered philosophy of development; on innovative, coordinated, green, and open development that is for everyone; on coordinated efforts to finish building a moderately prosperous society in all respects, comprehensively deepen reform, fully advance law-based governance, and strengthen Party self-governance in every respect; and on all-out efforts to build a great modern socialist country, represent the

ultimate purpose, vision, overall strategy, and overarching goal of the Party in upholding and developing socialism with Chinese characteristics.

Also incorporated into the Party Constitution are statements on the need to achieve better quality and more efficient, equitable, and sustainable development, to improve and develop the system of socialism with Chinese characteristics, to modernize China's system and capacity for governance, and to pursue reform in a more systematic, holistic, and coordinated way. This will help all Party members closely follow, in both thinking and action, the well-conceived assessment and strategic plans of the Central Committee, uphold and put into practice the new development philosophy, and continue to break new ground in reform and development.

The Congress holds that since our 18th National Congress, the Party Central Committee with Comrade Xi Jinping at the core has developed new ideas, new thinking, and new strategies for promoting economic, political, cultural, social, and ecological advancement. The Congress agrees to add to the Party Constitution the following statements: we shall give play to the decisive role of market forces in resource allocation and ensure the government plays its role better; advance supply-side structural reform; establish a system of socialist rule of law with Chinese characteristics; advance extensive, multilevel, and institutionalized development of consultative democracy; nurture and practice core socialist values; promote the creative evolution and development of fine traditional Chinese culture; carry forward our revolutionary culture; develop an advanced socialist culture; enhance our country's cultural soft power; hold firmly the leading position in ideological work; help our people gain an increasingly stronger sense of fulfillment; strengthen and develop new approaches to social governance; pursue a holistic approach to national security; and fully understand that lucid waters and lush mountains are invaluable assets.

These statements are of great importance in helping all Party members more consciously and determinedly implement the Party's basic theory, basic line, and basic policy, and coordinate the implementation of the five-sphere integrated plan.

The Congress notes that since the Party's 18th National Congress, Comrade Xi Jinping has set forth a series of important ideas and viewpoints on strengthening national defense and the armed forces, ethnic unity, "one country, two systems" and national reunification, the united front, and foreign affairs, charting the course for staying committed to the path of building strong armed forces with Chinese characteristics; for safeguarding and developing socialist ethnic relations featuring equality, unity, mutual assistance, and harmony; for promoting national reunification; and for building a community with a shared future for mankind.

The Congress agrees to include into the Party Constitution the following statements: The Communist Party of China shall uphold its absolute leadership over the People's Liberation Army and other people's armed forces; implement Xi Jinping's thinking on strengthening the military; strengthen the development of the People's Liberation Army by enhancing its political loyalty, strengthening it through reform and technology, and running it in accordance with the law; build people's forces that obey the Party's command, can fight and win, and maintain excellent conduct; ensure that the People's Liberation Army accomplishes its missions and tasks in the new era; foster a strong sense of community for the Chinese nation; uphold justice while pursuing shared interests; work to build a community with a shared future for mankind; follow the principle of achieving shared growth through discussion and collaboration; and pursue the Belt and Road Initiative.

The inclusion of these statements will help ensure the Party's absolute leadership over the people's armed forces, modernize national defense and the military, promote ethnic unity, and develop an open economy of higher standards.

The Congress holds that since its 18th National Congress, the Party has made steady progress in exercising full and rigorous governance over the Party, taken all-around measures to explore the strengthening of Party building, and gained abundant successful experience and achieved major outcomes, which must be included into the Party Constitution in a timely manner and therefore become the common will and rule of the whole Party.

It is affirmed at the Party's 19th National Congress that the Party must firmly exercise self-supervision and practice strict self-governance in every respect; strengthen the Party's long-term governance capacity and its advanced nature and purity; and take enhancing its political building as the overarching principle and make comprehensive efforts to ensure that the Party's political work is stressed, ideology is strengthened, organizations are consolidated, conduct is improved, discipline is maintained, institutional development is always emphasized, and the fight against corruption keeps going. The Congress agrees to add the above statements to the Party Constitution.

Also included into the Party Constitution are: The Party must constantly strengthen its ability to purify, improve, reform, and excel itself; use Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era to achieve unity in thinking and action; keep firmly in mind the need to maintain political integrity, think in big-picture terms, uphold the leadership core, and keep in alignment, and firmly uphold the authority and centralized, unified leadership of the Central Committee with Comrade Xi Jinping at the core; strengthen and regulate political activities within the Party; make intraparty political activities more politically oriented, up-to-date, principled, and effective; cultivate a positive and healthy intraparty political culture; and foster a sound political

ecosystem featuring honesty and integrity within the Party. Firmness in exercising strict self-supervision and self-governance is included into the Party Constitution as a fundamental requirement the Party must work with firm resolve to meet in building itself.

