Nuclear heresy: environmentalism as implicit religion

By: Caroline McCalman

A thesis submitted in partial fulfilment of the requirements for the degree of

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Abstract | Nuclear heresy: environmentalism as implicit religion

This thesis is a discourse study of environmentalism in the UK. The research indicates how reframing environmental issues using religious concepts and language can deepen our understanding of people's relationship to the environment and environmentalism. The thesis suggests that this process of reframing may be important for the social sciences, by illuminating new ways to engage with and understand the controversies and debates at hand. The data supporting this reframing analysis was obtained through in-depth, semi-structured one-on-one interviews with individuals identified as being 'environmentally concerned' and was analysed first thematically, and then using the researcher's 'discourse toolkit'.

Nuclear power is treated as an *emblematic issue* to provide a concrete focus for a topic prone to abstraction; viewing environmentalism as a form of religion encouraged interdisciplinary working. By developing ideas from Bailey's *implicit religion* (Bailey, 1997) I provide a language for environmentalism-as-religion, wherein pro-nuclear heretics challenge an anti-nuclear orthodoxy.

Linking environmental discourses to enduring cosmologies shows that 'superficial' conflict over climate change mitigation is acrimonious precisely *because* it deals with manifestations of deeper convictions on the human-nature relationship. Updated versions of existing 'nuclear discourses' are analysed in combination with environmental-religious discourses, showing that ideas about public understanding and acceptance of nuclear power, even when rebranded as 'sustainable', are still best understood in terms of ancient cosmological ideas about the 'natural' or 'proper' way for humanity to approach and interact with the environment. Key environmental discourses were overtly religious and or even direct reformulations of Christian *mythoi*, with important implications for the movement's stagnation and inherent contradictions. This thesis argues for the social sciences to take religion seriously, as the religious impulse – both implicit and explicit – is an important social phenomenon which shows no sign of fading and remains an important factor in modern society.

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Chapter 1 | Introduction

> The earth shall be utterly laid waste and utterly despoiled; for the LORD has spoken this word. The earth dries up and withers, the world languishes and withers; the heavens languish together with the earth. The earth lies polluted under its inhabitants; for they have transgressed laws, violated the statutes, broken the everlasting covenant. (Isa 24:3-5 NSRV)

1.1 Foreword

In 2008 the UK government signalled its intention to take part in what was then optimistically being called an international "nuclear renaissance" (e.g., Nelson, 2010) with the publication of a White Paper titled *Meeting the Energy Challenge: A White Paper on Energy* (BERR, 2008). In the Foreword to the paper, nuclear power was described as having a "role to play" in the country's "future energy mix alongside other low carbon energy sources" (Ibid., p. 7). This rhetoric indicated a significant change in the way nuclear power was being marketed to the energy-consuming public. Such discursive change was diffuse and global: the authors of the 2008 White Paper were not alone in their suggestion there might be environmental reasons to promote nuclear power, but its inclusion in such a document meant the re-branding of nuclear had received official sanction. Then, in March 2011, the world was rocked by the Fukushima Daiichi disaster: a huge earthquake had occurred off the northeast coast of Japan, and the subsequent tsunami overwhelmed the seawall protecting a nuclear power station and the emergency generators meant to maintain its reactor cooling systems. The resulting nuclear meltdown and radiation release has had enormous and far-ranging ramifications not only for Japan, but for global debates on the merits – or lack thereof – of nuclear power.

Unsurprisingly, the incident bolstered anti-nuclear sentiment around the world (Kim *et al.,* 2013). However, in the UK (and elsewhere) there were some curiously anomalous responses which indicated that attitudes to nuclear power and its impact on the environment were undergoing fundamental changes. A 2014 report commissioned by the UK Energy Research Centre (UKERC) found that public attitudes in the UK towards nuclear power remained broadly the same before and after the Fukushima incident and noted a rather apathetic overall reaction to what was arguably the worst nuclear event in decades (Poortinga *et al.,* 2014). More shocking, however, was the immediate reaction in March 2011 of a noted environmental campaigner and journalist, George Monbiot. He indicated that, having been questioning his unwavering anti-nuclear position for a long time, the incident in Japan had convinced him that nuclear power was not as dangerous as

his lifetime of environmental concern had taught him. In fact, Fukushima helped him to "stop worrying and love nuclear power" (Monbiot, 2011a).

> "…there are no ideal solutions. Every energy technology carries a cost; so does the absence of energy technologies. Atomic energy has just been subjected to one of the harshest of possible tests, and the impact on people and the planet has been small. The crisis at Fukushima has converted me to the cause of nuclear power." (Monbiot, 2011b)

With this, Monbiot leapt into the nuclear fray. As expected, he was vilified by the environmental establishment: but Monbiot was also supported by a significant and growing percentage of pro-nuclear environmentalists. The resulting furore was, for many, the first indication that the environmental movement was facing serious resistance to its long-established dogma – that nuclear power is bad for the environment. Anti-nuclearism is such an entrenched position within environmentalism that to question it had become akin to heresy: hence why Monbiot was subjected to a modern-day equivalent of Galileo's trial by the Holy Office (later the Inquisition) of the Catholic Church. This time, however, the heretic emerged relatively unscathed: there was no recantation – and the lack thereof is profoundly significant for environmentalism and for this thesis, as it takes us to the crux of the matter.

On the surface, the division between pro- and anti-nuclear environmentalists appears to be merely methodological: in that, they have different preferences over how to protect or save the environment. Their goal is broadly the same. I argue in this thesis that those preferred methods for environmental protection – such as championing one energy technology over another – are, in fact, manifestations of deeply held convictions about how the world works and from which flow normative assumptions about the proper relationship between humanity and the environment. Religion has long been a key social structure regulating relationships between humanity, environment and the divine, enabling interpretation and understanding of both abstract and material phenomena. Religion provides the possibility for deeper analysis and understanding of environmental issues than the somewhat shallow binary conception of the human-environment relation that dominates both modern environmentalism and many other aspects of our social, political, cultural and economic lives. Thus, the recourse to religious metaphor, terminology and analogy in the previous paragraph is deliberate. Here, as indicated by the title of this thesis, environmentalism – the philosophy (or philosoph*ies*) of the environmental movement – is viewed as an implicit religion (see Chapter 2). The ideational role of nuclear power in this thesis is as an

emblematic issue (Hajer, 2006: 68) which enables the research to focus on otherwise very abstract notions of what the 'proper' place of humanity may be in relation to the environment.

More precisely, environmentalism is being viewed here as both *analogous to* religion and an *inheritor of* religion – specifically Western Christianity. This thesis strives to highlight how approaching the analysis of environmental issues with the logic, metaphors and terminology of religion firmly in mind can generate new understandings and pave the way for the linking-up of literatures which deal with parallel issues, but which are currently unaware of each other. It can also make possible the reinstating of religion as a relevant and rational aspect of our modern lives which requires the serious attention of a broader range of academic disciplines than is currently the norm.

1.2 Key Concepts

Throughout the thesis I will be using a range of concepts and terms associated with environmental thought, postmodern theory, and religion. I introduce them here with minimal explanation to facilitate basic understanding so that the reader can follow the discussion hereafter. Most of these concepts and terms are heavily contested (see §2.2.2) and as such I make no claim that the definitions used here are the sole or best possible definitions, but they are meanings which are useful for the purposes of this project.

Discourse refers to a "specialist system of knowledge embodied in a particular language, a kind of mind-set that structures understanding and behaviour" (Heywood, 2000: 87). Discourse analysis is a product of the postmodernist turn, as it "recognises that meaning is not implicit in social objects and practices but is historically and politically constructed, and that it can uncover social antagonisms and struggles for hegemony that conventional theory ignores" (ibid.: 87-88). Discourse analysis is heavily indebted to the work of Michel Foucault, who brought the term into modern philosophy as an analytical tool. Many different types and methods of discourse analysis have since been developed in various disciplines.

Cosmology is a term used across a wide variety of disciplines – e.g., religion, philosophy, mythology, and even physics and astrophysics – but the basic point is always the same. Cosmology is to do with the study and contemplation of the universe: theory of origin (how the universe/world came to be), theory of the development/evolution of the universe/world, and what the fate and purpose of it might be. As humans are the ones doing the contemplating, it invariably also involves questioning how humanity fits into that universal journey. As such, any religion will have a cosmology as a foundational meta-narrative from which all other aspects of the associated worldview flow (see Cheng, 2013: 39).

Environmentalism is a philosophy of human-environment relations. It concerns, generally, "The ways in which the relationships between people and their surroundings are understood and acted upon" (Hinchcliffe, 2009: 204). It is inextricable from social, cultural, economic and political norms, and thus differs greatly between geographies and across time, allowing authors to speak of different 'environmentalisms'. In common parlance, however, the term environmentalism is often liked with the **environmental movement** and associated with "the activities of most environmental pressure groups and (…) a stance that may be adopted by a range of political parties" (Heywood, 2000: 55). The great variation of 'environmentalisms', however, has led to internal "warfare" (Pepper, 1984: 13) within the environmental movement, resulting in "a deeply heterogeneous movement that has proven to be, in the best of times, a broad coalition of caring engaged critics and thoughtful visionaries of thoughtful futures and, in the worst, a deeply divided, exclusionary, and even reactionary force for the reproduction of elitist and racist fears" (Kosek, 2009: 202). "[T]he movement's most powerful contemporary expressions can be found in international grassroots communities and organizations that challenge the violent effects of early twentieth-century globalization" such as Greenpeace or Friends of the Earth (ibid.). The relationship between environmentalism and the environmental movement is one of the key issues discussed in this thesis, as is the linked issue of **environmentalist** identity.

Implicit religion denotes a social phenomenon which either functions as or structures its actors in a similar fashion to a religion, but which is not commonly viewed as such. Examples may include Marxism, capitalism or, as in the case of this thesis, environmentalism (see Bailey, 2012). Being able to view such social phenomena in this manner requires an 'academic' rather than a 'lay' definition of religion (see following paragraph).

Religion is one of the most contested concepts discussed in this thesis, as it has become conflated with its illustrative instances, many of which have histories indelibly linked to warfare, corruption, social repression and colonialism. Those whose business it is to think about definitions of religion – theologians, academics concerned with religious issues etc. – tend to gravitate towards definitions that are surprisingly broad, all-encompassing and sometimes not even obviously 'religious' from an everyday, lay perspective. Stripped down to its purposive basics, religion is "a belief that the world has an unseen order, coupled with the desire to live in harmony with that order" (Garreau, 2010: p. 11; drawing on James, 1902).

The relationships between these contested concepts are complex and vary from one discipline or author to another. To clarify their relationship for now, I relate these terms in the following

manner: environmentalism is an (implicit) religion; cosmology is a foundational element of religion, and cosmology functions as a foundational discourse.

1.3 The Research

1.3.1 Research aim and Premises

There is a wealth of literature available on the both the past, present and future of environmentalism and associated issues of nuclear power. Most analyses do not acknowledge the inherent religiosity of environmentalism, resulting in a mass neglect of a wealth of deep complexity intrinsic to perspectives on the environment.[1] In contrast, this research is predicated on the notion that explanations of complex environmental attitudes should be based on analysis that acknowledges the religious roots of many assumptions about the environment and the proper place of humanity in relation to it. Given the paucity of similar explanations of environmentalism, it is my contention that the approach to such topics taken in this thesis is relatively unique and therefore has the potential to provide new and constructive understandings. Two observations underpin the research herein:

- That environmentalism is both analogous to and an inheritor of religion, meaning that to approach the analysis of this social phenomenon as a form of religion should result in interesting and useful conclusions which would not be as available or intelligible were more 'standard' approaches to be used (such as Social Movement Theory).
- That the rejection of nuclear power is a foundational tenet of orthodox environmentalism and as such may be viewed as a doctrine undergoing challenge.

Thus, this research aims to show the various ways a 'religious' analysis can improve understandings of the current and possible future states of environmentalism in the UK, using the emblematic issue of nuclear power as a means of focusing the research and analysis processes. The emblematic issue of nuclear power provides a concrete means by which to approach more abstract topics surrounding normative relations to the environment, providing a focus for conversation and a means of 'grounding' a semi-structured interview that is intelligible to the interviewee (Hajer, 2006: 68). Nuclear technologies are highly controversial for a range of well-established historical, social, political (both domestic and internationally), and economic reasons, and as such there is a high likelihood of being able to gather a great deal of very rich discursive data related to such a topic. The decision to pursue a 'religious' analysis reflects a personal preoccupation that I was gratified to see borne out in the literature and fieldwork. Initially I had viewed my tendency to see religion

[1] The only authors (that I have found) to have made a similar claim to those made in this thesis are Robert Nelson (R. H. Nelson, 2010), George Marshall (Marshall, 2015) and the historian William Cronon (Cronon, 2004).

shadowing most aspects of my research as a hangover from my Roman Catholic upbringing: now I have learnt to (critically) embrace that perspective on the world as a lens I can use to my advantage.

1.3.2 Justification of the research

Firstly, as mentioned above, this research is concerned to highlight the potential benefit of an analysis which highlights, rather than occludes, the religiosity inherent to environmental thought. As a broad result of the development and convergence of trends in religion, philosophy, natural science and what emerged as 'social science,' it has become increasingly unusual for academics outside of a few select disciplines to engage with religion constructively. The reasons why it has become *de rigueur* for the social sciences in particular to ignore religion (Grassie, 2008: 134), will be dealt with in Chapters 2 and 3 respectively. It is important to note at this early stage that this thesis is *not* concerned with proving the value of religion or, indeed, in proving whether environmentalism is a religion of sorts. Rather, I am seeking to show the value of taking religion *seriously* as a structure at work in society, affecting agents and influencing the discourses they reach for to make sense of the world.

Secondly, as the entire world lurches ever closer to cataclysmic and irreversible climate change, research such as this which focuses on people's deeper convictions regarding the proper relationship of humanity to the environment is timelier than ever. Since the beginning of modern environmental concern in the mid-1960s (Pepper, 1984: 16), there has been a steady increase in research on all aspects of environmental damage and attitudes to it, global recommendations, agreements and disagreements on ways to reduce or reverse the damage and similar. Yet despite such leaps forward in both knowledge of the problems and in terms of our abilities to address them, overall concern about the global environment continues to grow. Although some environmental battles have been won (environmental protection policies enshrined in law, recycling etc.) in other areas it seems that environmental concern and action are stagnating (Anderson, 2010). A fresh approach is needed – such as that attempted here through an in-depth analysis of how multiple discourses relating to the environment and environmentalism come together to explain 'ordinary people's' responses to both the climate crisis, and to the possibility of nuclear power being re-branded as a form of climate change mitigation.

More specifically, while the issue of new nuclear build has been somewhat overshadowed in the UK by broader economic and political issues, a governmental pro-nuclear stance has been retained despite changes in administration and the ongoing controversy surrounding the beleaguered Hinkley Point C project. Nuclear issues are, by their very nature, long-term in the extreme (see

Morton, 2013; Benford, 2000; Adam, 1990) and aiming for a better understanding of how people relate to these issues will always be a worthwhile goal.

Thirdly, environmentalism's inherent religiosity is under-researched. While there are numerous papers available on how explicit religions are incorporating elements of environmental concern into their liturgies or the effect of specific religious fervour on aspects of environmentalism (e.g. Reader, 2010), there seems to be very little work available which analyses the religious *content* of environmentalism (see discussion in Bartkowski & Swearingen, 1997). Only a very few have made explicit their acknowledgement of environmentalism's inherent religiosity (Crichton, 2010; R. H. Nelson, 2010; Cronon, 2004), and those authors who have studied environmentalism as a 'new social movement' seem to have also missed its religious functions and metaphors (e.g., Crossley, 2002; Eyerman & Jamison, 1991). Given what I perceive to be the obvious nature of this argument the glaring omission in the literature is extraordinary – but is partially explained by the reluctance of the social sciences to engage with theologies. Additionally, the perspective taken in this thesis has shown that there are some important literatures which scholars of environmental and nuclear issues could usefully incorporate into their own work, but which seem to have been bypassed because of their placement in those disciplines to which religion has been relegated by the academy. This thesis aims to highlight such useful literatures and bring them to the attention of the wider social science academy as well as, of course, making its own moderate contribution to the study of environmental implicit religion.

1.3.3 Approach to the research

The principal research approach utilised in this thesis is discourse analysis – specifically, a discourse analysis founded on a Foucauldian notion of discourse, as operationalised in the work of Maarten Hajer. The details of how discourse is defined and operationalised in this thesis will be dealt with in Chapters 2 and 5: for the time being it is sufficient to describe discourse analysis as "the study of language-in-use" (Hajer & Versteeg, 2005: 176). "The basic assumption of discourse analysis is that language profoundly shapes our view of the world and reality, rather than being merely a neutral medium mirroring it" (Hajer, 2006: 66). Our knowledge of the world is mediated through language: entities, events, issues and so forth have their own specialised languages. These specialised languages are discourses, and they both *represent* and *constitute* the objects of which they speak. "We do not have an unmediated access to the world *an sich*, even though the 'robustness' of its material quality limits the spectrum of interpretation. Knowledge of the world is not a neutral understanding by the cultural response to symbolic systems that are provided by the social environment. These symbolic systems are typically produced, legitimized, communicated, and transformed as discourses" (von Stuckrad, 2015: 4). Thus, the analysis of discourse is assumed to

uncover knowledge or meaning which is not typically explicit, as it occurs *implicit* within specialist systems of "knowledge embodied in a particular language" (Heywood, 2000: 87).

Discourse *matters*: it provides the linguistic and ideational resources that people use to make sense of the world around them, and to transmit their sense-making to others via speech, text or images. A Foucauldian approach to discourse is particularly appropriate for this thesis as the topics under discussion require much historical contextualisation; "Throughout his work, Michel Foucault was interested in the genealogy, or 'archaeology,' of discursive structures, which naturally implies an historical dimension in his analysis of discourse" (von Stuckrad, 2015: 5). This thesis takes a consciously historical approach, thereby uncovering the dynamic and interlinked relationships of religion, science, environmentalism and nuclear power. Curiously, although Foucauldian approaches to discourse are extraordinarily well-placed to investigate topics such as the secularisation and the 'scientification' of religion, it seems that "the academic study of religion has only sporadically taken notice of … approaches to the study of discourse that break down the boundaries between academic disciplines" (von Stuckrad, 2015: 2). Von Stuckrad explains that a greater contribution from discourse analysts to the academic study of religion would help to "resolve some of the conceptual problems in the field," and "provide a coherent analytical framework … that is capable of countering the theoretical challenges the discipline has to face" (ibid.). As this thesis is consciously viewing environmentalism through the same conceptual lens as religion, much of what von Stuckrad has to say on why discourse analysis is so important for the study of religion applies to environmentalism as well.

While discursive approaches have not been sufficiently used in the academic study of religion, they have been used to great effect in the study of environmentalism and environmental policy by scholars such as Dryzek (2005), Hajer (Hajer, 1993, 2006, 2009; Hajer & Versteeg, 2005) and Sharp and Richardson (2001). As mentioned at the beginning of this section, the approach taken in this thesis owes much to the work of Maarten Hajer, who explains that "Illuminating discourse(s) allows for a better understanding of controversies, not in terms of rational-analytical argumentation but in terms of the argumentative rationality that people bring to a discussion" (Hajer, 2006: 68). The topics under discussion/investigation in this thesis are saturated with controversies; in such argumentative conditions, where "discourses shape what can and cannot be thought" (Hajer & Versteeg, 2005: 178), an approach which "appreciates the messy and complex interactions that make up the environmental policy process" (ibid., 176) is crucial.

1.4 Structure of the Thesis

Chapters 2 to 4 constitute the literature review section of this thesis, exploring in-depth the contexts of the key relationships under scrutiny: human-environment, science-religion, and environmentalism-nuclear. These three chapters will also elucidate the reasoning behind specific methodological choices and identify knowledge gaps to be addressed. Chapter 2 begins with an introduction to the notion of discourse as understood in this thesis to provide a theoretical basis for all following mentions of discourse and discourse analytical terminologies. Following that is a crucial discussion about implicit religion: what might constitute explicit and implicit religion, and why it is a useful framework for the analysis of environmentalism – as opposed to social movement theory, which could be considered the 'norm' for the analysis of such social phenomena as environmentalism. The final section of Chapter 2 is concerned with the notion of cosmology – a foundational aspect of all religion – which is approached herein as a foundational discourse providing tacit environmental understandings and assumptions for participants.

Chapter 3 provides the historical and philosophical link between religion and environmentalism, through an exposition of the history of science and Christianity. An in-depth look at how classical Greek philosophy was incorporated into early Christian cosmologies brings the discussion to the 16th century and the start of the Renaissance. The Protestant Reformation, the Scientific Revolution, the Enlightenment, the Industrial Revolution and the Romantic response to it are all approached with an eye to how these developments influenced knowledge about the natural world and normative assumptions about the human-nature relationship. The 'science' in this history of science and religion includes what we now differentiate as physical and social sciences, and thus includes a discussion of the role of positivism in the social sciences and how it contributed to the dismissal of religion as a topic and method of 'rational' enquiry and the rise of the 'secularisation thesis'. Finally, the role and influence of the 'New Atheists' is reviewed in terms of the ongoing 'debate' between science and religion.

Chapter 4 concludes the literature review section of the thesis with a comprehensive socio-historical look at environmentalism and the key doctrinal issue of nuclear power. The foundational discursive roles of romanticism, pastoralism and transcendentalism are reviewed before the post-war transition into alternative youth cultures, civil resistance and 'new social movements', as well as the crucial role of Asian philosophies and religions in the late 20th century. The second half of Chapter 4 focuses on the key discourses associated with nuclear power that can be found in the literature, as well as providing background for key terms that will be used extensively in the analysis sections. Chapter 4 concludes with a dialogue on the prescient issue of distrust of expertise that

has been documented for some time in the UK and is indeed still rife. The issue of mistrust plagues both environmentalism and the nuclear industry.

Chapter 5 brings together the basic questions and knowledge gaps exposed by the previous three literature review chapters to pose a specific and linked set of research questions and present an analytical framework through which the empirical work was structured and analysed. This is followed by a description of the methods used in generating and analysing field data. Chapters 6 and 7 present the empirical findings specifically related to environmental implicit religion and its manifestation in participants' discussions of the environment and their relation to it. Chapter 6 focuses explicitly on 'internal' aspects of environmental implicit religion – that is, personal relationships with the environment, cosmologies, and identity implications. Chapter 7 focuses on 'external' manifestations of environmental implicit religion, namely how participants navigated their daily lives through a social, political, cultural and economic system that does not privilege environmental concerns in the way they felt it should.

Chapter 8 first analyses how the key nuclear discourses uncovered in the literature discussed in Chapter 4 were used or dismissed by participants and presents updated versions of some of those discourses, to provide a relevant basis for the Nuclear Synthesis discussion in the second half of the chapter. That synthesis discussion looks at how the nuclear discourses were incorporated into environmental-religious discourses by participants, and as such highlights the value of the religious perspective taken in this research for understanding of attitudes towards nuclear power and the environment.

Chapter 9 concludes the thesis with a systematic presentation of how this thesis addresses the three principal research questions (see §5.2.1), and reflections on avenues for further research.

Chapter 2 | Discourses of Religion

2.1 Introduction

In this chapter I will introduce the literatures which have informed the conceptual framework of this thesis. The chapter begins with an introduction to discourse theory, definitions of discourse and the processes involved in constructing a research method from the chosen discursive approach. Then, I introduce the literature on religion as an abstract concept and social phenomenon, thus enabling the theoretical and analytical sidestep from explicit to implicit religion. The chapter concludes with a discussion of cosmology: what it is, why it is included in this thesis and some key examples of cosmologies at work in the topics under broader discussion in this project.

2.2 Discourse: loquela tua manifestum te facit[2]

Discourse Analysis (DA) is a "research programme or paradigm" which has flourished from the last half of the twentieth century onwards (Howarth, 2006: 23), and is widely understood to emerge from post-structuralist theory and post-modernism. The approach appeals to researchers who perceive the important role that language plays in embodying and constructing meaning in the world: "Language does not 'float' in society" (Hajer & Versteeg, 2005: 177); it is irrevocably connected to history, culture and practices and is not, therefore, a "neutral medium" reflecting an objective, external reality (Hajer, 2006: 66). Discourse analysts reject the notion that meaning is explicit in communicative events: "Very often it is assumed that the meaning that the receiver 'reads' in a message is the same as the sender intended to put in the message. This assumption of mutual understanding is false. Discourse analysis brings out, time and again, that people talk at cross-purposes, that people do not really or do not fully understand each other" (ibid., p. 69). Thus, discourse analysis is a particularly good approach for the investigation of social phenomena or topics wherein a great deal of conflict over meaning is known or expected – such as environmentalism, religion, science, and nuclear power. As a result, the approach is very good for exposing implicit, rather than explicit, meanings and connections (Heywood, 2000: 87).

The object of analysis in discourse analysis is, of course, *discourse*. However, "the term is used in many, and often conflicting, ways. It has further added to the confusion that many scholars do not clearly define what they mean when they use the term 'discourse'" (von Stuckrad, 2015: 3). "[I]t is crucial that this issue is clarified, as it shapes the choices that must then be made about the research: where to look, what to look for and how to analyse what is found" (Sharp & Richardson, 2001:

[2] "your speech makes you manifest" – "a close translation of Matt. 26.73 … spoken to Peter, whose Galilean accent revealed him as one of the followers of Jesus" (During & Martinez, 1996: 163, note 25).

195). The specific definition, or conception, of discourse utilised by a discourse analyst is therefore of extreme importance because it has direct repercussions for the type of research and analysis conducted, the conclusions drawn and their wider meaning and, of course, the philosophical basis on which the entire project is founded. As mentioned previously (§1.3.3), this thesis falls within the Foucauldian branch of discourse analysis. However, this does not mean that the definition used herein is taken directly from the work of Michel Foucault; rather, I prefer a two-tier system of definition based on the work of scholars who themselves took inspiration from Foucault. The basic notion is one that sees discourse as "a specialist system of knowledge embodied in a particular language, a kind of mind-set that structures understanding and behaviour" (Heywood, 2000: 87). The more complex meaning of discourse – the second tier – incorporates an understanding of how it works in the world and gives an indication of why discourse analysts think the study of discourse is so important:

> "a discourse is not [just] a communicative exchange, but a complex entity that extends into the realms of ideology, strategy, language and practice, and is shaped by the relations between power and knowledge. Whilst Foucauldian discourses may shape what happens in public meetings and policy processes, such events are simply manifestations of their existence. In this conceptualization, the continuous power struggles between competing discourses create the conditions that shape the social and physical world and construct the individual" (Sharp & Richardson, 2001: 195-6).

In a more practical sense, Foucauldian 'discourse' is a "group of statements which provide a language for talking about – a way of representing the knowledge about – a particular topic at a particular historical moment … Discourse is about the production of knowledge through language. But … since all social practices entail meaning, and meanings shape and influence what we do – our conduct – all practices have a discursive aspect" (Hall, 1992: 291). The interrelationship between practice and discourse referred to by Hall is also mentioned by Hajer, who elaborates; "linguistic utterances cannot be usefully understood outside the practices in which they are uttered. Similarly, discourse should always be conceived of in interrelation with the practices in which it is produced, reproduced and transformed" (2006: 70). The Foucauldian acknowledgement of practice is an important part of rebuttals to common accusations made against discourse analysis, that it may reduce all reality to mere language: in truth, "Foucault does not deny that things can have a real, material existence in the world. What he does argue is that nothing has any meaning outside of discourse" (Hall, 2001: 73; Foucault, 1972). There is a real, material world, but we cannot know anything about it *unless* through the medium of discourse. Hence Landwehr's statement that "at the bottom [*Grund*] of realities and discourses there is no other fundament than their own

historicity. Hence, the shortest possible definition of the function of discourses must be: discourses generate realities" (Landwehr, 2009: 92).

Hall's (1992: 291) point about discourses representing "a particular topic at a particular historical moment" is another reason why Foucauldian discourse analysis is especially appropriate for the subjects of this thesis. As will be made clear in Chapters Three and Four, the way meanings and 'truths' change through history is viewed in this thesis as being of the utmost importance in providing contextual understanding for how environmental and nuclear discourses act and interact in the present time. Also as indicated in §1.3.3, von Stuckrad notes that the way Foucauldian-inspired discourse analysis approaches uncover "the genealogy, or 'archaeology,' of discursive structures," means that analyses grounded in this type of research paradigm provide a "crucial contribution" to the study of religion, "arguably a discipline that has a strong historiographical focus" (2015: 3, 5-6). In particular, "discourse analysis has three particular strengths; the capacity to reveal the role of language in politics, to reveal the embeddedness of language in practice and to illuminate mechanisms and answer 'how questions'" (Hajer & Versteeg, 2005: 176). This thesis sets out to 'illuminate mechanisms' and answer 'how questions' but, in the process, will undoubtedly reveal the role and embeddedness of language in the politics and practice of environmentalism as implicit religion.

2.2.1 Doing discourse analysis

One important reason why there has been such a "proliferation of various models" of discourse analysis (Hook, 2001: 521) is because Foucault refrained from presenting a prescriptive method for conducting discursive analysis (Sharp & Richardson, 2001). Hence why, when lamenting the paucity of precise guidelines on how to do Foucauldian discourse analysis, Linda Graham (2011: 663) wonders if "perhaps the difficulty in locating concise descriptions is because there is no such thing?" The term 'Foucauldian discourse analysis' is a misnomer; one is more likely to come across Foucauldian-*inspired* discourse analysis, or merely an approach to discourse 'grounded in the theory of Foucault' (Sharp & Richardson, 2001: 193). Anyone seeking a complete methodology in Foucault's work will be disappointed. Besides, Foucault "ended up with a conception of discourse that is so concerned with the essential dispersion and contingency of social categories that it self-consciously defies and resists all generalizing summaries" (Wagenaar, 2011: 112).

The lack of precise methodological frameworks for *doing* discourse analysis means that researchers are required to – at some level at least – construct their own method for applying and operationalising the various abstract notions of discourse they find appealing in the work of those scholars who provided inspiration. This process is worthwhile, as it allows the researcher to tailor-

make a discourse approach which is grounded in the wider literature yet also specific to their needs, the requirements of the topic, and their epistemological and ontological preferences. Through this process I came to rely on the work of Maarten Hajer (2006), an environmental-political discourse analyst grounded in Foucault, and a paper on media discourse about nuclear power by Gamson and Modigliani (1989). The work of Hajer provided a number of useful concepts for understanding how discourses work; the paper by Gamson and Modigliani, while not obviously Foucauldian, nevertheless provided a concrete example of how to recognise examples of discourse and construct ideal-type 'discourse packages' as a means of presenting what ideas and statements a discourse might include. The specific concepts and methods of the approach taken in this thesis are presented in Chapter 5, in §5.3: "Discourse tool-kit".

One final point to mention here is that discourses operate at different levels of complexity in society. Most discourses discussed in this thesis function at moderately the same (mid-) level – there is of course some variation but not enough to warrant an extra level of analysis. The exception to this is a type of discourse which operates within the topics of environmentalism and religion at a base, *foundational* level. These foundational discourses are *cosmologies*, and they will be discussed in more detail in the final section of this chapter. In an abstract sense, the foundational cosmologies are broad, underpinning discourses functioning at an inter-societal level that began thousands of years ago and contain quite basic – but very influential – enduring ideas about the origin, purpose and materiality of the universe and all its contents, including humanity. The rest of the discourses – the 'mid-level' discourses – operate within societies and are therefore more likely to be specific to Britain, geographical regions or perhaps even particular socio-economic strata. The presence of foundational and mid-level discourses indicates that there may be discourses operating at a finer level of detail in society – perhaps at the group or community level – but the methods adopted in this project are unable to capture that level of complexity.

2.2.2 Contested concepts

Most authors writing in this field will agree that there is simply "no clear-cut and easily circumscribed definition of environmentalists or environmentalism," as the many possible variations "overlap and produce confusion" (1984: 13). A key reason for this confusion is that "contests over meaning are ubiquitous, and the way we think about basic concepts concerning the environment can change dramatically over time" (Dryzek, 2005: 6). As Dryzek himself points out, there was no concept of the environment prior to the 1960s that we would recognise today, although "concerns with aspects of what we now call the environment, such as open spaces, resource shortages, and pollution" of course were already extant (ibid.; 5).

A key problem resulting from the "warfare" between environmental factions referred to by Pepper (1984: 13) is that each has different ideas about what *counts* as being environmentally 'good.' Thus, two individuals who might be viewed by a third as 'environmentalists' can have justified reasons for saying either that their companion (or opponent!) is, or is not, an environmentalist. There is no internal agreement or cohesion when it comes to the 'fine print.' Historically, however, there has been a lot of agreement over the large print: pollution, deforestation, animal extinction, habitat degradation and climate change are all *bad*, and environmentalists are – broadly speaking – people who work to protect the environment from those things. Of course defining the 'good-ness' and 'bad-ness' of any factor in the abstract here is rather pointless, "because these terms make sense only within the specificity of their contexts" (Darier, 1999: 27).

What *is* worth noting is that the problems of defining the 'fine print' of environmentalism and what is means to be 'an environmentalist' are not *problematic* as such. This is because, following from WB Gallie's initial insights on the subject (Gallie, 1955), environmentalism is usefully understood as a 'contested concept'[3]. Gallie's broad point was that with a number of key political concepts, "controversy runs so deep that no neutral or settled definition can ever be developed" (Heywood, 2000: 6) , and that "such disputes tend not only in fact to be undecidable, but that there is something conceptually or logically undecidable about them" (Ruben, 2010: 259). Acknowledging the 'contested' nature of environmentalism "is not, however, to abandon the attempt to understand it, but rather to recognise that competing versions of the concept may be equally valid" (Heywood, 2000: 6). When it comes to contested concepts such as 'democracy', 'freedom' and 'environmentalism' the "search for a unitary and precise meaning … is misguided. It rests on a mistaken view of the nature and function of political concepts" (Jacobs, 1999: 25).

Jacobs (who prefers the term 'contest*able*' concepts) cogently explains and updates Gallie's initial explanation, teaching us that such concepts function at two simultaneous levels of meaning (Jacobs, 1999: 25). The first level is what is referred to in the previous paragraph as the 'large print': definitions are "unitary but vague," "defined by a number of 'core ideas'" which are "general, but substantive and non-redundant" (Jacobs, 1999: 25). The second level of meaning is the 'fine print', and is where contestation occurs over "how the concept should be interpreted in practice" (Jacobs, 1999: 25). In the case of environmentalism, contestation at the second level is where we encounter arguments about *how* to protect/enhance the environment, rather than *whether* we should do so. A person might be identified as "an environmentalist" if they feel that the environment is under

[3] NB: Gallie actually used the term '*essentially* contested concept' but subsequent investigations have resulted in well-argued refutations of the 'essential' aspects. Authors have suggested we use 'currently' contested (Birch, 1993) or 'contingently' contested (Ball, 1997). I use neither, as the point is not of great relevance to the overall thesis.

threat and that humanity has a responsibility to protect or save aspects of that environment or even the whole planet. Approaching environmentalism as a contested concept means that disagreement over the proper methods of doing so becomes – to the researcher, at least – a 'second level' point of interest to be investigated rather than a definitional stumbling block to be overcome. Seeking, either academically or in practice, "universal agreement on a unitary meaning for the term" is pointless and "will never happen, for those who use it have different interests and political values. Such agreement is only possible at the first level" (Jacobs, 1999: 26). The really interesting point about contested concepts that Jacobs notes almost in passing – which Ruben (2010) agrees with but buries in prose – is that the contestation over second level meaning is *constitutive* of the concept and its functioning in the 'real world'. The constant debate and contestation keep environmental issues relevant, on the agenda, on people's minds. Disagreements over meaning constitute the political struggle at the heart of environmentalism: they "are not semantic disputations but *are* the substantive political arguments with which the term is concerned" (Jacobs, 1999: 26).

Clarifying the importance of contestation at the second level, however, should not obscure the importance of the first level. The two levels are inextricably linked. The orthodox environmental position of rejecting nuclear power operates at the first level of meaning; it is a general, core idea acknowledged traditionally as a substantive and constitutive aspect of environmentalism. Nuclear power is viewed as *exceptionally* bad, and has thus become a touchstone for the environmental movement and environmentalism in general (see McCalman & Connelly, 2015: 6). In basic terms this is because it is a polluting technology; the chemical reaction which takes place to release energy from the fuel generates a waste product which is highly toxic both to humans and to any aspect of the environment with which it comes into contact. In more complex terms, however, "[m]odern thinking about nuclear power… has less to do with current physical reality than with old, autonomous features of our society, our culture, and our psychology" (Weart, 1988: 421). Pro-nuclear environmentalists challenge those old, autonomous features of our society, and in doing so they move the arena of contestation over meaning from the second to the first level. The orthodox environmental movement is accused of stymying efforts to reduce climate change through their opposition of nuclear power by those who point out that given our current energy technologies, less nuclear power does not result in more 'clean' renewable energy but instead greater dependence on fossil fuels (e.g. Monbiot, 2013). Pro-nuclear environmentalists ask us to "set our emotions aside and embrace what science tells us. GMOs and nuclear power are two of the most effective and most important green technologies we have. If – after looking at the data – you aren't in favour of using them responsibly, you aren't an environmentalist" (Naam, 2013).

Contestation at both levels of meaning of environmentalism puts the future of social categories and practices based on some notion of the 'environmental' in a precarious position: therefore, how the 'threat' of pro-nuclear environmentalism is dealt with by the environmental orthodoxy is of great importance to the future of environmentalism in general.

Having framed environmentalism as a contested concept, it is important to remember its concurrent position as an 'identity'. Brubaker & Cooper (2000) point out that identities constitute both categories of 'practice' and categories of 'analysis'. In research projects such as this one, actors and their actions are externally categorized for the purposes of analysis, but there is no guarantee that these analytical categorizations will match actors' own *practical* categorizations:

> "As a category of practice, it is used by "lay" actors in some (not all!) everyday settings to make sense of themselves, of their activities, of what they share with, and how they differ form, others. It is also used by political entrepreneurs to persuade people to understand themselves, their interests, and their predicaments in a certain way, to persuade certain people that they are (for certain purposes) "identical" with one another and at the same time different from others, and to organize and justify collective action along certain lines" (Brubaker & Cooper, 2000: 4-5).

Therefore, analysts must guard against conflating the identity with the concept, just as they should bear in mind the two levels of meaning inherent to contested concepts. Embracing the contestation of meaning, however, does leave the concept of environmentalism open to the worry that the definition becomes so broad as to *lose* all meaning, since it might include anything and anyone. However, to that challenge I answer with the following: the environmental crisis widely agreed to be imminent – irreversible climate change with all attendant ramifications – is being faced by the whole planet. The ostensible aim of the environmental movement is to make sure that everyone recognises this fact and works together to avert disaster. Logically, therefore, the associated aim is to make *everyone* an environmentalist and any *thing* and any *action* a part of the environmental movement. A broad definition in a project such as this means that it is likely to include the attitudes of those both within and without the environmental movement as it currently stands in the UK. It becomes possible to ask, "why not?" instead of just "why?".

In the next section I introduce the concept of implicit religion and look at literature dealing with the analysis and description of religions, both explicit and implicit. This is required because, as with discourse, an understanding of what is meant by 'implicit religion' is necessary for all the following chapters.

2.3 (Implicit) Religion

To speak of 'implicit' religion, it is first necessary to explain what an explicit, 'typical' example of religion might be. Therefore this chapter section begins with a discussion about the vagaries of defining religion in an academic – as opposed to everyday – sense, and then introduces the notion of implicit religion provided by Bailey (1997, 2009, 2010). The final part of this section discusses some examples from those few scholars who have acknowledged the inherent religiosity of environmentalism and thought about its consequences.

2.3.1 Defining (explicit) religion: a creed, a code, a cult

Religion, like so many other abstract concepts, resists uncontested definition. Human ingenuity circumvents this problem on an everyday level by conflating the concept with its illustrative instances. This is unproblematic for casual discussions, as "the meaning of a word is in its use in the language" (Wittgenstein, 1953: [43]). Over the centuries we have tacitly, implicitly, and unconsciously agreed with each other that some things count as a 'religion' and some do not. However, when academic investigations look at commonalities between the various instances of recognized, 'explicit' religions, previously uncontested boundaries become blurred. There are instances where political ideologies provide moral guidance, and economic preferences guiding the formation of new social strata or communities (e.g., Marxism). What makes a religion *religious* becomes increasingly less obvious because the functions it fulfils in our society are so broad and underpin so many other social forms, many of which have become overtly secularised. Wittgenstein's notion of 'family resemblance' is particularly helpful here. Instead of assuming there is some ultimate, perfect and incontestable 'true definition' of religion waiting to be discovered, instead we can recognise that there are many social phenomena which share aspects of what makes a religion. Thus Marxism, Catholicism, and environmentalism can be seen to share certain 'family resemblances' despite being generally considered as very different phenomena. Looking carefully at those familial characteristics helps us to see that, although only one of those examples are commonly referred to as religion, the choice to exclude the others is not because of any intrinsic characteristic they hold or lack. It is simply to do with how we are accustomed to using the term 'religion.'