The incorporation of these statements will ensure the Party has a clearer goal and a more complete plan for building itself. They will help the whole Party advance Party building with more well-conceived ways of thinking and more effective measures, so as to continuously improve the quality of Party building and ensure the Party is always full of vigor and vitality.

The Congress holds that the leadership of the Communist Party of China is the most essential attribute of socialism with Chinese characteristics, and the greatest strength of this system; the Party exercises overall leadership over all areas of endeavor in every part of the country. The Congress agrees to add this major political principle to the Party Constitution, which will help heighten the Party consciousness of every Party member, and ensure unity of thinking, political solidarity and concerted action of the whole Party. It will also help enhance the Party's ability to innovate, power to unite, and energy to fight; ensure the Party always provides overall leadership and coordinates the efforts of all involved; and offer the fundamental political guarantee for all areas of work of the Party and the country.

The Congress notes that in view of the successful experience gained in Party work and Party building since the 18th Party Congress and in compliance with the revisions to the General Program, appropriate revisions to some articles of the Party Constitution are necessary.

To conscientiously study Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, to consciously observe the Party's political discipline and rules, to have the courage to reveal and correct any statements and actions violating the Party's principles, to lead the way in practicing core socialist values, and to advocate traditional virtues of the Chinese nation, are obligations of Party members. Upholding political integrity as the primary criterion is the major principle that must be adhered to in admitting new Party members.

To ensure the full coverage of discipline inspection and carry out inspections at central, city (prefecture), and county levels is practical experience gained in the Party's discipline inspection work; it must be upheld and developed.

To clarify that Chairperson of the Central Military Commission assumes overall responsibility over the work of the Commission and that the Central Military Commission is responsible for Party work and political work in the armed forces, complies with the realistic requirement to ensure the Central Military

Commission fulfills its responsibility for Party self-supervision and self-governance after the military reform.

To fully reflect the achievements of Party work and Party building since the 18th Party Congress, revisions are made to: adjust the term of office of general Party branch committees and Party branch committees; regularize and institutionalize the requirement for all Party members to study the Party Constitution, Party regulations, and General Secretary Xi Jinping's major policy addresses and to meet Party standards; define the status and role of Party organizations in state-owned enterprises; elaborate on the functions and responsibilities of primary-level Party organizations in social organizations; explicate the responsibilities of primary-level Party organizations in offices of the Party or the state at every level; demonstrate the position and functions of Party branches; set out new criteria and requirements for selecting officials; and adjust and elaborate on provisions related to the Party discipline and Party organs for discipline inspection.

These revisions will help all Party members grasp the guiding ideology of the Party and keep up with the times, align themselves with Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era and use it to guide practice and advance work, see primary-level Party organizations become politically stronger, and move further forward with the full and rigorous governance over the Party.

The Congress urges Party organizations at all levels and all Party members to, under the firm leadership of the Party Central Committee with Comrade Xi Jinping at the core, hold high the great banner of socialism with Chinese characteristics, follow the guidance of Marxism-Leninism, Mao Zedong Thought, Deng Xiaoping Theory, the Theory of Three Represents, the Scientific Outlook on Development, and Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, and more purposefully study, observe, apply, and uphold the Party Constitution. The Congress urges the entire Party to uphold and strengthen the overall leadership of the Party, ensure the Party's strict self-supervision and strict self-governance in every respect, and keep working to secure a decisive victory in finishing building a moderately prosperous society in all respects, to strive for the great success of socialism with Chinese characteristics for a new era, to realize the Chinese Dream of national rejuvenation, and to see our people fulfill their aspirations for a better life.

Appendix C

Concordance tables supplementing discourse analysis in Chapter Five.

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Fig. 15: Table to show concordance of key word 'sustainable development' in left/right context. Corpus: China's 13th 5-Year Plan. Analysis by author.

Left	Key word(s)	Right
, and speed up transformation of the growth model to achieve higher quality, more efficient, more equitable, and more	sustainable development	. • Continue to deepen reform. Reform is a powerful force for development. In line with the chief objectives of improving
years are as follows: • Maintain a medium-high rate of growth While working to achieve more balanced, inclusive, and	sustainable development	, we need to ensure that China's 2010 GDP and per capita personal income double by 2020, that major economic indicators
We need to uphold the fundamental state policy of conserving resources and protecting the environment as we pursue	sustainable development	, and keep to a civilized development path that ensures increased levels of production, better living standards, and
society, coordinating development between rural and urban areas and between different regions, and bolstering	sustainable development	. We will launch investment programs that are of overall, strategic, and fundamental importance. Section 3 New Export
production zones; 3 strategic ecological security based on the two ecological shields and three ecological belts;	sustainable development	of maritime space. We will ensure an appropriate intensity of development of China's territorial space and increase

Fig. 16: Table to show concordance of key word 'consumer' / 'consumers' in left/right context. Corpus: People's Republic of China's 13th 5-Year Plan, official English translation. Analysis by author.