Those whose business it is to think about definitions of religion – theologians, academics concerned with religious issues etc. – tend to gravitate towards definitions that are surprisingly broad, all-encompassing and sometimes not even obviously 'religious.' In addition, definitions of religion vary on a spectrum of 'formal' and 'functional': that is, they refer to both what characteristics religions tend to have in common (i.e., what form religion takes), and to what functions religions perform in society. Pertaining to the issue of environmentalism, then, there are

instances in my data where environmentalism functions as a religion, or when it *looks like* – has the characteristics of – a religion. Of course, these two definitional aspects are not entirely separable and therefore the following definitions, from philosophers working across more than a century, feature a combination of both form and function.

In his 1902 book *The varieties of Religious Experience*, the American philosopher William James distilled the essence of religion down to its purposive basics: "a belief that the world has an unseen order, coupled with the desire to live in harmony with that order" (Garreau, 2010: p. 11; James, 1902). Many social enterprises might be readily understood in those terms. In terms of form and function, James' definition provides the essentials of both; the form is an all-encompassing philosophy, an ontology, perhaps. The function it performs in our society, as far as James was concerned, was to inspire those who shared that ontology to align their lived experience with the reality they believed in. This is remarkably similar to the definition favoured by Stackhouse, for whom the key characteristic was broadly the same: "…a confidence in a comprehensive worldview or 'metaphysical-moral vision' that is accepted as binding because it is held to be, in itself, basically true and just, even if all dimensions of it cannot be either finally confirmed or refuted" (Stackhouse, 2007). Even the functions observed by Stackhouse are reminiscent of James'; "Further, every worldview or comprehending 'vision' worth worrying about is functional: it provides a framework for interpreting the realities of life in the world, it guides the basic beliefs and behaviours of persons and it empowers believers to seek to transform the world in accordance with a normative ethic of what should be" (ibid.). An important point to note here is that these rather concise definitions of religion, in their attempt to distill some sort of 'essence' of religion, result in philosophical formulations which closely resemble cosmology (see § 2.4) and even what could be referred to as a 'worldview' (a word Stackhouse uses, but which is often used in a broad spectrum of social science disciplines). From this perspective it is clear that many academics who investigate the social ramifications of one 'worldview' or another are not as far from looking at religion as they may assume.

Chung-ying Cheng, drawing on work previously published in the *Oxford Dictionary of World Religions* (Bowker, 1997), presents what is ostensibly a strictly formal definition, judging by his focus on "conditions for defining an ideal form of religion or religious spirit…based on a reflection on all existing world religions" (Cheng, 2013, p. 39). I present below Cheng's 'conditions' by which we might define a religion:

1. "Such a form of religion must provide an understanding and sometimes an explanation of how the world came into being, how life and human life began, what the purpose/end of human life is and what human death represents.
2. It must provide an idea of a good life or an ideal form of life for a human person to strive for or to rest his or her mind or heart on in ultimate peace and ultimate tranquillity.
3. It must provide a way or a system of practice for achieving this good form of life so that a community of people, not just an individual, could follow and incorporate it in their lives.
4. It must provide a central authority for maintaining this system of practice which allows justified and regulated changes and improvements.
5. It must actually establish a following or a community who embody the practice and thus demonstrate and testify to the authenticity of the practice." (Cheng, 2013, p. 39)

The above text reveals the inherent difficulty of separating form and function in practice: all of Cheng's formal 'conditions' are functions. This is a prescriptive list of what religions are supposed to do in/for their relative societies; provide understanding, provide an explanation of the purpose of life and the role of humanity, act as a means by which to achieve peace/harmony (transcendence), provide a framework of practice and ethics and enable the formation and development of a community of practice. Put in those terms, we could be describing any ideology. In contrast to this focus on function, William P. Alston's definition, published in an *Encyclopedia of Philosophy* (Alston, 1967), is overtly *formal*. It lists characteristics which, although couched in such terms as to suggest illustrative examples of (explicit) religions, Alston nonetheless successfully demonstrates can be applied to a broader range of social phenomena:

1. Belief in supernatural beings (gods).
2. A distinction between sacred and profane objects.
3. Ritual acts focused on sacred objects.
4. A moral code believed to be sanctioned by the gods.
5. Characteristically religious feelings (awe, sense of mystery, sense of guilt, adoration), which tend to be aroused during the practice of ritual, and which are connected in idea with the gods.
6. Prayer and other forms of communication with gods.
7. A worldview, or a general picture of the world as a whole and the place of the individual therein. This picture contains some specification of an over-

all purpose or point of the world and an indication of how the individual fits into it.

8. A more or less total organization of one's life based on the world view.
9. A social group bound together by the above. (Alston, 1967: 141-142)

Alston's definition is simultaneously both the most problematic and the most useful. It is the most obviously problematic because of its use of terminology which has been directly associated with explicit instances of religion for millennia: gods, supernatural, prayer, sacred, profane. Alston deals with the complexities built into his definition by making it clear that the presence of all the above characteristics is not absolutely required in order that a specific phenomenon be labelled 'religion'. No religious phenomenon will ever be so unequivocal as to include, without exception, clear examples of the nine characteristics Alston observes to be inclusive of 'religion.' Alston explains how, since religions are as complex and multifarious as every other aspect of humanity, the suppression or even total elimination of one characteristic does not negate the overall religiosity of one phenomenon or another:

> "…there can be a variety of cases that differ from the paradigm in different ways and to different degrees, by one or another of the different religion-making characteristics dropping out more or less. For example, ritual can be sharply de-emphasized, and with it the demarcation of certain objects as sacred, as in Protestantism; it can even disappear altogether, as with the Quakers. Beliefs in supernatural beings can be whittled away to nothing, as in certain forms of Unitarianism, or may never be present, as in certain forms of Buddhism." (Alston, 1967: p. 142)

In this manner, Alston's understanding of what religion is, in a fundamental sense, fits very well with the Wittgensteinian notion of family resemblance. As with modes of environmentalism, religious phenomena might be imagined as occurring on a spectrum, with the "paradigm cases" – such as Roman Catholicism and Islam – on one end, and more nebulous 'religious' phenomena on the other; such as socialism, or capitalism. As more and more of the religion-making characteristics "drop out, either partially or completely, we feel less secure about applying the term 'religion,' and there will be less unanimity in the language community with respect to the application of the term" (Alston, 1967: 142). Also, there is never an obvious boundary separating the 'religion' from 'nonreligion'; "It is simply that we encounter less and less obvious cases of religion as we move from, for example, Roman Catholicism through Unitarianism, humanism, and Hinayana Buddhism to communism" (Ibid.). Therefore, it is perfectly possible to find a religion

which has no explicit deity or notion of God. Of course, that is not to say that an implicit notion of God may not still be present (Dupré, 2013).

'Academic' – rather than casual – definitions of this sort indicate that there are a variety of social phenomena which could be usefully categorised as religious – or, at least 'quasi-religious' – by the measure of their function in society and the roles they play in people's lives. The philosophers included in this section would concur; Stackhouse gives an excellent example:

> "…worldviews such as a philosophical-ethical Confucianism, an atheistic spirituality such as Buddhism, or a secular-humanistic ideology such as Marxism, whenever they form a creed, a code and a cult[4], and are used to interpret and guide the formation of an ethos… They function as "religions," shaping an ethos, even if they are opposed to theistic traditions or do not recognize themselves as religious. They are also subject to theological analysis, for they inevitably contain a "metaphysical moral vision" – an ontology, a theory of history and ethic – that involves some view of transcendence" (Stackhouse, 2007: 8).

A "creed, a code and a cult." *'This is what I believe about the world and our existence, therefore this is what I should do and how I should act; around me are other people who share this vision, with whom I sympathise and feel a kinship towards.'* Despite the inclusivity of academic definitions of religion, the problem remains that many people (academics included) may be reluctant to recognise the inherent religiosity of such things. The 'illustrative instances' of religion remain as the benchmark for the concept in the forefront of many people's mind. It is for this reason that the distinction between 'implicit' and 'explicit' religion must be made. Following Wittgenstein, a religion is what is commonly recognised as such: thus, Christianity, Islam, and Judaism are all explicit religions. They are recognised internally and externally in this fashion. However, as the definitions included in this section have indicated, those characteristics which make a religion *religious* are frequently found in other social phenomena. It is these other social phenomena which may be usefully categorised and analysed as *implicit* religions. The term 'implicit religion,' its origins and the body of work with which it is associated are discussed in the next part of this section, as well as the paucity of work on environmentalism-as-implicit-religion.

2.3.2 Implicit Religion

As mentioned above, philosophers and theologians who strive to understand religion in the abstract find instances of religion in arenas other than those which are explicitly 'religious.' Alston

[4] "…in the specific, classical sense of liturgical norms and practices" (Stackhouse, 2007)

(1967) points towards socialism and capitalism as proxy religious phenomena, and Stackhouse (2007) explained how Confucianism and Marxism may function as religions. Their work, however, does not *focus* on these peripheral religious phenomena. Therefore, I was pleased to discover the work of Edward Bailey (1935-2015)[5], the originator of the term 'implicit religion'. Bailey was neither the first, nor the only researcher to have noticed the existence of alternate forms of religion which did not conform to the conventionally understood markers of paradigmatic religions, but his terminology caught on where others did not. When in the first stages of compiling sources for his lifetime's work on the subject, Bailey listed "over fifty specific terms pointing in the direction of something of the nature of implicit religion" and then, with the benefit of hindsight, noted that "During the 1980's, a second such list could probably have been compiled, as the collection of bibliographical resources has grown to some four thousand items" (Bailey, 1997: p. 10). The mere collection of a pile of similar-yet-different terms indicating more-or-less the same social phenomenon is, of course, not definitive proof that what we are pursuing as a topic of study is a 'reality'. As Bailey himself puts it, "as with etymology, so with bibliography … nothing is thereby "proved" (in the naïve sense, of eliminating the possibility of contradiction)" (Bailey, 1997: p. 10). However,

> "the list is significant. The number of such "pointers", in the form of specific terms or of general schema, the diversity of their original contexts, and the authority accorded to many of their originators, strengthens the conviction that the concept refers to a reality, and that it is significant. This is particularly important when (like some Loch Ness monster) it lacks detailed evidence, official recognition, general categorisation, or agreed title. Their multiplicity and variety also increase the likelihood of arousing, in others, the memory of a similar apprehension" (Bailey, 1997: p. 10).

Despite the acknowledged abundance of alternative terms, Bailey's "Implicit Religion" has thrived to the almost total exclusion of other options. Currently, "Implicit Religion" is a well-established concept which boasts a journal dedicated to its study (which Bailey himself edited until his death recently) and a yearly conference (the *Denton Papers on Implicit Religion*). Intriguingly, however, little-to-no work discussed in these fora has focussed on *environmentalism* as implicit religion. Reader's (2010) article *New Environmental Movements and Implicit Religion: What Faith Might Learn from the Growth of Transition Initiatives* and Robert Nelson's (2014) *Calvinism Without God: American Environmentalism as Implicit Calvinism* are the only papers I could find which address any aspects of environmentalism

[5] Edward Bailey was Rector of the Parish of Winterbourne, Bristol from 1970 to 2006, was Founding Director of the Centre for the Study of Implicit Religion and Contemporary Spirituality, and Visiting Professor at Middlesex and Staffordshire Universities.

as a form of religion in its own right. Many papers (published in a range of journals) focus on the role of religious organisations in incorporating elements of environmentalism as aspects of 'Creation care' or suchlike. Most common are studies discussing how traditional (explicit) religions might further incorporate environmental ideas into their theologies so as to remain 'relevant' and retain believers in an era when some level of care about environmental issues is quickly becoming a socially ubiquitous moral obligation (e.g., Ellingson, Woodley, & Paik, 2012; Gottlieb, 2007; Taylor, 2006). The next step of analysing environmentalism as an implicit religion is yet relatively uncommon. Other scholars have also noted this omission:

> "Most previous social scientific examinations of the religion-environmentalism connection… have largely restricted themselves to assessing the effects of formal religiosity (e.g., theological convictions, denominational membership) on individual ecological attitudes. Meanwhile, another fascinating aspect of the religion-environmentalism relationship – i.e., the implicitly religious character of environmentalism – has received little or no scholarly attention. This oversight is rather surprising, given the recent "spiritualization" of the environment and ecological issues that has been ushered in by a growing coterie of popular eco-theologians, deep ecologists, and ecological feminists (e.g., Fox, 1991; McFague, 1993; Starhawk, 1989; see Oelschlaeger, 1994, as well as assorted selections in Birch, Eakin and McDaniel, 1990; Gottlieb, 1996). (Bartkowski & Swearingen, 1997: p. 308)

Robert Nelson is the only scholar I have come across to use the term 'implicit religion' in a manner similar to my own (Nelson, 2014), and even in his main work on the topic (*The New Holy Wars: Economic Religion vs. Environmental Religion in Contemporary America,* 2010), Nelson uses the term "secular religion" rather than "implicit religion." Since he also omits any reference to Bailey's work, it is possible that Nelson had not yet become aware of the wider literature on the topic when originally working on his *oeuvre*. Finally, it is important to note that a particular curiosity of this field of research is the extent to which 'modern,' implicit religions often categorically deny their own religious characteristics and theological groundings. Some even go so far as to incorporate atheism as doctrine: it is possible to have a "religion of no religion" (Grassie, 2008: 132). To some extent this is due to the success of a few explicit religions and their meaning-in-language: "…the conspicuous survival of older forms of religion, tends to maintain a restriction on the use of [the term]" (Bailey, 1997: p. 12). Hence, the requirement for qualifiers such as 'implicit' when speaking about alternative types of religion that are popular today, in part due to what is often an overt (yet self-contradictory) anti-religious bias.

The following section will expand on the issue of how it is possible to view environmentalism as implicit religion, by presenting a few examples of other historians and thinkers who have made the same leap of imagination as I am doing in this thesis, and whose work indicates the exciting possibilities generated when one is open to the idea of environmentalism as religion.

2.3.3 Environmentalism as Implicit Religion

Given that – as indicated in the §2.4.2 – there is a recognised lack of focused scholarly work specifically dealing with environmentalism as implicit religion, it was difficult to find literature to serve as a foundation for this project. Therefore, I feel it is worth including those few examples of scholarly outputs which *do* indicate both their authors' recognition of environmentalisms' inherent religiosity and give some examples of where/how similarities of form and function may occur. The most useful examples came from historians; namely, Thomas Dunlap (2004, 2006) and William Cronon (2004). Dunlap references William James' work on religion explicitly, explaining that from James' perspective;

> "…religion… flowed from humans' need to make sense of their lives in this world, and beliefs that gave answer to those questions were religious ones, though they might not be complete (in the sense of answering all important questions), might deny deities or even the possibility of transcendence, might even rely on other systems they called religion (as the American Way of Life did) to supplement their creeds. Environmentalism fell into that category" (Dunlap, 2006: 322).

The above excerpt is discussing the possible *functional* religious roles of 'other systems' such as environmentalism: cosmology (explaining the universe and the role of humanity, "a framework for interpreting the realities of life in the world" (Stackhouse, 2007: 7)) and the possibilities of supernatural abstractions offering guidance to a path of transcendence. Dunlap then goes on to expound on some of the more formal religiosity offered by environmentalism to its followers:

> "[Environmentalism] offered (in those first years somewhat too enthusiastically) jeremiads – warnings of disaster if we followed our sinful ways, directions to the path of righteousness, and the promise of an Earthly Paradise if we reformed our ways – and told us how we should live. Like an established religious tradition, pointing the path to sainthood, offering comfort to the masses, and holding open the door to the repentant sinner, it had ways of work for all. It offered the committed bioregionalism, a life lived in the wild, learning its possibilities and building a community that would unite humans and nature and heal them" (Dunlap, 2006: 325).

Religion "guides the basic beliefs and behaviours of persons and it empowers believers to seek to transform the world in accordance with a normative ethic of what should be" (Stackhouse, 2007: 7). One could easily replace 'religion' with 'environmentalism' and, with Dunlap's analogies in mind, the sense of Stackhouse's statement would remain. An environmentalist uses the broad framework of environmentalism (often in concert with other frames/ideologies) to interpret the world around them and inform their decisions accordingly. A wealth of everyday behaviours and decisions can flow from that one ostensibly discrete but truthfully all-encompassing aspect of a person's life. A person may choose not to fly, stick to a diet, vote, pursue a certain career, or even choose whether to have children because of environmental reasons. There is the hope that the aggregate effect of many individuals' environmental actions might transform the world – just as those faithful adherents of explicit religions might hope that their combined prayers may somehow tip the scales of fate.

> "[Environmentalism] offers a complex series of moral imperatives for ethical action, and judges human conduct accordingly. The source of these imperatives may not appear quite so metaphysical as in other religious traditions, but in fact derives from the whole of creation as the font not just of ethical direction but of spiritual insight. The revelation of seeing human life and the universe whole, in their full interconnected complexity, can evoke powerful passions and convictions ranging from the mystical to the missionary. Certain landscapes – usually the wildest and most natural ones – are celebrated as sacred, and the emotions they inspire are akin to those we associate with the godhead in other faith traditions. Much environmental writing is openly prophetic, offering predictions of future disaster as a platform for critiquing the moral failings of our lives in the present. Leave out the element of divine inspiration, and the rhetorical parallels to biblical prophecy in the Hebrew and Christian traditions are often quite striking. Maybe most important, environmentalism is unusual among political movements in offering practical moral guidance about virtually every aspect of daily life, so that followers are often drawn into a realm of mindfulness and meditative attentiveness that at least potentially touches every personal choice and action. Environmentalism, in short, grapples with ultimate questions at every scale of human existence from the cosmic to the quotidian, from the apocalyptic to the mundane. More than most other human endeavours, this is precisely what religions aspire to do." (Cronon, 2004: xi-xii)

Other writers have noted the increasing religiosity with regards to the environment, noting that "Attitudes worldwide toward nature… are changing. 'Green' is the new religion. (…)

Environmental shrines, such as the Great Sarcophagus at Chernobyl, begin to fill the landscape" (Ausubel, 1996: 14). The philosopher Holmes Rolston III, noted for his work on environmental ethics and on the relationship between science and religion, sees in the forests of America the cathedrals of today;

> "With forests, America is even more of a promised land than is Palestine. (…) Such forests are a church as surely as they are a commodity. Trees pierce the sky like cathedral spires. Light filters down as through stained glass. The forest canopy is lofty; much of it is over our heads. In common with churches, forests invite us to transcend the human world and experience a comprehensive, embracing realm" (Rolston, 2004: 296).

In fact, here we find a clue to the curious vigorousness of American *explicit* religion, as opposed to the commonly feted waning of traditional religiosity in Western Europe. As a result of how the first European settlers arrived in America and their reasons for being there, it could be argued that Americans retain a feeling of being a 'chosen people'; As Nelson explains, "Many Puritans saw themselves as repeating the Jewish exodus from Egypt; the trip across the Atlantic was their passage through the Red Sea" (2010: 139; see also Gelernter, 2007). Not merely the journey, but the uncompromising landscape they arrived at reinforced the feeling of being God's chosen people: "wilderness was still a place of testing, the backdrop for spiritual purification in which the corruption of old England might be permanently purged. As a proving ground for saints, the wilderness might also protect them from worldly evil and even invigorate them. Indeed, it might become God's chosen place for conferring religious insight" (Albanese, 1990: 37). Likewise, the experience of 'wilderness' as a means of challenging one's fortitude and revealing a person's special characteristics has been retained in modern day environmental implicit religion, in the mode of Thoreau's retreat to the shores of Waldon Pond. Environmentalists may go on lengthy pilgrimages to areas of wilderness to get 'back in touch with nature' or choose from various forms of self-sacrifice to challenge themselves and achieve ever greater forms of personal coherence between their actions and beliefs e.g., adopting a vegan diet for environmental reasons, or choosing to forgo procreation (see Fleming, 2018; Carrington, 2018).

Although this section has shown that others have certainly noticed the striking religiosity of modern environmentalism, there seems to be little or no literature available which analyses environmental implicit religion in a British, or even Western European context. Nelson's (2014; 2010) contributions to the field are firmly within the north American context, as are Dunlap's, Cronon's and the other scholars mentioned here. A thorough literature search using

'environmental implicit religion' and other similar terms and phrases results in a number of publications by Robert Nelson and one by Berry (2013) – also focussing on northern America – but after that the search results are overwhelmingly of studies investigating the effect of explicit religiosity on environmental concern; again, mostly in the USA (e.g. Sherkat & Ellison, 2007). It seems clear that this is a gap in the literature that this thesis can address.

In the final section of this chapter the discussion of cosmology links together the literatures of discourse and religion. Cosmology, as briefly mentioned in the first section, functions in my conceptual framework as a foundational level of discourse, tacit knowledge about the universe (cosmos) which undergirds both religious and environmental assumptions.

2.4 Cosmologies

Cosmology and religion are linked, but not analogous, phenomena used by people for millennia to explain the universe and guide their relationships with nature and other sentient beings. Most authors seem to refrain from explicitly defining cosmology. Scholars speak of 'traditional' cosmologies (Sutherland & Nash, 1994), 'ideal-types' of cosmologies using variations on Mary Douglas' grid-group framework (Davidson, 2011; Douglas, 1970), relate – or conflate, depending on your perspective – cosmology with metaphysics (Ferr, 1999) or, indeed, discuss eschatology with absolutely no passing reference to cosmology whatsoever (Davis, 1999): but none begin with a simple, workable definition of their key concept.[6]

In my conceptual framework cosmology is to do with the study and contemplation of the universe; theory of origin (how the universe/world came to be), theory of the development/evolution of the universe/world, and what the fate and purpose of it might be. As humans are the ones doing the contemplating, it invariably also involves questioning how humanity fits into that universal journey. There is no one cosmology, but various *cosmologies*; each specific and appropriate to its cultural, historical, societal, political and economic context. Some have endured for millennia (e.g., the notion of a divinely created universe and all that entails), while others are relatively new and recent (scientific cosmologies e.g., The Big Bang) (see Davis, 1999).

The conception of cosmology used herein aligns with Botkin's poetic description: "a layer of belief, myth, and assumption, of symbol and metaphor: the clock, the tree, and the stars" which exposes "four ancient questions about the fundamental relationship between human beings and nature: What is the character of nature undisturbed? How does nature influence human beings? How do

[6] In Douglas' book *Natural Symbols: explorations in cosmology* there is no specific mention of cosmology at all until page 151 of 170 – and even then, there is no explicit explanation of what cosmology is in relation to the other concepts discussed at length: religion, ritual, society, ethics and so on.

human beings influence nature? What is the proper role for human beings in nature?" (Botkin, 1990: viii). Thus it becomes apparent that cosmology implies basic assumptions about how the world works: what is normal/abnormal, natural and unnatural. It involves a set of normative expectations about how the world *should be*. From there follow assumptions about why the world is not currently as it should be and whether it is desirable or even possible try to return it to that ideal state.

In this thesis cosmology acts as a foundational discourse which undergirds both explicit and implicit religions – in which environmentalism is included. It is also important to recall that, although the term 'environmentalism' has, in our own era, acquired rather specific political and cultural connotations the essence of environmental thought remains, as it has always been, the issue of humanity's relationship with nature. This is an easily overlooked point, which is nevertheless incredibly important for this thesis in particular; especially since, for millennia, the most vital tool mankind used to understand nature – the environment, our environs – was religion: "What people do about their ecology depends on what they think about themselves in relation to things around them. Human ecology is deeply conditioned by beliefs about our nature and destiny – that is, by religion" (White, 1967: 1205). To properly demonstrate the role of cosmology in this thesis, I shall discuss three important types of cosmology in the following sub-section: classical, modern environmental, and Christian.

2.4.1 Classical Cosmologies: Divine Order, Organic, Mechanistic

The Divine Order, Organic, and Mechanistic cosmologies are referred to here as 'classical' merely to demarcate them from the other cosmologies discussed in this chapter. Despite the necessity of presenting cosmologies as discrete ideational thought-worlds they inevitably bleed into each other. The closer they are examined, the less differentiated they become. This is typical of discourses so it is unsurprising that cosmologies – as foundational discourses – act similarly: "...as no discourse can hope to exhaust all the possibilities in the vast social world, every discourse is at risk of being attached or invaded or eroded by elements from other discourses" (Wagenaar, 2011: 139). Thus, before proceeding it is important to recognise that elements of the classical cosmologies will appear in the modern environmental and in the Christian cosmologies, and that this is expected and does not devalue their separate discussion.

Divine Order refers to a cosmology wherein the universe and all its contents are borne out of the divine, and as such are perfectly ordered and in balance: "Divinely created nature was perceived as perfectly ordered and perfectly stable; it achieved constancy, and, when disturbed, returned to that constant condition which was desirable and good" (Botkin, 1990: 8). Botkin explains that this idea

of nature is to be found "in the writings of the classical Greeks and Romans" (ibid.) although given the rather anarchic state of the Greek and Roman pantheons it might be argued that perhaps classical scholars were trying to impose an order they hoped for rather than one they felt existed: "The pantheon portrayed in both Greek myth and the Homeric epics can hardly be said to exemplify virtue: the origins of the gods in particular make up an extraordinary catalogue of horrors and violence" and the Greeks viewed with "cheerful resignation" the "disconcerting lack of moral predictability" of their capricious gods (MacCulloch, 2010: 32). The Divine Order cosmology persisted throughout the centuries, and Botkin finds it in the writings of the nineteenth century American conservationist George Perkins Marsh:

> "In countries untrodden by man, the proportions and relative positions of land and water, the atmospheric precipitation and evaporation, and thermometric mean, and the distribution of vegetable and animal life, are subject to change only from geological influences so slow in their operation that the geographical conditions may be regarded as constant and immutable." (Perkins Marsh, 1864: 29-30)

The divine order cosmology was easily assimilated into the Western Christian tradition: "The integration, which in its philosophical aspects was achieved by St Thomas Aquinas and in science was carried out by Albertus Magnus, was a very close one, and was accomplished in the 12th and 13th centuries" (Pepper, 1984: 39). The natural state of harmony became man's 'state of grace' in the Garden of Eden before the Fall. The disordered world full of phenomena hostile to humanity's happiness and comfort is the result of sin (the reason for the fall from grace) and therefore the road to redemption involves the removal of sin from our world.

Whereas the Divine Order cosmology assumes the 'natural' state of nature to be a perfectly balanced steady-state ordered and maintained by the divine, the organic cosmology puts all creation in an equal state of divinity and deduces the nature of God from his Creation: "it is from nature that the divine force may be known" (Wong, 1977: 82-83). The organic perspective is, according to Botkin, the oldest cosmology. "The organic view has been traced back by archaeologists and anthropologists to early cultures, prescientific and non-Judeo-Christian. It can be found in many contemporary non-Western 'primitive' societies" (Botkin, 1990: 93). The organic cosmology, like Divine Order, was also easily assimilated into Judeo-Christian thought, helping to "justify the biblical stories of the change of the earth," such as "the loss of the Garden of Eden and the Flood. (…) The physical chaos represented by mountains, oceans, and marshes, as well as the existence of fossils, were taken to be the direct result of the Flood and a consequence of the expulsion from the Garden of Eden" (Ibid.).

Pepper notes that although the organic cosmology is very much a *historic* perspective, it has "reappeared today as a major tenet of ecocentric philosophy" (1984: 43). Ideas of the earth and all its spheres[7] being akin to a 'superorganism' whereupon humanity has spread like a virus certainly recalls the medieval version which "saw the world having feelings and being a huge animal, in which men and women lived, like intestinal parasites" although today's ecocentrics refrain from describing the earth's "water and volcanic conduits" as "circulatory and digestion systems – volcanoes erupting, for instance, were a process of breaking wind" (ibid.). Botkin assumes the organic view seems "quaint and strange" to us, and that it is incompatible with the perspective of the scientific age (Botkin, 1990: 93, 99). However, the notion of the earth as an organic whole, a "superorganism," to misquote the discredited ecologist F.E. Clements, is on the rise once more, although "…the superorganism concept has not fared well within evolutionary biology, which is the one discipline best qualified to judge it" (Wilson & Sober, 1989: 338).

The rise of the mechanistic cosmology has been considered as a sort of "death of the Earth" (Nicolson, 1959) since "the earth was no longer regarded as an animate creature, but as a vast machine" (Botkin, 1990: 103). The notion of the planet as a live thing infused with spirit seemed to completely wither in the light of new discoveries about how humanity could re-engineer nature. In the mechanistic macro-environmental discourse, the whole of nature is viewed as a Great Machine, with each of its constituent parts analogous to the cogs, wheels and levers characteristic of the innovative machines which allowed humanity to discover new realms of knowledge about their existence on earth and thus allowed embarkation upon an "unlimited programme of debunking" (Habgood, 1964: 12). "The development of modern sciences, beginning with physics, led to a change in metaphors, but more profoundly to a change in explanation" (Botkin, 1990: 103). The rise of the mechanistic cosmology has had profound consequences for understandings of our relationship to nature. The unavoidable recognition of the power of the new natural 'laws' took away much of the mystery and power previously attributed to the divine. The machinery resulting from engineering innovation sparked by new understandings of these laws had transformed society dramatically. Humanity was beginning to take the position previously assigned to the divine – that of directing natural processes. The ability to *understand* natural law led to the ability to *use* natural law for our own ends. The mechanistic cosmology also offered an explanation of the planets geologic and biological processes: e.g., "Looked at from the purely physical point of view, the earth has often been loosely described as a 'heat engine.' It is now clear that this is not simply a metaphor but that it is literally true" (Wetherill & Drake, 1980: 96).

[7] Lithosphere, atmosphere, etc.

Most intriguingly, although the mechanistic cosmology was the furthest removed from the divine of all previous cosmological ideas, it offered a new theological position, providing a link back to some notion of Divine Order: The Watchmaker analogy. This is the idea that "the world is 'like a watch' and not only is a perfect machine, but must also have a maker" (Botkin, 1990: 104). This allowed for the possibility of both a creator-God and free will as, once set in motion, the watch no longer needs the watchmaker. Johannes Kepler, through his explanation of the solar system, sought to "show that the celestial machine is to be likened not to a divine organism but rather to a clockwork…, insofar as nearly all the manifold movements are carried out by means of a single, quite simple magnetic force, as in the case of a clockwork all motions (are caused) by a simple weight." (Kepler, letter to Herwart von Hohenburg, 1605, quoted by Holton (1956) in Pepper, 1984: 47). This resulted in a conception of God as "a Creator and nothing more. He was not ever-present and did not intervene in the workings of his creation. Rather, he was an engineer, using geometry to make a plan from which he had constructed a machine. He set the machine going and then left it" (ibid., 84)

Despite the modern implications of the mechanistic cosmology (secularisation thesis, discussed in §3.4) all three 'classical' cosmologies include a notion of the divine; the existence of divinity was not in doubt until a few centuries *after* the emergence of the mechanistic perspective. "Today we tend to assume that the only interesting question of theology concerns the *existence* of God. For the overwhelming majority of philosophers of the Enlightenment and for essentially all of the founders of the American Republic, however, the existence of God was never in doubt. The important questions were all about the *nature* of God," and to some extent where humanity might expect to come into contact with the divine (Stewart, 2014: 130). "These three images of nature – the machine, the creature, and the divine – dominate our thoughts about the environment, although we are not usually aware of them" (Botkin, 1990: 12). The combined result meaning that most people have residual assumptions about the environment and the proper human-nature relationship that is based in some fuzzy understanding of divinity – although, as Botkin says, we're not usually aware of it.

2.4.2 Modern Environmental Cosmologies: ecocentric versus technocentric

As with the previous section on classical cosmologies, this section begins with a proviso regarding *naming*. In this instance the issue is not with the categorisation of being *environmental* – rather, it is with the choice of binaries. The existence of "two main branches of environmentalism" is well documented, and "the conflict between the two schools" has been evident since "the first wave of environmentalism which started in the nineteenth century, and which subsided with the outbreak

of World War One" (Pak, 2011: 5). The choice of epithets given to these two branches is a matter of contestation.

Broadly speaking, one branch of environmentalism operates on a cosmology which supposes that there was in the past some form of pristine nature in a state of harmony which has been disrupted by the onslaught of humanity and its various interventions in the environment. As mentioned earlier, elements of Divine Order come through here, in ideas about there having been a stable, harmonious state of nature prior to disruption from humanity and a general ambivalence or hostility towards modern civilization. This branch has been called "Arcadian" (Pak, 2011; Worster, 1994), "ecocentric" (Pepper, 1984; O'Riordan, 1981), "biocentric" (Pepper, 1984), "preservationist" (Heinberg, 2004) and so on. The other branch of environmentalism operates on a cosmology which embraces change in the environment and celebrates humanity's ingenuity in finding "benign and efficient" uses for natural resources (Pak, 2011: 5). This branch has been called "Utilitarian" (Pak, 2011), "technocentric" (Pepper, 1984; O'Riordan, 1981), "anthropocentric" (Pepper, 1984), "Promethean" (Lewis, 1992) and so on. This cosmology incorporates elements of both the organic cosmology – in terms of embracing environmental change as the norm – and the mechanistic cosmology, evident in the positive attitude towards human intervention in the environment.

The choice of epithets is very much down to those elements of cosmology that a scholar wishes to stress or sees as most important, and this means that the various terminological options cannot be assumed to be directly analogous. For the first cosmology, Pak (2011: 6) prefers 'Arcadian,' as the term "derives from Greek mythology and refers to a recurrent motif in Western thought that regrets the passing of a mythic 'golden age of plenty, innocence, and paradise' (Pankofsky, 1955)". For the second cosmology, Pak reaches for 'Utilitarian,' both because of the direct emphasis on the *utility* of the earth's resources and because of the link with utilitarian philosophy – "the greatest good or happiness for the greatest number" (Pak, 2011: 6). I find Pak's choices very appealing but have chosen to use the terms 'ecocentric' and 'technocentric' for the simple reason that neither requires a grounding in classics or the work of J.S. Mill and Bentham to grasp the central theme. 'eco' leads one to think *ecologically*, and 'techno' is self-explanatory. The terms may lack nuance, but they make up for it in general accessibility.

The ecocentric and technocentric cosmologies have had a mostly adversarial relationship. "In fact, conflict seemed inevitable at times, given the fundamental differences in their views on the proper relationship between nature and humans" (Pak, 2011: 6). Despite the seemingly unavoidable struggle between them, "It is not that the Utilitarian [technocentric] perspective will or should

replace the Arcadian [ecocentric]. Historical experiences show that the two camps need each other to stimulate them into action and balance out each other's excesses" (Pak, 2011: 7). Over the last century, the ecocentric cosmology seems to have dominated environmental thought, with many consequences – some fortunate, some less so. One particular unfortunate consequence has been, in the opinion of technocentric environmental scholar Björn Lomborg (and others) that the public has learnt to equate the ecocentric litany of environmental doom and gloom, guilt and fear with all of environmentalism (see also Anderson, 2010; Lomborg, 2001).

2.4.3 Christian Cosmologies: Dominion vs Stewardship

The dominion and stewardship cosmologies are tightly linked together. It might be argued they do not represent separate cosmologies at all, given that both perspectives have the same assumptions regarding the origin, development and fate of the universe, the Earth and all its inhabitants: divine creation by the Christian God, eventual rapture and apocalypse as foretold in Revelation. The difference between them lies in the interpretation of humanity's proper role in relation to nature; again, links can be seen with the other cosmologies that have already been discussed. Prior to a discussion of those links, however, it is important to explain the origins of the dominion-stewardship debate. Both 'dominion' and 'stewardship' cosmologies were first clearly articulated in the latter half of the twentieth century, almost exclusively as a direct result of a paper by the historian Lynn White Jr.; *The Historic Roots of our Ecologic Crisis* (1967).

The 'Lynn White thesis' is crucial to discussions of dominion/stewardship and has become "the most cited work (other than the Bible) in the literature of Christian ecotheology and environmentalism" (Douglas, 2009: 724). It has had an extraordinary influence on disciplines such as "the history of religion, ecotheology (now commonly called Religion and Ecology), environmental ethics, eco-philosophy, and environmental history, as well as… environmentalism as a social and intellectual movement" (Whitney, 2015: 396). What made White's thesis so controversial was that he constructed Christianity – and the values and assumptions about the natural world and our place within it with which Christianity had inculcated Western society – as the base problem from which all our contemporary environmental problems stemmed:

> "Especially in its Western form, Christianity is the most anthropocentric religion the world has ever seen… Man shares, in great measure, God's transcendence of nature. Christianity, in absolute contrast to ancient paganism and Asia's religions (except, perhaps, Zoroastrianism), not only established a dualism of man and nature but also insisted that it is God's will that man exploit nature for his proper ends. (…) By

> destroying pagan animism, Christianity made it possible to exploit nature in a mood of indifference to the feelings of natural objects" (White, 1967: 1205).

White's argument has been thoroughly debated and roundly criticised over the last half-century, but his essential point – that the type of relationship between humanity and nature espoused in Genesis is one of exploitation (dominion) – has proven hard to shake. At the time of publication, environmental issues were emerging as a key concern: Rachel Carson's polemic *Silent Spring* had been published only a few years prior (1962), and both public and academic communities were waking up to a new global issue (other than the ongoing Cold War). White's thesis tapped into an awakening ecological consciousness and laid the blame somewhere specific (Christianity) and comfortable (the past). The term 'dominion' came directly from a specific interpretation – and, indeed, a specific translation – of the Bible and the key verses in Genesis 1:26-28:

> 26 Then God said, "Let us make humankind in our image, according to our likeness; and let them have dominion over the fish of the sea, and over the birds of the air, and over the cattle, and over all the wild animals of the earth, and over every creeping thing that creeps upon the earth.
>
> (…)
>
> 28 God blessed them, and God said to them, "Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth. (NRSV)

As will be discussed in later chapters, terms such as 'dominion' can mean different things for different people in different eras. White argued that the term 'dominion' had been interpreted as a form of direct ownership by humanity, wherein the earth and all its resources become 'unsacrosanct' material to do with as mankind desired. His was a very selective reading of history and he had a very specific purpose in mind with his work, which has been exhaustively picked-over and criticised and disputed over the last fifty years (see discussion in Whitney, 2015). The details of those criticisms are not necessary to this discussion. What is pertinent is that in response – or retaliation – to White's explanation of the role of 'dominion' in ravaging the earth, other scholars revisited those same verses in Genesis and argued that Christians had been misinterpreting 'dominion' for millennia, and that what was truly meant by the term was something more akin to a notion of *stewardship*. For example, "dominion does not mean domination, rather it means humans taking responsibility for the earth as stewards and viceroys of that creation" (Deane-Drummond, 2008: 82). Also, "Dominion as outright oppression is not advocated or condoned by Scripture. First, Genesis 1:28 gave the blessing and mandate to people *before the fall into sin*. Second,

this passage must be understood not in isolation, but in the context of the rest of the Bible, which shows that dominion means responsible stewardship" (de Witt, 2008: I-26).

When considering how the dominion and stewardship cosmologies link to the others discussed in this chapter, the key point to note is that both the Christian cosmologies are inherently anthropocentric. Dominion is obviously so: humanity is interpreted as having the right to use creation as it desires to do so, with no outright expectation of being called to account for its actions with *regards to the natural environment* – discussions of sin and repentance are reserved for actions against God and fellow men and women. Stewardship, with its emphasis on "appreciation" leading to "restoration" and then to "serving", retains a notion of ownership; "This service includes loving, caring, and keeping what God has given us to hold in trust" (de Witt, 2008: I-28). 'Dominion' perspectives are more obviously destructive and exploitative, but 'stewardship' perspectives still place humanity at the pinnacle of all Creation. Stewardship also retains a notion of human superiority: where does this responsibility stem from, if not humanity's greater capacity for reason and creativity? The hubris remains; humanity is 'better,' and thus the responsibility is to make decisions *for and on behalf of* the rest of Creation. Humanity is placed above other residents of the planet, as "God's Agents of Renewal" (Wright, 2008: I-78). See, for example, this expression of stewardship responsibility from Pope Francis: "This responsibility for God's earth means that human beings, endowed with intelligence, must respect the laws of nature and the delicate equilibria existing between the creatures of the world… (…) Clearly, the Bible has no place for a tyrannical anthropocentrism unconcerned for other creatures" ('Laudato Si', 2015).

2.5 Chapter conclusion

This chapter provided some contextual literature on discourse analysis and the epistemological stance indicated by the preference for a Foucauldian approach as taken in this thesis. Despite criticism from those scholars threatened by the post-modern and post-structural turns, Foucauldian discourse approaches have been shown to be well-suited to discussions of socio-environmental and enviro-cultural change, as evidenced through the work of Hajer (1995), Dryzek (2005) and others. A common difficulty associated with discourse approaches is regarding the variety of definitions of discourse that have become available: however from a Foucauldian perspective the sum of these definitions is that "discourses generate realities" (Landwehr, 2009: 92). With that in mind it is reasonable to agree with von Stuckrad when he asserts that Foucauldian discourse approaches are uniquely suited to historiographical studies of religion, and who finds it "astonishing that Foucauldian approaches have only rarely been adopted in the study of religion, arguably a discipline that has a strong historiographical focus"(von Stuckrad, 2015: 5-6). Having noted that many Foucauldian-inspired scholars follow Foucault in their reluctance to lay bare the

detailed methods of their research process, I make the point that many discourse analysts undertake to produce their own method which suits their needs and those of the project at hand. My discourse analysis 'toolkit' will be explained in detail in Chapter 5.

In the section on religion, I began with an obvious (although necessary) point regarding the differences between academic and casual or 'lay' definitions/understandings of religion and alluded to Wittgenstein's ideas regarding meaning in language. Having laid the groundwork for there being contestation of meaning, I then went on to present and discuss academic definitions of religion from a variety of scholars, focusing specifically on the differences between 'formal' and 'functional' definitions. I make the point that in practice these qualities are hard to separate, as generally one begets the other, and that academic understandings of religion tend towards broad, underpinning philosophical positions which at times become hard to distinguish from other social phenomena, thus leading the discussion into that of *implicit* religion. Reassuringly, it is apparent that many scholars have observed the existence of quasi-religious social phenomena, or phenomena which have the form and function – but not the name – of 'religion.' Of these, the term popularised by Bailey (e.g. 2010) – implicit religion – is what seems to have gained prominence, and is what is being used in this thesis. Then, §2.3.3 gave various examples from scholars who have noticed the religious-ness of environmentalism. However, this section finishes with the observation that somehow the scholarship on implicit religion has not ventured into environmentalism; there is a noted paucity of scholarship on environmentalism-as-implicit-religion.

The final section of this chapter brings together the key concepts of the chapter in a discussion of cosmology. Cosmologies are explained as the foundation of both environmentalisms and religions, as they provide explanations of the origin, evolution and teleology of the universe, planet Earth, and the role of humanity in that journey. Methodologically, they function in my conceptual framework as foundational discourses, thus bringing together the two key conceptual frameworks of the thesis. I identify important historical, environmental and Christian cosmologies which underpin much of the discourses which are discussed both in the following literature review chapters and in the analysis chapters.

An important conclusion to be made at the end of this chapter is that the literature surveyed has shown that there is are key knowledge gaps in environmental and religious scholarship than can be addressed in this thesis. As a project expressly analysing environmentalism as an implicit religion, and doing so using a Foucauldian-inspired discourse approach, this thesis goes some way to both addressing the lack of studies of environmentalism within the implicit religion literature,

the associated lack of religiosity in the environmental studies literature, and also the observed lack of discursive analyses of religion as mentioned by von Stuckrad (2015: 5-6).

Chapter 3 | History of Science and Religion

3.1 Introduction

One of the central claims of this thesis is that focusing on (implicit) religion as a subject of inquiry, while also using religion as a tool of inquiry, is novel and useful. While obviously not being novel in religious or divinity studies, and certainly not among those scholarly factions which make implicit religion their focus, such an approach *is* relatively novel in the social sciences. The reasons why such a central and universal social phenomenon is a novelty in the social sciences literature can only be understood against a societal, cultural and intellectual context which has been shaped over the last two and a half millennia – if not longer – by the dynamic relationship between religion and what has come to be called science. As should be clear by the end of this chapter, "The epistemology of Western culture is based in rationalism and empiricism. We are a product of the Enlightenment. This is not a conscious notion for most of us. We live in a highly technical world, and we believe that science can provide us with truth and is therefore the only, or at least the most important, source of knowledge" (Morvillo, 2010: 90). That epistemology means not only that religion might be considered a novelty, but that knowledge associated with religion and the study of religion has become radically de-valued in many social science disciplines.

To reach an understanding of how religion and science – which were once one and the same – first separated, and then became opposed (supposedly - see Elsdon-Baker, 2017), this chapter ventures to present those historical periods, events and philosophical revolutions that are most pertinent to the history of religion and science. The relationship between religion and science is crucial to this thesis as environmentalism has predicated much of its authority on a notion of scientific legitimacy (see Chapter 4). But as discussed in Chapter 2, environmentalism owes much of its rhetoric and motivating mythos to religion, and to Christianity in particular. Given that there are grounds for the analysis of environmentalism as an implicit religion, this presents a conundrum which this thesis aims to address.

In many respects, however, it will soon become apparent that such a history is mostly a history of Christianity in the West, as a force which encompassed scientific inquiry for most of the periods under scrutiny. As "For most of human history, there was no distinction between the disciplines of science and religion" (Morvillo, 2010: 5); the semantic distinction between religious and scientific endeavours in Western philosophical thought is a conscious product of the last 500 years. I specify it as a semantic distinction since, as I hope to show through this review and my later analysis, the practicalities of religion remain embedded in our social world. Environmentalism, despite building pillars of legitimacy on the secularised authority of science and peer-reviewed research, remains deeply anchored in the shifting sands of religious conviction. The history of

science and religion presented below begins with the great philosophers of Classical Antiquity: Plato and his student Aristotle.

3.2 Foundations of Western Thought

One cannot begin to understand Christianity and the way it has affected the history of the West – or the rest of the world, for that matter – without acknowledging the role played by the philosophies that came out of Classical Greece:

> "Christians inherited Graeco-Roman culture and thought, and when they have talked about questions of faith or morals or have tried to make sense of their sacred books, it has taken an extraordinary effort of will and original imagination to avoid doing so in ways already created by the Greeks. It was particularly difficult in the early centuries, when Christianity was so much dominated by the Classical thought-world around it, at the very time when it was having to do a great deal of hard thinking as to what it actually believed." (MacCulloch, 2010: 30)

MacCulloch identifies three key individuals as being of special importance; Socrates (c. 469-399 BCE), Plato (428/7-348/7 BCE) and Aristotle (384-322 BCE), describing them as "foundational to Western philosophical tradition" (ibid.). We know Socrates mainly through the texts of his student Plato, who used Socrates' method of dialogue and questioning when writing and presenting philosophical arguments. This method of presenting an argument has been, and still is, extraordinarily important; not least because it was a Platonian-Socratic dialogue which put the final nail in Galileo's coffin (by his own hand, no less) (Morvillo, 2010: 64), an affair which continues to haunt the science-religion relationship. Plato is more important later in this history than his student Aristotle, mainly because for centuries most of his texts were lost to the West and only rediscovered in Arabic translations as one of the results of the Crusades in the Holy Lands (1095-1291): until that point it was Aristotle who had the greatest impact on the development of science and religion in the West.

Although the substance of Aristotle's thought is undoubtedly very interesting and worthy of much discussion, the important thing for this research project is how "his philosophy impacted science and religion for over 2,000 years" (Morvillo, 2010: 8). With that in mind, it is important to note some points about Aristotelian science. Aristotle's "writings about the natural world, many of which survive, were so complete and comprehensive that Aristotle became *the* authority regarding natural phenomena, and all knowledge was thought to be contained in his writings. For centuries, science (natural philosophy) consisted of commenting on Aristotle" (ibid.). His preference for observation and the collection of data meant that on those topics he was able to directly study, his

work was extraordinary for the time. However, "most of his notions of physics and cosmology were based on either common sense or his own assumptions, and therefore his conclusions were horribly flawed" (ibid.). As we shall see shortly, it was the physics and cosmology which caused the initial rift between science and religion, which was to deepen irrevocably.

There were, initially, many points on which early Christian theologians disagreed with Aristotle profusely. However, as previously alluded to by MacCulloch (2010), in the classical world that Christianity was fated to find its footing, classical Greek philosophy was unavoidable. A key issue was that Greek had become the language of learning:

> "early theologians were well versed in the Greek philosophies, having been educated extensively in the methodologies; the philosophical underpinnings were deeply ingrained in them. Most theologians of this time were philosophers who later converted to Christianity and attempted to integrate the two belief systems. In addition, their defence of Christianity required them to engage in dialogue with non-Christians, and so these early theologians needed to be well versed in the Greek philosophies to communicate with those who did not accept the faith. And, ultimately, theologians who denied the usefulness of the philosophers and considered them to be heretics still employed the pagan arguments." (Morvillo, 2010: 9)

This meant, in basic terms, that at the time it made more sense for Christianity to incorporate Greek philosophy than to reject it. This was done gradually over the centuries, through the work of many thinkers and theologians; however, the most influential synthesis of Aristotelian philosophy with Christian theology was accomplished by Thomas Aquinas (c.1225-74) (MacCulloch, 2010: 34; Morvillo, 2010:10; Pepper, 1984: 39). Aquinas was a Dominican theologian, and he accomplished "an almost perfect mapping of Aristotle's physical picture on to Christian theology – onto the Christian moral universe" (Pepper, 1984: 39). Again, in this case the substance of that integration of thought is not as important as the fact that it became 'truth' and that thereafter, any scientific discovery either had to mesh with that truth or face rejection. If one challenged Aristotelian thought and understanding of the natural world, one challenged the truth of God as understood and defended by the church.

One point regarding substance is worth exploring, however. The interpretive method favoured during the early Christian period meant that as Greek texts were translated and dispersed, rather than being frustrated that their view of the world might seem alien, theologians such as St Augustine of Hippo and Thomas Aquinas espoused the 'principle of accommodation'. The starting point for the principle of accommodation was the idea that God had (in His infinite

wisdom) presented his Word to the people of Israel in such a way as they were *prepared to accept it at the time*. It was contextually dependent. Therefore, as scientific knowledge advanced humanity's ability to perceive the world as it truly was, so should scripture be re-interpreted to reflect the new, emerging reality. "Whenever the literal meaning of scripture clashed with reliable scientific information, Augustine insisted, the interpreter must respect the integrity of science or he would bring scripture into disrepute" (Armstrong, 2010: 1232; see also Morvillo, 2010: 12). This is in noted contrast to the spirit of literalism that was to emerge from the Enlightenment which forever changed how the Bible was read and interpreted by the majority, and which had long-term implications for the way religion has come to be viewed in our society. Unfortunately, this era of open-mindedness ended abruptly as Rome fell and Europe was plunged into centuries of intellectual gloom – the early Middle Ages (commonly referred to as the Dark Ages).

3.2.1 Schism!

The period from the fall of the Roman Empire until the Renaissance, Protestant Reformation and the Scientific Revolution (see §3.3) is fascinating but not, unfortunately, very pertinent to the discussion at hand. What *is* important to understand about these intervening years is that a series of theological confrontations occurred within the Catholic church which eventually resulted in the Great Schism of 1054. The church split into East and West and the bitter feelings on both sides has meant that "Although formal reconciliation efforts began in 1968, it is likely that the Eastern Orthodox and Roman Catholic Churches will remain separate for a long time to come" (Losch, 2001: 71; see also MacCulloch, 2010: 374). One result of the Schism was the successive investiture of Gregory VII as Pope of the Western church (reigned 1073-85). Gregory instigated a raft of reforms in the church which clashed with the monarchs of Western Europe, creating continuous power struggles between church and state. In these confrontations, the church was never able to win outright and, as a result, "Western Europe was not destined to become a single sacred state like the early Muslim caliphate, under either emperor or pope, but a constellation of jurisdictions, some of which threw off papal obedience in the sixteenth century" (MacCulloch, 2010: 375). There, MacCulloch implies a causal link between the reduction of sacred unity in Western Europe and the willingness of certain states to reject papal authority when the Protestant Reformation gave them the opportunity to do so.

The Schism is also the likely reason why Pope Urban II felt it quite reasonable to ignore a series of pleas from the Emperor of Byzantium (who by then was subject to the Eastern Orthodox Church) for aid against Muslim aggression – at least until it was expedient for him to use one such call for help as a means to persuade the recalcitrant monarchs of Western Europe of the benefits of Crusade in the Holy Lands. With regards to the flowering of culture, art, intellect and science

which began in the following centuries – the Renaissance – a key instigator of this was the emergence of previously lost Classical Greek texts. Many of these found their way to Europe in in the saddle-bags of returning crusaders and the "baggage of scholars fleeing from the wreckage of Christian commonwealths in the east" (MacCulloch, 2010: 576): "The only positive aspect of the Crusades was that the Crusaders brought back from the East a wealth of learning and an appreciation for classical culture that had been lost during the Dark Ages in Europe" (Losch, 2001: 72).

The (Italian) Renaissance which followed in Europe during the fourteenth to sixteenth centuries was termed such – a 'rebirth' – because it was seen as a "rediscovery of something very old" (MacCulloch, 2010: 575). There had been previous Renaissances, but the impact of rediscovered texts was now far greater, because printing allowed for more rapid and widespread distribution of knowledge, as well as giving impetus and incentives for the spread of literacy, as more people wished to share in the new 'old' wisdom (ibid.). The influx of this "intoxicating but unsorted flow of information" meant that "Historical authenticity gained a new importance: it now became the chief criterion for authority" (ibid.; 578-9). The various means developed to assess the authenticity and legitimacy of a text were eventually, inevitably, applied to the Bible itself. Renaissance scholars, equipped with newly acquired methods of critically assessing translations – aided by the wider understanding of Greek, instead of the previous reliance on Latin – gleefully discovered that the translation the Church had been basing its authority on for centuries was riddled with translational inaccuracies and idiosyncrasies – some of them quite laughable (MacCulloch, 2010: 580-1).

The activities of those Renaissance scholars, who were mostly "patently sincere Christians who wished to apply their enthusiasm to the exploration and proclamation of their faith" – paradoxically ended up paving the way for a demolition of church authority and the Protestant Reformation (MacCulloch, 2010: 574). The pace of societal and cultural change sped up from the sixteenth century onwards: the emergent Protestant Reformation gained momentum as the Scientific Revolution launched and the two combined to some extent in the Enlightenment. This tumultuous period from roughly 1500 onwards is the focus of the next section, with a specific focus on the Enlightenment period as that particular societal revolution which had the single greatest impact on the issues at stake in this thesis: religion and its de-valuation, the foundation of the social sciences in an era which actively repudiated the "vestigial superstitions" of previous millennia (Wuthnow, 2012: 1), and the origins of the 'secularisation thesis' which has affected the perception of religion in Western Europe. Although the following section is titled "The last 500 years" the events of the 1900s are skated over very lightly, as they form the body of the first section in Chapter Four; the eras of Romanticism and Transcendentalism which occurred in reaction to

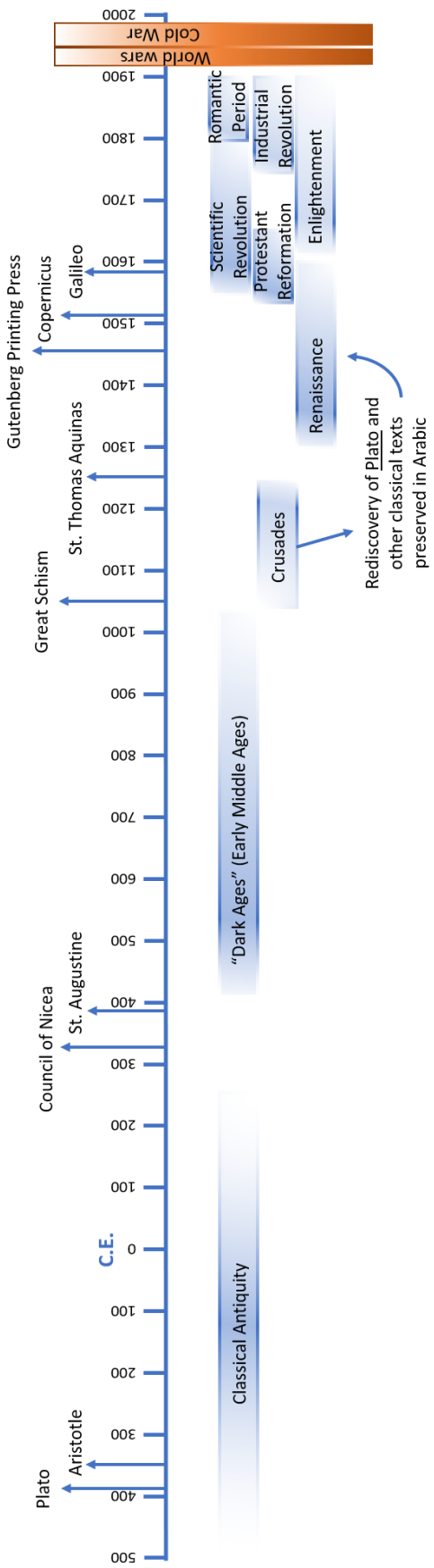

FIGURE 1: TIMELINE: SCIENCE AND RELIGION

the stripping away of spirituality which was the ethos of the Enlightenment, and which simultaneously formed the foundation of modern environmentalism.

3.3 The last 500 years

The following paragraphs will endeavour to discuss those periods of time in European history referred to variously as the "Protestant Reformation," the "Scientific Revolution," and the "Enlightenment" – sometimes referred to as the "Age of Reason." The presentation of them in prose as discrete and linear progressions of thought, events and reactions is merely a convention. If one were to look at a timeline of these five centuries, it would be clear that these were "overlapping and closely related periods," and the "differential use of terms" denotes "more of a focus on particular issues and trends of the time in specific areas, rather than identifying unique and distinct eras" (Morvillo, 2010: 15).

3.3.1 The Protestant Reformation

The Reformation is the most obvious beginning of the erosion of religion in Western Europe. Even though it resulted in the parallel existence of two strands of the same religion – Protestantism and Catholicism – it had the broader effect of undermining church authority in an abstract sense. Martin Luther's *Ninety-five Theses* nailed to the door of the All Saints' *Schlosskirche* in Wittemburg dealt (among other issues) with the Roman Catholic Church's generation of income through the selling of indulgences. Returning to the issue of how religion affects all aspects of social life, we can pause here to reflect that in doing so Luther was attacking a pillar of the church's economic power, which went hand in glove with political power (and still does). He was also attacking the church's moral authority, by

designating the selling of indulgences as immoral and as preventing people from charitable giving; this, in turn, was an attack on the church's cultural power – the manner in which religious norms dictated people's behaviour and moral decision-making. The pronouncements of clergy were no longer to be taken as the absolute will of God. Of course, the Inquisition – which had begun centuries earlier in France to combat the Cathar and Waldensian heresies – was then expanded to fight the Protestant heretics.

The technological advance of printing made the reformation debates far more wide-reaching than they would have been otherwise: "In the past, the Church had – to an extent – been able to supervise the flow of ideas and information, but the proliferation of books and pamphlets after middle of the sixteenth century made this censorship far more difficult" (Armstrong, 2010: 169). One key inheritance from Luther's theology which was thence widely dispersed and profoundly effective was his rejection of the notion that investigating the cosmos and the natural world could bring true knowledge and understanding of God: he constructed a faith based exclusively on scripture. This had the effect of consciously desacralizing the cosmos – our environment – encouraging future scientists to construct their investigative approaches in a manner which privileged *logos* at the expense of *mythos* (Tarnas, 2010: 240-2).

3.3.2 The Scientific Revolution

The Scientific Revolution which followed so closely on the heels of the Protestant Reformation was a period of rich scientific discovery about the natural world and the heavens which stretched from the early 17th century until the beginning of the 18th century. Despite increasing antipathy between doctrine and theology[8], for the most part the Augustinian principle of accommodation still applied. Science was still viewed as the use of a God-given intellect to discover the mysteries of Divine Creation, and Aristotelian physics still reigned supreme. Copernicus' radically new model of a heliocentric universe was quietly received when it was published just before the scholar's death in 1583, aided greatly by the canny maneuvering of his friend Osiander, who prefaced *De revolutionibus orbium coelestium* (On the Revolutions of the Celestial Spheres) with a statement which drastically reduced the text's revolutionary character. As with the Renaissance scholars, few of the scientists associated with the Scientific Revolution viewed themselves as religious rebels, and for the majority of the sixteenth and seventeenth centuries, "science, philosophy and religion" remained "tightly welded together" (Armstrong, 2010: 178). Copernicus, for example, had no intention of challenging church authority and biblical interpretation: he wanted to help in the construction of a more accurate calendar, and his choice of a heliocentric universe was made

[8] Doctrine = the (official) teachings of the church; theology = the study of God. Theology involves asking questions; Doctrine provides answers which the church tends not to want questioned.

mostly on aesthetic, rather than scientific grounds (Morvillo, 2010: 58-9). It was still typical to regard inquiry into the natural world as a means of encountering God, as shown through Kepler's conviction that God had "written a mathematical riddle into the universe which it was his vocation to solve" (Habgood, 1964: 33): he "followed with sweat and panting the footsteps of the Creator"[9].

Those scientists who did come into conflict with the church often did so unwittingly – Galileo is a famous case. His trial and conviction are a prime example of the value in examining the context of an event: "Galileo was in the wrong place at the wrong time, and his actions could not be tolerated. The church was still trying to recover from the Reformation, and it was in the midst of the Thirty Years War, another struggle with the Protestants over the religious fate of northern European countries. It had little time or patience to deal with Galileo" (Morvillo, 2010: 64). Galileo was a staunch advocator of Copernican heliocentrism, and was "condemned by the Roman Inquisition in 1633 for providing empirical evidence for the radical version of cosmology proposed by the long-dead Polish cleric Nicolaus Copernicus" (MacCulloch, 2010: 684). Recall that because of the efforts of Osiander, Copernicus' heliocentric depiction of the universe had not been much remarked upon by the Church in any official capacity. It was thanks to Galileo that "In 1616 the Church… belatedly declared Copernicus to be in error; the Roman authorities then forced Galileo to deny that the earth moved round the sun and not the other way round, because his observations challenged the Church's authority as the source of truth" (MacCulloch, 2010: 684). In the resulting furore "many eminent Churchmen made fools of themselves, and Galileo recanted" (Habgood, 1964: 28). "Despite his conviction that theology and science were entirely separate disciplines, [Galileo] seemed perversely intent on reconciling his discoveries with scripture" (Armstrong, 2010: 181). As with Copernicus and Kepler, "Galileo was a good Catholic. He never left the church, and never questioned the authority of the Bible (just the interpretation of it). He felt he was doing the church a favor by purging incorrect scientific information from its teachings, and never intended any embarrassment or disrespect" (Morvillo, 2010: 64).

Sir Isaac Newton is another visionary who saw no contradiction between science and his Christian faith. The dispersal of his extraordinary discoveries meant he "became the symbol of an age. (…) Men felt at last they had solved the riddle of the universe" (Habgood, 1964: 35). Newton's laws of motion and universal gravitation became the foundation of modern science, but Newton was perhaps even more interested in the deeper questions of life. "In fact he wrote more theology than he wrote science: but it was very queer stuff, and it is not for this that he is remembered" (ibid.). The 'queer' nature of Newton's theology is reiterated by Westfall, who explains that Newton

[9] Dedication to Emperor Rudolph II, in Buckley, 'The New Science', op. cit., p. 15. (Armstrong, 2010: 178)

"justified himself in terms of the Bible, but the Bible as he understood it was far removed from the Bible of traditional belief. Where that Bible contained truths beyond reason, Newton summed up his true religion in terms that effectively dispensed with all of revelation beyond the prophecies" (1980: 826).

A recurring theme throughout these discussions of both the Renaissance, the Reformation, and the Scientific Revolution is that those individuals who spurred on the intellectual ferment which so frequently damaged the authority of the Church often did so unwittingly. Luther, of course, was purposefully challenging the Catholic Church, but did so in the hope of revitalizing Christianity rather than beginning a process of secularization. Time and time again, some well-meaning, educated and enquiring cleric or intellectual sought answers to questions of natural philosophy, and found answers which contradicted, rather than supported, church doctrine. Had the context been different, perhaps the church may have responded more positively; but the Church had been weathering storm after storm for centuries and was as a result defensive and reactive, seeking to shore up its authority and power. In some cases there were personality issues as well, as in the case of Galileo and Pope Urban VIII (Morvillo, 2010: 64). These trends were to be exacerbated in the Enlightenment, as an emphasis on rationalism and empiricism seemed to mock the foundations of church teaching. Once again, the way the church reacted – to double down and proclaim the literal truth of the Bible – was to have severe and long-lasting ramifications for the future of religion in Western Europe.

3.3.3 The Enlightenment

The gradual accumulation of scientific discoveries since 1500 undoubtedly cast doubt on some of the truth-claims of the church(es) in Western Europe. However, the glut of progressive, *aggressive*, rationalist and atheist thinkers, poets, and writers that gave the Enlightenment period its name arguably did more damage to the supremacy of religion in social life than had been achieved in the previous two centuries combined. The work of *philosophes* such as Kant, Turgot, Condorcet, Auguste Comte, Henri Saint-Simon, Voltaire, Rousseau, Benjamin Franklin, Hume and Diderot all combined to put religion on the back foot, and science – or at least, knowledge gained through 'scientific' means – to the fore.

Given the context in which the 'prophets of Paris' (Condorcet, Turgot, Henri, Comte de Saint Simon and Auguste Comte) and the *philosophes* (Voltaire, Rousseau and others) lived, worked, thought, and wrote, it is unsurprising that they managed to infuse the European Enlightenment, the French Revolution and the nascent discipline of sociology with not only an anti-religious bias, but a specifically anti-Catholic bias (MacCulloch, 2010: 800). French Catholicism was the specific,

all-encompassing religious example from which they all emerged. The Church was intimately bound up with the state: the French monarchy had managed to cling to a "far more coherent and ancient ideology of sacred monarchy" than even Great Britain, its main rival (ibid: 814). The Catholic Church had become synonymous with preserving the social order which was to disintegrate in such a violent fashion, and was itself a wealthy, powerful and oppressive social structure. There were good grounds for the "virulent anti-religious bias" (Kumar, 1978: 22) that was placed at the centre of the future 'science of society' by the forefather of sociology, Condorcet[10]. His conscious rejection of the "residual theology" that had been present in all previous attempts to philosophise the continually changing nature of human society, including the work of his friend and mentor Turgot[11], allowed Condorcet to imagine a future society which had left all traces of 'vestigial superstition' behind while embracing science and reason (ibid.). Condorcet viewed science and the men of science as the instigators of a new epoch:

> "It was the scientists who, as a group, carried the seeds of the future within them. Science was the fullest embodiment of the principles and tendencies of the European Enlightenment. It represented the distillation, as it were, in its purest form of the rationalist philosophy with which the Enlightenment had fought the superstitious and unregenerate forces of Church and State. Therefore the new society, whose whole informing principle was to be rationality, should be guided and shaped by the men of science." (Kumar, 1978: 25)

Condorcet's vision has had profound consequences for the fashion in which the social sciences have progressed since that pivotal point, as his (and his contemporaries') biographer Frank Manuel shows:

> "In Condorcet's last manuscripts there continually obtruded grave misgivings about the decisions of any public bodies which were not technically competent as experts. With the accumulation of sufficient data and the application of calculus of probabilities the state could be run by social mathematics – without debates. With one leap the first sociologist of scientific creativity traversed the age of middle-class parliamentarianism and arrived at the ideal of the all-knowing scientific technician as the ruler of society." (Manuel, 1965: 60)

[10] Marie Jean Antoine Nicolas de Caritat, Marquis of Condorcet, known as Nicolas de Condorcet: French philosopher, mathematician, and early political scientist. 1743-1794.
[11] Anne Robert Jacques Turgot, Baron de l'Aulne: French economist and statesman and an early advocate for economic liberalism. 1727-1781.

The key point to emphasise here is that the de-sacralisation of social thought during this period was *deliberate*. The great thinkers of the day were consciously rejecting what had been the discursive 'status-quo'. The desecration of religion by scientific reason was not pure altruism, a form of saving humanity from its own folly: it served an express purpose. Gieryn's notion of 'boundary work', so familiar to social scientists, helps us see that in demarcating supposedly clear lines between religion and science (when in reality the boundaries were then and still remain fuzzy and inconsistent), scientists were able to promote a "public image for science by contrasting it favorably to non-scientific intellectual or technical activities" (Gieryn, 1983: p. 781). Thus, "religion bashing actually served scientists well … Rather than depicting religion as something different from science but useful in its own way scientists characterized it as pseudo-science based on false empirical claims. That such uses of religion by scientists continue is readily apparent" (Wuthnow, 2012: 258). As soon as we look a little deeper, it becomes apparent that

> …science and religion cannot be compartmentalized as easily into separate and noncompeting domains as some observers would like to think. As long as the two have fuzzy edges, proponents, antagonists, and bystanders in the general public will be able to contest where one domain should end and the other should begin. The likelihood of such contestation increases, moreover, because religion and science are never static. Both struggle to assert themselves as legitimate ways of addressing important issues and this as legitimate claimants of social resources. (Wuthnow, 2012: 260)

3.3.4 The Industrial Revolution

If the Enlightenment thinkers were hoping for the establishment of a secularised society, then those writing in the Industrial age felt they were truly witnessing it. Krishnan Kumar writes,

> "Of one thing most people felt certain: the industrial society was a secular society. By this they meant that, one the one hand, there was a progressive decline of institutionalised religion, and of the formal beliefs associated with religious institutions; and, on the other, these beliefs were being increasingly replaced by ones deriving their authority from science and reason, rather than from systems of revealed religion" (1978: 95).

Kumar links the processes of secularisation, rationalisation and bureaucratisation together. More interesting from the perspective of this thesis is that, although Kumar never uses the term, he refers to both secularisation and industrialisation with terminology reminiscent of implicit religion: "Secularism may very well be said to be a religion. …industrialization brings with it secular

institutions, practices, and beliefs. In what further sense these may also be said to share certain properties with traditional religions belongs to another discussion" (Kumar, 1978: 100). Habgood makes a similar point about science in general: "In some parts of the world science has been distorted into the pattern of religion to be a yet stronger opiate for the masses" (Habgood, 1964: vii). MacCulloch makes the point that the "rhetoric of revolution," when combined with the new possibilities inherent in the steam-powered industrial revolution, "more and more people had the experience of building up their own lives without traditional resources of family or custom" (2010: 813). The Enlightenment and the Revolution had "served long-term notice that the institutional Church and perhaps Christianity itself would be seen as an enemy of the new world" (Ibid., 809). Through social changes put in motion by scientific and technological innovation, people were empowered to construct their own ideas of what life should be, without reference to Christianity if they so wished – albeit often in conditions of extreme poverty and deprivation. "The French Revolution's slogan of 'liberty, equality, fraternity' could not be forgotten" (MacCulloch, 2010: 813).

3.4 The secularisation thesis

When asked by a contemporary in Berlin, Immanuel Kant replied that Enlightenment was "mankind's exit from its self-incurred immaturity" (as quoted in MacCulloch, 2010: 803). A large part of that immaturity that needed to be jettisoned – according to many Enlightenment thinkers – was religion: specifically, Christianity. "[T]he story of the European Enlightenment … is sometimes told as a fairy-tale progression from Christian (and clerical) short-sightedness to a secularized clarity of vision" (MacCulloch, 2010: 770). It has become *de rigueur* to assume that the secularised society and academy with which we are so familiar was somehow inevitable. It would be more realistic to say that the groundwork for our secularised society was laid during the Reformation's de-sacralisation of the cosmos; that concrete notions of a secularised society were constructed during the Enlightenment; and that these notions became entrenched and seemingly proven during the Industrial Revolution. The secularisation thesis is, broadly speaking, the assumption that social theory can legitimately "describe the historical movement of modernity in Europe in terms of a transition from a society dominated by magic, myth, superstition and religion, into one with a cognitively superior outlook in which these things are disclosed as illusions and delusions which we shed in the name of reason, criticism and science" (Glendinning, 2017: 200). Stripping away religion from social thought

> "proved to be a task of no great difficulty. From Burke onwards it became commonplace to point to the French Revolution's substitution of the Goddess of Reason for the God of Christianity. Then there was Saint-Simon's 'New Christianity',

> a secular, scientific faith for the new world of industrialism, to replace the obsolete old Christianity of the Obsolete of world. This shortly reappeared as Comte's 'religion of humanity', Positivism, aptly characterized by T. H. Huxley as 'Catholicism minus Christianity'" (Kumar, 1978: 99).

Thus, "the secularisation thesis became increasingly matter of course for European intellectuals…" In writing from the late nineteenth and twentieth centuries "there was this unquestioned background that, while there were still some foolish believers around, the proper methods were finally making their way; and the methods with a future were rational and scientific" (Glendinning, 2017: 200). C. Wright Mills neatly summarised the position taken by so many;

> "Once the world was filled with the sacred – in thought, practice, and institutional form. After the Reformation and the Renaissance, the forces of modernization swept across the globe and secularization, a corollary historical process, loosened the dominance of the sacred. In due course, the sacred shall disappear altogether except, possibly, in the private realm" (quoted in Norris & Inglehart, 2004: 3).

Despite recent challenges to the ubiquity of the secularisation thesis, it seems to have become so endemic to the academy that many scholars are now blind to their own inherited bias. For example in Rom Harré's highly-cited *The Philosophies of Science : an introductory survey* (Harré, 1972), the only mention of religion to be found is in his discussion of the philosophical contributions of Bishop Berkeley. All well and good, but even here the author's interest is clearly only in the non-religious aspects of Berkeley's work. Harré sees God's role as dispensable in relation to the bigger picture he draws of the philosophies of science. For the Bishop, God was – unsurprisingly – absolutely central to the argument. The point to note here is that an undoubted authority on the topic (Harré is a distinguished philosopher and psychologist who was instrumental in founding the Honours School of Physics and Philosophy at Oxford University) is so uninterested in the role of faith; his work doesn't come across as consciously against religion per se; religion just isn't part of the story. Given Harré's role in teaching and writing on the topic of philosophy of science in the UK and further afield, this is an intriguing example of how God (and religion) gets written out of the history of science.

The secularisation thesis has been heavily criticised but, much like with the White thesis (see §2.4.3), it caught the imagination of generations of scholars, seeming to confirm what many might hope to be true: "amongst analytical philosophers, ignorance of religion is a point of professional honour, where social science continues to be dominated by theories of secularization that were falsified generations ago" (R. H. Nelson, 2010: xv). There are three key problems with the

secularisation thesis which will be presented in the following subsections: firstly, that the way it constructs religion as 'irrational' is inherently problematic; secondly, that rather than naturally dying out, religion seems to be exceptionally persistent; and thirdly, that the combination of the first two criticisms points to the notion that religion is somehow necessary to human society.

3.4.1 Irrational religion

Due to a combination of factors, religion and faith have been constructed as inherently *irrational* perspectives from which to understand the world around us. Science, in contrast, has been constructed as a perfectly *rational* and *reasonable* starting point for anyone seeking greater understanding: "In the modern West … 'science' is a rational mode of enquiry, waging an ideological battle with an irrational foe, Christianity" (MacCulloch, 2010: 773). Garreau makes the point that the very terms 'religion' or 'religious' are often thrown around in a pejorative manner:

> "This disdain is rooted in an uncontroversial proposition: You cannot reason your way to faith. That's the idea behind the "leap of faith" – or the leap to faith, in Kierkegaard's original formulation: the act of believing in something without, or in spite of, empirical evidence. Kierkegaard argued that if we choose faith, we must suspend our reason in order to believe in something higher than reason" (Garreau 2010, 11-12).

The above quote from Garreau neatly gets us straight to the crux of the matter. Religious faith is, now more than ever, viewed as fundamentally incompatible with rationality. "The social sciences… were largely founded by thinkers who took it for granted that there was no truth content or value to religions, that religions were irrational, superstitious, regressive, and dysfunctional. They all bought into Comte's vision that the natural trajectory of human civilization, as it became more economically and scientifically developed, would be to forsake these childish beliefs and adopt scientific attitudes and worldviews" (Grassie, 2008: 134). To believe in God is therefore, by definition and in the eyes of an academy steeped in binary notions of objectivity/subjectivity, facts vs. values (and, implicitly good/evil), to *choose* irrationality. The pejorative connotations that the term 'religion' has garnered over the last century or so have an understandable 'knock-on' effect on any social phenomenon so-labelled.

The reason it has been so easy for religion to be disparaged as an irrational basis for almost any perspective in modern society is, broadly speaking, because of how religions construct knowledge. "Most of the knowledge of the universe which the great religions have offered to their adherents has the authority of divine revelation. When knowledge so obtained becomes patently incorrect, the religion in question is in a dilemma from which it cannot easily extricate itself" (Isaacs, 1966:

10). Early in the history of Christianity, Augustine's 'principle of accommodation' allowed scripture to be reinterpreted to reflect current knowledge about the cosmos. Early church fathers understood that asserting the literal truth of biblical passages which were demonstrably inaccurate put all doctrine in question. As history progressed, the church became less tolerant of well-meaning and intelligent scientists who – often unwittingly, as discussed in §3.3.2 – made discoveries and deductions which contravened accepted biblical 'truths.' Printing also helped crystallise our notion of truth; "as the printed book began to replace oral methods of communication the information it provided was depersonalised and, perhaps, became more fixed and less flexible than in the old days, when truth had developed in dynamic relation between master and pupil" (Armstrong, 2010).

By the nineteenth century, theologians were unable to see "the many-sidedness of the notion of truth. They wanted to assert that God has truly revealed Himself in the Bible. What they found themselves saying was that the Bible was true; and when pressed to make clear what they meant by 'true', they went on to define it as 'accurate literally and historically'" (Habgood, 1964: 51). Armstrong concurs, explaining that "*Logos* achieved such spectacular results that myth was discredited and the scientific method was thought to be the only reliable means of attaining truth. This would make religion difficult, if not impossible. As theologians began to adopt the criteria of science, the mythoi of Christianity were interpreted as empirically, rationally and historically verifiable and forced into a style of thinking that was alien to them" (Armstrong, 2010: 6). As Roszak commented, such "reliance on a precarious, dogmatic literalism" is obviously dangerous; "Such a religious tradition need only prick its finger in order to bleed to death" (1970: 212). MacCulloch adds the point that this trend towards empiricism was more dangerous for Protestantism than Catholicism; "Protestants were nevertheless more seriously affected than Catholics, because of their general rejection of allegory in interpreting the Bible unless absolutely necessary. They were left with the literal sense of the biblical text, if sense there was (try some of the versions of Ezekiel), and scholarship proved alarming for literalists then as now" (MacCulloch, 2010: 785).

Science's means of acquiring knowledge was inherently and overtly God*less* – it ostensibly required merely that a person so-inclined be able to follow the protocols of the scientific method[12]. Thus *humanity*, rather than God, became both the source of and arbiter for truth in the sciences. After centuries of having ultimate control of one's own experiential knowledge being metaphysically wrenched away, the scientific method undoubtedly had an immense appeal. As the industrial age

[12] Although 'the scientific method' is not as well defined as the term implies. Issues of scientific methods and notions of authority and legitimacy deriving from them are recurring themes in the data and will therefore be discussed in greater detail elsewhere in the thesis.

wore on and class mobility increased, easier access to scientific education meant that despite the church's efforts to counter the theological issues being created by scientific discoveries, more and more people were able to independently confirm scientific discoveries. There was no single, omnipotent authority to decree what counted as the ultimate truth – what counted was what was *falsifiable*. To quote again from Glendinning, "the proper methods were finally making their way; and the methods with a future were rational and scientific. In principle, they would leave nothing unexplained, and such explanations would have nothing to do with religion (or 'God and Fate') at all" (2017: 200).

The scientific method was observed to confer a type of legitimacy and authority that was untouchable. Those who sought to establish the new, distinctly social academic disciplines sought exactly that form of inalienable legitimacy and authority. Thus, social thinkers strove for empiricism, positivism, and objective facts about society: "Throughout the eighteenth century it was the secret ambition of most social philosophers to do for their own subject what Newton had done for physics" (Habgood, 1964: 38). Auguste Comte could be said to have achieved just that: his 'Positive Philosophy', or positivism, "proposed that the study of society could be conducted in the same way that the natural sciences approach the natural world" (Little, 2016: 14). Despite Comte never conducting any social research, his ideas were incredibly influential – a cognitive accident which echoes the problem of Aristotelian physics (see §3.2). "It has become increasingly clear, however, that human beings somehow elude that clear, precise, mathematical kind of description which Newtonian physics held up as an ideal; and even if such a description were possible, to understand how human beings function is one thing, and to decide how they ought to behave is another" (Habgood, 1964: 39). It has taken a century or so for the social science academy to emerge from the shadow of that uncompromising beginning and to reclaim the realm of subjective knowledge as being legitimate in its own right – although many of those working in specifically qualitative fields may contend that the struggle is far from over. Today, as Condorcet had wished, science reigns supreme. Wuthnow complains that,

> "Being an educated person does not require knowing anything about religion but does involve taking courses in science, passing examinations testing one's familiarity with scientific thinking, and being respectful toward science in one's work and at parties. In these ways, science shapes the cultural norms that serve as standards of self-worth. A person who understands science is not simply more knowledgeable than one who does not, but is likely to be deemed more worthy and deserving of greater self-respect and prestige" (Wuthnow, 2012: 257).