Left	Key word	Right
. The value-added of the tertiary industry accounted for a larger share of GDP than that of the secondary industry.	Consumer	spending continued to rise. Disparity between rural and urban areas and between regions has been narrowing. By 2015
as well as the crowdsourcing of manufacturing operations and maintenance services, knowledge, content, and	consumer	services to give impetus to public participation in the division of labor in online production and distribution. We
, we will work to improve the environment in which the potential of consumption is unleashed, better satisfy and create	consumer	demand through improved and innovative supply, and constantly strengthen the fundamental role that consumption
the fundamental role that consumption plays in fueling [sic] economic growth. We will channel great energy into expanding	consumer	spending by increasing consumer buying power, improving consumer expectations, and tapping rural potential for

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plays in fueling [sic] economic growth. We will channel great energy into expanding consumer spending by increasing	consumer	buying power, improving consumer expectations, and tapping rural potential for consumption. We will focus on
. We will channel great energy into expanding consumer spending by increasing consumer buying power, improving	consumer	expectations, and tapping rural potential for consumption. We will focus on expanding consumption of services to
new models of consumption, such as the integration of online and offline consumption. We will see that the quality of	consumer	goods is improved, strengthen the protection of consumer rights and interests, and give full play to the role of
and offline consumption. We will see that the quality of consumer goods is improved, strengthen the protection of	consumer	rights and interests, and give full play to the role of consumer associations in order to create convenient,
goods is improved, strengthen the protection of consumer rights and interests, and give full play to the role of	consumer	associations in order to create convenient, worry-free environments for consumption. We will actively work to
behavior and for conduct oversight that genuinely protects the legitimate rights and interests of financial	consumers	, so as to achieve oversight that covers every aspect of financial risks. We will improve the management system for
system. 5. Rule of law in the financial sector § Improve systems that protect the rights and interests of financial	consumers	; § Put an end to implicit guaranties and inflexible yields, and deal with credit violators in accordance with the law; §
protection, thereby helping key manufacturing sectors move into the medium-high end. We will improve the supply of	consumer	goods. We will encourage mergers and acquisitions of enterprises so as to put in place a highly concentrated,
environment, so as to help producer services move both toward specialization and higher up the value chain, and help	consumer	services become more refined and increase in quality. Section 1 Specialization in Producer Services With the aim of
more in line with international standards so as to increase their international competitiveness. Section 2 Better	Consumer	Services We will accelerate the development of service sectors such as education and training, health and elderly
, working to ensure they become more specialized, scaled-up, and online-based. We will encourage integration in the	consumer	service sector and the growth of customized services to meet personalized demands. We will support service sector
their levels of professionalization and specialization. We will put in place an action plan to ensure quality	consumer	services, spread the use of identifiers of quality service commitments along with systems for their management, and
comprehensive improvements in water-saving equipment and technologies. We will tighten oversight over major water	consumers	, and encourage the reuse of water as well as the differentiated use of water according to its quality. We will establish
industries; § Support the demonstration of comprehensive energy efficiency improvement efforts by 500 major energy	consumers	; § Organize the implementation of projects, such as those to improve energy systems, upgrade the energy-efficient
of seawater to meet the demand for water on islands; § Strengthen monitoring over the use of water by major water	consumers	. 3. Economical and intensive use of land designated for construction purposes § Improve inspection and evaluation
the import structure by importing a greater amount of advanced technology, advanced equipment, and high quality	consumer	goods. We will actively respond to foreign technical barriers to trade, improve early warnings of possible trade
income tax system based on both adjusted gross income and specific types of income. We will bring certain luxury	consumer	items and high-expenditure activities under the scope of excise tax. We will improve tax policies which encourage

Appendix D



CERTIFICATE OF TRANSLATION / 翻译证明

I, Naseem Jeewa, representing Bubbles Translation Services Ltd (Full Member of the Association of Translation Companies, membership number B15), hereby certify that the enclosed **SIMPLIFIED CHINESE** translations of the **DE MONTFORT UNIVERSITY LETTER dated 9 MAY 2017 and the STATEMENTS DOCUMENTS** are true and accurate translations of the **ENGLISH** versions and have been performed by a qualified translator.

本人, Naseem Jeewa, 代表 Bubbles Translation Services Ltd (翻译公司协会正式会员, 会员编号 B15) 特此证明: 随附的 2017 年 5 月 9 日的德蒙福特大学信函和声明文件的简体中文翻译是对英文版本的真实且准确的翻译, 且由合格的译员完成。

Signature / 签名:

Date / 日期:

1 June 2017 / 2017 年 6 月 1 日

Name / 姓名:

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