This fundamental opposition regarding how knowledge is sought and created has led to the popular assumption that conflict between science and religion is somehow inevitable; "Ever since the Renaissance, the scientific method has popularized an empirical approach to the universe which has been consistently at loggerheads with religious dogmatism" (Isaacs, 1966: 10). Bertrand Russell, as well as assuming that science would be the inevitable victor in what he described as the "warfare" between science and religion, expressly named 'traditional religion' as the *aggressor* (Russell, 1935: 7). The broad position espoused by such commentators still today is that religion "is obsolete, clung to only by those who are so stupid that they cannot see the arguments against it, or so clever that they can make up spurious reasons of their own for continuing to believe" (Habgood, 1964: 9). Richard Dawkins, for example, has devoted much of his work "to demonstrating that religiously inclined people are simply uninformed about science, and especially about scientific arguments that contradict faith or more easily explain natural phenomena. Many of his ideas are directed at theologians and other apologists – whom he concludes are "often more chronically incapable of distinguishing what is true from what they'd like to be true"" (Wuthnow, 2012: 11; Dawkins, 2009: 135). Apparently, religious faith is "one of the world's great evils, comparable to the smallpox virus but harder to eradicate" (Dawkins, as quoted in Wuthnow, 2012: 262). Dawkins is on the extreme end of the anti-religious trend in our modern society[13]. Even Bertrand Russell felt that religion had at least one redeeming characteristic: the capacity to imbue life for a person so-inclined with a sense of meaning, or ultimate purpose (Russell, 1935: 17). As the Industrial age was determinedly secularising and rationalising all aspects of social, political, and economic life, there were those who felt the loss of some greater meaning.

3.4.2 Remaining religion

The secularisation thesis has come under sustained criticism in recent years from those who have recognised that, despite the hopes and predictions of so many philosophers, religion "has simply not gone away" (Glendinning, 2017: 201). Thus, in the most basic sense, the secularisation thesis has been falsified merely by the course of history. As Norris and Inglehart explain, "The seminal social thinkers of the nineteenth century – Auguste Comte, Herbert Spencer, Emile Durkheim, Max Weber, Karl Marx, and Sigmund Freud – all believed that religion would gradually fade in importance and cease to be significant with the advent of industrial society… It is obvious that religion has not disappeared from the world, nor does it seem likely to do so" (Norris & Inglehart, 2004: 3-4).

[13] Further discussion of Dawkins' opinions on religion will occur in §3.5 New Atheism and scientific authority.

Another way the assumption of secularisation can be challenged is through an understanding that, in Western European philosophical thought, we simply cannot remove ourselves from the historical context of which we are all a product. Anyone educated in a Western European social sciences discipline ultimately comes from, or becomes immersed in, a "European cultural tree [which is] Graeco-Christian or Pagano-Christian," "not only whether we like it or not but whether we know it or not" (Glendinning, 2017: 203). Jean-Paul Sartre, reflecting on the work of Gustave Flaubert, summarized this beautifully:

> "Flaubert writes for a Western world which is Christian. And we are all Christians, even today; the most radical disbelief is still Christian atheism. In other words it retains, in spite of its destructive power, schemata which are controlling – very slightly for our thinking, more for our imagination, above all for our sensibility. And the origins of these schemata are to be sought in the centuries of Christianity of which we are the heirs, whether we like it or not." (Jean-Paul Sartre, *L'idiot de la famille*, vol.2, cited and translated in Cumming, 1979, p. 225)

As an extension of the point that to ignore the existence and effect of religion in and on society could be highly problematic, this was recognised even by Napoleon. Faced with the challenge of reuniting a France riven by the French Revolution, Bonaparte "attached great importance to religion – not because he cared about it personally, but because he saw that other people cared about it a great deal" (MacCulloch, 2010: 810). Even before that, many of the key thinkers of the Enlightenment foresaw that the destruction of religion might pose a problem for society. Rousseau recognised that "If God departed from our consciousness, or had become impersonal or mere abstraction, the world would be a cold and empty place… [and] tried to remedy this by devising a 'natural' religion" (ibid., 802). The destruction of religion left a perceptible void which many sought to fill: "For many in the nineteenth century, nationalism became an emotional replacement for the Christian religion" (ibid., 814)

3.4.3 Necessary religion

Despite the distaste for religion evident in the work of Condorcet and his colleagues, the notion of religion serving some innate function of society has remained. Durkheim, commonly viewed as the *official* founder of the discipline of sociology, saw religion as being "functionally necessary to society, the central mechanism of integration of its members and the most important source of its unifying symbols and rituals" (Kumar, 1978: p. 99): "There is something eternal in religion which is destined to survive all the particular symbols in which religious thought has successfully enveloped itself. There can be no society which does not feel the need of upholding and re-

affirming at regular intervals the collective sentiments and the collective ideas which make its unity and personality…" (Durkheim, 1915: p. 427).

Not only intellectuals and academics noticed the important role religion played in society, and worried about what its absence might mean; artistic and literary figures took note as well. The famous humanist philosopher and author Aldous Huxley, in his book *Time Must Have a Stop*, noted that "To the surprise of Humanists and Liberal Churchmen, the abolition of God left a perceptible void. But Nature abhors vacuums. Nation, Class and Party, Culture and Art have rushed to fill the empty niche" (Ziolkowski, 2007: p. 211). George Orwell wrote that "the energy that actually shapes the world springs from emotions – racial pride, leader-worship, religious belief, love of war – which liberal intellectuals mechanically write off as anachronisms" (Orwell, 1941). Ziolkowski explains that the emotions to which Orwell was referring "often function as surrogates when religious faith has been lost – surrogates to which individuals transfer the psychic energy formerly reserved for religion and in which they seek the same gratifications, and often the same forms and rituals, as previously afforded by religion" (2007: p. x). Where society has stripped out official religion, unofficial religiosity – implicit religion – rises to take its place out of pure necessity; which is how some ideologies, such as Marxism or, as in our case, environmentalism, come to fill the void in people's lives where religion might have previously existed. As the Catholic apologist and theologian Belloc remarked, the "Modern Attack" on faith "has so far progressed that it has already produced social, intellectual and moral forms which combined give it the savor of a religion" (Belloc, 2017: 181).

Garreau concurs with Huxley's sentiment, explaining in his article *Environmentalism as Religion* that "the rejection of traditional religion … has created a vacuum unlikely to go unfilled; human nature seems to demand a search for order and meaning, and nowadays there is no shortage of options on the menu of belief" (Garreau, 2010: p. 9). Linked to this idea of religion fulfilling an innate societal *need* is the notion of religion being a *universal* characteristic of human society[14]. Even Freud, in his dismissal of religion as an "obsessional neurosis" acknowledged that it was, at least, "universal" (Gay, 1992: p. 435).

The culmination of the themes of the Enlightenment and the secularisation thesis is visible in the work of the 'New Atheists' of the late twentieth- and early twenty-first-centuries. "Doubt is fundamental to religion"(MacCulloch, 2010: 776). Religion exists within the dynamic relations between faith and doubt, and theological investigation involves the cultivation of doubt and the questioning of faith to find new ways that religion might be of use to humanity in the fast-evolving

[14] As a Roman Catholic, I am inclined to note here that the term 'catholic' means 'universal'.

contexts our societies find themselves. The continuing emphasis on empiricism and rationalism that began in the sixteenth century and which became entrenched in the Enlightenment leaves little room for doubt. At the time of the Reformation and the Counter-reformation, 'atheism' was the "blanket label" given to all forms of doubt. We find few "Specific examples of doubt" from that time, "since it was suicidal for anyone to proclaim doubt or unbelief"; "Educated and powerful people in the sixteenth century of course did speak seriously of doubt, but rather like medieval discussion of toleration, such talk had to be understood as theory only, if it was to be considered respectable" (ibid., 779). The manner in which the 'New Atheists' have flourished shows us that not only is it (obviously) no longer suicidal to proclaim unbelief in our society, but it is possible that the scales may have tipped slightly the other way; also, their medium of debate – popular scientific literature – has meant that discussion of unbelief is no longer limited to elites with an interest in Classical scholarship.

3.5 New Atheism and scientific authority

In 2006 an article appeared in *Wired* magazine titled "The Church of the Non-Believers." Its author, Gary Wolf, was reflecting on the call-to-arms that had been issued in the previous few years by a group of prominent, polemical atheist authors, who have been dubbed the "four horsemen" of atheism (Johnson, 2013; Capps, 2012; Wolf, 2006). Richard Dawkins, Sam Harris, Daniel Dennett and the late Christopher Hitchens and, later on, others including Victor Stenger have come to be known collectively as 'New Atheists.' The 'newness' of New Atheism ostensibly comes from a rejection of tolerance and the conscious adoption of an aggressive tone. New Atheism "…says that we shouldn't be treating religion with kid gloves or avoid offending moderate Christians merely because we need their support for various science education battles, such as the fight over evolution being taught in the schools. …there are too many evils resulting from religion, requiring that we speak out more forcefully than before" (Grothe, 2010, pp. 6, 43). However, such self-assured, belligerent atheism is hardly new, since "'Old' Atheists like Bertrand Russell, H. L. Mencken, Robert Ingersoll, and W. K. Clifford, to mention just a few names, wore no kid gloves; the rhetorical forcefulness of their critiques of the evils of religion and of the rational superiority of disbelief over belief is unmistakable" (Johnson, 2013, p. 6). What is new this time around is the fact that these authors are achieving success with big-name commercial publishers and have enjoyed time on best-seller lists. The debate they have helped engender is taking place in a broader collective consciousness than ever before. Choosing to direct their texts to a lay public, rather than an academic audience, has meant their arguments have been received with both enthusiasm and alarm among a far wider readership than the 'old atheists' could reach. Armstrong concurs with

this point about being able to reach a wider readership, but adds that there is a difference in the specific notion of the divine that the new Atheists are rejecting:

> "Classical Western atheism was developed during the nineteenth and early twentieth centuries by Feuerbach, Marx, Nietzsche and Freud, whose ideology was essentially a response to and dictated by the theological perception of God that had developed in Europe and the United States during the modern period. The more recent atheism of Richard Dawkins, Christopher Hitchens and Sam Harris is rather different, because it has focused exclusively on the God developed by the fundamentalisms, and all three insist that fundamentalism constitutes the essence and core of all religion. This has weakened their critique, because fundamentalism is in fact a defiantly unorthodox form of faith that frequently misrepresents the tradition it is trying to defend" (Armstrong, 2010, p. 7).

The key points of the New Atheism polemics and the furious and frustrated apologies[15] that have ensued are not the topic of this thesis. What *does* concern us here is how the popularity of New Atheism, and the way it has allied itself with a particular conception of scientific evidence and legitimacy, may combine to further vilify the very concept of religion and how, in turn, that could stymy understanding of social phenomena such as environmentalism. When Victor Stenger discusses New Atheism, he emphasises the role of "non-believing scientists" (Stenger, 2010). Indeed, as Schulzke notes, "Many of the New Atheists are scientists and the movement seems to be particularly popular among scientists specializing in evolutionary biology" (2013, p. 65). The further focus on to evolutionary biologists is important, as the result is a movement steeped in the precepts of ontological and methodological naturalism (Stenger, 2010). Fraser explains that,

> "For Dawkins, scientists are those who are tasked with discovering what is true, and they do so through observation, the collection of evidence, and the making of predictions. Scientists determine the truth of things directly through the senses, or indirectly through special instruments. These observations then lead to the construction of scientific models. New atheists view the theory of evolution by natural selection as among the most important of all discoveries made using the scientific method. Whereas our existence once represented the greatest of all mysteries, this mystery has been solved once and for all by science. Darwin's discovery is not only of

[15] "In the tradition of Christian apologetics, an apology is a defence of a framework of beliefs against criticisms or misunderstandings by those who reject the framework" (Johnson, 2013, p. 5).

> paramount importance for the question of origins, however, but unifies the realms of science and meaning." (Fraser, 2015, p. 446)

The inherent problem becomes more readily apparent when we consider that, "As naturalists, New Atheists claim that the methods of the natural sciences are the only ones capable of providing evidence for empirical or normative claims, and that the only things that exist are those that are potentially observable using natural science research methods" (Schulzke, 2013, p. 66). Thus, we end up with Robert Park proclaiming that "Science is the only way of knowing – everything else is just superstition" (Park, 2010, p. 215). The 'science' that Park, Dawkins and the other New Atheists typically uphold as the arbiter of ultimate truth is actually a very limited conception, and the strict positivism that ensues has been roundly criticised by philosophers of science (Laudan, 1996). If this debate were limited to the pages of academic journals perhaps it would not be quite so devastating. However, angry atheist polemics filled with scathing rhetoric and gifted with eye-catching titles are being read and discussed by all and sundry. This is undoubtedly a good thing – philosophical debate should not be confined to ivory towers – but works such as *The God Delusion* and *God is Not Great: How Religion Poisons Everything* (Dawkins, 2009; Hitchens, 2007) valorize a minority conception of what 'science' is and demonize a minority conception of what 'religion' is. As Wuthnow points out, "if religion was as crazy as they say it is, it would indeed be hard to believe. These writers have made a valuable contribution by identifying precisely the kind of religion that most believers distance themselves from when they are given a chance to talk about their faith on their own terms" (Wuthnow, 2012, p. ix).

Here we get to the crux of the matter. The New Atheists, despite having some valid points about the problems our societies encounter, base their critique on one *version* of religion. That conception of religion is rather unorthodox, and to use Wuthnow's phrasing, most 'reasonable' religious people of all creeds would reject it out of hand. The arguments that ensue are broadened to accuse *all* religion of the many heinous crimes the New Atheists perceive to be occurring, and thus successfully demonize religion in the abstract rather than the specific version that they use as evidence. This methodological sleight of hand is in contradiction to the rules of the 'scientific method' which New Atheists value so highly but does not detract from the general appeal of their work: indeed, "The popularity of their books suggests that many people are bewildered and even angered by the God concept they have inherited" (Armstrong, 2010, p. 8). Just as certain 'world religions' have come to define – for the masses – what religion *is*, so too have the New Atheists come to embody today's version of atheism and, to an extent, science. Thanks to their high-profile and widely-discussed work, the New Atheists – who make much of their scientific nous – have

helped atheist perspectives to become virtually synonymous with a scientific worldview (Elsdon-Baker, 2017). However,

> "…while it is one thing to represent atheism as seeking to adopt a scientific way of thinking about the world as part of their broader worldview, it is an entirely different proposition to represent a scientific worldview as being in and of itself a necessarily atheistic position. Unfortunately, this important distinction has become increasingly blurred in public debate, with these two different, but historically dispersed, intellectual traditions becoming inextricably linked in some aspects of recent public commentary. As a result, one could be forgiven for expecting that science must be in some kind of inevitable and ongoing conflict with religion" (Elsdon-Baker, 2017, p. 82).

3.6 Chapter conclusion

This chapter demonstrates a few linked points pertinent to the issues and debates at play in this thesis. First, it should now be apparent that the separation of science and religion, and the subsequent de-valuation of religious knowledge or knowledge from religious sources, were by no means inevitable or even predictable historical trajectories. The success of the secularisation thesis has obscured the fact that, for much of our history, science and religion were not opposing forces in society at all. In fact, for substantial periods it was the church – individual institutions, monastic groups, clerics and so on – that fostered advancement in natural philosophy. In many respects, the negative and unconstructive reactions of the church to the developments of the Scientific Revolution must be understood in terms of the geo-political and theological challenges the church was weathering at the time. It is unfortunate that the church responded *reactively* rather than proactively to these challenges, unwittingly paving the way for the intellectual ferment of the Enlightenment and the shattering of societal dependence on the cultural and political authority of the church. As the Enlightenment thinkers gained confidence their attacks on the Catholic Church, then Christianity, and then faith in general, became increasingly vicious and pointed; their eloquence, combined with increasing levels of literacy and access to the printed word ensured that discourses of unbelief became normalised in a manner previously impossible. In the process, knowledge gained through 'scientific' means was elevated far above knowledge gained through revelation. Scholars have looked at these processes and retrospectively applied the logic of secularisation, advancing a teleology which has become widely accepted, despite having been widely criticised.

The criticism of the secularisation thesis that was presented in this chapter focused on three linked issues; firstly, that religion has been reconstructed as inherently irrational; this is, from my perspective morally dubious as it denigrates the lived experience of millions of people worldwide. More pertinent, however, is that this trend in the social sciences has devalued knowledge gained through theological investigations and religious disciplines. While the humanities still provide a home for religious studies, the social sciences are depriving themselves of a wealth of social thought that has been built up, questioned, modified, applied and re-applied for roughly 2,000 years or even longer if other religious traditions are considered. Secondly, it has become increasingly apparent that the central prediction of the secularisation thesis – that religion would eventually die out as society progressed – has failed. Religion – both in explicit and implicit forms – is persistent and vibrant in our society and globally. Thirdly, the curious resilience of religion has led thinkers throughout the period of time commonly associated with the secularisation thesis to ponder whether religion is somehow necessary to society; since the removal of religion leaves such a 'perceptible void' that even the fiercely atheistic Jacobins of the French Revolution understood they had to somehow provide a substitute for the religion they had destroyed so gleefully (MacCulloch, 2010: 809). Due to religion's ubiquity and seeming necessity, it is unlikely to die off completely (Glendinning, 2017). What is more likely is that other social phenomena will rise and swell to fill the void left behind. Our society is still saturated with religion, but a large proportion of it is simply unrecognised as such – hence the value placed in this thesis on the concept of 'implicit religion'. The problem now arising is that because we no longer recognise religion when it occurs in this way, an ever-increasing amount of discussion and research on topics such as environmentalism run the risk of missing some vital point, or possibly, missing the point entirely. If we don't think religion is worth looking at, how would we know?

The ascendance of empiricism and the associated descent of revelation as means of gaining knowledge of the natural world laid the foundations for the twenty-first century's version of unbelief: New Atheism. The New Atheists have popularised a worldview wherein 'scientific' has become synonymous with 'atheist,' with great use made of popular rhetoric and an aggressive tone which catches the imagination. This presents a problem for environmentalism, a social phenomenon which relies heavily on rhetoric and values derived directly from religious sources (mainly Christian ones) but which also reaches out to enthusiastically embrace scientific authority and legitimacy. If environmentalism is religious, yet denies that religiosity and looks for authority from a source which is presently held to be in opposition to religion, might there be some internal but as yet unrecognised contradiction within the movement which is stymying progress with the global environmental project?

More generally, the devaluation and even demonization of religion may have already led to a situation where academics and laypeople alike mentally shy away from looking too closely at religion, for fear of surrendering to base superstitious instincts. This thesis aims to show how a focus on religion as both a social phenomenon and a tool of investigation can be useful and instructive, and that reinvigoration of religious studies in both our society and our research institutions would be beneficial. Not because more people should be conventionally or explicitly religious – but because it might help us better understand some of the current social trends both nationally and globally, as well as challenging, for example, commonly-held but often-ignored assumptions about our relationship with nature.

This chapter has stopped just short of discussing the entirety of the 'last 500 years' as promised in the title of §3.3. This is because the chronology picks up again in the next chapter, with the Romantic period providing the foundation for what we might recognise as 'modern environmentalism.' This represents a decisive break from the belligerence of the Enlightenment, as Europe was "chastened by its memory of what happened when Enlightenment ideals were put into practice," leading to "a general shift among western Europeans towards what was styled romanticism" (MacCulloch, 2010: 815).

Chapter 4 | Modern Environmentalism & Nuclear Discourses

4.1 Introduction

Chapter 2 presented theory and literature showing how environmentalism can be seen to be both analogous to, and an inheritor of, religion. As the environmentalism in question is of a peculiarly Western European type the explicit religion to which it is analogous and an inheritor of is Christianity. Chapter 3 gave a history of Christianity in Western Europe which focused particularly on the dynamic relationship between religion and science, a relationship which is particularly crucial for this thesis. Environmentalism, while being implicitly religious, reaches out to a reified – and perhaps deified – notion of scientific authority to legitimize its positions and arguments. This chapter, therefore, will trace the background and emergence of that social phenomenon which most would recognise as 'modern environmentalism'.

As hinted at the end of the previous chapter, the background to modern environmentalism begins before the 'modern' period is commonly agreed to have begun. The term 'pre-modern environmentalism' is used here merely to demarcate between the period which provided foundational ideas and notions for modern environmentalism, and the period dominated by modern environmentalism itself. Although this discussion starts in the 'romantic' period, it begins with a discussion of Rousseau. A great figure in the European Enlightenment, Rousseau achieved "a secular form of sainting in the new France of the Revolution" (MacCulloch, 2010: 800). However, considering the relationship between religion, science and now environmentalism that is central to this thesis, Rousseau's thought is more important in terms of how it influenced the key thinkers of British Romanticism and American Transcendentalism – themselves the forefathers of what became modern environmentalism. Thus, §4.2 charts a period of history and intellectual development lasting roughly 100 years that provided the fault lines for the environmental battles beginning in the second half of the twentieth century.

§4.3 then presents three key factors influencing modern environmentalism: the influx of alternative philosophies from the East and the associated 'counter culture' (Roszak, 1970) of the late 1960s and 70s; the crisis of confidence occurring in modern society and the troubled position of authority figures such as scientific experts and politicians; and finally, the foundational role of anti-nuclearism and the core nuclear discourses which encompass current thought (as found in the literature).

4.2 Pre-modern Environmentalism

The current iteration of environmental concern with which this thesis is concerned, and which began roughly round the late 1960s (Pepper, 1984: 16), is commonly referred to as 'modern'

environmentalism. The use in the following sections of the term 'pre-modern' environmentalism is simply to indicate that the developments under discussion occurred before the late 60s.

4.2.1 (Mis)understanding the State of Nature: Rousseau's legacy for Romanticism and Transcendentalism

It is somewhat ironic that Rousseau, a doyen of the European Enlightenment, managed to foster a peculiar version of spirituality in the minds of those who found themselves appalled by the horrors of the French Revolution and the changes wrought upon societies and landscapes by the following industrial revolution. However, Rousseau is described by some as "a foremost pre-environmentalist as well as the seminal pre-Romantic of the 18th century" (LaFreniere, 1990: 66). Romanticism, and its American counterpart Transcendentalism, sought to re-establish the 'Book of Nature' that the natural philosophers of much earlier periods had sought to investigate (MacCulloch, 2010: 774). In many cases, key figures of the Romantic and Transcendental periods ended up with versions of Christianity which were quite far removed from the norm (such as Ralph Waldo Emerson), and which have demonstrably influenced the priorities and motivations of 'modern' environmentalism.

The lines of intellectual influence flow from Rousseau to the Romantics, and then from the Romantics to the Transcendentalists. Rousseau's ideas – particularly the 'state of nature' – influenced the Lake Poets like Wordsworth and Coleridge, whose ecstatic and worshipful descriptions of nature deeply impressed the Transcendentalists. LaFreniere explains how, even though American Transcendentalism is commonly thought to be 'indigenous,' it is actually possible to trace the evolution of ideas directly from European thinkers – Rousseau being chief among them in this instance (1990: 41-42). "[Rousseau] deserves a well-recognized place at the beginning of the tradition that extends from him through Wordsworth, Emerson, Thoreau, Marsh, Muir, and Leopold to contemporary deep ecology critics of an ecologically destructive commercial-technological society" (LaFreniere, 1990: 66). Rousseau's body of thought, ranging from "a critique of the beliefs and practices of Western Civilization to a set of utopian models for reform in the realms of politics, society, education, and religion," was all set "within the context of a deep respect for nature" (ibid.; 54). Rousseau viewed wild nature as being uniquely 'morally inspiring', and thus of great benefit to society. His "descriptions of pastoral and wild nature and the sense of a special, higher moral sensibility towards nature … enjoyed a vogue and exerted a direct influence," which was "reinforced by Rousseau's indirect influence through Wordsworth in the 19th century" (ibid.; 64).

It was Rousseau's raptures about the Swiss Alps which inspired Wordsworth to visit, and we can thus credit Rousseau for Wordsworth's dramatic description of his experience at the Simplon Pass

(Wordsworth, 1936: 536). In that ecstatic verse, "What Wordsworth described was no less than a religious experience, akin to that of the Old Testament prophets as they conversed with their wrathful God" (Cronon, 1996: 11). This religiosity, the sacralization of wild nature, can be found throughout the transcendental movement. The founder and leader of the American Transcendentalists Ralph Waldo Emerson felt, like St Francis of Assisi many years before, that God could be found in His Creation – the natural world. Emerson had previously been a Unitarian minister, but his religious ideas became so unusual that he was denounced as an atheist (Trueblood, 1939). Cronon is anxious to remind us that experiences like those of Wordsworth on the Simplon Pass were not limited to weak-willed Europeans who lacked the American pioneering spirit. Thoreau, celebrated as an exponent of 'wilderness' living, had a similar experience when climbing Mount Katahdin in Maine, where his emotions were "no less ambivalent than Wordsworth's about the Alps" (Cronon, 1996: 11).

No description of the roots of modern environmentalism is complete without a discussion of John Muir (April 21, 1838 – December 24, 1914). Muir's father decided to move the family from Scotland to the New World in order to realise a desire for religious freedom that he felt the "social and physical landscape" of America would fulfil (Holmes, 1999: 39). Muir became a largely self-taught individual who flitted from one occupation to another, amassing a vast array of different life experiences. When comparing Muir with his one-time friend Gifford Pinchot, Meyer comments that "Muir's diverse life experiences make him both a more complex individual and a more complex thinker" (Meyer, 1997: 275). Muir was integral in transforming the limited appeal of avant-garde philosophies and artistic sensibilities which were the mainstay of transcendentalism into a national socio-political movement in the USA (Worster, 2008; Guha, 2000). "In addition to his influential writings, and the National Park Bill of 1899 (responsible for creating Yosemite and Sequoia National Parks), Muir's legacy also includes the founding in 1892 of the Sierra Club, which remains the institutional backbone of American environmentalism and one of the most powerful environmentalist organizations in the world" (Pak, 2011: 6). Muir was the first individual who can be described as an "environmental advocate" who enjoyed widespread renown; he was, perhaps, the original environmental 'movement intellectual,' foreshadowing people like George Monbiot or Michael Schellenberger, despite always being "something of an unkempt outsider, a solitary prophet crying in the wilderness" (Mckusick, 1995: 37).

The above discussion of the roots of modern environmentalism has unavoidably leapt from Europe to North America. During the period in question, Europe was much embroiled in trying (and failing) to avoid an outbreak of war, while the USA was pursuing a more isolationist path. Of course, that is not to say that there were no people interested in the advancement of environment

issues in Europe at the time; however, Muir's legacy is very important for any discussion of environmentalism and his influence reached back across the Atlantic in short order. Muir's rhetoric and actions in campaigning for the protection of 'pristine' landscapes continue to shape environmental confrontations the world over. In the following section, I present the stories of the first environmental controversies; the campaign to prevent the flooding of Thirlmere in Britain in 1876, and a similar campaign to prevent the damming of the Hetch Hetchy Valley in Yosemite National Park spearheaded by Muir – the failure of which is commonly held to have contributed to his death in 1914. These incidents marked out battle lines still recognisable today.

4.2.2 Thirlmere and Hetch Hetchy Valley: the first environmental controversies

The designation of areas of 'pristine' wilderness as National Parks owned by the (white[16]) American people was remarkable for the time – Britain's first national parks (Peak District, Lake District, Snowdonia and Dartmoor) were designated much later in 1951. This discrepancy cannot be put down to a lack of interest in preserving and conserving these extraordinary landscapes in Britain, but rather to historical geography: the British Isles are tiny in comparison to the USA and there were few 'pristine,' uninhabited wilderness areas available. Today in the USA the state – ostensibly, 'the people' – own the national parks, whereas national park land in the UK is owned privately or through charitable institutions like the National Trust, with the National Park Authorities coordinating efforts to maintain and conserve the resources therein. In the USA, national parks such as Yosemite remain uninhabited: in Britain, this would have been impossible to achieve; hence, national parkland is often put to agricultural use, and was already inhabited or in use prior to its definition as such.

The strength of sentimental feeling attached to certain landscapes in Britain was fuelled by Romanticism and came into direct conflict with Victorian industrialism at Thirlmere, in Cumbria. In 1876, residents of what is now the Lake District National Park became aware that "the pristine beauty of one of their cherished lakes was under serious threat" (Ritvo, 2003: 1510). The city of Manchester's governing body was planning to dam Thirlmere to create a reservoir, just as they had already done in the Peak District. Resistance to large infrastructure projects like railroads was common, but mostly only from those whose properties would be directly affected. The controversy around Thirlmere was significant because of the levels of interest from people all over the country. As Ritvo explains, "Thirlmere lay close to the center [sic] of the Lake District, which had for a century occupied a pre-eminent position in the pantheon of English natural beauty, even

[16] See following §section 4.2.3 on why these areas are not pristine but *cleansed* of their native inhabitants (Cronon, 1996) *The State of Wilderness: from the terrifying to the sublime*.

before its sacred status was consolidated by the poetry of William Wordsworth and his fellow Lake poets" (Ritvo, 2003: 1510).

The furore surrounding the issue of Thirlmere, the legacy of the Lake Poets and their romantic sacralisation of the landscape gave birth to a new kind of land claim: "The lake country belongs in a sense, and that the widest and best sense, not to a few owners of mountain pasture but to the people of England" (Thirlmere Defence Association, in Ritvo, 2003: 1511). Those opposing the construction of a reservoir did not, overall, deny the good reason for such a proposal: the need for clean water was acknowledged. The difficulty lay in deciding which 'good use' should take priority. Only John Ruskin "irascibly wished that Manchester would be drowned by the water it wished to steal" (Ritvo, 2003: 1511).

At the time, the arguments made against the construction of a reservoir at Thirlmere were novel, and the widespread nature of the debate was unusual. The example of the Thirlmere Defence Association was to provide inspiration for John Muir and others who, a few decades later, vociferously opposed the damming of the Hetch Hetchy Valley in Yosemite (which by then was well-established as a national park) in order to provide water to the growing population of San Francisco (Ritvo, 2003: 1511). It is hard to overemphasise the significance of Hetch Hetchy Valley for modern environmentalism: it is there that today's battle lines were drawn. As at Thirlmere a generation previously, those hoping to dam the valley were not insensible of the aesthetic and cultural value of Yosemite. As Gifford Pinchot wrote to President Theodore Roosevelt, "I fully sympathize with the desire … to protect the Yosemite National Park, but I believe that the highest possible use which could be made of it would be to supply pure water to a great center of population" (as quoted in Nash, 1973: 164). Far from 'sympathising' with his opposition, Muir unleashed hellfire and fury in his defence of the integrity of Yosemite as a pristine, Edenic wilderness: "Their arguments are curiously like those of the devil, devised for the destruction of the first garden – so much of the very best Eden fruit going to waste; so much of the best Tuolumne water and Tuolumne scenery going to waste. Few of their statements are even partly true, and all are misleading" (Muir, 1912: 260). It is striking how familiar these sentiments are to those versed in modern ecocentric environmental rhetoric (see Liddick, 2006: 82). Today, overt references to biblical tropes are stripped out, but the feeling of 'paradise lost' is clear. What is important to note, however, is that while today wildernesses are discursively constructed as 'good' places where people might have positive experiences, this was not always the case. The following section discusses how we have lost the original meaning of sublime wilderness and replaced it with a pristine paradise – neither of which ever existed outside human discourse.

4.2.3 The State of Wilderness: from the terrifying to the sublime

Throughout the previous sections, there have been numerous references to a notion of 'pristine wilderness' as the basis for much of the effervescent rapture associated with the nature experiences of Rousseau, Wordsworth, Emerson, Thoreau and Muir. This is an important conceptual construct with a long history, which underwent a dramatic transformation during the Romantic and Transcendentalist period. The concept of wilderness was originally associated with the supernatural. The vastness of an uninhabited, hostile landscape was understood to engender the right frame of mind to acknowledge a person's own insignificance in the face of God's awesome (in the original sense of the word) power. The wilderness was dangerous – a person ran the risk of losing their faith – but one might "glimpse the sublime face of God" (DeLuca & Demo, 2009: 254). It was a frightening place where one might encounter a wrathful deity, as the Israelites did when they were on the brink of worshipping an idol after having wandered in the desert for forty years (Cronon, 1996: 8). In fact,

> "Many of the word's strongest associations then were biblical, for it is used over and over again in the King James Version to refer to places on the margins of civilization where it is all too easy to lose oneself in moral confusion and despair. (…) The wilderness was where Christ had struggled with the devil and endured his temptations: 'And immediately the Spirit driveth him into the wilderness. And he was there in the wilderness for forty days tempted of Satan; and was with the wild beasts; and the angels ministered unto him.'[17] The 'delicious Paradise' of John Milton's Eden was surrounded by 'a steep wilderness, whose hairy sides / Access denied' to all who sought entry.[18] When Adam and Eve were driven from that garden, the world they entered was a wilderness that only their labor and pain could redeem. Wilderness, in short, was a place to which one came only against one's will, and always in fear and trembling." (Cronon, 1996: 8-9)

However, thanks to the same philosophical lineage that descended from Rousseau this conception underwent radical change, so that the late transcendentalists – and John Muir in particular, who had a strict Calvinist upbringing – used the 'doctrine of the sublime' to describe their blissful wilderness experiences. One might still glimpse the face of God – but it was no longer likely to be a terrifying experience.

[17] Mark 1:12-13, KJV; see also Matthew 4:1-11; Luke 4:1-13.
[18] John Milton, "Paradise Lost," John Milton: Complete Poems and Major Prose, ed. Merritt Y. Hughes (New York: Odyssey Press, 1957), pp.280-281, lines 131-42.

Similar to how notions of wilderness have changed, so has our understanding of the sublime. Today, 'sublime' is a "word whose modern usage has been so watered down by commercial hype and tourist advertising that it retains only a dim echo of its former power" (Cronon, 1996: 10). In a sublime landscape, the supernatural is omnipresent, but beneath the surface:

> "In the theories of Edmund Burke, Immanuel Kant, William Gilpin, and others, sublime landscapes were those rare places where one had more chance than elsewhere to glimpse the face of God. Romantics had a clear notion of where one could be most sure of having this experience. Although God could, of course, choose to show Himself anywhere, He would most often be found in those vast, powerful landscapes where one could not help feeling insignificant and being reminded of one's own mortality" (Cronon, 1996: 10).

Deluca and Demo also point to Burke's notion of the sublime, and their description makes the link with biblical wilderness very clear: "For Burke, the sublime is an intense passion rooted in horror, fear, or terror in the face of objects that suggest vastness, infinity, power, massiveness, mystery, and death" (DeLuca & Demo, 2009: 246) (See also Nicholson, 1973; Burke, 1757). One key point of interest to mention is that in Burke's writings on the sublime, there is a strong suggestion that the sublime is *un-representable* (as noted in DeLuca & Demo, 2009). This is because, as a manifestation of God, the sublime resists being rendered down to mere words or flecks of paint – although this did not stop hordes of 19th century poets and painters from attempting it. Early theologians often spoke of God as 'Nothing' – not because they doubted the existence of the divine, but because they wished to preserve His pre-eminence by acknowledging the limits of our human perception, visualisation, and language in describing the indescribable: "We could not even say that God 'existed', because our concept of existence was too limited. Some of the sages preferred to say that God was 'Nothing' because God was not another being. You certainly could not read your scriptures literally, as if they referred to divine facts. To these theologians some of our modern ideas about God would have seemed idolatrous" (Armstrong, 2010: 2).

Through the efforts of 19th century artists, photographers, poets and writers, not only was the sublime wilderness increasingly rendered tangible and thus made available to the masses, but the masses were erased from the picture, quite literally: "'sublime' was used increasingly to refer to the 'wild' in nature, and rather than focus on some work of man that gave meaning to the scene, romanticists tended to perceive a sublime landscape as a nondirect expression of God Himself" (Demars, 1991: 12-13). In the popular descriptions and images of 'sublime wildernesses' the intrusions of humanity were often intentionally removed. Carleton Watkins, the first real landscape

photographer – who made his name with astonishing images of Yosemite – made sure that evidence of mankind was out of frame, as did the later Ansel Adams, whose photographs are arguably better known. Mines, miners, shepherds and their animals and other tourists were all deliberately omitted to preserve the myth of a pristine, Edenic wilderness. This ensured "a Yosemite devoid of human markings, a pristine wilderness where one could glimpse the sublime face of God … a nature out there ontologically divided from culture serves as a source of resources, artistic inspiration, spiritual awe, emotional succour, and so on" (DeLuca & Demo, 2009: 254). Erasing the vestiges of humanity from pictures was easy; most of it had already been done. "The West wasn't empty, it was emptied – literally by expeditions like the Mariposa Battalion, and figuratively by the sublime images of a virgin paradise created by so many painters, poets, and photographers" (Solnit, 1992: 56)" Deluca & Demo describe it as a "form of imagistic genocide. Yosemite was not pristine, but cleansed" (2009: 256, 242).

Thus, not only had the first national park never truly been devoid of human influence, it was steeped in bloodshed. In the USA, national parks of this type remain uninhabited, with their original inhabitants removed to 'reservations,' small parcels of land which First Nations might not have any historical or cultural connection with. The problematic heritage this notion of 'pristine,' sublime wilderness leaves for parks like Yosemite is obvious, but it also has implications for environmentalism globally.

> "The rhetoric of nature as pristine and separate from human culture set in motion the trajectory of environmental politics for its first one hundred years. As evidenced in their pictures, writings, and actions, environmental groups have been consumed with preserving "pristine" places. This narrow focus has had the major effect of reproducing the nature-culture dichotomy and circumscribing environmentalism in two complementary ways. In taking as their charge the preservation of wilderness, environmental groups relieved themselves of the responsibility of protecting non-pristine areas and of critiquing the practices of industrialism that degraded the general environment. In exchange for pockets of wilderness, environmental groups ignored industrialism's progressive plundering of the planet. Similarly, if the places people live are by definition not nature, environmental groups need not concern themselves with inhabited environments" (DeLuca & Demo, 2009: 257).

The environmental discourses around pristine places and 'wilderness' discussed above by DeLuca and Demo are very US-centric. Despite the influence of Wordsworth on the transcendentalists and Muir, the development of conservation and environmental consciousness in Britain involved

different discourses from those of 'sublime nature' and pristine wilderness. In Britain, preservationism took on a different tone, as "policies were framed within the three durable discourses of aesthetics, amenity and science" (Macnaghten & Urry, 1998: C. 2, 12/36). More generally, the landscape aesthetic in particular was more pastoral than in the USA, and the result was a patchwork of landscape and conservation designations, and a complex 'ecosystem' of environmental organisations, some of which date back to the late 19th century (see §4.3). However, such endeavours still discursively create notions of environment that conform to what humans think ought to be; humans decide which species and spaces require conservation, which areas are 'special' enough to be granted the status of being a site of "Special Scientific Interest" or, alternatively, Areas of Outstanding Natural Beauty.

The problematic legacy of pre-modern environmentalism remains. The preceding discussion on the discursive changes relating to our notions of 'wilderness' and 'the sublime' demonstrates the gradual stripping out of overt religiosity from descriptions of wild nature. Both terms were originally described how a person might encounter the divine in nature, but they are no longer understood in that manner. the Romantic project of "secularizing Judeo-Christian values" was extraordinarily successful (Cronon, 1996: 16). What wilderness originally comprised and what sublime really refers to have been forgotten. We no longer recognize the way "the language we use to talk about wilderness is often permeated with spiritual and religious values that reflect human ideals far more than the material world of physical nature" (ibid.). The places we recognise as sublime remain the same as they have always been; "we still see and value landscapes as [romanticism] taught us to do; God was on the mountaintop, in the chasm, in the waterfall, in the thundercloud, in the rainbow, in the sunset" (ibid.: 10). The religiosity of environmentalism isn't new; but as religion falls down the list of our societal priorities we are losing the ability to recognise it. This has the implication that participants in the environmental debate may become blind to their own, and others', deepest motivations and intentions:

> "Many environmentalists who reject traditional notions of the Godhead and who regard themselves as agnostics or even atheists nonetheless express feelings tantamount to religious awe when in the presence of wilderness – a fact that testifies to the success of the romantic project. Those who have no difficulty seeing God as the expression of our human dreams and desires nonetheless have trouble recognizing that in a secular age Nature can offer precisely the same sort of mirror." (Cronon, 1996: 16)

The purpose of this and the previous sections has been to show that as this literature review and narration enters the more obviously 'modern' era of environmentalism, it does so with a lot of religious and philosophical 'baggage' that is, by now, going largely undetected. In the late twentieth century this was not a problem, as the environmental movement was making large gains in many areas; membership of environmental organisations increased, national and international policies and agreements were enacted and so on. However in the twenty-first century, concerns are being raised that the movement is stagnating and that people are losing interest (Anderson, 2010). As such problems arise, it behoves researchers to investigate the discourses at work in modern environmentalism, as this thesis aims to do.

4.3 Modern Environmentalism

When academics speak of 'modern environmentalism' they are referring to a specific iteration of environmental concern which began in the late 1960s. The first half of the 20th century was marred by the two world wars, which ruptured the course of global history. The nascent environmentalism of John Muir and others was brought to an abrupt halt as all energies were concentrated on the conflicts which began in Europe and spread to the rest of the world. This was, of course, also the point at which nuclear technology reached its terrible fruition. In the immediate post-war years countries struggled to regain their footing, and most – except the USA – faced bankruptcy, famine and mass disillusionment. The environmental call to arms sounded and resounded in the early 60s, with the publication of Rachel Carson's *Silent Spring*:

> "Although the American environmental movement traces its roots to such nineteenth-century visionaries as Henry David Thoreau, George Perkins Marsh, and John Muir – all of whom were concerned with the preservation of wilderness – the modern environmental movement – with its emphasis on pollution and the general degradation of the quality of life on the planet – may fairly be said to have begun with one book by Rachel Carson called *Silent Spring*. Environmental historians are nearly unanimous on this point." (Waddell, 2000: 1)

The silent spring to which Carson referred was a future foreseen as the result of pesticides spreading through the food chain. "For the first time in the history of the world, every human being is now subjected to contact with dangerous chemicals, from the moment of conception to the moment of death" (Carson, 1962: 15). *Silent Spring* had an unprecedented effect; it provoked "great debate in the media, new legislation in the USA and an outraged defensive response from the chemical industry and scientists responsible for pesticide development" (Doherty, 2002: 31). In fact, the reactions from disgruntled scientists played a large part in renewing public debate about

the costs of unchecked human exploitation and manipulation of nature, and therefore had an "important role in the revitalisation of environmentalism in the 1960s" (ibid.).

Another key publication is the report of the Club of Rome titled *Limits to Growth*, in 1974 (see Meadows *et al.*, 1974). The report came under immediate sustained criticism, but its lasting effects remain: an understanding of the planet's resources as finite rather than unlimited, the notion of our planetary ecosystem (and therefore our very existence) being under threat and that radical change is required to avert catastrophe. As Doherty explains, the new understandings enabled by *Limits to Growth* meant that existing 'green ideas' acquired "new meanings in the context of a world of finite resources, as for instance with the idea that justice now requires that we consider the needs of future generations" (Doherty, 2002: 31). Contextually, it is also important to remember that in 1972 the earth was photographed from space for the first time in its entirety – the celebrated 'Blue Marble' shot – giving people a new appreciation for the planet as a holistic, fragile entity (Dryzek, 2005: 5)[19].

Botkin describes the environmentalism of the post-war decades as "essentially a disapproving … negative movement, exposing the bad aspects of our civilization for our environment. It played an important role by awakening people's consciousness, but it did not provide many solutions or even viable approaches to solutions to our environmental problems" (Botkin, 1990: 5-6). Botkin's frustrations have been repeated by Anderson some twenty years later: "Popular interpretations of environmentalism often reflect the sentiment conveyed by Björn Lomborg: environmentalism is about doom, gloom and denial. Environmentalism is commonly seen to outline a negative doom-laden scenario for the planet and its species" (2010: 978).

The late 60s and 1970s also heralded the birth of 'new social movements' – feminism, the civil rights movement, the peace movement, and what became collectively referred to as 'the environmental movement' (Doherty, 2002: 20-21). As movements achieved their goals or the socio-cultural context changed, their boundaries and make-up shifted accordingly. For example, protests against the war in Vietnam joined up with general peace protests and anti-nuclear protests, and protests which had originally been specifically about nuclear weaponry – "ban the bomb" – became about nuclear power in general, conflating civil and military uses(Doyle, 2011: 109; Gamson & Modigliani, 1989; Pepper, 1984: 16), as will be discussed in §4.3.3: *Nuclear Discourses*.

By the end of the twentieth century, the modern environmental movement had evolved into an increasingly complicated organisational landscape. In the UK, both pre- and post-war attitudes to

[19] There was an earlier photograph, titled 'Earthrise,' taken by Astronaut Bill Anders in 1968, on the Apollo 8 mission. However, that photograph has part of the moon's surface in the frame, and not all of the Earth is visible, and thus the shot doesn't have the same effect as the 'Blue Marble.'

the environment were governed by preservationism: a reaction to Enlightenment environmental mentalities sharing a Romantic root with the American transcendentalists in Wordsworth. However, the core of British preservationism was linked to an aesthetic ideal which became a spiritual and cultural ideal and thus, took a separate path from that of its American counterpart. "Rejecting the ugliness of the industrial revolution, preservationists sought to restore links with the past, and through the preservation of 'relics' and national 'monuments' to reinvigorate a spiritual relationship to place and country" which became, in turn, "a quest to save an integral part of English identity." (Macnaghten & Urry, 1998: 36).

The varying interests encompassed by British preservationism thus resulted in a large collection of voluntary conservation groups, which over time expanded their ideas of conservation and preservation to include habitats and ecosystems, thanks to the increasing role of ecologists (Macnaghten & Urry, 1998: 41). The key issue with the conservation aspect of British environmentalism before the late 1960s and early 1970s was that these various groups became part of the establishment. Their cosy relationship with the state was shaken by the arrival of two environmental imports from North America: Friends of the Earth (FoE) and Greenpeace. Both organisations set up offices in Britain within a year or so of their original founding (in 1969 and 1971). Their campaign tactics and irreverence for the established means of 'politicking' in Britain had lasting ramifications – not least by encouraging some more traditional groups to become more radical in their approach to campaigning (Macnaghten & Urry, 1998: 52). Significantly for this thesis, it was the issue of nuclear power, in the form of an inquiry into the THORP reprocessing plant at Windscale (now Sellafield) which brought the discrete parts of British environmentalism together and gave them common ground, creating "a new sense of a British environment movement, " (Macnaghten & Urry, 1998: 54) with anti-nuclearism as a foundational aspect.

However, as environmentalism gained influence and membership, its very success led to a sense of disenchantment among those who had been excited by the radical nature of it all in the beginning. In reaction to that perceived loss of activist legitimacy, smaller and more disparate radical environmental groups started emerging. The counter-cultural lifestyle choices remained, but the type of activism changed. Going into the new millennium, direct action took forms which were more critical of the "professionalism and growing elitism of the more established environment groups – indeed to the environmental discourse which has been so painstakingly invented over the past three decades. …there is thus a newer generation of environmentalists who are by-passing conventional environmental groups especially those perceived to have been co-opted by the state and industry" (Macnaghten & Urry, 1998: 70).

In the 1970s, perhaps, it would have been easy to say that any member of an environmental movement organisation (EMO) such as Greenpeace was 'an environmentalist' and that as such, you could assume their commitment to a number of core tenets of 'green' thought: anti-nuclearism, anti-seal culling, anti-whaling, anti-pollution, and so on. However, from the late 1980s onwards environmental discourses became increasingly mainstream as states and international bodies accepted the core message of environmental crisis, and it began to be written into policy. "[E]nvironmental groups in Britain have struggled to redefine their role in a world in which environmental discourses are now accepted as a legitimate part of a new world order" (Macnaghten & Urry, 1998: 62). As certain lifestyle choices or environmental behaviours which were previously part of an environmentalist identity became more and more normal, the numbers of informally environmental people – lay environmentalists – have increased. The 'environmental movement' has stratified out into new groupings. The formal environmental movement organisations, which are still so strongly associated with 'environmentalism' (Greenpeace, FoE), are likely to be losing potential new members from both ends of the spectrum. Those unwilling to be associated with anything too 'campaigning' might pay a monthly donation but refrain from active participation, or simply not join, while those more interested in activism and direct action have a wealth of more radical groups to choose from. The participants targeted in my research come mostly come from the 'lay environmentalist' stratum – or 'strata', as it is undoubtedly more complex. Elsewhere these have been described as "Environmentally Friendly" people – a "less participatory" counterpart to those termed "Environmental Campaigners" (Macnaghten & Urry, 1998: 83).

In the following sections some of the key societal factors contributing to modern environmentalism are presented, after which there is a detailed discussion of the discourses pertaining to nuclear power which are most prevalent in the literature.

4.3.1 Asian influences

The ease with which modern environmental perspectives interlock with ancient eastern philosophies seems to be one of those academic curiosities which has not benefited from explicit research and analysis. Thus, although it may seem 'obvious' that modern environmentalism has benefited greatly from the philosophies of Buddhism, Sikhism, Hinduism, Jainism, Shinto, Confucianism, Daoism and the like, it is remarkably difficult to find literature that explicitly discusses *how that came to be the case*. There is, to be sure, plenty of literature focusing on how our modern Western society may benefit more generally *now and in the future* from a closer look at Asian philosophical traditions. Modern scholars seek to strip away Western hubris and battle the residue of centuries of colonialist and imperialist thought. They show not only how most philosophies – including those which have been prevalent in Asia – have broadly similar bases (caring for each

other and the world around us, rules for developing a strong and moral society), but also how Asian philosophies have helped eastern nations to survive and thrive in ways that Western society may learn from (Callicott & McRae, 2014).

The rationale for looking to Asia for inspiration is well-established: our own philosophies have proven insufficient, given the environmental crisis in which we are now all but submerged. In 1967, as previously discussed, Lynn White Jr detonated a philosophical bomb when he placed the blame for "Man's unnatural treatment of nature and its sad results" at the feet of the Judeo-Christian worldview (White, 1967, p. 1203). However, almost merely in passing, White also noted the possibilities that the youth of his time could see in eastern philosophies: "The beatniks, who are in the basic revolutionaries of our time, show a sound instinct in their affinity for Zen Buddhism, which conceives of the man-nature relationship as very nearly the mirror image of the Christian view" (White, 1967, p. 1206). Callicott and McRae explain that 'beatnik' was a term used at the time to refer to the youth counter-culture identified by Roszak (1970) who were closely influenced by the 'Beat Generation' poets and authors of the time: "The *nik* suffix was derived from *Sputnik*, the name of the world's first artificial orbital satellite, launched by the soviets in 1957. The term insinuated that the beat-generation counterculture was pink if not flaming red" (Callicott & McRae, 2014, p. xviii).

White, as Callicott & McRae (2014) note, immediately dismissed the long-term viability of Zen Buddhism in Western culture, and instead suggested a reinvention of the cult of St Francis of Assisi as an antidote to the destructive, anthropocentric tendencies of the Occident as he saw them (White, 1967: 1206). Others, however, were prepared to pay more attention to the delight the youth culture of the 1960s and 1970s found in Asian philosophical and religious traditions. In *The Making of Counter Culture* Theodore Roszak devoted a whole chapter to the "eclectic taste for mystic, occult, and magical phenomena [which] has been a marked characteristic of our postwar youth culture since the days of the beatniks" (Roszak, 1970: 125). The beatniks had their own prophets, men like Allen Ginsberg, Alan Watts, Gary Snyder and Jack Kerouac, who both embodied and imparted the wisdom of the East to their followers. Roszak opined that Ginsberg had "totally committed himself to the life of prophecy," allowing "his entire existence to be transformed by the visionary powers with which he conjures and has offered it as an example to his generation" and that his appearance alone was "enough to make him an exemplification of the counter cultural life" (Roszak, 1970: 128, 129).

Scholars such as Roszak and Callicott & McRae view the enthusiasm for eastern philosophies among the youth of the 60s and 70s with a healthy dose of scepticism and frustration. Not because

the philosophies themselves might not catch on, as White had assumed, but because of how the all-encompassing, undiscerning enthusiasm demonstrated by many would-be eastern philosophers often resulted in an unsophisticated philosophical *bricolage* rather than a comprehensive system of thought which might be truly helpful. "By 1984, Callicott had become painfully aware that sorties into Asian traditions of thought … were, for the most part, amateurish and naïve" (Callicott & McRae, 2014: xix). Roszak, typically, used more colourful language: "instead of culture, we get collage: a miscellaneous heaping together, as if one had simply ransacked *The Encyclopedia of Religion and Ethics* and the *Celestia Arcana* for exotic tidbits." (Roszak, 1970: 147)

The counter culture that Roszak (1970) analysed gave birth to the 'new social movements' mentioned previously. Because of the "miscellaneous heaping together" of any and all 'alternative' worldviews and practices, some aspects of eastern philosophies and religious traditions were 'built in at the ground level' of modern environmentalism. There is a prevalence of vegetarianism, veganism, paganism, mysticism, and yoga practice (the list could be quite long) among those who fall within the fuzzy boundaries of the environmental movement. This is an obviously complex area, surprisingly little studied, and in the case of any individual such practices or views may or may not be consciously tied to other ways of thinking about the environment: a taste for hemp clothing and asana yoga does not an eastern philosopher make. To trace where these elements come from, how they fit into 'environmentalism' more generally and how important they are, would take a concentrated effort of discourse analysis – possibly more consciously in the Foucauldian *archaeology of knowledge* style. Scholars such as Callicott and McRae are now tackling the lack of sophistication prevalent in Western uptake of Eastern philosophies, aiming to present "professional and sophisticated explorations of the environmental attitudes and values in various Asian traditions of thought;" however, it appears they agree with Lynn White about "the viability of any Asian worldview in the West" (Callicott & McRae, 2014: xix).

4.3.2 Distrustful reliance: experts and politicians

The issue of trust in experts and other authority figures is a thread which runs all the way through this thesis. The topic already has a vast literature which informs the thesis, rather than being a key focus of investigation. Put simply, the Western world has been going through a crisis of authority which has been snowballing since the post-war period. Politicians, institutions of authority and industry are coming under ever more critical scrutiny from generations with higher expectations and higher levels of education than ever before. Collectively, people are now more aware of how "a wide variety of environmental issues, including ozone depletion, species destruction, global warming, acidification of lakes and forests, nuclear radiation and chemical pollution, have become

widely recognized as risks which are complex, global, long-term, often incalculable, and largely invisible to our senses" (Macnaghten, 2000, pp. 113-114).

In response to these developments, Ulrich Beck drew attention to what he named the 'risk society' (Beck, 1992). As society became more aware of these invisible risks, trust in the ability of authorities to cope with these dangers decreased, as events and crises occurred and were perceived to be mishandled. The Windscale fire in 1957, and the frustration caused by government responses to the Chernobyl fallout in much the same geographical area has had a lasting effect on public trust in the UK particularly regarding issues of nuclear power and the government's ability and inclination to police the industry properly (see Wynne, 1996). The increase in perceived danger, has meant that "As risks transcend the boundaries of sensory perception, and as the contours of risk extend to the very distant and the extra-ordinarily long term, the public becomes dependent on national and increasingly global expert systems for information, knowledge, images and icons that might enable such processes to be 'interpreted'" (Macnaghten, 2000, p. 114). The everyday citizen is frustratingly aware that there are many aspects pertinent to their personal life which they are reliant upon experts – often far removed in terms of economic, cultural and social life experience – to determine. That same citizen is also most likely aware of how *unlikely* it is that these aforementioned experts are totally without bias or ulterior motives, as they are often dependent on funding from governments and industries which have their own agendas. In 2000, Macnaghten reported a loss of faith in the future and general feelings of hopelessness: a perception that "voting rarely changed anything, that real power was largely beyond their control, and that the deteriorating state of the environment was a largely intractable by-product of a system increasingly dictated by financial interests" (Macnaghten, 2000: 120). Today, although "social trust" between citizens seems to be fairly stable in the UK, trust in the state is declining (Phillips *et al.,* 2018: 4; Driver, 2009).

But what does the mis/trust of experts and authority figures mean for environmental implicit religion? Both environmentalism and nuclear power have, separately and as linked issues, experienced a similar trajectory of disillusion with authority. However, certain individuals have been able to make an impression amongst the masses. The notion of focusing particularly on the pronouncements and influence of specific individuals in this intellectual arena was initially provided by Eyerman and Jamison's (1991) notion of *movement intellectuals*. For Eyerman and Jamison, movement intellectuals make the "underlying cognitive praxis" of a social movement *visible* (1991, p. 44). Movement intellectuals shape the discursive practices and identities of their chosen movement:

> "They are not necessarily leaders, though they may be: their defining role is discursive. They are important because, although (of course) constrained by the discursive resources at their disposal, they are influential in changing the legitimate discursive resources and identities available to others, by virtue of their persuasiveness, perceived expertise, or charisma. They also have access to channels of communication…" (McCalman & Connelly, 2015, p. 6)

Viewed from the perspective of implicit religion, the movement intellectuals associated with certain social movements – such as, in this case, environmentalism – function as *prophets*; using persuasive and emotional rhetoric, imbuing themselves with a moral purpose to legitimatise their opinions, interpreting events and providing inspiration for their followers. In this chapter there have been a few other individuals which have fulfilled similar roles; John Muir was described as "a solitary prophet crying in the wilderness" (Mckusick, 1995: 37), and Roszak referred to Ginsberg as having "committed himself totally to the life of prophecy" (Roszak, 1970: 128).

4.3.3 Emblematic issues: Nuclear Power

It is possible to track the progress of modern environmentalism via the emergence of *emblematic issues*; these are issues which have become particularly associated with environmentalism or environmental campaigns and which are emblems "in terms of which a general understanding of what environmental problems were about was constructed" (Hajer, 2006: 68). For example, there have been long-term, global and high-profile environmental campaigns around issues such as genetically modified organisms (GMOs), acid rain, depletion of the ozone layer, several fauna-related campaigns ('Save the whales/polar bears/pandas/orangutans' etc.), the melting of the icecaps due to global warming and so on. Nuclear power is perhaps the first, and therefore the most long-standing emblematic issue related to modern environmentalism: writing in the early 1980s, Pepper traced the evolution of modern environmentalism from the anti-bomb protests of the late 1950s;

> "One can perhaps see a continuum of mass protests over concerns that can be broadly interpreted as environmental. It starts with the big anti-nuclear-bomb protests of the late 1950s in Britain, and brings us up to the current immense peace movement in Western Europe, which is now spreading its way into the USA, Eastern Europe and Australasia. These movements have been about what is clearly the greatest environmental threat, the atomic, hydrogen and neutron bombs - their power to pollute being spectacular and ultimate (Schell 1982). Over the past few years ecology and anti-bomb groups have been steadily coming together in recognition of this fact

> and in recognition, too, that the arms race symbolises, promotes and is promoted by a whole set of philosophies and socio-economic structures which are inimical to the achievement of harmony between man and nature, and between men and men. One difference between the earlier and later manifestations of the movement was that in the late 1950s the protesters were calling for the use of 'atoms for peace' (see Pingle and Spigelmen 1982). In the early 1980s relatively few of them make the same call, for it is increasingly recognised that the nuclear energy and nuclear bomb issues are inextricably linked." (Pepper, 1984: 16)

The above quote from Pepper demonstrates that an anti-nuclear position – which began as a reaction to the Cold War – was, like some elements of Asian religion, built in at the 'ground level' of modern environmentalism. It became a foundational tenet upon which the movement and environmental movement organisations built their platform. Greenpeace, for example, is proud of its anti-nuclear legacy; its first campaign was against nuclear testing, and it lists The Comprehensive Nuclear Test Ban Treaty among its achievements ("Our Impact", Greenpeace UK). As the above excerpt also shows, the trend of anti-bomb protests becoming anti-nuclear protests, and then forming the basis of environmental movements, was a global one.

Nuclear power is an extraordinarily powerful emblematic issue which lends itself to discursive analysis. As such, it is important to devote some time to a discussion of those discourses prevalent in the literature which deal specifically with nuclear power, so that field data can be analysed contextually. Therefore, the following subsection presents those 'nuclear discourses' which other scholars have noted in their investigations on nuclear power and environmentalism.

Nuclear exceptionalism

'Nuclear exceptionalism' is a cross-cutting discursive theme brought to light through the work of Gabrielle Hecht (2002, 2006, 2009). Hecht notes that nuclear exceptionalism has been a "recurring theme in political discourse since the U.S. dropped an atomic bomb on Hiroshima in 1945. American and European cold warriors and their activist opponents portrayed atomic weapons as fundamentally different from any other human creation" (2009: 3). The 'exceptional' qualities attributed to nuclear power, weaponry, materials, technology and research have meant the discourse has become immensely powerful and used on all possible sides of the debates that surround the fission of uranium atoms;

> "'Nuclear' scientists and engineers gained prestige, power, and funding far beyond their colleagues in 'conventional' research. Anti-nuclear activists argued that nuclear technologies posed qualitatively and quantitatively distinct, never-before-encountered

> dangers. The fact that 'going nuclear' involved splitting atoms – creating rupture in nature's very building blocks – only strengthened this exceptionalism" (Hecht, 2006: 321).

Depending on what has been politically expedient, various political regimes and groups have sought to use nuclear exceptionalism to their own advantage. For example, as anti-nuclear activists picked up on the exceptionalism discourse and used it to their advantage by highlighting the "unprecedented qualitative and quantitative dangers posed by exposure to radioactive substances" the industry responded by nullifying that exceptionalism: "radioactivity was a part of nature, nuclear power merely a form of energy among others" (Hecht, 2009: 4). These kinds of artificial declarations of mundanity are still part of the nuclear exceptionalism discourse, as they rely on a notion of exceptionality against which to be measured. The 'cross-cutting' nature of nuclear exceptionalism is clear when viewed in combination with other discourses, such as, for example, nuclear dualism. Many nuclear dualism discursive statements include clear examples of nuclear exceptionalism (see next section).

Nuclear dualism

'Nuclear dualism' refers to the various ways in which civil nuclear power is often equated and conflated with military uses of nuclear technologies, but more broadly can refer to the dual capabilities for destruction and production (Doyle, 2011). This can be done implicitly or explicitly, consciously or unconsciously. When referenced implicitly, abstract imagery might be called into the discussion, as in this example from Gamson & Modigliani: "The culture of nuclear power has been indelibly marked by Hiroshima and Nagasaki. Public awareness begins with the images of sudden, enormous destruction, symbolized in the rising mushroom cloud of a nuclear bomb blast. Even when discourse focuses on the use of nuclear reactors to produce electricity, the afterimage of the bomb is never far from the surface" (1989: 12). Boyer expresses it more explicitly, with the pronouncement that "Either civilization would vanish in a cataclysmic holocaust, or the atomic future would be unimaginably bright" (1994 [1985]: 125). More recently, this discourse can be found in pronouncements from key environmental campaign groups such as Greenpeace: "nuclear power atoms are no different to the atoms used in nuclear weapons and dirty bombs. As terrorist targets, nuclear power stations are expensive, polluting sitting ducks—static time bombs" (Greenpeace, 2005). The nuclear dualism discourse had its heyday in the period between Hiroshima and the 1960s (Gamson & Modigliani 1989: 12): dualism more generally has existed in human folklore and consciousness since our earliest days (see Weart, 1988; esp. chapter 9 "Good and Bad Atoms").

Nuclear stigma

'Nuclear stigma' has two parallel and interconnected themes running through it. One element of the discourse refers to the how the word 'nuclear' can stigmatise technologies, reflecting prior negative associations with nuclear issues and events which influence people's responses to nuclear things today. The second element is how people – for example, workers at a plant or resident from the nearby area – can become stigmatised by nuclear power and feel themselves to be socially ostracised as a result of their association, however slight, with a nuclear facility.

Horlick-Jones *et al.* (2012) investigated the stigmatisation of 'nuclear' by discussing the concept of nuclear fusion with focus groups. Nuclear scientists hope that fusion could become the ultimate renewable energy (e.g. Hendry & Lawson, 1993; Jukes, 1959). Nuclear fusion is a relatively positive story in comparison with fission, which is why Horlick-Jones *et al.* thought to use it to investigate the degree of stigma associated with the 'nuclear' descriptor. They found an "almost visceral" response to the word nuclear (Horlick-Jones *et al.,* 2012). Their findings underscore the need for an integrated methodology that combines discourse and imagery: "it is as though a nuclear label serves to very powerfully communicate a rich and detailed collection of ideas and images". Overall, this element of nuclear stigma entails a response which "seems to be an almost instantaneous emotion of fear, prompted simply by the technology being labelled by the word nuclear" (ibid., 520).

Horlick-Jones *et al.* (2012) use Goffman's (1963) concept of stigma, in the sense of it denoting a 'spoiled identity'. This same reading of the concept of stigma is used by Parkhill *et al.* (2013) in their discussion of the second element of nuclear stigma, relating to the stigmatisation of people (and place) through their association with nuclear power. Parkhill *et al.* describe it more expressly as "arising when an aspect of our social identity is anticipated (by others) as being of a 'less desirable kind'" (2013: 3). The place where a person lives – their immediate landscape – can become a stigmatising aspect of their identity (see also Devine-Wright & Howes, 2010; Wester-Huber, 2004; Gregory, Slovic, & Flynn, 1996). Common features of people-place stigmatisation are "a source of hazard which elicits 'high perceptions of risk', the violation of a standard which is right and natural, and the inequitable distribution of impacts" (Bush *et al.,* 2001: 47-48). The notion of a 'violation' of some 'natural' and 'right' standard recalls Hecht's (2006) notion of 'rupture', contributing to nuclear exceptionalism.

Techno-Rationality & Abstract Faith in Science

These two discourses are very closely linked and can be said to form a discourse cluster (Hajer, 1993: 47). In 'techno-rationality,' technological progress is expressly linked to social progress and

works to construct nuclear power as a logical next – or continuing – step in ensuring future growth and progress. Concerns over safety are batted aside with the assurance that we just need to make sure we get the 'next generation' of reactors up and running because *obviously* they will be much better in all respects. Nuclear accidents and problems are dismissed as happening in old reactors or as occurring under lax safety standards (in less civilized/developed countries) that would never be tolerated today (for example Chernobyl, Three Mile Island) and as being positive opportunities for learning curves (Irwin, Allan, & Welsh, 2000: 82). Furthermore, the socio-technical model of progress is an explicitly Western model of progress; explanations of Chernobyl often focus on the reactor design being a Soviet model which would never have been licensed in the USA or the UK because of its minimal safety features, and also as occurring due to the unwillingness of workers to question the orders they were given and their general lack of understanding of what they were doing: "accidents are dismissed … as a consequence of non-scientific design choices (frequently seen as occurring in 'other countries')" (ibid.). Kilbourne *et al.* present a 'techno-rational' discourse they term 'technofix' which, while not specifically to do with nuclear power, is nevertheless able to encompass nuclear issues: "technology has been so successful in the pursuit of material progress that it has led to the arrogance of humanism", leading many to assume that "technology will succeed whenever it is called on for the solution of human problems, including environmental problems" (2001: 212). Like nuclear exceptionalism, techno-rationality has been visible since the beginning of the nuclear era, always rising to meet the objections of those who are wary of humanity overreaching itself: "Nuclear power has been characterized from the start by an explicit confidence in science and technology as a basis for social progress… Such a faith in 'science and progress' has also meant that critical voices are generally dismissed as either (at best) uninformed or (at worst) irrational" (Irwin *et al.,* 2000: 82).

Techno-rationality can often be found conflated or intermingled with the 'Abstract Faith in Science' discourse (henceforth shortened to 'abstract faith'). Abstract faith has a more distinctive flavour of a resigned and mildly worried dependence on scientific progress, often expressed by people who are quite far removed from decision-making regarding these matters and who might not feel personally able to follow the scientific arguments to and fro, as found by Bickerstaff *et al.* (2008: 156). In general, Bickerstaff *et al.* found broad expectation that scientists were not only capable of fixing any problems that might arise from the topics under discussion (climate change and radioactive waste), but that they were *morally obliged* to do so. Coupled with this, "rather than absolute confidence, these comments reveal[ed] a hope that science will deliver answers – even a sense of dependency" (ibid.). Brian Wynne brought this phenomenon to light in the 1980s, when presenting his research on the aftereffects of Chernobyl and the subsequent regulation of the sheep

farming industry in Cumbria, in the north of England (Wynne, 1989). He noted a simultaneous expectation and hope that the scientists sent by the government would a) know what they were doing and b) sort out the problem. These expectations conflicted with a growing awareness among the farmers that the scientists had not considered the specific ecological conditions in the Cumbrian fells and were not, therefore, as omniscient as they might wish to present themselves; and also that both the scientists sent by government to oversee the regulation of the industry and the scientists and engineers at the nearby Sellafield nuclear plant were failing in their duty towards the public (Wynne, 1989; Macgill, 1987). Thus, the abstract faith discourse, while presenting users with a certain amount of hope and possibly a way in which to be 'pro-nuclear', also creates fear and anxiety by demonstrating to them how unable they are as individuals to cope with 'nuclearity' without the scientists, engineers and experts on which they are so dependent. This forms a complex nexus of hope, fear, worry, gratitude and resentment, which does not make for reliable pro- or anti-nuclear positionality.

Techno-rationality can be used not only to rationalise a pro-nuclear position, but to irrationalise an anti-nuclear stance; abstract faith is more neutral in this respect. Techno-rationality can be used to dismiss those people raising concerns about nuclear power as "nervous Nellies" or "pastoral luddites" (Gamson & Modigliani, 1989: 4). Some might combine the discourse with traditional prejudices, as for example when "belief is placed in the rationality of western science and technology, as the 'non-nuclear' stance of the Irish is characterized as being 'ignorant and backward in technology' (Doyle, 2011: 116; see also Syon, 2006). "Such a faith in 'science and progress' has also meant that critical voices are generally dismissed as either (at best) uninformed or (at worst) irrational", and has allowed nuclear institutions to dismiss "opposing notions of nature as possessing intrinsic value or of life as being of incalculable benefit" as being "misguided and anti-scientific" (Irwin *et al.,* 2000: 82-3).

Energy Gap & Energy Independence

'Energy gap' and 'energy independence' are both politico-economic discourses that have also been in evidence for some years. Energy independence came into force as a discourse used in pro-nuclear arguments around the time of the oil crisis in 1973. Some have connected the nascence of the French civil nuclear programme to worries seeded during that time: "The 1973 oil crisis triggered the implementation of a massive nuclear power programme, justified by the country's need to guarantee its energy independence" (Teräväinen *et al.,* 2011: 3436). Concerns about being dependent on oil from the Middle East have lingered over the years due to the instability of the region. Newer causes for concern involve the possibility of Russia halting gas supplies to Europe,

as happened in 2009 when Russia and Ukraine butted heads over a fixed price for gas (Mclaughlin & Mock, 2009).

As a means to gain this much-touted 'independence', nuclear power is an attractive option. The energy density (amount of energy that can be extracted from the fuel) is far higher than renewables or any fossil fuel (Lovelock, 2007: 92). It is also able to provide what is termed a 'base load' power and is therefore often compared favourably to renewables which can be dismissed as 'intermittent' energy providers. Previous concerns about being dependent on Middle Eastern oil have broadened to encompass all forms of imported energy: Doyle (2011: 110) explains the notion of energy independence in terms of independence from foreign imports, and Pampel notes that results from international polls show that "Europeans are attracted to establishing independence from imported sources of energy" (2011: 250).

Energy Independence and Energy Gap often cluster together, with commentators bringing both discourses into the discussion to support a pro-nuclear position. Energy gap first came to light when society became aware that the earth's supplies of fossil fuels were rather more finite than had ever been considered. The general thrust of the argument is that due to a combination of factors, we will soon be facing another energy crisis; one where the fossil fuels have run out, the nuclear reactors have been shut down by people who "see only problems and ignore the benefit" (Gamson & Modigliani, 1989: 4) and the renewable energy technologies whose funding has been suppressed by the fossil fuel industries for so long are unready and unable to take up the slack (e.g. Goodall, 2009). Energy gap is a useful discourse, widely-used by both the pro- and anti-nuclear camps, and is often easy to pick out of any discussion or text when couched in terms of needing to find ways to "keep the lights on" (Strachan & Russell, 2014).

Energy gap was explicit in the sixth report from UK Environmental Audit Committee's 2005-2006 session, resulting in a report titled *Keeping the lights on: Nuclear, Renewables and Climate Change*. The report states that "Various organisations argued in their submissions [to the committee hearing] that a new generation of nuclear power stations was needed both to keep the lights on and to reduce carbon emissions. Indeed, it is largely because concerns on both these scores have recently increased that the issue of nuclear power is once again being vigorously debated" (2005: 28). Thus, energy gap receives authoritative endorsement, and it is evident in the utterances of members of the governing Conservative Party. For example, "if people at home want to be able to keep watching the television, be able to turn the kettle on and benefit from electricity, we've got to make these investments. It's essential to keep the lights on and to power British business" (former Energy Secretary Ed Davey, quoted in Dominiczak, 2013).

4.4 Chapter conclusion

This chapter positioned the current, 'modern' environmentalism in its historical, cultural and philosophical context – as a product of the romantic reaction to the excesses of the Enlightenment, and as having absorbed a collage of asian philosophical influences. Understanding the background of key 'pre-modern' environmental figures like Muir and Emerson is crucial to a full appreciation of how and why the battle lines were drawn at Thirlmere and Hetch Hetchy as they were: generally, the American Transcendentalists – influenced by British Romanticism – sought to re-mystify and re-consecrate the environment but did so in a peculiarly unorthodox manner. Powerful religious metaphors were used to stake out the philosophical ground, but they became stripped of overt Christianity and reflected a more deist or pantheist spirituality.

The second half of the chapter looked more closely at the factors contributing to modern environmentalism in post-war and Cold War Europe. The publication of key texts such as Rachel Carson's *Silent Spring* (1962) and the Club of Rome's *Limits to Growth* (Meadows *et al.,* 1974) caught the eager attention of the rising counter culture of the mid- to late-twentieth century (Roszak, 1970). Generations of disaffected youth, better educated and with more cultural, social and political awareness than ever before, looked outside the confines of Christian theology and Western European philosophy for inspiration. While many scholars are keen to note that Asian philosophies undoubtedly contain elements which could provide insight into the environmental (and socio-political) problems of post-modernity, the consensus seems to be that the eagerness of the 'beat generation' resulted in an unsophisticated bricolage rather than a useful alternative philosophical tradition (Callicott & McRae, 2014). As such, modern environmentalism retains some Asian traces, both philsopohical and in practices. Linked to the counter culture of the twentieth century is the crisis of trust that scholars have remarked upon as occurring throughout Western Europe. As successive governments and authoritative bodies have tried and failed to deal satisfactorily with a variety of environmental crises, citizens have lost faith in elected officials and placed their trust in environmental movement organisations to lobby for change.

Finally, this chapter introduced the focal topic of nuclear power and positioned it discursively as an emblematic issue which draws together the threads of religion, science and environmentalism. Environmentalism combines moral, cosmological and scientific aspects of nuclear power. For example, a scientific miscalculation may have devastating environmental consequences, as the Chernobyl incident demonstrated powerfully. The nuclear discourses presented in the final section of this chapter thus all combine religious, scientific and environmental facets. Taken together, the nuclear discourses return the discussion to the overarching issue of cosmology; is nuclear fission the point at which humanity overstepped its bounds and transgressed against the natural balance

of the universe? Is it possible to go back and fix things, or should we concentrate on moving forward hoping that past mistakes will ensure better decisions in the future?

The following chapter will draw together and summarise the argument that has been spread across these three literature-review chapters and present the research questions which emerge. Following that, a presentation of the methods used to collect data and the conceptual framework used to analyse the data.

Chapter 5 | Methodology, research questions and methods

5.1 Introduction

The overall focus of this research, as set out in Chapter One, is to investigate how reframing environmental issues using religious concepts and language can deepen our understanding of people's relationship to the environment and environmentalism. The thesis sets out to achieve this goal through the utilisation of a discourse analysis approach, and thus seeks to discover what discursive resources people are using to make sense of environmental issues and how these discourses relate to one another. The importance of this investigation lies in both its re-framing of environmentalism – how foregrounding the role of religion (Christianity) sheds new light on the foundational assumptions of current, 'modern' environmentalism – and in indicating how re-integrating religious perspectives into the social sciences might open up avenues for research which were deliberately closed during the Enlightenment.

Chapters Two, Three and Four combined to form an extensive review of literature pertaining to the key concepts and historical relationships at work in this thesis. §5.2 summarises the content and findings of those chapters to identify knowledge gaps and theoretical linkages which deserve further investigation, thus preparing the ground for the research questions as set out in §5.2.1. Following on from the research questions are two sections which specifically address the practicalities of operationalising the concepts of discourse and implicit religion for analytical purposes. The second half of the chapter is concerned with the materiality of fieldwork; choice of methods for data collection, means of participant sampling, and the practicalities of both. The chapter finishes with a brief examination of the ethical issues involved in the research.

5.2 Literature review summary

Chapter Two indicated that a Foucauldian discourse analysis approach is especially appropriate for the topics under investigation in this thesis, and for the type of questions to be posited (see §5.2.1). Despite this, Foucauldian discursive analysis approaches have been under-utilised by scholars working in the field of religious studies (von Stuckrad, 2015: 6). Scholarly investigations of religion rely on broad philosophical underpinnings which are far more widely applicable than is commonly assumed. Many theologians acknowledge the broadness of the academic notion of religion and identify other social phenomena which may be described in religious terms. Bailey (1997) synthesised a vast and disparate literature indicating widespread but disconnected acknowledgement of non-religious institutions which nevertheless behave like recognised religions, and provided the term 'implicit religion' that is used in this thesis. Many authors have anecdotally noted the religious characteristics of environmentalism, but none have applied the

term 'implicit religion.' Likewise, those scholars working in the field of implicit religion have not turned their attention to environmentalism. The notion of cosmology is helpful in terms of bringing together the key concepts of religion and environmentalism; in the discursive framework used in this thesis, a cosmology functions as a foundational discourse providing ideational resources for people making sense of their relationship to the environment.

Chapter Three showed that the success of the secularisation thesis does not equate to the success of secularisation. On the contrary, despite common feelings that we are living in a 'secular society' critics of the secularisation thesis are keen to point out that religion simply has not gone away: explicit religion has been extraordinarily resilient to the stresses of modernity and post-modernity, and implicit religion is all around as society seeks to fill the "perceptible void" left by the "abolition of God" (Aldous Huxley, in Ziolkowski, 2007: 211). The social sciences – as direct products of the Enlightenment – have been ignoring the substance, purpose, historical and present-day influence, vocabulary and culture of religion; in the Western European context, the religion to be ignored has been Christianity. Taken together with the understanding that environmentalism is an implicit religion but has been largely overlooked as such, it becomes clear why this is the case: the social sciences have yet to jettison centuries of assumptions regarding the inherent value of religion and knowledge derived from religion or religious sources.

Chapter Four's *telos* is the notion that applying 'religion' as an analytical tool to environmentalism requires – from a Foucauldian discourse analysis perspective – an understanding of the history of 'modern environmentalism'. What that history demonstrated was that environmental thought has undergone a complex process of mystical re-configuration. Overt Christian references have been stripped out, or the terminology has undergone a change or subversion of meaning, as in the case of 'wilderness,' but the underlying cosmologies remained as enduring *mythoi* regulating assumptions about the environment. Hence why the battle lines of Hetch Hetchy Valley, drawn so starkly with religious imagery, remain so familiar to us. Later on, Roszak's reactive youth counter culture (1970) deliberately incorporated some elements of oriental mysticism, although unfortunately the unsophisticated manner in which this was accomplished has led scholars to be reticent on the potential for Asian philosophies and religions to have a tangible impact on environmental issues (Callicott & McRae, 2014). Chapter Four concluded with the introduction of nuclear power as an 'emblematic issue' (Hajer, 2006: 68) and presented the key discourses commonly found in scholarly investigations of social attitudes and opinions on nuclear power.

Overall, the literature review chapters seek to show that religion is an integral aspect of society which was, for many centuries, well-integrated into most (if not all) aspects of social, cultural,

political, philosophical and intellectual life. Granted, the institutionalising features of the Christian churches generated its own problems, and its reactions to those problems were often destructive rather than productive. The ascension of empiricism and Enlightenment thinking was undoubtedly crucial for the social development of Western Europe, and by extension (via imperialism/colonialism) the rest of the world, but as critics of the secularisation thesis have shown, the accompanying dethroning of Christianity was unnecessarily destructive. The rise of implicit religions indicates that religion remains important, despite the protestations of humanists and New Atheists like; but the social sciences – and, perhaps, the academy in general – have been reticent to divest themselves of their Enlightened distaste for religion.

The question then becomes, "What happens if we revisit the role of religion?"

5.2.1 Research questions

This research project sought to answer that broad query through the following principal research questions:

1. How does reframing environmental issues using religious concepts and language deepen our understanding of people's relationship to the environment and environmentalism?
2. What implications does the pro-nuclear heresy have for environmental*ism* and environmental*ists*?
3. What new ways may be illuminated for the social sciences to engage with and understand environmental controversies and debates?

In pursuit of empirical answers to the principal research questions, a further set of contributory questions were delineated:

- What evidence of Christian inheritance can we see in the environmental discursive resources being used?
- Which enduring cosmologies are present in environmental discursive repertoires?
- In what ways can we identify environmentalism as fulfilling the function of religion?
- How do lay environmentalists relate to organised environmentalism?

These questions are addressed in Chapters Six and Seven in terms generally related to environmentalism. Then, in Chapters Eight and Nine, the questions are considered with a specific emphasis on how nuclear power, as an emblematic issue (Hajer, 2006), provides discursive challenge in the context of environmentalism as implicit religion.

5.3 Discourse Toolkit

The discourse toolkit used in this thesis is a further development of a method constructed and used previously in the paper *Destabilizing Environmentalism: Epiphanal Change and the Emergence of Pro-Nuclear Environmentalism* (McCalman & Connelly, 2015). That earlier discourse toolkit was established early in the life of this project and, crucially for the purposes of this methodology, *before* I entered the field and collected my own data. The previous version could not be employed in this project largely because of the different nature of the data being analysed. In *Destabilizing Environmentalism*, McCalman & Connelly (2015) analysed data which was very 'clean' – as it was in the form of texts purposefully prepared by an experienced writer for publication in a national newspaper. To some extent the texts were also pre-coded, as Monbiot (the main protagonist in that paper) had helpfully categorized his articles thematically on his personal website. As a professional writer, Monbiot had carefully constructed, drafted and redrafted the articles to make sure the desired points came across clearly and in a forceful rhetorical style. This made discursive *statements* – a Foucauldian concept discussed by Garrity (2010) – very easy to pick out, group and compare. The data I collected from my participants for this project, on the other hand, was *messy*: participants stammered, repeated themselves, contradicted themselves, forgot themselves, and forgot to finish their sentences. This meant that the interview transcripts required much more in-depth work when it came to thematic and discursive coding than was the case with the data for the 2015 paper, even though some of the (nuclear) discourses remained the same. During that process it became clear that Gamson and Modigliani's (1989) notion of constructing ideal-type *discourse packages* would be a useful means to consolidate and analyse discursive fragments spread thinly between multiple interview transcripts.

The conscious inclusion of Gamson and Modigliani's idea of discourse packages and the expansion of the thematic coding step to include 'cleaning up' the data are the key differences between the discourse analysis approach taken in the 2015 paper as opposed to the one adopted in this thesis. Also, the emphasis in this project on the role of cosmologies as *foundational* discourses is a new addition to my discourse approach. I present the discourse toolkit below:

> **Discourses** are "a specific ensemble of ideas, concepts, and categorizations that are produced, reproduced, and transformed in a particular set of practices through which meaning is given to physical and social realities" (Hajer, 1995: 44). Discourses may operate at distinct levels, allowing for the possibility of **meta-discourses** with **sub-discourses** grouped within them, underpinned by **foundational discourses** (cosmologies). Sometimes, a group of two or more discourses may share a greater or lesser degree of **discursive affinity**, meaning that they form a **discourse cluster** and

> are frequently found working together or sponsored by the same **discourse sponsors**. Discourses may rise or fall in terms of their general influence among the population due to the work of **discourse sponsors**, who can be a variety of agents, from individuals (such as movement intellectuals) to international industries. A discourse analyst may construct a **discourse package** as a means of organising the "metaphors, catchphrases, visual images, moral appeals, and other symbolic devices" which characterize a discourse (Gamson & Modigliani, 1989: 2) – collectively referred to as '**discourse markers**' and used as a means of recognizing a discourse at work in a text.

The definition of discourse, and the concepts of discursive affinity and discourse clusters – as well as the term 'emblematic issue' – are all taken from the work of Maarten Hajer (2006). The terms 'discourse sponsors' and 'discourse packages' are taken from Gamson and Modigliani (1989). The terms 'meta-discourses,' 'sub-discourses' and 'foundational discourses' are all terms relating to the different levels of complexity at which discourses operate (see §2.2.1) and are terms of my own invention. The term 'discourse marker' is also of my own invention, and is used in preference to the Foucauldian term 'discursive statement' (Garrity, 2010) for the reasons given above – in the field whole statements relating to single discourses were rare, compared to the 'marker' fragments. A discussion of how this toolkit is put into practise is included in §5.5.4 (Analysis).

5.4 Operationalising Implicit Religion

Despite my enthusiasm for the notion of environmentalism as an implicit religion, the terminology is not without controversy. To what are we referring? Definitions are useful as basic tools for analysis, but they can also be inherently problematic if they become a focus of attention. Bailey discovered this during his own thesis project, when he was unable to choose between three possible definitions of 'implicit religion'. His solution was to present three separate case studies, each of which used – and demonstrated – a different definition: "commitments," "integrating foci," and "intensive concerns with extensive effects" (Bailey, 1997, 2010). Years after the publication of his thesis *Implicit Religion in Contemporary Society* (1997), Bailey acknowledged what seems rather obvious with hindsight: that all three cases were merely aspects of a single phenomenon which was inherently more flexible than previously assumed (2010). However, despite Bailey's reflexivity regarding his own contributions to the field, contemporary uses of the term 'implicit religion' – as reified in the journal *Implicit Religion: Journal of the Centre for the Study of Implicit Religion and Contemporary Spirituality* – retain the confusion that was built into the original thesis: perhaps because scholars were wary of modifying a term whose originator was both 'alive and kicking,' as well as the editor of the journal in which they hoped to be published.

As another contender, Robert Nelson's term 'secular religion' (2010) is unsatisfactory for two key reasons. At first sight it is an oxymoron: a great deal of scholarly work is available which will convince most people of the basic proposition that "secular" literally means "the opposite of religious" (Bailey, 1997: p. 6). The relationship between 'religious' and 'secular' is close and inverse, while allowing for the true meaning of both to fluctuate in the manner that all meanings in continuous use do. Secondly – and linked to the first reason – the use of 'secular' as a descriptor or qualifier removes the possibility of there being any overt spiritual or divine characteristics of that which is being described. Therefore, although Nelson describes environmentalism as a religion, his use of 'secular' excludes all forms of environmental 'religion' that is at all *religious*. He is in danger of describing theology *without* spirituality – which then becomes little more than any other cosmology one might use to explain the world and our place within it.

This thesis uses the term 'implicit religion', but defines it using a combination of Alston's definitive and much-cited entry on religion in the *Encyclopedia of Philosophy* (Alston, 1967: see discussion in Chapter Two, §2.3.1), and the literal definition of 'implicit' as meaning "implied though not plainly expressed; naturally or necessarily involved in, or capable of being inferred from, something else" (OED online). The flexibility inherent to Alston's definition could have solved Bailey's issues in defining his concept and might have aided Nelson too. Alston allows the use of 'religion' as a *general* descriptor, rather than it tacitly referring only to those versions of religion which are commonly described as such. From thence we understand that there are multiple religions active in society today, but that some are *explicitly* acknowledged and referred to as such, whereas others have their religious character denied or suppressed. Those in the latter category are what we can refer to as *implicit* religions. Again, a discussion of how this understanding of implicit religion is practically applied during the data analysis is provided in §5.5.4.

5.5 The Research Programme

5.5.1. Introduction

The following sections cover the research process through which the research questions as set out in §5.2.1 were addressed. The main considerations of this research process were: how to ensure large enough quantities of rich conversational data (see §5.5.2) and how then to turn the resulting 'raw' data into observable examples of discourse at work (see §.5.5.5). This half of the chapter finishes with a discussion of ethical considerations and the positionality of the researcher.

5.5.2. Data collection I: Semi-Structured Interviews

Discourse analysis is a qualitative research methodology predicated on a notion of social reality being constructed through language. This approach therefore requires data collection methods

which provide a large amount of text for the analyst to dig through. Many of the examples of discourse analysis that I have drawn on so far in this thesis used data collected in a two key ways: through analysis of publicly available textual content (e.g., Doyle, 2011) or through the collection of 'raw' data via semi-structured interviews and focus groups (e.g., Bickerstaff *et al.,* 2008). The data for this project was collected using semi-structured interviews.

Semi-structured interviews provide an open conversational structure which encourages participants to be reflexive and as 'natural' as possible, while allowing the researcher to retain overall control and prevent unproductive tangents. Being aware of what discourses were being employed by the media on the issue of environmental concern about nuclear power meant that meandering conversations retained meaning and value as I was able to contextualise participants' utterances 'en route' and ask secondary probing questions.

Each semi-structured interview was guided by a set of questions constructed to ensure that all the key topics of interest were covered during the discussion. These questions were written out on flashcards that were part of the general equipment of the interview: consent forms, information sheets, digital recorder, coffee cups, notepad and pens, question cards. Their main purpose in that format was as a visual indication to the interviewee of when I wanted to move the conversation onto the next topic: I would pick up the cards and move the top question to the back of the pile. The questions were not always asked in the same phrasing or the same order; the conversations needed to flow as naturally as possible to encourage disclosure on the part of the interviewee. To get the conversation started I introduced a couple of word association 'starter questions' which were the same for each participant. These were "Complete the sentence 'The environment is…'" and "What comes to mind when I say 'nuclear'?" Generally, participants responded very well to these starter questions and they easily fell into a reflexive and contemplative mode of thought and discussion. Then, the key topic areas I sought to cover in each interview were as follows:

- How the participant characterised their relationship to the environment and environmentalism.
- Who, or what kind of person, the participant thought of as 'environmentalists.'
- Whether the participant had any experience of EMOs and what their thoughts were on EMOs within the environmental movement.
- Whether the participants' ideas about the environment were informed by faith of any kind. If the answer was a straight 'no' I would then ask whether they had encountered any people who viewed the environment through a faith 'lens' and how they felt about that.

- What the participants life experiences of nuclear (power) were. This involved asking about their first memories of nuclear technology, and then going through key events in their lives which had been affected in some manner by nuclear things.
- What their opinions were about attempts by government and industry to 'rebrand' nuclear power as 'sustainable' and as a climate change mitigation tool.

All these questions were deliberately open and abstract. I wanted to encourage the participant to reflect on their life experiences and their assumptions about the environment and nuclear power. Most participants responded well and commented at the end of the interview how much they had enjoyed the opportunity to think about and discuss the topics we had covered. A few participants struggled initially, having expected more survey-style questions. In those cases, I explained why I was asking abstract questions and the value (from a researchers' perspective) of having a more open discussion: then, participants usually relaxed and the interview flowed well.

Despite originally planning to round out the data set with some focus groups, I was prevented from doing so due to the lack of cooperation and subsequent actions of a key 'gatekeeper' who, despite initial friendly overtures, ultimately decided to rescind access to an important pool of potential participants. This setback had profound ramifications for how the rest of the field research panned out (see §5.5.3) and meant that the semi-structured interview became the sole means of obtaining raw data. This did not hinder the data collection process, however, as the timing of the field work coincided with an upcoming national election (May 2015) that focused almost exclusively on the economy. This meant there was a notable paucity of current media content on the key topics of this project, despite there being plenty of fodder for such stories due to the still-recent Fukushima disaster, the ongoing furore over the construction of an additional reactor at the Hinkley Point C nuclear site, and the issue of renewing the Trident nuclear missile programme. Some of my participants even commented on the lack of media discussion with derision. Because of the perceived lack of national debate on these issues, participants reacted positively and energetically when given the opportunity to have an open discussion on those issues, as they felt frustrated at the lack of public debate. This meant that generally the interviews flowed well, and the data was quite rich.

5.5.4. Data Collection II: Methods and practicalities

Who were my participants? (Sample Universe, Size, Strategy and Sourcing)

SAMPLE UNIVERSE

The 'sample universe' (also referred to as the "study population" or the "target population") is "the totality of persons from which cases may legitimately be sampled in an interview study"

(Robinson, 2014: 25-26). Delineation of the sample universe is achieved through the application of *inclusion* and/or *exclusion* criteria (Luborsky & Rubinstein, 1995; Patton, 1990). The greater the number of inclusion and exclusion criteria, and the more specific they are, the greater the level of homogeneity to be expected in the sample universe. In this project I deliberately sought to construct a heterogeneous sample universe, through the use of broad inclusion criteria and a conscious lack of exclusion criteria. The (deliberately very general) overall inclusion/exclusion criterion governing my sample universe was 'lay membership' of the implicit environmental church: this was operationalised through a subjective consideration of whether any potential participant had demonstrated some level of interest or concern about environmental matters – and, of course, had indicated they would be willing to be interviewed.

My specific inclusion criteria were as follows:

- Participation in environmental activity
- Participation in the academy
- Participation in an explicit religion
- Participation in an EMO (environmental movement organisation)

A potential participant need only fit one of these inclusion criteria. These criteria sought to ensure there were sample cases (participants) which represented social groups which might conceivably be associated with the key issues/topics discussed in this thesis; environmentalism, religion, and (social) science (see below section on sampling strategy). The benefit to deliberately constructing a heterogeneous sample universe "is that any commonality found across a diverse group of cases is more likely to be a widely generalisable phenomenon than a commonality found in a homogenous group of cases. Therefore, heterogeneity of sample helps provide evidence that findings are not solely the preserve of a particular group, time or place, which can help establish whether a theory developed within one particular context applies to other contexts" (Robinson, 2014: 27). A particular benefit of transparency when discussing the rationale behind the sample universe is that "it also provides an important theoretical role in the analysis and interpretation process by specifying what a sample is of, and thus defining who or what a study is about" (ibid.: 28).

SAMPLE SIZE

Robinson makes the point that for ideographic research, as most qualitative, interview-based research tends to be, it is preferable to aim for a "sample size that is sufficiently small for individual cases to have a locatable voice within the study, and for an intensive analysis of each case to be conducted" (Robinson, 2014: 29). The perennial question in such studies as this is "How many

interviews are enough?" and the answer, invariably, is "It depends." In literature reviewed by Guest *et al.,* the authors found that qualitative researchers who dealt in interviews as their basis for data collection spoke of the term 'theoretical saturation' (2006: 59). However, they also found that very little had been published discussing how the term 'theoretical saturation' should be operationalised by a researcher seeking to judge how many interviews to budget for (ibid.: 60). The notion of 'saturation' implies that the researcher is reflexive while in the field, constantly mulling over the data already collected and comparing it to data currently being obtained, so as to know intrinsically when the point of theoretical saturation has been reached. That is all very well, but as Guest *et al.,* explain, "Waiting to reach saturation in the field is generally not an option. Applied researchers are often stuck with carrying out the number of interviews they prescribe in a proposal, for better or worse. A general yardstick is needed, therefore, to estimate the point at which saturation is likely to occur" (ibid.). Robinson suggests setting oneself a 'minimum-maximum' yardstick (2014: 29), and also recommends being open to altering the sample size if necessary when in the field, as "monitoring and being responsive to the practical realities of research is a key skill for the qualitative researcher as collecting in-depth data leads to challenges that are never entirely predictable at the outset of a project" (ibid.: 31).

In this project, I approached the fieldwork with a minimum-maximum target for interviews, with the minimum being 30 and the maximum – or ideal number – being 40. I felt this sample size would be large enough to provide good coverage of different kinds of participants and different viewpoints, while remaining manageable in terms of analysis and practical in terms of time take to gather and code. The sample universe eventually comprised 37 semi-structured interviews, and I feel I did reach 'theoretical saturation.'

SAMPLING STRATEGY

This project employed a 'purposive' sampling strategy (2014: 31):

> "Purposive sampling strategies are non-random ways of ensuring that particular categories of cases within a sampling universe are represented in the final sample of a project. The rationale for employing a purposive strategy is that the researcher assumes, based on their *a-priori* theoretical understanding of the topic being studied, that certain categories of individuals may have a unique, different or important perspective on the phenomenon in question and their presence in the sample should be ensured" (Robinson, 2014: 31).

Based on "*a-priori* theoretical understanding of the topic being studied" I knew that I wanted cases in the sample universe which included people who participated in environmental activities, explicit

religion, EMOs, and the academy so as to make sure to generate data which might speak to the various knowledge-worlds of religion, environmentalism, and the sciences. Thus not only was my sampling purposive, it was stratified:

> "In a stratified sample, the researcher first selects the particular categories or groups of cases that he/she considers should be purposively included in the final sample. The sample is then divided up or "stratified" according to these categories, and a target number of participants are allocated to each one. Stratification categories can be geographical, demographic, socioeconomic, physical or psychological; the only requirement is that there is a clear theoretical rationale for assuming that the resulting groups will differ in some meaningful way" (Robinson, 2014: 32)

Again, as with the issue of sample size, having a numerical goal for each stratum is rather by-the-by if one encounters difficulties in sample sourcing, as I did (see section below on sample sourcing). See Appendix 1 for list participants and their categorizations.

SAMPLE SOURCING

In voluntary, interview-based research projects such as this, Robinson reminds us to be aware of the possibility of 'self-selection bias' among participants (2014: 36; see also Costigan & Cox, 2001). While I acknowledge that the majority of my participants could be described as 'outgoing' I feel that self-selection bias is not as problematic in my sample universe as it could have been, largely due to the combination of sourcing strategies I employed.

Firstly, I made extensive use of personal networks; this is not to say I interviewed all of my friends, but rather that I asked certain key individuals either if they would participate based on my assumption of their fitting some of the inclusion criteria, or if they knew other people who they felt were 'environmental,' 'religious' or interested and knowledgeable on the topics under investigation in this thesis. I feel this negates (some) of the self-selection bias as this meant that a significant number of people were participating on the recommendation of a friend (not necessarily myself), and that many of them might not have felt comfortable replying to a more generic advertisement of the study. Indeed, when I did attempt more 'generic' advertising (in the form of posters in areas where likely candidates might gather), the only reply I received was from a person who was not interested in participating, but who wanted to know my 'results'.

Secondly, having gained access to those first key participants, I then employed a method of *snowball sampling* (also known as chain- or referral-sampling (Robinson, 2014: 37)). At the end of interviews, I routinely asked participants if they knew anyone who might be interested in participating or particularly worthwhile to contact. If they were able to suggest a potential candidate then I took

that person's details and checked if I was able to mention the current participant's name as the person who had referred them: alternatively, the participant themselves would then email a few people on my behalf. This method accounted for more than half of the interviews conducted. I did not always interview a person recommended to me through this method; there were a few clear cases where a referral did not sufficiently fit the inclusion criteria.

As indicated previously, however, the recruitment of key individuals and the subsequent snowball sampling was not the sourcing strategy I initially embarked upon. Originally, I sought to recruit participants from local EMOs, on the assumption that such people represented a ready-made pool of people with demonstrable environmental interest or concern. On that basis I chose two local groups, each of which represented different types of EMO, and contacted the person I assumed would act as the "recruitment gatekeeper" (Devers & Frankel, 2000). In both cases, the gatekeeper was the chairperson of the group. In both cases, although in different ways, the group dynamic presented unique challenges which directly impacted the subsequent fieldwork. With the smaller of the two groups, I became aware that my proposal was almost summarily rejected because the committee did not perceive either themselves or the group as a whole as 'environmental.' With the larger of the two groups, many of the committee were pleased to participate in the research and did so. The chairperson was the last member to have their interview scheduled and, it became apparent, had not read the information sheet I had provided until the evening directly before the interview. When I arrived for the interview, it quickly became clear that a) consent for an interview would not be forthcoming, b) that the chairperson had substantially mis-understood the purpose of the research and the content of the information sheet (as well as the concept of anonymisation), and c) was prepared to ask those who had already participated to withdraw from the study. None of the participants did.

These experiences of approaching organised groups for participation radically changed my approach to both sample sourcing and, subsequently, the sample universe. I was forced to take a step back from the research and reconsider. The interviews already conducted became a pilot study and I performed initial thematic analysis (see §5.5.5) on the data already obtained. Overall, the decision to do so was beneficial to the research, for the following reasons:

- The initial thematic analysis of the pilot study made the 'religion' issue obvious, especially given that the groups selected at that stage had no obvious connection to organised religion;

- Approaching local EMOs had unintentionally given my sample an age-group bias (late middle-age and over 60s). I was able to address this with the modified sourcing strategy discussed above;
- The initial sourcing strategy resulted in a very homogenous sample. Again, I was able to ensure a more heterogeneous sample with the modified sourcing strategy I then adopted.
- The reluctance of the smaller EMO committee to participate due to their not being 'environmental' meant I became more reflexive regarding the inclusion and exclusion criteria for the sample universe. I realised that to ensure a heterogeneous sample I could not rely on external expressions of interest in the environment. The relative freedom of the modified sourcing strategy meant I could focus more on ensuring that the sample included cases that covered more of the environmental 'spectrum'.

Data collection: material practicalities

The first interview was conducted at a local coffee shop, and due to the levels of background noise I made sure that all subsequent interviews were conducted either at participants' homes or at my department building, as per the participants' preferences. All the interviews were digitally recorded, and notes were made openly during the interviews as well. What retrospectively became the pilot study was conducted between the 24th April and 11th August 2015. The rest of the fieldwork was conducted between the 8th February and 19th August 2016.

5.5.5. Analysis

The data analysis process was divided into a series of phases, each building on the previous. The first phase involved reading and re-reading the interview transcripts, to 'get to know' the data well. This prepared the ground for the second phase, where basic thematic analysis took place. Thematic analysis is a "foundational" qualitative analysis method used for "identifying, analysing and reporting patterns (themes) within data. It minimally organizes and describes your data set in (rich) detail" (Braun & Clarke, 2006: 78, 79). Braun & Clarke note that "a lot of analysis is essentially thematic – but is either claimed as something else (such as DA, or even content analysis)" (ibid., 80). The 'DA' referred to there is discourse analysis, and while it is possible that generic or broad versions of discourse analysis may be better described as thematic analysis, in this project I make a clear distinction between the thematic and discursive analysis stages. In the thematic analysis stage, the raw data was sorted into broad themes, some of which were then re-combined or divided further. Examples of thematic codes used in this stage are "define environmentalist," "archetypical EMO" and "follow the money." There were thirty-eight thematic codes altogether, and every interview transcript was divided between them. Some pieces of data ended up in several codes. At

this stage the data was still in its 'raw state' – with all the incidental phrases and repetitions that occur in natural speech.

The next stage involved going through each themes' contents and cleaning up the data. This was important because it made the discursive markers clearer. An example of this process is replicated below:

> **Raw:** "...the environment, you know, could be, well what's my local street like, you know, what's the environment of the local street; I'm not talking about that as being; so extremely, extremely important. It, it, it, It's, it's how the whole interconnected ecosystems that affect the, you know, the Gaian stability of the planet."
>
> **Clean:** "...the environment could be my local street, you know. I'm not talking about that as being so extremely important – It's how the whole interconnected ecosystems affect the Gaian stability of the planet."

The process of 'cleaning up' the raw data meant I got to know the data even better and helped to bring the outlines of the key discourses into focus. I had to be very careful not to change the meaning of what my participants said, making sure to re-listen to the interview recordings and checking my notes to make sure I kept the meaning, feeling and intention behind the data intact.

The substantive discourse analysis began at the next phase. This started with critical reading, looking for repeated discourse markers across a range of participants. Examples of discourse markers in the excerpt above are the terms 'interconnected' and 'Gaian stability.' Discourse markers were recurring words or clusters of near-synonyms/cognates which appeared to have significance for the interviewees. Terms and phrases such as these were not obviously discourse markers immediately upon 'clean-up': their role became clear after having iteratively gone through the dataset and thus gaining knowledge of the data in aggregate. As this process of critical reading and the selecting of discourse markers continued, discourses began to stand out from the text. The discourse packages did not correspond directly to the themes and instead cut across or combined themes. Once a discourse became apparent, I would gather the data which contributed to it – this could amount to a very large quantity of text – and arrange it in a narrative structure to show how the discourse worked and how participants used it. This is what forms the basis of the following analysis chapters.

In some cases, where I felt a discourse was particularly important or needed clarification, I constructed a discourse package in the style of Gamson and Modigliani (1989). I gave each discourse a title, to make it easier to refer between discourses in the analysis. I used small phrases or portmanteaus as discourse titles, which gave a clear depiction of the content and *telos* of the

discourses: an example of this from the nuclear discourses already discussed in §4.3.3 would be 'Abstract Faith In Science', shortened to 'Abstract Faith.' Once the discourses started consolidating, it became clearer how they related to one another, allowing me to see if there were 'clusters' or 'affinities' at work (Hajer, 2006). At this stage, the analysis also moved into a phase of consideration of overall discursive structure: whether there are groups of discourses operating within or 'under' broader discourses. A consideration of discourse sponsors (Gamson & Modigliani, 1989) is one of the last stages of the discourse analysis process.

The analysis process that I have described is quite linear, giving the impression of a simple progression from one stage to the next. In practice, it was more of an iterative process, especially towards the end of the second, discourse analysis stage (as opposed to the relatively simple thematic analysis stage). There was also an iterative process occurring continually between the *a priori* knowledge of the literature and the information coming through from the discourse analysis process.

5.5.6. Ethics and positionality

Although the research raised no ethical issues which warranted extraordinary measures, there were still ethical aspects, principally regarding consent and confidentiality.

Prior to conducting an interview with a participant, I emailed them to enquire about their possible participation and with that email I included an information sheet and the consent form (see Appendix A2). The text of the initial email encouraged the potential participants to read all the information I had provided and not decide based on the email contents only. When it came to the day of the interview, I made sure I had printed copies of both the information sheet and two copies of the consent form. Before the interview began, I gave both to the participant and asked them to read the information, encouraged them to ask questions, and went through the consent form with them. The consent form made it clear that I was requesting to record the interview, but the option was given for participants to reject this clause. None did – but if they had I would have conducted the interview with written notes only. The consent form also made it clear that data would be anonymised, and that participants' contributions would be available only to myself in their raw state. The consent form made it clear that I might wish to publish research based on the data gathered during the fieldwork, but that this would only ever be presented in its anonymised format. Thus, I ensured confidentiality for my participants.

The only ethical issue which slightly compromised confidentiality was a product of the sourcing strategy (see §5.5.4). Because of the 'snowball' or 'referral-chain' sourcing method, a number of participants knew each other or knew that they had been referred to me by someone who had

participated already. If participants chose to discuss their interviews with each other separately from the research process that was their prerogative – but on a few occasions, participants asked me in the interview about what others had said. When that happened, I explained that the confidentiality clauses on the consent form kept responses confidential between participants as well as between participants and the wider public. In general, however, none of the topics under discussion put any of the participants, or myself, at risk.

A note on positionality

In an ideographic, post-positivist, qualitative research study such as this the position of the researcher is a variable to be accounted for in the research just as much as, say, the presence of any discourse. In this case the positionality of the researcher raises legitimate questions regarding teleology: being a researcher who is religious, writing on the topic of religion, leaves me open to the accusation of having an axe to grind or a predisposition towards certain 'findings'. Simply being aware of that possibility is the first step towards avoiding that pitfall, but to some extent my religious background is somewhat atypical and has, in my opinion, been beneficial to the overall project. Key aspects of my background which are pertinent to this project are as follows:

- 'Cradle Catholic' upbringing – but with a very liberal, reflexive and critical approach to Roman Catholicism. I have also experienced a variety of other Christian denominations – Anglican, Baptist, evangelical – which ranged in their levels of conservatism and fundamentalism. As an adult, I am a practising Roman Catholic, which gave me access to a parish from which to recruit participants to fill the 'explicit religion' inclusion criteria of my sample universe.
- White, female, young, immigrant, middle class and Christian. These personal characteristics meant that there was generally at least one way in which participants could identify with me and therefore may have helped them feel more comfortable and relaxed in the interviews.
- Immigrant to the UK (although not obviously so). Although well integrated, the feeling of being slightly 'other' remains and coloured my upbringing, as my family was slightly ostracised. I feel this has ensured my perspective on the data (arising, for the most part, from white, middle class, non-immigrants) is slightly more critical than it might have been otherwise. Although of course the subjective nature of that statement means it is unverifiable.

Chapter 6 | Cosmologies and relational environmental identities

6.1 Introduction

The analysis presented in the following sections aims to address two of the sub-questions specified in §5.2.1: "Which enduring cosmologies are present in environmental discursive repertoires?" and "How do lay environmentalists relate to organized environmentalism?"

§6.2 presents a theoretical development of the literature on cosmologies which includes a visual representation of how the 'classical' cosmologies relate to one another. Building on that cosmological synthesis, §6.2.1 presents the analysis performed on the cosmological discourse fragments found in various themes throughout the data. The main theme from which the cosmological fragments were gleaned was 'define environmentalist' – which indicates the important role that cosmology plays as a foundational (or perhaps formational) discourse.

The second half of the chapter focuses further on the issue of environmental identities, showing how participants rejected the term 'environmentalist' due to its perceived connections with environmental fundamentalism and evangelism – despite constructing very positive and 'reasonable' abstract notions of what it was to be 'an environmentalist'. §6.3.1 looks in detail at various environmental stereotypes and their implications for the future of 'organised environmentalism'.

6.2. Cosmological synthesis

When analysing the cosmological data from my participants, I experienced increasing frustration that although the 'classical' cosmologies (Divine Order, Organic, Mechanistic) were present, I could not delineate them. Of course, due to the socially constructed nature of discourse, a discourse analyst would not expect to find very clearly defined boundaries – but there would normally be discursive 'spaces' where discourses diffuse and merge. I struggled to find these spaces between the Divine Order, Organic, and Mechanistic cosmologies.

Of all the discourses scrutinised in this thesis, the classical discourses are the oldest. Some have endured for millennia. I realised that I had not truly taken this into account when looking at my data. Botkin (1990) had (possibly due to editorial necessity) presented the classical cosmologies as rather discrete ideational entities, both in terms of consciousness and chronology – but his work was *not* a discourse analysis; it was more of a historical narrative. He was presenting the classical cosmologies with examples of discourse from their purported zeniths, so *of course* they appeared more distinct from each other in his text than in my data. I had allowed the structure of Botkin's thesis in *Discordant Harmonies* (1990) to mislead me into assuming that the cosmological data I found in the field would fall into three discrete categories. Addressing the cosmologies as

foundational discourses reminded me that however they may be presented in a monograph, in messy reality they all exist together – sometimes working in harmony, sometimes not.

The application of my *bricolage* of discourse theory to the classical cosmologies, and how the classical cosmologies seem to be working in my data and (possibly) in post-modernity, is represented in Figure 2 (see below). At each point of the triangle I have constructed a discourse package pertaining to a distinct classical cosmology (using a blend of literature review sources and fieldwork data), and connecting the cosmologies are indications of discursive markers and concepts which allowed the cosmologies to 'blend'.

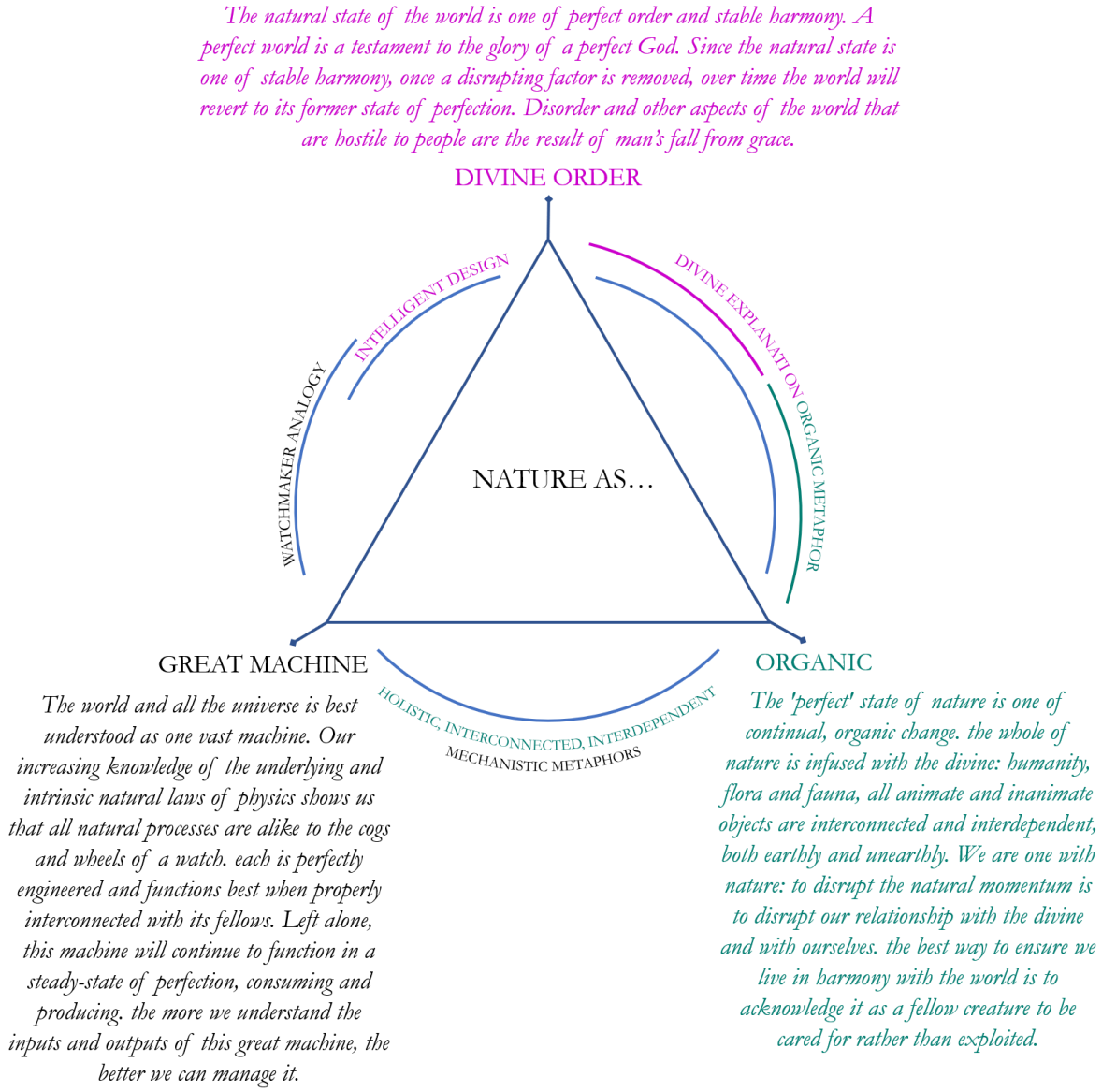

FIGURE 2: COSMOLOGICAL SYNTHESIS

The contribution of the above figure is as a development of *a priori* knowledge extant in the literature, influenced by the revelation from my analysis that the application of discourse theory to

the historical understandings of cosmologies shows us that although they do still endure, they blend over time. My participants' cosmological positions had to be deduced from traces left behind in conversations on more focused topics than "how the universe works." As well as having to work 'backwards' – distilling some notion of cosmology from the muddy waters of a structured conversation[20] – from a practical, analytical perspective it was important to approach the cosmological data knowing that the classical cosmologies would most likely present themselves blended together. For example, therefore, rather than looking for 'the Organic cosmology' or for participants referring to the universe as a mechanism, I looked for recurring discursive markers and concepts which might indicate cosmological positions – such as the use of terms like 'interconnected'.

6.2.1 Participant cosmologies

The key sections of my interviews which uncovered traces of cosmology were those where participants explained how they related to their environments: specifically, what they considered 'the environment' to consist of, where they placed themselves within (or without) that environment, whether there was any notion of the divine implicit within those placements, and what was the ideal role of humanity.

A key point to note before moving into the analysis for this and subsequent chapters is that although all participants demonstrated some elements of cosmology, not all participants are represented in the following sections. This is because the nature of cosmology as an enduring, foundational type of discourse meant that although it was possible to see cosmology working in the data at an aggregate level, relatively few participants offered up explicit cosmological discourse markers. In the following sections referring to cosmologies, I therefore refer to 'discourse fragments' rather than discourse markers to indicate the disparate nature of the cosmological data. The participant quotes that I have chosen to present in the following sections are those which I felt were the clearest and most accessible, and which I felt could therefore stand in for the discourse fragments found elsewhere in the interviews.

An interconnected whole…

When responding to the question of how to define an environmentalist, some participants focused on a definition which concentrated on the relationship they felt that 'an environmentalist' *should have* with their environment. In doing so they had to – *ipso facto* – explain what they considered the environment to consist of, and what role or responsibility humanity had as a consequence. It was

[20] In contrast, Botkin was working *forwards*: starting his analysis with ancient/Classical examples and then following their paths through history.

from these discussions I saw the outlines of what could be the underlying unseen order of my participants' environmentalism – their cosmological preferences. An important descriptor used was the word '*interconnected*' or variations on it; our environment was conceived of as being "all holistic and connected" (Steve). The whole planet and all its components were viewed as "one system altogether… where changes in different parts affect other parts" (Denise) and of which humanity, as one species among many, was an *integral* (rather than a masterful) part: "…the environment is not something separate from me as a human, it *is* me… It's not separate from me." (Brenda) Participants were keenly aware of their own dependence on aspects of the environment which are easily taken for granted and saw themselves as merely a part of the system. Sue, who took a "very systemic view of the environment" viewed "everything that's living and isn't living" as "all part of the environment I'm interconnected with."

The emphasis on systems and ideas of the environment as being holistic and interconnected are all discursive markers which link both the Organic and the Great Machine cosmologies. The distinctive ideas about how all *animate and inanimate* matter is part of the environment ("everything that's living and isn't living") and the intrinsic notion that humanity cannot be considered separately skews this group of participants towards the organic cosmology. However, this is where the role of cosmology as being *foundational* becomes extremely important: each participant discussed in the paragraph above came from what might be considered the most opposing cultural and social corners of my sample. Sue and Denise were confessedly atheistic whereas Steve was a liberal Christian. Brenda was the most 'pagan' of the whole sample; being the only participant to speak seriously of earth worship practices. Their ages ranged from late 20s (Denise), early middle-age (Brenda), late middle-age (Sue) to early 70s (Steve). None of them shared social groups, read similar literature or followed the same movement intellectuals. There was variation in terms of politics: Sue and Brenda were of the Green Party persuasion, Denise was very left-wing and Steve gave the impression of being left-wing on cultural and ecological issues but more right-wing on social values and financial preferences. In short, they were very different people sharing a cosmological foundation.

When confronted with the 'messiness' of reality the understanding that the seemingly incompatible ideal type cosmological positions can be blended in some ways becomes extremely important. John, a retired veterinarian and former Green Party councillor, gave a very clear demonstration of this blending by being one of the few participants willing to speak consciously in terms of spirituality and the earth's personification as 'Gaia';

> "Well the environment to me is Gaia really… and the ecosystems which all interlink in order to make Gaia work; it's about how the interconnected ecosystems affect the Gaian stability of the planet. The natural world, to me, is a source of great enjoyment and, yeah, I think it does contribute to my spirituality." (John)

Looking at this excerpt, one might be tempted to see the word 'Gaia' and think 'organic cosmology.' However, a number of key terms indicate that this is, at the very least, a blend of the Great Machine and Organic cosmologies; '[eco]systems' which are 'interlinked' and 'interconnected' are all terms which link both those cosmologies, while the notion of the interlinking system contributing to, or controlling, the 'stability' of the planet is more of a mechanistic idea. At most, we can see a blend of all three cosmologies when one considers the idea of interacting with the environment as being a means to touch or acknowledge the divine. This could either be Organic – all existence is infused with the divine and we act in acknowledgement of that – or it could be an indication of Divine Order – the natural world is viewed as evidence of the divine hand. The logic of these combined cosmologies is as follows: the system is broken; we need to fix it. Humanity is both capable and necessary as a tinkering engineer; we have disconnected what was originally interconnected, and therefore need to put the system back together for it to achieve its organic, holistic potential. The Divine Order aspect of this blend of cosmologies is a version of the Eden myth: thanks to humanity the interconnected system is no longer perfect and holistic. My participants were searching for redemption:

> "prior to human intervention… there was a lot of symbiosis and complementarity and things functioned very well, and then humans have come along and altered lots of things. We now seem to be learning that if we put them back similar to how they were before things might improve." – Sue

All participants deliberately recruited for their faith included a notion of a divine creator in their explanations about the environment and humanity's relationship and responsibility towards it. The vestiges of the Eden myth (the idea of a previous time of perfect harmony, the notion that human actions have resulted in the destruction of that paradise, and the hope that if we mend our ways we might regain that lost paradise) were found in a much broader sample of participants, notably those who professed little faith but who enjoyed reading popular scientific literature. There was often a key historical point at which my participants felt that 'it all went wrong', typically at the Industrial Revolution (Sue, Richard). The Eden myth will be discussed fully in Chapter 7.

Before moving on to discuss the implications of participants' cosmological leanings (the entailed *duty of care*), I want to briefly make note of another facet of the interconnected, holistic

environmental concepts favoured in my sample. That is, the distinct effort to highlight the semantically inferred but also literal *broadness* of the concept of 'environment'. Notably, participants were careful to include urban environments in their definitions, trying not to fall into what they perceived to be the trap of equating 'the environment' with 'the countryside.' Some even went so far as to lament the fact that there still seemed to be this limiting conception of what the environment consists of in our society: "the environment is everything around us really… and unfortunately with a lot of people, environment means the *green* environment…" (Tom). The felt implication of this commonplace (mis)conception of the environment was that it might limit attempts to address environmental problems or lead to similarly (mis)conceived solutions.

…which entails a duty of care

The broad implication of the overall blended cosmological stance taken by my sample is that being part of and having broken the system entailed a common responsibility for fixing the system. Although many spoke of the need for experts and technicians in society, most were not happy to allow the burden of redemption to fall on the shoulders of a technocratic minority. All people were held to be responsible in a myriad of small (and large) ways for our current global environmental situation, and that entailed a commonly-felt *duty of care*. The environment is "something that humans should look after" (Brenda) because it is "something we are a part of and not something that's separate" (Jenny); so, an environmentalist is "someone who cares for the environment" (Lindsey, Donna). There seemed to be an implicit concern that, in some respects at least, the environmental crises which dominate headlines today were due to previous generations allowing (or even expecting) scientists, engineers and experts to act without sufficient oversight – an issue which was brought starkly into definition in later discussions of nuclear issues.

Data on the *duty of care* implication of participants' cosmological preferences was gleaned substantially from discussions regarding *environmentalists*. That is, people who were assumed to have already accepted the duty of care. But what does 'caring for the environment' entail? In our everyday lexicon there are two notions of care, constituting two faces of the same coin: care about and care for. When speaking of the environment and the responsibilities of environmentalists, the distinction between these two versions of care was keenly felt; and although it was acknowledged that care about the environment might naturally lead to care for the environment, the point was made – variously and clearly – that a person need not have moved on to the second stage in order to be considered 'an environmentalist.' Richard summarized this perfectly; "Do you think about it, do you worry about it, do you try and find out things about it; then the next stage is whether you go on to be an activist."

For some participants, an interest in the environment and an awareness of environmental issues – *care about* the environment – was enough to consider a person an 'environmentalist.' Karen assumed "they'd be interested in conserving habitats and nature and wildlife, the local nature... they would be against development – I mean development in terms of using land for roads and homes." It's possible that Karen subconsciously equated 'being interested in' with 'doing' but it wasn't explicit in her statements; as it stands, her contribution stopped short of making *care for* a requisite for the mantle of 'environmentalist.' Others were happy to grant the environmentalist title to people who merely "know a lot about a particular part of [the] environment that they're interested in" (Mary), who are "mindful of the environment on a personal level" (Sharon) or who simply are "passionate" about it (Mary, Sharon). The weakest attribution of *care about* came from Pam, who despite having very clear ideas about what was good or bad for the environment felt that all one needed to do to be counted as an environmentalist was to "be aware" and "think about" how "ordinary everyday things" impact the environment.

Rather than being satisfied with merely thinking about the role of humanity within nature, other participants saw the implications of their cosmological preference as requiring action. Thus environmentalists were defined as people who translated their intellectual care *about* the environment into care *for*. For example, "…someone who's intentional about his/her relationship with the environment and would make practical decisions based on that and would campaign to try… at least at some social level to improve our relationship to the environment…" (Debbie). There was still the clarification that it was a matter of personal choice how far a person took their environmental convictions, and that 'extreme' actions (which ranged from campaigning to scaling cooling towers and hijacking oil platforms) were not achievable or even necessary from everyone wishing to take action on the environment. The emphasis was still, most often, on *awareness*:

> "An Environmentalist is someone who firstly, is aware of the threats and dangers posed to the environment. Someone who has thought of ways to be sustainable and actively considered what is the best way in their lives, with the knowledge that they have, to protect the environment, and also take those steps to fulfil those understandings of how to protect the environment with the knowledge that they have." (Dan)

Dan and Debbie, in comparison with some other participants, are quite generous in what they require of environmentalists. Dan makes it clear that not everyone would be able to make the same choices with regards to the environment and their relationship to it, with his exhortation for people to 'consider what is the best way in their lives, with the knowledge that they have' to make what

changes they can. Debbie concurs, albeit in simpler terms, with her emphasis on '*practical* decisions.' Others, however, expected more: Sandra was dismissive of those who make small changes, saying "everybody might do a few green things; *environmentalism* feels more of a way of life."

Finally, those who expected the most from their hypothetical environmentalists yearned for consistency between thought and action: "[Environmentalists are] people that are consistent, so they will vote green and they will probably do green things" (Jeff). This expectation of an ideal form of environmentalism has been documented in social movement theory literature under the term 'personal coherence' (Ruiz-Junco, 2011; Snow & McAdam, 2000). Many participants felt the imperative that those who professed environmental sensibilities should 'put their money where their mouth is.' James makes this clear with his use of the qualifier '*genuine*'; "….my view of an environmentalist, a *genuine* environmentalist, is someone who is interested in the environment, and tries to live in a sustainable way. Basically, someone who looks after the environment, feels it's their duty to look after the environment – even if it means making life a little bit harder for themselves." Jenny concurred with James's sentiment, expressing how vital it was that people who were "aware of how important the natural world is" would "*act accordingly* in terms of making decisions about how they're living their life to *at least* reduce their negative impact and *ideally* to make a positive impact." Dan, who had previously expressed what I termed a 'forgiving' definition of environmentalist, went on to explain that achieving – or attempting to achieve – personal coherence was not automatically "necessary for being an environmentalist. But it makes you a really good one. I suppose."

A further implication resulting from the duty of care and the Edenic notions arising from participants' cosmological preferences was self-disgust and recrimination (in some cases quite extreme). Damage to the planet by humanity as a global species was perceived as a form of secular sin – a stain on all the world's soul. The question of whether we might one day be able to return the earth to some form of the previous state of Eden was a point of special discursive conflict. That conflict could be the result of the underlying logic of the contributing cosmologies: Mechanistic and Organic ideas simply contradict one another on this issue. A mechanistic cosmology supports the notion that we might somehow fix the Great Machine, or at least fix our previous mistakes. An organic cosmology does not support a return to Eden: "Even an idealized organism lacks continuing perfection, since it eventually ages, dies, and decays. This process is natural, and gives organic entities individuality, charm, and attractiveness, enhanced perhaps by a touch of sadness at the fleeting nature of organic beauty" (Botkin, 1990, p. 93). Thus participants were caught between feeling that we should try to return the earth to a previous state of paradise and knowing it was inherently impossible. This caused obvious personal distress and anguish. "We

are the one species that has the greatest capacity and the greatest willingness to slaughter each other. So, we are the main threat to the environment. Undoubtedly…" (Steve). Many participants spoke of humanity as a species in the most negative and vitriolic terms (e.g. James).

This level of self-disgust paralleled some of the accusations levelled at Christianity and other religions in recent years; "That we think the world's going to end. That we want to help the world to end. That we teach people to hate their own natural selves. That we want people to be afraid. That we want people to be ashamed" (Spufford, 2012, pp. 2-3). It was particularly striking that the only participants generally free of this form of self-hatred were those who openly identifying as Christian faith and happily acknowledging a more complete version of the Divine Order cosmology – or who, at least, favoured a cosmological blend which incorporated the underlying logic of a Creator God. They had an acceptance that humanity was largely to blame for the global environmental crises but bore less backward-looking shame and more forward-looking hope. Humanity was not seen as inherently problematic, but as more of a wayward child that could be guided back to the true path. It struck me that these participants seemed more content, despite having roughly the same level of environmental awareness as the others in the dataset. I would like to offer the possible explanation that this was because they did not feel the same contradiction about mankind's place and purpose that resulted from cosmological preferences skewed more towards the mechanistic and organic poles. Those who had constructed a mix where Divine Order's underlying logic remained knew their place in the Great Chain of Being: they had a psychic certainty that others lacked.

This chapter will now proceed with an analysis of how my participants constructed and applied the concept of 'environmentalist' and what this implied about their relationship with 'organised environmentalism,' as well as how these constructions might limit or promote a positive environmental agenda.

6.3. Not "that kind" of environmentalist

When questioned about what made an environmentalist environmental, many of my participants resorted to stereotypes. Sandra, who had previously conducted her own postgraduate research in an environmental field, was the only participant to actively avoid this: "I don't think all environmentalists have to believe the same thing; I think environmentalists do tend to often believe a kind of stereotypical set of things, but I think there is room for disagreement." A follow up question resulted in an understanding that Sandra had gone into her postgraduate degree with a relatively fixed idea of what 'being an environmentalist' meant, but that during her studies she began to understand the complexity of defining environmentalism and how many variants of

'environmentalist' exist; this was unique amongst my participants. Many were able to discuss the impact of reading a certain book, or of a particular event in the development of their environmental awareness, but no-one else was able to be reflexive about environmental identity in the same way. Instead, the majority expressed examples of various types of 'good and bad' environmentalists. Inevitably, the implicit aim (sometimes explicit) of this construction was to enable the participant to place themselves on the favourable side of a binary.

After religion fell from grace thanks to the success of the Enlightenment project, the popularity of the secularization thesis and the blurring of distinctions between scientific and atheistic worldviews (see Elsdon-Baker, 2017), we have reached an era in which many people treat any form of religiosity with suspicion. It is for this reason that the responses of my participants to the question "How do you define an Environmentalist?" are particularly interesting; there was a distinct tendency to reach for religious markers - much of the data suggests an implicit sacralization of the environment.

There were two distinct types of response to the question of defining environmentalists. One focused on the type of relationship that a hypothetical 'environmentalist' would have with their environment, and the responsibilities that were an intrinsic part of that relationship. The second type of response indicated an aversion to those facets of 'organised environmentalism' which function more 'obviously' in a religious manner. A common feature in these responses was a distaste for the term 'environmentalist,' which seemed to indicate a specific type of environmentalism that most of my participants preferred to keep at arm's length. Intriguingly, despite the clear dislike, very few participants were willing to outright condemn those environmentalists who were, to use one participant's phrasing, "active in a different way" (Lindsey). There was a tendency to concede that although these other environmentalists were 'not our sort of people' they were, in some manner, necessary: "the naggers who keep on nagging" (Lindsey).

6.3.1 Us and them: lay perspectives on 'environmentalists'

> [Question] "Would you consider yourself to be an environmentalist?" [hesitation] "Yes. [laughs] I was hesitating because I was conjuring up the stereotype of an environmentalist." – Jenny

In all of my interviews, I took my participants through the process of discovering what they thought about, or how they defined, certain key concepts: in this case, 'the environment,' and 'environmentalist.' Immediately, an extraordinary contradiction leapt out of the data: given that

most participants instinctually sought a holistic description of the environment[21], they tended to define environmentalists *in the abstract* in very positive, broad terms. However, when asked if they would be happy to apply that term to themselves, very few were pleased to be labelled 'environmentalists.' Even Jenny, one of my most openly and strongly ecocentric participants, who was able to speak about her environmentalism in spiritual as well as literal terms, hesitated – *because of the stereotypes*.

Naïvely, it had never occurred to me that any of my participants would have a problem with the term 'environmentalist,' since each was selected on the strength of their environmental concerns or efforts. A great many were members of conservation groups or environmental management groups, and some even worked as conservation managers, sustainability officers, for the Environment Agency, or had made significant changes in their personal lives for environmental reasons. Overwhelmingly, I found that participants rejected the 'environmentalist' descriptor, and generally for two reasons. Firstly, there was a reaction against the 'stereotypical environmentalist' of which, again, there were two sometimes overlapping subsets; a) shouty, political campaigning environmentalists, and b) crunchy [22], tie-dyed, hemp-wearing (and smoking), dishevelled environmentalists. Secondly, a smaller – but still significant – group of participants demurred from the 'environmentalist' descriptor as they felt they were not *good enough* to be considered an environmentalist – either because a) they didn't *know* enough or b) because they didn't *do* enough. For these participants, to adopt the identity marker of 'environmentalist' would be disingenuous.

The Stereotypes: shouty vs. crunchy? Or both?

That there *existed* a stereotype of a shouty, political, campaigning 'eco-warrior' environmentalist trope was well represented in the data. What was less clear was what this meant for the wider movement and, more specifically, what it meant for my participants. Within one subset, who were all members of local environment and conservation groups, there were conflicted feelings about this stereotype that most found difficult to articulate. Firstly, there was the feeling that 'environmentalist' sounded "activist-y" (Pat). Tom was uncomfortable with the idea of being associated with "direct action, chaining myself to trees..." and Nancy concurred, saying "I don't go out and fight, I don't go out and fight the battles…" These participants preferred being "more of a muller-over" (Jeff). For these participants, there was a very distinctive logic: environmentalists were environmental *activists*. My participants were not 'activists'; *ergo* they were not environmentalists. It is important to note that those participants discussed here made few or no normative statements regarding whether activism was a social good. For Tom, the value to the

[21] Whether or not they *achieved* a holistic conception of the environment is another issue.
[22] A word taken from a participant quote: "bearded, crunchy vegetarian style" (Denise).

broader community of chaining himself to a tree is neither here nor there. Some people do it, he does not wish to. Others, however, made it clear they felt that 'activism' was a particularly undesirable form of environmental action. Lindsey spoke dismissively of environmental activism as a "campaigning sort of thing" and made it clear she had no desire to be associated with that sort of behaviour: "Don't intend to be ever…" Joe shied away from environmental activism, as he associated it with a type of eco-evangelism and manipulation using social pressure: "the word has that feeling of someone who's trying to make other people think how they're thinking..."

Lindsey's vehemence against 'campaigning' was articulated in terms of a specific example of organised environmentalism: Greenpeace.

> "There are some aspects of looking after the environment that I think are wrong or spurious… Some of the Greenpeace stuff gets to me… I think it's their campaigning nature, harassing shipping and that sort of thing – I don't go for that, I don't think that's achieving what they want, you know… It's an attitude and I don't go with it myself. They absolutely wind me up. I don't know if they're having any effect. They *might* be, but it's not obvious. They're just the naggers that keep nagging, I think they're just trying to make people aware. But there are other ways…"

What Lindsey found objectionable was a specific form of activism, which had come to be embodied in a certain organisation. The words that she uses – 'harassing,' 'attitude,' 'nagging' – all have rather negative connotations. Others also referred to the behaviour of Greenpeace in particular (as opposed to other groups such as Earth First! or Friends of the Earth). The underlying concern was that some specific methods of campaigning, or forms of activism, are inherently problematic. Joe was concerned about Greenpeace being 'antagonistic,' Will spoke dismissively about protesters 'waving placards,' and Rob expressed concern about the emphasis on moralised arguments centered on individual responsibility and how that might discourage people. This issue of environmental campaigning alienating the target audience instead of motivating them has been noted by Anderson (2010). When the lens of implicit religion is applied to the issue, it becomes apparent that participants were reacting negatively to environmental *evangelism*. The form of campaigning that Greenpeace uses is both effective and alienating because it places such an explicit moral judgement on people's individual choices and actions. Faced with the prospect of this judgement, participants expressed themselves in one of two ways; they either felt motivated to change and act, or they felt defensive and reactive. Many of my participants understood on some level that was problematic because of the way it could turn people away from environmentalism in general.

The very act of evangelising implies that the person being preached to is morally lacking, because the preacher is assuming that their victim needs guidance or instruction in the 'true faith,' or in how to apply it to their everyday life. In the case of environmental evangelism, the basic assumption that people need instruction or are morally lacking because they're not *as environmental* as the evangelist would like is, potentially frustrating. As noted by Dan and Debbie earlier on, not everyone will be able to make the same choices or the same level of personal sacrifice in their daily lives as others. All my participants were aware of environmental issues and felt a responsibility – but resented the implication that they were somehow less 'committed' than someone who waved a placard. Because after all, "I don't know how far that gets you" (Joe). In addition to Lindsey's explicit frustration with this type of campaigning (mentioned previously), Kevin articulated feelings of resentment and intimidation for being made to feel "less than" by the more "terribly earnest" environmentalists, and frustration about being made to feel "like an imposter" when confronted with some environmentalists' "worthier than you" attitude. Pam gave the clearest and most well-argued explanation of the inherent problems of this approach:

> "Well, if you feel that getting thrown in jail is what you need to do, fair enough... but I think people get very judgemental and there are some environmentalists that are very "oh you mustn't do this and you mustn't do that" you know, "you mustn't eat meat" – all those things, and OK, if that's the way you want to go that's fine but I think you have to find your own level... if you feel that you're doing the right thing and doing everything you can, to promote it and also to life a life that isn't too damaging, then that's a start, isn't it? I think being very deep green is... it puts people off." – Pam

Being judgemental and intimidating, 'putting people off'; an image of a certain kind of environmental activist is emerging, one which is pervasive and detrimental to the environmental cause. My participants shied from being known as 'environmentalists' to avoid association with those elements of organised environmentalism which have become the most visible. Pam doesn't want to 'put people off' because she recognizes that the group she represents is only effective if people like it and want to support it. Kevin's timid foray into a local eco-group was cut short because he found them intimidating and 'holier than thou' – he ended up feeling that he just wasn't environmentalist material. Another participant, who was clearly very concerned about the environment and considered the environmental implications of many of her daily actions, still expressed the feeling that she was "just being selfish and making rationalisations for keeping a comfortable lifestyle level rather than worrying about building a zero-carbon home somewhere in the middle of Wales and wearing hemp… (laughs) smoking hemp!" (Pat). It struck me that all my participants could easily have been more pro-environmental*ist* if they felt the environmental

movement was empowering, rather than making them feel guilty for being human. Rob, talking about the problems he had faced when part of the Climate Camp movement, expressed this perfectly, saying that there were

> "…consequences in how the Climate Camp or the movement was perceived within the rest of society. Say, for example, you target aviation and you end up not thinking about the fact that you're basically telling people not to go on holiday when they have shit lives [laughs], don't enjoy working very, very hard for very little money. You end up alienating the people who you actually want to be your allies..."

The point about people having 'shit lives' and 'working very, very hard for very little money' is important. Many of my participants expressed a concern that many environmentalists (in the abstract sense) were so overtly concerned about the environment (in the sense of flora and fauna) that they became blind to the human problems of our world. Dan explained that he worried that people felt environmentalists "are so obsessed with the environment that they don't actually care that much about the people around them perhaps. So, they are too bio-centric and not anthropocentric enough." Not being anthropocentric enough is an odd accusation to level at a hypothetical environmentalist, but Dan wasn't alone in his concern. Nancy also worried about environmentalists "prioritising nature over people." To unpack this; there has been some discussion in literature on environmental awareness and action which shows us that while ideally speaking every person would be environmentally concerned and make appropriate changes in their lifestyle, the reality is that many people in the world are struggling just to stay alive (see Inglehart, 1990, 1995). People living in poverty struggle to care about the environmental consequences of their actions when they may not be able to feed and clothe themselves. Inglehart (1990, 1995) uses the terminology of 'post-materialism' to theorise how those societies which have become suitably affluent and in which basic material needs are easily met have a greater proportion of people who now seek to fulfil 'post-material' needs and desires, such as an environmental duty of care. Among my participants, this was most clearly understood by Brenda, who described environmentalism as a form of 'middle-class privilege:' "if you can afford to spend more on organic meat and Ecover products, you've obviously got more money to throw about; you can afford to make those decisions. So, you must have your needs pretty well met if you are able to give your energy and time to that cause." Others referred to this issue (Jenny) and spoke about the need for the environmental movement to broaden its scope to include issues of 'social justice,' but virtually no one else was prepared to admit so openly that, in UK society at least, it is much easier to be environmental if your household is relatively affluent. Rob explained that although the environmental movement was "obviously a very big, disparate thing, lots have been quite white

and middle-class movements, basically, to the exclusion of the way environmental problems intersect with race, class, etc." He refrained from saying, as Brenda did, that being "white and middle-class" made making environmental choices easier.

The notion of environmentalists being slightly divorced from the social and economic realities of the interviewees' world came across more clearly when participants discussed the issues of *aesthetic* stereotypes. My participants were very clear on the following points:

a) that there was an aesthetic stereotype which was discursively active,
b) that 'people' tended to extrapolate from a person's aesthetic choices the kinds of politics they might adhere to or the types of lifestyle choices they may make, and that
c) this stereotype was damaging to environmentalism in general.

From a methodological perspective, the discussion of the aesthetic stereotypes provided a curious bit of 'light relief' for my participants: most found it amusing and enjoyable; as Richard quipped, "let me put on my prejudices." The stereotype my participants built is, in aggregate, extraordinarily clichéd: "a slightly dodgy looking," "otherly, alternative hippy" "who's not very clean" wearing "socks and sandals," a "scraggy beard and a scraggy t-shirt" and other "certain clothes" pertaining to the "crunchy vegetarian style" and who might be "dismissed by most of society as being a madman" (quotes taken from Jenny, Pat, Kevin, Nancy, Brenda). Our hypothetical environmentalist looks like a dirty, unkempt, crunchy, bearded (if male), possibly dreadlocked (Tim), hippy who probably both wears hemp and smokes marijuana (Pat). This person is on the margins of society both by choice and by social exclusion, since our society frowns upon people who choose not to wash as much as we might like them to and who take recreational drugs. Society is encouraged by these stereotypes to make assumptions about other, less obvious aspects of a person's life if they appear in this manner: "There's a stereotype in respect of appearance… in respect of beliefs, maybe what they do for a living, their behaviours, for instance…" (Jeff) – even if a person has never seen evidence to corroborate these stereotypes. Observe this exchange with Mike:

> [Q] "Have you ever across anybody who does see the environment as Gaia?"
>
> "Yeah, but they take a lot of drugs (laughs) definitely. (laughs)
>
> [Q] "...have you actually met people who go on about Gaia and take drugs?"
>
> "No. (laughs) I don't know really. So you can just; so you read books, watch films… you can imagine them playing the guitar and taking drugs… Yeah, they all look a bit dirty, don't they…"

As amusing as this picture was to construct with my participants, when reflecting on it the majority found themselves intensely frustrated by it. Pam felt that the aesthetic stereotype limited people's conception of who or what an environmentalist could be: "The press promotes that image of the... how to they always put it... the sandal-wearing, lentil eaters and all that – which is ridiculous! It's awful, and it sticks... and people think 'oh you can't possibly be green because you're not like that', which is wrong." Rob, who certainly had the 'bearded, crunchy vegetarian style' referred to by Denise, was very concerned that the Climate Camp he had been previously a part of was not reduced in people's minds to just being "a bunch of weird hippies in a field." Rob was upset that the popular image was limiting the 'broad appeal' of environmentalism. But, as most of them were willing to admit, part of why the stereotype was both so powerful and so damaging was because there are elements of the environmental movement which conform to it. As Kathy explained, "I think, that they think, we wear sandals and have beards and go around saving butterflies. Some of us do do that, of course."

Dan explained his concern that "There is an understanding amongst certain groups of people, that *environmentalists aren't like us* because they have long unwashed hair, old jumpers and things like that". Among my participants was a sub-sample which almost refused to be interviewed because, despite being committee members of a very active local environment campaigning and conservation group, they thought they weren't 'environmentalists'. One particularly forthright committee member explained to me that:

> "…it was almost thrown out, the idea of being interviewed. People said 'I'm not an environmentalist – not me personally' – as a group, none of us were environmentalists. So, I said 'well it depends how you define being an environmentalist' … I said we must all be very much included in it because we are on the X environment committee, and the word in the middle, although environment and environmentalism mean different things and, you know, they do mean different things... it is still part of what we are, and surely we care about where we live." (Liz)

I had not realised that my application to the group committee for interviews had been debated to the extent hinted at by this participant. I was shocked to discover that the entire committee of such a group would be so opposed to the notion that they might be considered environmentalists. Another committee member, who did consent to be interviewed, explained to me that she wasn't even sure that 'environmentalism' was a real word, and that she felt it was a "University word" (Donna): "I'm not sure what an environmentalist is, I have to say, I think it's a word... you know, do you think it's in the dictionary? I doubt it! [laughs]". Previously, Lindsey had explained that the

reason she and others on the committee didn't think of themselves as environmentalists was because they didn't *campaign*. Lindsey later explained that the group periodically protested planning applications and lobbied the Local Authority on issues which affected their local area. So, the group had reasonable experience in campaigning and political activity, but because it was of a decidedly local nature and didn't involve waving placards and scaling the walls of the local council offices it didn't count as environmental campaigning in the group's imagination. A close questioning revealed a clear contradiction in Lindsey's thinking, which seemed endemic of the rest of the committee sub-sample: they all provided perfectly 'reasonable' and broad definitions of what it was to be an environmentalist, which to me seemed like excellent descriptions of themselves and what they did/thought. However, they preferred to think of themselves as being "active in a different way" instead of "preaching" (Lindsey): they rejected the term 'environmentalist' as an identity marker for themselves.

Lindsey dismissed those environmentalists who "preach." Previously, Joe had used the term 'evangelical' to describe the type of environmentalism that he was consciously moving away from, saying "the more I know about [environmental issues], the less evangelical I am about it because I see the bigger picture and see what things really matter compared to others." Very gradually, we were getting to the root of my participants' issue with the term 'environmentalist'. There was a deep-seated and vaguely recognised concern with perception which ran through the entire sample universe: Charlie explained that an environmentalist was "someone that's a lot more idealistic, and black and white" and Sue concurred; "the sort of person that won't ever fly... (laughs) ...you know, just like really hard line…" Interestingly, it was those participants who were not part of an established EMO of any kind who were able to look at the situation reflexively enough to apply religious terminology;

> "Sounds like a bit like a fundamentalist, doesn't it… they're getting a bit of a bad rep at the moment [laughter]" (Mike)

> "any movement gets its fundamentalists, you know; zealots." (Ken)

My participants were scared of being perceived as *fundamentalists*. The term 'fundamentalism' is originally a religious term, nowadays used to refer to the literal interpretation of scripture. As we learnt from Habgood, in many ways it was the conflict between religious pluralism and fundamentalism (in which fundamentalism came out on top) that caused the most damage to the standing of religion in our society (1964, p. 51, 65). Like Armstrong (2010), Habgood is keen to remind us that the obsession with literal scriptural interpretation is a relatively recent phenomenon: "a third century theologian like Origen had found no difficulty in saying that [parts of the Old

Testament] were not to be taken literally" (1964, p. 53). But the lasting effect of the success – if one can call it that – of literal scriptural interpretation is a post-modern era dominated by atrocities linked with various kinds of religious and ideological fundamentalism. As commentators around the world denounced the Islamic fundamentalism that contributed to the attacks on the World Trade Center in New York on September 11th, 2001, others made sure to counter the rising Islamophobia with reminders that Christian fundamentalism can be just as frightening (if not more so, as it seems to be quite broadly tolerated in Western society, and sometimes even protected in law)[23]. While in previous centuries, fundamentalist religious variations were accepted parts of the socio-religious landscape (Calvinists, Puritans), today they are our society's bogeyman. To be a 'fundamentalist' of any kind is to be seen, as Charlie mentioned, as someone who views the world in 'black and white.' This is intrinsically problematic, as many of my participants were keen to point out, because there are "more shades of grey" (Nancy) in our society and which give rise to an inherent complexity which fundamentalist perspectives are ill-prepared to explain or counter. To be accused of fundamentalism is, for most people in our society and for most of my participants, to be suspected of cleaving to an unrealistic perception of the world which can be societally damaging. Lisa felt that the title 'environmentalist' "has become a sort of term of abuse" and Tim explained that he didn't want to be too overt in his environmental concern because he "didn't want to ostracize [himself]." Jeff had similar worries, saying "I've known people describe environmentalists in immensely derogatory terms…" Few would be pleased to be described as an 'idealistic, zealous hard-liner' who 'preaches' at people and acts as if they are "holier than thou." (Kevin)

My participants were all worried about environmental issues and had all made changes to their personal lives for environmental reasons. Some were members of local, national and even international environmental movement organisations. They had all read key texts by environmental authors and campaigners or had conservation and environmental heroes they felt were worthy of emulation. Yet many were wary of accepting the descriptor 'environmentalist' either because they associated it with an 'extreme' form of environmentalism, or because they felt that others would mis-understand their life choices and assume they view the world in 'black and white'. Nancy even expressed a feeling of mild jealousy of those people who felt able to live their lives in black and

[23] The antics of the notorious Westboro Baptist Church in Kansas, USA come to mind. Described by the Southern Poverty Law Center as "arguably the most obnoxious and rabid hate group in America," their church website address is www.godhatesfags.com. ☹ (https://www.splcenter.org/fighting-hate/extremist-files/group/westboro-baptist-church)

white, as she felt maybe it made their decision-making easier and less fraught than her own: thereby articulating the perennial academic frustration with the prevalence of binary assumptions.

Nancy shied away from binaries and stereotypes because she was aware that instead of illuminating an issue, they inevitably distort our perceptions instead. As the issues which plague our societies become ever more complex, the binary positions and stereotypes commonly used to explain the world cause more and more damage. A person can say "that doesn't concern me, because I am not an environmentalist" when – as many of my participants were keen to stress – simply living in the world means that we are all concerned with environmental issues, whether we choose to acknowledge that or not. In the case of environmental stereotypes, my sample universe separated out into a few different strata. A small number of participants were quite un-reflexive, happily regurgitating stereotypes for which they had no real evidence (e.g. Tim, Mike). A large group found the stereotypes amusing to reconstruct, because they didn't apply to them personally or to many people they knew – thus they were completely hypothetical and not to be taken seriously. The small number of participants left over were sharply aware of the damage being done to the environmental cause by stereotypes (e.g. Rob, Pam, Jenny).

The crunchy vegetarian, hemp wearing, unwashed hippy stereotype was perceived to be just as damaging as the shouty placard-waver. Both prevent people from 'engaging with the cause,' as Jenny put it, because the cause – environmentalism – has become associated with groups on the margins of society which do not appeal to 'the vast majority of the population.' Of course, for environmentalism to truly change our social order, and for real global changes to occur in humanity's relationship with the environment, it is precisely the 'vast majority' that needs to be brought into the fold. I deliberately targeted participants who seemed (to me, at least) typical of an environmentally conscious 'middle England.' That there was such antagonism towards the term 'environmentalist,' deriving from the stereotypes discussed in this section, is very interesting. Anderson (2010) laments the plummeting appeal of the environmental movement, asserting that environmentalism is in danger of becoming – if it has not already succumbed – a 'zombie' category. The implication is that the methods, actions, rhetoric and discourses that were once successfully utilised by organised environmentalism to drum up support for environmental causes need updating to appeal to the masses of lay environmentalists and maintain momentum. My data corroborates this assessment.

I don't know enough/I don't do enough

The other key reason my participants gave for rejecting the environmentalist label was that they weren't *qualified*: "I haven't been trained as one" (Liz). There was a curious assumption that the

environmentalist identity was one that could only be achieved through diligent study – "to be an environmentalist I think I'd have to have some kind of credentials and my academic studies aren't environmental (Sue) – or professional advancement: Tom explained that he had been considering going for "chartered environmentalist status". This idea was totally new to me: I had been approaching the term 'environmentalist' in the same manner as one might use the term 'feminist' – an ideological position which could be bolstered by study, but which was intrinsically a personal choice. Some of my participants viewed it as a status to be conferred or earned: "I haven't earnt that label." (Sue)

For Liz, Sue and Tom, simply being environmentally interested, concerned, and active was not enough to admit them into the cadre of environmentalists. They would require some form of externally validated qualification – some kind of training, a period of academic study devoted to environmental issues or, as in Tom's case, a 'chartered environmentalist' status. While this was initially quite charming, on reflection it is also concerning. This perspective contributes to the damage caused by the more 'otherly' stereotypes discussed in the previous section: shouty and crunchy. The notion that true environmentalists are those who have studied and devoted their careers to some aspect of the environment and have attained some elevated credentials merely adds to the perception that environmentalists are 'not like us' (Dan). Thus, the environmentalist and the environmental cause remain on the social periphery – whether lauded as being a 'specialist' or denigrated for being a hippy.

More commonly, participants shied away from accepting the environmentalist identity because they felt their lives were somehow lacking; they didn't recycle as much as they knew they could, or they still flew overseas for holidays or, like Sue, they hadn't managed to become fully vegan yet: "I'm a vegetarian but I haven't managed to be vegan just yet; I'm working on it." As Jeff explained, "I'm always conscious of the fact that I could be doing more". Sharon felt similarly, stating in a round-about way that she could not, in good conscience, call herself an environmentalist because she had yet to change from merely 'nurturing' the environment to actively 'protecting' the environment: "that means addressing people who are not conscientious about the environment." Sharon felt that a true environmentalist was not afraid to be 'shouty'. Denise, despite being recommended as someone very environmentally concerned, also felt this way, saying: "I guess I'm not an evangelist [laughs] from my point of view; I guess I can see why someone looking at me might describe me as such, [as an] environmentalist. But I'm definitely not as much that as a lot of other people I know."

On the face of it, the point of "I am not shouty enough therefore I am not an environmentalist" and "environmentalists are shouty therefore I am not an environmentalist" may seem as though they belong together. However: discursively, the addition of that one word, *enough*, is crucial. The participants discussed in this section felt a moral imperative pushing them towards further action. As they felt they had not yet achieved that future state of 'true environmentalism', they could not yet call themselves environmentalists. The lens of environmental implicit religion shows them to be environmental postulants[24]: seeking admission into, or searching for a route into, 'proper' environmentalism. Underlying this discourse is an assumption that there exists a 'true environmentalism' to be achieved and that *can be* achieved – environmental transcendence, almost. Few were able to articulate what this state of perfect environmentalism might encompass or involve, but many were able to explain what aspects of their current lives were preventing them from attaining this state.

> "…I've still got a big car… I still fly; I try not to but my wife books the holidays; we're flying to Geneva. [laughs] There's still lots of packaging in our house, but again, I don't do the shopping. I'm just aware, a bit guilty… I'm aware that you can buy things that aren't in packaging, you don't need to buy that packaging… it's more difficult, but it's… I could do more." (Mike)

Mike's sense of guilt and embarrassment comes across strongly in the above excerpt. He is perfectly aware that, if he were to take more personal responsibility for household decisions, his environmental status might be much improved (in his own estimation). He knows that he's making a choice between the environment (the bigger picture) and his own personal ease of life – and, perhaps, matrimonial happiness. In his professional life, Mike advises people on making socially and environmentally responsible and ethical financial investments. The argument could be made that in this manner he has a far wider impact than if he were to spend more of his time sorting the recycling – but Mike still feels inadequate in his environmentalism. This feeling of guilt and inadequacy was highly prevalent among my participants. Richard described it as being "like the *Ancien Régime*, you just enjoy yourself till the collapse as it were. I mean I'm being quite honest about myself you know – I'm an armchair environmentalist." Richard was another participant who, while perhaps letting the smaller environmental actions in his personal life slide somewhat, was very committed to furthering the environmental cause in other ways; through his work on various committees, speaking engagements, and personal links with politicians.

[24] postulant, n.: "A candidate for admission into a religious order" (OED online)

Driving a car, flying abroad, turning a blind eye to the amount of plastic packaging in your weekly shop: "a proper environmentalist wouldn't do those things" (Sandra). A *proper* environmentalist. That such a person can and does exist seemed to be taken for granted by my participants. But what sort of characteristics would such a person exhibit? Judging by the descriptions from my participants of which actions count and which do not, of which beliefs should be held or what sort of personal sacrifices should be made, an image emerges of an ascetic mystic, wandering in the wilderness: eating wild locusts and honey, perhaps. The theme of unattainable true environmentalism was recurrent, as were the feelings of guilt that inevitably resulted. I say inevitably, because – as will become apparent when this issue is discussed further in the following chapter – even if such a perfect form of environmentalism did exist, it seems clear that attaining that form is impossible for someone entrenched in Western capitalist society, as all my participants were. Dan, who had obviously given this existential conundrum some thought, corroborated the image of the lone mystic. In the following exchange he describes how, having until quite recently thought of himself as living quite a 'sustainable' life, he had an epiphanic moment (McCalman & Connelly, 2015; McDonald, 2008) when participating in another research interview: "I realised throughout the conversation that I was not as sustainable as I thought I was. Despite my awareness of the issues I am not living my life in a fully sustainable way."

This turn of phrase, "not living my life in a fully sustainable way," caught my attention. It implies that it is possible to live 'fully sustainably.' I asked if Dan felt it was possible, and how that might be achieved.

> "By essentially distancing ourselves from all of the things we depend on or take for granted now – including society and all the things around us. I think the only way we could live sustainably from a biophysical environmental way would be to eschew the more manufactured aspects of the environment; so, the democracy, the jobs and the infrastructure that is around us. (Dan)
>
> [Q] "But, seeing as you were saying that the environment includes the societal aspects of our lives, would that also therefore mean essentially becoming a hermit?"
>
> "I think so. Yes." (Dan)

True ascetic-hermitic living of the kind envisaged by Dan would be virtually impossible for the average person – with a family, a job, a mortgage and other debts and responsibilities – to achieve. It is also unlikely to appeal to a large enough number of people for this lifestyle choice to make a recognizable difference to the global climate. Initially it seemed that the mythical 'true environmentalist' was a dangerous trope, causing frustration and guilt in ordinary people who were

doing the best they could. If my participants thought all the way through to the end of Dan's logic, would they just give up entirely? Might they instead be content, like Richard, to just enjoy themselves until the collapse of the *Ancien Régime*? Perhaps, however, it serves a purpose as well: inspiration, motivation, a path to follow.

6.4. Chapter Conclusion: Environmental discourses

This chapter sought to address two of the sub-questions from §5.2.1: "Which enduring cosmologies are found in participants' discursive repertoires?" and "How do lay environmentalists relate to organized environmentalism?" With regard to the first of these, the analysis has shown that participants displayed evidence of a blend of all three of the 'classical' cosmologies (Divine Order, Organic, Great Machine) in their assumptions of how the 'environment' functioned, what it consisted of, and how humanity should relate to it. Regarding the other cosmologies identified in Chapter 2 – ecocentrism and technocentrism (§2.4.2), and Dominion and Stewardship (§2.4.3) – these cosmologies are better represented in subsequent analysis chapters. However, some initial analytical observations show that:

a) I unintentionally biased my sample away from Dominion perspectives and in favour of Stewardship perspectives. I had initially assumed that the more socially conservative Christian participants would display some Dominion elements in this discursive repertoire. However, hindsight shows that because I deliberately looked for people who were 'environmentally concerned,' I ended up with a group of participants for whom Dominion discourses would have been anathema.
b) My sample universe included both ecocentric and technocentric 'stewards.'

There was a clear tension in my participants' ideas about what their cosmological preferences obliged them to do about/with their environmental convictions. Most commonly, participants made use of a discourse package that I have decided to call Pragmatic Stewardship. The 'stewardship' aspect refers to the felt obligation towards the environment, the duty of care that my participants expressed in numerous ways. The 'pragmatic' aspect is meant to encompass the understanding that each person has different constraints upon their agency, their ability to act on their convictions. The overwhelming, aggregate perspective of this discourse is that change begins from *within*. Yes; society has to change drastically, but each individual must affect some personal change in their own daily lives so as to spark the radical societal change so many of my participants felt there was a need for. Participants spoke about the need for people to be 'aware,' to understand how everything is 'interconnected,' and about how this greater awareness of the environment leads first to small, and then to greater changes in people's daily lives.

The Pragmatic Stewardship discourse emphasised the need for people to make gradual changes to bring their lifestyles into line with their environmental ideals – to achieve 'personal coherence' (Ruiz-Junco, 2011). One might begin by recycling and composting and then, when those activities have been totally normalised into the daily routine, further changes can be added. Making a lot of changes all at once is daunting, and those who try it often fail to keep up with their good intentions. Making a small change and then building on it is easier and, in the end, more effective than if one gives up because life has suddenly become complicated and difficult in ways it never was before. Hence why participants talked about cycling instead of driving, about shopping for local produce rather than groceries with air-miles, and other 'small-scale' lifestyle choices. The key was to make living a more environmentally friendly life something achievable by everyone; thus, making the broad-scale societal change more likely. At the same time my participants utilised the Pragmatic Stewardship discourse, they often also reached for a discourse that I call 'Proper Environmentalists,' the title taken from Sandra's statement that "a proper environmentalist wouldn't do those things."

That my participants constructed a paradigmatic, ideal type environmentalist is not surprising. I essentially asked them to do it once it became clear that, *en masse*, they refused to accept the ascribed descriptor. I needed to know what it was that they felt they were not. What is particularly striking about the Proper Environmentalists discourse package is how unachievable it is. Looking at the data in aggregate, it struck me that no wonder so few of them were happy to be called environmentalists. I was reminded of a line from Jane Austen's *Pride and Prejudice*: "I am no longer surprised at your knowing only six accomplished women. I rather wonder now at your knowing any." Could such an environmentalist truly even exist? The list of attributes that a 'proper environmentalist' was meant to incorporate into their daily life was so long and so prescriptive as to result, if it were to be achieved, in a person resembling Dan's ascetic hermit. Such a person would:

> *Never fly or own a personal vehicle other than a bicycle. Only eat locally grown, seasonal produce. Would not support the meat or dairy industries – and would therefore (ideally) be vegan. Would make ethical (read: green and socially just) choices about how their utilities were provided. Would only wear clothing made from natural biodegradable fibres, made in an ethical work environment. Would only consent to work for a company with unimpeachable moral and ethical standards where issues of environmental degradation and social justice were taken seriously.*

In its most essential form, this discourse package does not look all that problematic. The issues become clearer when each point is followed to its logical conclusion. For example: a person who

wants to be totally sure that their utilities (water, electricity, sanitation etc.) are environmentally friendly either needs to have complete trust in their utilities providers *or* provide and maintain their own facilities. Some of my participants (e.g., Pat) explained that they had decided to choose 'green' energy providers – but acknowledged that because of how the electricity grid works in the UK, they could not be sure that the electricity powering their tea kettle was produced in a 'green' manner, or whether it was actually coming from what was referred to as the local 'Incinerator'. The other consideration was that choosing to stick with 'green' utility providers was not necessarily the cheapest option, bolstering the 'middle class and privileged' reputation that Brenda felt environmental consumer choices represented. The only way a person might be truly sure that the energy powering their household was completely environmentally friendly, is to produce that energy themselves – in the form of ground-source heat pumps, solar panels, wind turbines etc. A number of my participants had invested large amounts of personal capital in adding such energy accoutrements to their houses but were still dependent on the national grid – which took the energy they produced and paid them for it, generally, rather than them actually using what they produced. For them to be able to live totally sustainable energy lives, they would have radically alter their lives and go off grid –since their energy consumption would have to match their production. The further we consider the implications of the Proper Environmentalists discourse package the closer we get to Dan's hermit living alone in a wooden hut, cut off from society.

My participants were locked in a cycle of discursive tension: they knew what was possible (Pragmatic Stewardship) and what would be ideal (Proper Environmentalists), and the difference between the two was so great as to introduce a third discourse; 'Not Worthy.' In the English translation of the Catholic Mass there is a line the faithful recite when in preparation to receive the Holy Eucharist: "I am not worthy, that you should even enter under my roof." My participants' perception of what being an environmentalist should involve was so high, so elevated, that they felt unworthy even to share the title they had unconsciously given to a mythical creature of their own creation. They weren't good enough, weren't committed enough, weren't as much of a 'hard-liner' as they should be, didn't protest or picket enough, didn't make enough personal sacrifices, didn't eat the right way, were too addicted to cheese to boycott the exploitative dairy industry, liked visiting family or holidaying in other countries too much to give up flying, or simply found the 'green' household products too expensive to warrant changing their brand choice. It would be pure hubris for them to even consider accepting the description of 'environmentalist' when they knew they were unworthy of such a status.

The result of all this discursive tension and contradiction was a huge burden of guilt. An alarming number of my participants displayed extreme frustration and distress at the realisation that they

were not and perhaps could never hope to live up to the impossible standards of the 'Proper Environmentalists' they felt they should be emulating. I was dismayed to see the negative effect of this discourse cycle on my participants. They had all been purposefully chosen to represent a social stratum which was (in my view) above average in their environmental convictions. Some of them described lifestyle choices and sacrifices that I was in awe of: Debbie, for example, explained that she washed her clothes using "lemon juice and bicarbonate of soda." My mind boggled at the quantity of lemons – an exotic imported fruit – she must get through on a regular basis. Yet, they all felt they were 'less than.' Environmentalism, which many assume should be an empowering social force, was making these people feel awful about themselves. If this is what is occurring within those social strata where people are already environmentally conscious, then how is this to be attractive to the rest of the population?

Of course, not all my participants were locked into this cycle of guilt. Some had managed to distance themselves from it through their conception of environmentalists as being "Not Like Us." The Not Like Us discourse includes many of the aesthetic and temperamental stereotype statements; 'dirty,' 'unwashed,' 'hemp-wearing and smoking,' 'idealistic,' 'black and white,' and so on. The discourse was used as an explanatory and 'othering' method. Participants could say "yes, I care about the environment, but I am not *like that*." Incorporated in this discourse were the concerns about some protesting methods – such as civil disturbance or disobedience that might result in arrest or the undue disruption of other people's lives. In this manner, 'environmentalists' were constructed as unruly elements on the margins of society who should not be viewed as indicative of what environmentalism was really all about.

Chapter 7 | Saints, Sinners, and the Books of the Prophets

In the previous analysis chapter, the discussion was overwhelmingly introspective, as the data related to participants' own conceptions of their 'self' as lay environmentalists, and about how this 'self' related to the wider environment and organised environmentalism. Participants' cosmological preferences and the other environmental discourses broadly related to identity and were primarily *internal*. They involved the participants in thinking and reflecting on their own internal conceptions and assumptions about how *they as individuals* related to the idea of environmentalism. In some respects, this involved comparisons with external factors, but the result was still reflexive.

In this chapter the analysis moves away from these internal musings towards a discussion of how participants made sense of their perceived environmental 'duty of care' (§6.2.1) within the wider society. The discourses discussed in this chapter deal more with actions and interactions between agents and with/in the societal structures they find themselves. The assumption that environmentalism is an implicit religion remains in the analysis: discourses, agents and structures are all analysed with a view to exposing concealed aspects of environmental religiosity. Having previously been concerned with an environmental theology of sorts, the analysis now moves to investigate how environmental implicit religion plays out in people's external, material, lives. This chapter address a further two sub-questions from §5.2.1; "What evidence of Christian inheritance can we see in participants use of environmental discursive resources?" and "In what ways can we identify environmentalism as fulfilling the function of religion in participants' lives?"

The analysis will begin with a topic touched on briefly in the previous chapter: 'Eco-Guilt.' The product of the tension arising between the Proper Environmentalists, Pragmatic Stewardship and Not Worthy discourses was a feeling of unrelenting guilt that participants felt when they knew they could never live up to an unachievable set of standards, and that nothing they did would ever be enough. In the first half of this chapter the discourse of Eco-Guilt and its consequences for my participants and their implicit environmental religion will be discussed. In the second half, the contribution of the prophets of environmental implicit religion will be presented, as the bewildered and frustrated environmental faithful seek guidance in how to implement a meaningful form of environmentalism in their daily lives. These 'prophets' are discussed as *movement intellectuals*, a term taken from Eyerman and Jamison's (1991) contribution to the field of social movement theory.

7.1. Eco-guilt (and Infrastructural Lock-In)

In the previous chapter, I showed how guilt was the product of the tension produced when participants accessed the Proper Environmentalist, Practical Stewardship and Not Worthy discourses. Here I explore further the discourse around guilt, which I label 'Eco-Guilt', following

Mallett (2012). Doherty (2002, p. 8) found a similar tension in her research and explains that "…most find it hard to live to such standards and some argue that this level of consistency is not necessary since it places too much emphasis on individual responsibility. But for most, being a good green means trying to live as greens argue other people should. When it is impractical to do all that might be desirable in this respect, greens are likely to express regret, guilt or point to excuses for their failures". Mallett (2012) defines Eco-Guilt as "guilt that arises when people think about times they have not met personal or societal standards for environmental behavior" (p. 223). In this section, I unpack Eco-Guilt as a 'meta-discourse', adding to current knowledge on this issue through the construction of a discourse package using the data from my participants. There is a parallel to be drawn here with the notion of 'Catholic Guilt.' This is discussed in Chapter 9 as a linked literature contributing to the third main research question (see §5.2.1).

I did not introduce the guilt/shame vocabulary to my participants. All the discursive statements linked to Eco-Guilt were unprompted, and the sheer volume of them was striking. I approached participants because I perceived them to be environmentally concerned or active in one way or another. Although I did not assume participants would view themselves as I viewed them, the level of self-recrimination evident in the data surprised me. Many of the Eco-Guilt discursive statements occurred in response to questions about the characteristics of environmentalists and what actions participants felt to be 'environmentally friendly.' For example, "I feel a lot of guilt around things sometimes; I feel like I should be paying more attention or I should be wasting less." (Sandra)

Many participants chose to explain themselves in comparison to others: "Some of my friends are *very* environmentally conscious and when they talk about responsible consumerism I just feel kind of inadequate, next to that…" (Kevin). Note that Kevin does not directly say his friends are environmentally *active* – just 'conscious'. He felt inadequate because of an assumption that his friends factor the environment into their daily decisions more than he does. It seemed that Kevin had constructed an idealised environmentalist identity he then ascribed to some people he knew and admired, and found himself lacking in comparison. Further questioning indicated that Eco-Guilt was widespread: even Kevin's "very environmentally conscious" friends felt they were inadequate. This, of course, compounded Kevin's feelings of personal guilt:

> "And it kinda feels bad because when you talk to them they're always like, 'I am not doing enough', is generally the way they approach it, and I think well if *you're* not doing enough I'm *definitely* not doing enough and the majority of us certainly aren't doing enough... And it seems, if they do what they do and they *still feel guilty* then that's bad" (Kevin).

Other participants expressed similar feelings to Kevin, saying they felt inadequate in comparison to Proper Environmentalists and experienced feelings of guilt and shame. Pat explained that the knowledge that there are those who dedicate a lot of their time to environmental-political action made her feel "grateful," "slightly guilty that I'm not that kind of person" and "sort of in awe." Once again, here was a participant comparing themselves to an unnamed – and in this case entirely hypothetical – idealized notion of an environmentalist. When pressed, Pat could not name anyone she viewed as 'an environmentalist'. Thus, although she thought "they're better than me, they see things through, they really try to make a difference, rather than just sitting around being champagne socialists intellectualising everything," Pat was describing people that only existed in her imagination.

My data showed that Eco-Guilt could be invasive and unproductive. To highlight this, here is a longer excerpt from my discussion with Pat, who described a debate with her husband on why she wanted to buy bananas instead of blueberries:

> "the other day I really felt that I'm slipping because we had some blueberries; it's the middle of winter. As [my husband] pointed out to me "Why are we having bananas, we could just as well be having pancakes with blueberries, where do you think these bananas have grown?" And I'm like, yes, obviously, I missed the fact that bananas don't grow in the UK; seriously it was like a real mental lapse [Q laughs] it's like they're just such a part of diet that, you know, I never thought of them as being an exotic problematic fruit with a huge carbon footprint, they're just there, you have bananas but you don't have blueberries, when you're having bananas you can just as well have blueberries, so we ended up having blueberries and I felt very guilty about that, it being February." (Pat)

The argument about choosing between bananas and blueberries is, perhaps, rather absurd. However, that absurdity belies the fact that this situation generated an intense discussion between Pat and her husband about what fruit to pair with pancakes and such an extraordinary degree of introspection, reflection, and guilt about consumer choices that many people might not ever consider.

This discussion indicates the contributory discourse of Infrastructural Lock-In discussed further in the next subsection. The ingrained ideas about which fruits count as 'exotic' (and therefore come with 'food miles' and associated carbon sins) are part of a normative discourse dictating the type of choices available to would-be environmentalists. Bananas are somewhat ubiquitous in the UK – a 'common' fruit widely available for decades. Blueberries (a close cousin to domestic UK

bilberries), however, are strongly associated with American cuisine which has become more popular in the UK since the advent of social media platforms which have facilitated an unprecedented level of international cultural osmosis. Thus, blueberries are 'from overseas' in Pat's mind, but bananas are an 'everyday' fruit like apples and oranges (another fruit imported from overseas). Blueberries are also not as widely available and are more expensive – both factors increasing their perceived desirability. The more 'normal' and everyday a product or action is the less people are likely to consider its environmental impact, as Pat's dilemma illustrates.

The sudden realisation that her two choices – bananas or blueberries – both meant committing an environmental sin (the tacit acceptance of importing exotic goods, thus supporting the fossil fuel industry) caused Pat to go into an eco-guilt 'tailspin'. But – and this is crucial – the feelings of both immediate guilt (about wanting blueberries) and retrospective guilt (the realization that her previous buying choices may have been unavoidably harmful to the environment) *did not result in Pat choosing to buy local produce*. Instead, "we ended up having blueberries and I felt very guilty about that, it being February." Pat gave up on attempting to make pro-environmental consumer choices since being environmentally harmful seemed virtually unavoidable, given the choices available to her at the time. She decided to just live with the guilt: "I'm just being selfish and making rationalisations for keeping a comfortable lifestyle level rather than worrying about building a zero-carbon home somewhere in the middle of Wales and wearing hemp." (Pat)

There are two linked points to be made here about the consequence of Eco-Guilt in society that will be repeated throughout this section and the following subsections. The first is that Eco-Guilt did not result in eco-action. Pat and many other participants referred to feeling unable to act, or that their actions were constrained by forces outside their control, which made any personal sacrifice they made ultimately worthless. I refer to this as agential paralysis. In my data it presented as both a product of discourses acting in society, and as a discourse marker – that is, if a participant gave an example of agential paralysis, it generally indicated Eco-Guilt in their discursive repertoire. The second point linked to this is that nothing in her environmental discursive repertoire gave Pat the resources with which to cope with the guilt: she had to 'live with it'. That second point, although much less frequently explicitly referred to, was clear from the way the dataset seemed shot-through with environmental self-loathing (see §9.2.3. on Eco/Catholic guilt).

Having outlined Eco-Guilt, the following section will look in greater detail at the contributing discourses of Infrastructural Lock-In, Original Eco-Sin, and E'pocalypse. I then present an Eco-Guilt discourse package constructed from the main discursive statements found in my data on this

topic. The full implications for this discourse when viewed with the perspective of environmental implicit religion are presented in Chapter 9.

7.1.1. Infrastructural lock-in continued: agential paralysis vs. limited impact collective action

The 'infrastructure' referred to in Infrastructural Lock-In is conceived of far more broadly than the typical 'built environment' definition: "The basic physical and organizational structures and facilities (e.g. buildings, roads, power supplies) needed for the operation of a society or enterprise" (Oxforddictionaries.com). I am using 'infrastructure' to refer to not only the material and economic, but also the most deeply engrained social norms about consumption and behaviour, which characterise our consumption-oriented capitalist economy (as experienced and demonstrated by my participants). These social norms are almost cosmological in their fundamental nature and are correlates of participants' environmental cosmologies and as discourses, they characterise the mainstream of our society. The interest here is in how these social structures impinge on my participants' agency in environmental matters.

Pat attributed her agential paralysis to constraints on life choices imposed by broader societal norms and structures. This attribution was common, and formed the basis for a key Eco-Guilt contributory discourse: Infrastructural Lock-In. Mark, for example, made it clear that he considered the mere fact that he lived in the UK and enjoyed "living a fairly standard western lifestyle" to be a major reason why "I probably have an outsized impact on the environment." He explained that living his average life in the UK meant that he was "involved in the use of petrol and the production of loads of things out of plastic and loads of things that end up being thrown away and so on." The point implicit therein is that although Mark certainly had no direct, personal culpability for the oil or plastics industries, just being a normal person in a western society means living in and contributing to a system that supports and benefits from those industries and the associated environmentally harmful processes. The frustration felt by Mark because of this infrastructural lock-in was clear: "So, although I'm (sighs) probably slightly more conscious than most people in my situation of the environment, my net impact on it is probably far greater than, you know, a subsistence farmer somewhere."

Given that Mark clearly saw the extent to which so much of this situation was out of his control and that there was little he could do individually about the structure and direction of western society as a whole, it was striking that he still felt a great deal of personal eco-guilt: "Yes, yes, it does [weigh on my mind]. So, I would try to do things to mitigate it, like looking into carbon offsetting stuff or trying to recycle. I like buying clothes second-hand; I did a carbon calculator once and if you consumed anything second-hand then it considered it to have no carbon impact

which was quite nice…" However, as with Pat, Mark's well-developed Eco-Guilt did not translate into eco-action. One reason for this was money: Mark was struggling financially to make ends meet after having gone through a difficult divorce and a mental breakdown. He had moved back in with his parents and was spending a lot to support and visit his two children who lived with their mother in another part of the country. His Eco-Guilt was compounded by the knowledge that although there were ways he could be reducing his 'outsized environmental impact,' he could not financially afford to make the necessary changes. This parallels Sandra's discussion of environmentalism being a 'middle class privilege' and Jenny's understanding that environmental concerns might be less of a priority for people struggling on the breadline. Mark could not afford to carbon-offset aspects of his life and even though he knew that driving, for example, was a major environmental issue, he felt he could not give it up because it was the cheapest and most reliable means available to him to visit his children.

The common experience of Eco-Guilt not producing eco-action was a recurring motif. Mike explained his lack of Eco-Guilt-motivated action in reference, again, to unnamed others: "I think there's probably a lot of people like me that don't do enough. So, everyone thinks the environment's important but then they'll still shop in Tesco's; they'll still buy things that aren't very nice to the environment; they'll still drive to the shop two miles away." This 'everyone does it' discursive statement is another example of the type of infrastructural lock-in exemplified by Pat's 'blueberries versus bananas' dilemma. The more 'normal' a behaviour or consumer choice is, ingrained in the material world as well as in norms, the more physical, mental and economic effort is needed for a person to choose the environmentally friendly option. My participants consistently explained that choosing the environmentally harmful option – whether for travel, groceries, utilities *etc.* – was generally easier. Our capitalist consumer-driven society prioritises ease of life, and for this reason many of my participants despaired of individual action making much of a difference:

> "I am pessimistic about the general willpower of humans as a species to actually collectively solve the problem. Because there's too many reasons on an individual basis why it is easier – why it benefits the individual not to do anything about it… there's always going to be someone... even if 99% of people stop using coal or gas or oil then the one person who does makes a shit load of money. So… I can't see it changing." (Joe)

Joe was in his late 20s and worked for the Environment Agency. Throughout his interview, he came across as extremely pessimistic about the likelihood of realistic environmental mitigation

without radical social change and direct government intervention on a much greater scale than currently practiced in the UK. Pam similarly expressed frustration at the emphasis being placed on individual environmental behaviours, when she felt that "Councils and Councillors… and private companies… pay a lot of *lip service* to the environment." Pam felt that expecting private individuals such as herself to make extraordinary efforts for the environment which would have minimal effect was unfair and ultimately worthless without a proper example being set by authorities: "there's a lot of talk about making individuals act in a green way. But if they're not being given the leadership, and they're not being set examples by organisations, both private and public, you can't expect individuals to do anything, to do a lot themselves. …if you're up against organisations just behaving badly you think well, why bother?"

The 'why bother?' sentiment is a key discursive marker for Infrastructural Lock-In. Some participants made extraordinarily pessimistic remarks calling into question how much they felt their personal contribution to the environmental cause was worth: "I'm *theoretically* pretty good... But we do go abroad a lot, fly a lot, erm long-haul flights, so you could say well... it's like the *Ancien Regime*, you just enjoy yourself till the collapse" (Richard). The "minor things" that Richard does which might be considered as environmental mitigation are totally outweighed by his penchant for international travel: he knows it – and doesn't feel inclined to forgo that pleasure. Eco-Guilt again failed to produce eco-action; sometimes this merged into the E'pocalypse discourse, as evidenced by Pat: "we're all fucked, let's enjoy it on the way down."

One of the clearest divisions in my sample was between those who were active members of an EMO and those who were not. Unsurprisingly, those who were affiliated with an EMO generally felt that being part of a group improved their chances of having a positive effect on the environment. This difference was obvious in the way they responded to the presence of Eco-Guilt in their discursive repertoires. Liz, Maggie and Lindsey were all from a local EMO. Maggie and Liz made explicit statements about how they felt collective action as part of a group was the only way they, as individuals, could make any realistic difference. Liz was particularly impassioned: "People do take the environment for granted. But what can you do on your own if you care? Caroline, what can you do on your own if you care? What can you do on your own? I think we *collectively* have to do something." The repetition of the phrase "what can you do on your own if you care?" is strongly indicative of agential paralysis and, by association, Infrastructural Lock-In. Maggie felt that "a lot of these things are out of my hands. So, I can't always achieve what I would like to." This explicit example of Infrastructural Lock-In was immediately followed-up with the agential paralysis specific to those who were members of EMOs: "as one person, individually, you're not [powerful] – but as a group, you may make a difference."

Lindsey, Liz and Maggie were all members of a very specifically local EMO, which purposefully restricted its action to one area of the city. This was defended by the Chair (Lindsey) with reference to the aim of making the biggest possible impact by concentrating limited resources to a specific area to the exclusion of others: "if we start spreading, you spread yourself too thinly. And we think if we can concentrate here and leave other people in other areas to concentrate there, we'll end up with something much better." Here we have a notion of *limited impact* – a discourse marker for Infrastructural Lock-In. Lindsey feels very keenly that there is a limit to what even a group of motivated people can achieve and has made what she was aware others might view as a ruthless decision: to refuse help to even neighbouring local areas. Also, *limited impact* was discussed by both Lindsey and Liz with reference to the local/global binary: "We act locally... Because we know we can't effect global (Lindsey)" and "I know I can't change the bigger picture…" (Liz).

The feeling that individual environmental efforts might not be effective seems to be one of the key reasons why Eco-Guilt doesn't translate into eco-action. Sue, a Green Party member, explained the importance of optimism: "people really have to believe that this is worthwhile and; without hope that the work they do is going to make a difference then, yeah, no-one would bother doing anything, would they? So yes, Green Party's very big on hope." Sue's point about people needing to feel that their actions and sacrifices were 'worthwhile' is very important in the context of Eco-Guilt and Infrastructural Lock-In. Joe made a similar point about the need for optimism: "you have to try quite hard not to be defeatist and pessimistic about it and think along the lines of 'why do we bother?' because of just one thing after another; we're doing this, we're doing that, we're not doing anything about it... it makes you think 'Oh well, what can I do?'"

Sue, however, when confronted with the fatalistic version of Eco-Guilt leading to agential paralysis, was caustic and dismissive of people's struggles on this issue: "No, I've got no truck with nihilistic positions. That's ridiculous, let's just all jump off a cliff then, shall we? Mm. I worry that that's a cop out." Pat, speaking of her own attitude, was more philosophical: "I don't know if it's fatalism or laziness, but one reason why Lovelock's statement is appealing is because it relieves you from any responsibility, so you can just not worry about that plastic wrapper from a Twix bar that you just ate, which otherwise you'd have to worry about and agonise over." Grossly paraphrased, the statement from Lovelock (as explained by Pat) referred to here is that with regards to our environment the earth is past the point of no return; things are now so bad, so damaged, that any climate change mitigation efforts we make will merely be prolonging inevitable planetary collapse, not preventing it: this indicates E'pocalypse. Perhaps the most reflexive comment on this issue came from Dan, who had also performed some doctoral research on environmental issues: "I don't think we as a society do enough to protect [the environment] and I try to do as much as

I can, where I can, but I am aware that I can't [do everything]. I must have an impact on the earth and that doesn't mean that I should not exist. I think I am entitled to live a life that is fulfilling and so will other people even if that has damaging impacts on the planet."

Pat gave recycling as an example of an environmental behaviour which she felt was ultimately worthless because of the local environmental/energy infrastructure in the city: "I know that the idea about recycling being linked in any meaningful way to minimising our impact on the environment is just a myth, it doesn't actually happen, materials don't circulate in that way." Pat involved the city's incinerator in her expression of Infrastructural Lock-In, implying the futility of her division of recyclables due to its ultimate fate as fuel. James also referenced the incinerator but was neutral on whether or not it was an environmental 'good' or 'bad': "It's not recycling, it's not re-use, it's actually destruction of waste. But, it's better than chucking it in a hole in the ground and polluting the environment with the methane that it produces. So, it's a valid way of recovering energy, of making something useful out of things people chuck away." During his career, James (now retired) had worked for the Local Authority on energy and environmental projects and had intimate knowledge of the incinerator. Like Joe, who was at the beginning of his career in the Environment Agency, James felt that direct knowledge of the industry was important and had coloured his opinions on individual environmental actions. Joe explained that his direct experience in environmental services meant that he was "not less concerned… [but] a bit more realistic about the fact that stuff you recycle – it can go off and the likelihood is it will get burnt. But that's just pessimism; I'm in that industry every day and I see where the stuff goes." The result of this combination of discourse and the immediate context of the city's incinerator was that Pat, who had been so worried about the food miles on her blueberries, felt that "recycling is just a waste of time."

Mark, when agonising over his inability to pay for carbon offsetting, was struggling with an infrastructure as close to the OED definition as this study reached. Pat, in her blueberries dilemma, was struggling with the infrastructure of social and cultural norms: a more commonly experienced type. The *most* commonly discussed form of Infrastructural Lock-In that cropped up in my data was political. Specifically, the tension between what would be politically *ideal* and what is politically *realistic* or *feasible*. Frustration was expressed by participants over the fact that more could be done *with sufficient political will* – but that "turkeys don't vote for Christmas" (Will). Will made a point of remarking on the electoral process: "there are too many countries where the number one priority for leaders is getting re-elected in 4 or 5 years' time." Will felt that this meant that environmental policies suffered from short-termism, when most environmental issues are long-term in the

extreme. Ken raised the issue of global realpolitik in the context of a recent climate change conference, saying:

> "when it comes to campaigning, you're always dancing around between doing something which is politically realistic, and you hope will be effective, and something which begins to address the acute, urgent and overwhelming need for action which is far more widespread and radical than politicians find even remotely possible. The Paris conference was a good example of that. That was probably about as good as we're going to get."

The issue of ideal versus realistic possible action was referred to by many of my participants. Most often, it was presented with a thick gloss of societal pessimism indicative of the Original Eco-Sin contributory discourse (see §7.1.2). Participants felt that even explaining what they felt would be the ideal approach to climate change mitigation or environmental protection would be pointless – because the likelihood of enough people making the requisite changes in their habits and consumer choices to have any sort of demonstrable effect seemed highly unlikely. Participants were pessimistic about humanity's ability to work *en masse* in a productive, rather than destructive, manner and or that any world leaders would ever place global environmental protection above their own personal ambitions. In interviews, participants would transition quickly from an initial stance of optimism – 'this is what needs to be done' – through to anger and frustration directed at authorities for failing to deliver sufficiently on environmental protection and at humanity for its continued assault on the global environment. Finally, many participants expressed a defeatist attitude, feeling that little was going to change for the better, and thus merging with E'pocalyse:

> "The haves will not let the have-nots get their hands on what they've got. The have-nots will constantly try and improve their status and stop dying in great numbers... And everybody will want more and more energy, more and more cars, and everything that everybody's got. And it would be a brave and foolhardy politician who actually said "well hang on just a minute" ... It's just human beings, I'm afraid." (James)

The complete lack of faith in humanity demonstrated by James is striking. In his view, echoed more gently by others, the human species was the problem. Our very existence was anathema to a stable planetary environment. Well-known basic solutions to environmental problems involve personal sacrifice: sacrifices at the individual level – less available energy, changes in diet, travel, consumption– and sacrifices for entire nations. The tendency towards avarice and the associated unwillingness to forgo personal pleasure or comfort for the benefit of the greater society paints a dismal picture: humanity has fallen from grace. This perspective on the human condition and the

inevitable destruction of the world as we know it brings in the issue of original sin and possible comparisons with millenarianism. The construction of the human species as inherently sinful is another link to the issue of 'Catholic Guilt' to be discussed in Chapter 9.

7.1.2. Eden destroyed: Original Eco-Sin and the unavoidable E'pocalypse

In Chapter 6, I mentioned the issue of an embedded Eden myth. Many participants held the notion that there had been a decisive turning point in history with regards to humanity's relationship with the environment, where we moved from a relationship of simple harmony to one of exploitation and destruction. In the Christian Eden myth, Eve fails to overcome the temptation of illicit knowledge and thus dooms not only herself but also Adam and their progeny to a life of sin. This was the 'Original Sin' that St. Augustine explored in depth, and which was adopted as formal doctrine by the Roman Catholic church during the 16th century Councils of Trent. The notion of original sin is often used in Christian tradition to explain why there is so much disharmony and evil in a world created by a perfect and benevolent God: the greed and disobedience of our forefathers has tainted the whole world. In the implicit environmental Eden myth, just as in the Christian myth, the decision taken by our ancestors to pursue an exploitative relationship with the environment has led to our living in an environmentally, politically and socially unstable world: "I think the environment exists and humanity's come along and basically just ruined it. I don't think we live in partnership or in harmony with our environment really, do we?" (Kevin) The most pessimistic participants felt that the only certainty was an environmental apocalypse (hence, 'E'pocalypse'): "human beings will bugger up the planet; not in my lifetime – it'll take several generations" (James).

In some interviews, as we moved from the topic of environmentalism in the abstract to the concrete issue of nuclear power, a few participants raised the issue of humanity's seeming inability to resist the lure of dangerous knowledge. This is a particularly obvious example of the Eden myth being re-purposed for environmental implicit religion, with nuclear power set up as the tempting apple inviting the committal of Original Eco-Sin. Maggie made quite explicit Original Eco-Sin discourse statements: "obviously technology has opened up the world, which in some respects is good, but I feel sometimes we get to know too much about the wrong things..." I interviewed Maggie very early in the fieldwork period of this study, and it was her data which really brought the issue of implicit religion into the foreground. She equated her relationship to the environment as one guided by her Christian faith and produced a clear example of Pragmatic Stewardship as being her personal cosmological guiding principle when considering how her actions affected the environment. Given her explicit Christianity, hearing statements like this from her was hardly a surprise. At that early point in the research, I assumed that her Christianity was colouring her

environmentalism – but subsequent interviews with professed atheists showed me that a version of original sin has been incorporated into environmentalism. For example, Joe had no religious affiliation and made no overtly religious statements – but still used the term 'evangelical' to describe the approach of some environmentalists and used Original Eco-Sin to speak of how humanity seemed unable to resist temptation: "the fact that we can do it is amazing; but possibly, we shouldn't do it! It's great that we can do it, that's really interesting, but let's not … just the fact that we can get it, doesn't mean that we should use it. But people don't seem to understand that side of things."

The counterpart to the Eden myth (and the attendant Original Eco-Sin) in Christian tradition is the notion of the 'end times' – the period of destruction and transformation prophesied in the book of Revelation, also referred to as the Apocalypse, when Christ returns as an avenging warrior to lead a war on sin. Among millenarian sects such as the Jehovah's Witnesses, Seventh Day Adventists and Mormons (Underwood, 2017: 85), and even the militant fundamentalist Protestantism of the Reverend Ian Paisley (Jordan, 2011), the 'end times' is perceived to be imminent. The world will be transformed and Christ's thousand-year reign will begin, whereupon only the faithful few will be allowed to remain and enjoy the prophesied heaven on earth. In America, where these sects are most prominent, millenarianism has been associated with environmental neglect: since this world is fleeting and soon to be transformed by grace, why bother prolonging it? Environmental protection policies and efforts at climate change mitigation become sinful, since they aim to delay the eventual Apocalypse and the return of the Messiah. Famously James Watt, Minister for the Interior under Ronald Reagan between 1981 and 1983 was quoted in the Washington Post as saying "My responsibility is to follow the Scriptures which call upon us to occupy the land until Jesus returns. We don't have to protect the environment, the Second Coming is at hand."[25]

None of my participants were millenarian, but there was a tension between the professed importance of promoting environmental protection and climate change mitigation policies and an entrenched pessimism about the human tendency to reach for easy answers and to give in to temptation. Few of them felt that eco-action was truly worthwhile: "…humans are constantly looking for the easy answer and... Well, there is no easy answer. No short cuts. Nature doesn't take short cuts." (Karen) Using E'pocalypse, participants spoke of the eventual (and assured) destruction of humanity altogether, secure in the knowledge that Gaia – the planetary eco-system – would simply evolve and transition into a new phase: "When Armageddon comes there will be

[25] Quoted in the Washington Post, May 24th 1981.

life that carries on, but it'll be... not us." (Richard) When given the opportunity to hypothesise solutions to the climate crisis James responded with "I mean short of genocide... I mean, to be blunt, I don't think it's solvable. There's too many people in the world. Nobody's going to opt for self-destruction". Jeff bemoaned people's "baser drives" and Karen concurred, saying that "People don't want to make the effort, they want to be able to carry on living like they do…" and the inevitable conclusion? "So actually, I think we're doomed" (Mike) since, "by the time they realise, it'll be too late" (James).

7.1.3. Eco-Guilt and subsidiary/contributory discourse packages

Eco-guilt is too complex and too dependent on the subsidiary ideas of Infrastructural Lock-In, Original Eco-Sin and E'pocalypse to be treated as one aggregate discourse package. It is necessary to return to the notion of levels of discourse to fully appreciate what was happening in my data. The extant Eco-Guilt literature fails to appreciate this inherent complexity (see discussion in Chapter 9), and I hope that this section will contribute meaningfully to that body of work.

Below are three discourses in the style of Gamson and Modigliani's 'interpretive packages' which are "a combination of paraphrasing and direct quotes from multiple sources" (1989, p. 4, see footnote).

> Infrastructural lock-in*: You're often stuck trying to choose the 'least-worst' option; because of the way our society is set up sometimes there isn't an environmentally neutral choice to be made. In fact – if there is an environmentally 'better' choice, it's often more difficult, more expensive, more time-consuming; you can end up inconveniencing not just yourself but others too. At the end of the day, nothing any of us do individually will be effective, when you consider that we're trying to make up for a hugely embedded fossil fuel industry and fast-paced capitalist consumer-driven lifestyle.*
>
> Example: "When I think about it, yeah [I worry]. When it comes up, for whatever reason, I think 'oh I should do more about that,' and then don't… that's my main, main relationship to it." (Kevin)
>
> Original Eco-Sin: *What's the point in even trying? Nothing I do will make a difference anyway. Unless our governments have the guts to make some tough decisions about the direction of our economy and about policy priorities, little is going to change. No government is going to make those tough decisions, because it wouldn't be popular with the voters – and there you come up against the baser human characteristics of greed, ambition, and lust for power. Yes – groups may have more power to act than individuals, but that impact is limited; we need united, global action and it's never going to happen. No politician will make the tough choices because they want to be re-elected; the population*

en masse won't vote for those tough choices because humans are greedy and self-serving. No one is really prepared to make the kinds of drastic personal sacrifices necessary.

Example: "…you work very hard and you wonder whether you've made any difference at all." (Ken)

E'pocalypse: *Given how little I can do and how unlikely it is that anything truly effective will be implemented on the necessary globalised scale, I may as well just give up and enjoy the material benefits of our current society without considering the exploitative relationship with the environment that it is based on. I have a right to enjoy my life rather than live with this crippling guilt and worry, knowing that after the inevitable environmental apocalypse the likelihood is that life on earth will continue – but the age of the human will have passed.*

Example: "You can't put your head in the sand and you can't lie awake worrying all night because that is not going to achieve anything." (Steve)

To interpret their feelings about and relationship to the environment, my participants used all the discourses presented above. In concert they work together as a 'discourse cluster', sharing considerable 'discursive affinity' (Hajer, 1993: 47). Markers from each discourse come together in the meta-discourse of Eco-Guilt, with the addition of some specific guilt discourse markers:

"I feel inadequate – other people do so much more than I do/can with regards to the environment. But even they feel they're not doing enough – so it feels impossible. It's so hard to be environmentally friendly; everyday decisions become so complicated and I feel very guilty all the time because I'm virtually always doing something that's damaging to the environment in some manner. You wonder what the point is in even trying sometimes too, since nothing I do personally can ever make up for the damage being done worldwide."

To encompass the full complexity of the Eco-Guilt meta-discourse and the subsidiary discourses making up this cluster, the package presented above would become so large as to be unwieldy. Suffice to say that generally, a discourse marker from any of the three sub-discourses – Infrastructural Lock-In, Original Eco-Sin, and E'pocalypse – combined with a classic guilt marker ("I worry, I feel inadequate, I don't do enough, I feel guilty" etc.) indicates that a participant is accessing the Eco-Guilt meta-discourse.

Early in §7.1 I noted two linked points relating to the prevalence of Eco-Guilt in my data: the first was that it resulted in what I termed 'agential paralysis' – that is, Eco-Guilt did not produce eco-action. This is in direct contradiction to the general findings of other scholars researching this topic, and the implications of this finding will be discussed in Chapter 9. The second point was

that participants had no discursive resources to help them cope with the crushing feelings evinced through the Eco-Guilt discourse and its contributing discourses. In the following section I discuss the role of movement intellectuals as providing an unorthodox (in the literal sense) means of assuaging some – not all – of the guilty feelings resulting from discourses discussed in Chapter 6 and their product, Eco-Guilt.

7.2. Movement intellectuals

A discovery of this project was the extent to which my participants wanted to expand their knowledge and ideas – albeit in directions they were already interested in. Participants referred both directly and obliquely to books, articles and other texts they had read on topics related to the environment, energy, climate change or conservation, or to the work of prominent environmental journalists, campaigners, authors, and philosophers. The most common way that participants had encountered the ideas of these movement intellectuals was through having read their books; the three most commonly mentioned authors were George Monbiot, James Lovelock and Naomi Klein.

Movement intellectuals are *not* social movement leaders, although they may be involved with a movement; indeed, all the individuals discussed in this section could be argued to be involved with the 'environmental movement'. In the literature, leaders are those people who are *concretely* influential; who direct large groups and who make tactical decisions on behalf of the social movement, as can be seen from Morris' (2000) discussion of the civil rights movement's leadership. Conversely, movement intellectuals need not be the obvious director of a social movement organisation or make tactical decisions and direct protests. A movement intellectual may come to be seen as a *kind* of leader, through the visibility that their successful intellectual activities on behalf of the movement afford them: "This visibility, often helped along by sources outside the movement like the mass media, is the basis for the usual distinctions between the leaders and the led" (Eyerman & Jamison, 1991: 94).

More specifically, the term 'movement intellectual' refers "to those individuals who through their activities articulate the knowledge interests and cognitive identity of social movements. They are movement intellectuals because they create their individual role at the same time as they create the movement, as new individual identities and a new collective identity take form in the same interactive process" (Eyerman & Jamison, 1991: 98). The importance of having strong leadership in the environmental movement was indicated by Pam, "you can't expect individuals to do a lot themselves, if they're not seeing a good example set… by organisations, both private and public." Pam emphasised the importance of organizations in providing positive leadership in the

environmental movement, as she felt that individuals "will think why bother?" However, despite the common idea that collectives were more effective than individuals, many participants made a point of mentioning the work of certain individuals who had made an impact. Apart from Monbiot, Lovelock & Klein, others referred to were Mark Lynas, Fred Pierce, Joanna Macy, Jonathon Porritt, Chris Packham, David Attenborough, Mark Avery, Tim Flannery, James Hansen, Satish Kumar and Arne Naess. All these had an impact on the environmental consciousness of my participants.

The reason why movement intellectuals are included in the section on *eco-guilt* is the role they play in alleviating some of the burden felt by my participants. Firstly, the very act of reading a book on the topic of the environment or climate change provided a small way for my participants to feel they were truly part of the environmental movement. Choosing to read something which might be 'heavier' than their regular reading material, and which might distress them a little, made them feel virtuous in a small, yet significant way. This was evidenced by the pride with which they uttered the words "I have read Lovelock's book… I have read Flannery's *The Weather Makers* and Naomi Klein's *This Changes Everything* and quite a number of others…" (Steve). Reading and owning a large collection of popular environmental texts was a point of pride for several such as Richard: "I buy all the books, you know... [goes over to the bookcase] what have we got here... got all the James Lovelock books; *An Inconvenient Truth* Al Gore... Looking at the twenty-first century futuristic books the one I'm reading now is on the 6th extinction – *When The Rivers Run Dry* Fred Pierce... so you get yourself well-informed."

Reading the work of movement intellectuals meant that a person took the environment *seriously*. It meant that they felt more informed than the average person, and there was an implicit understanding that with greater knowledge and understanding came elevated virtue. This was compounded when participants made the point of expressing how 'heavy' a book had been: Naomi Klein's *This Changes Everything* was described as both "quite sloggy" (Denise) and "long-winded" (Steve), but with emphasis on how the effort had been worth it. The act of finishing a sloggy, long-winded book on "the terrible situation we're in, aaargh" (Denise) raised feelings of accomplishment, of a small contribution to the global fight against climate change. Some, such as Richard, based virtually their entire claim to an environmentalist identity on their propensity for reading such books: "I'm an armchair environmentalist." By extension, reading the work of visible movement intellectuals made each reader a movement intellectual in a small but personally significant way: "All activists in social movements are in some sense, 'movement intellectuals', because through their activism they contribute to the formation of the movement's collective identity, to making the movement what it is. All activists do not participate equally in the cognitive

praxis of social movements, however" (Eyerman & Jamison, 1991: 94). I am choosing to interpret Eeyerman and Jamison's use of the term 'activist' in the broadest possible sense, as someone who is *active in the movement*. In this instance the activity is consuming and recommending reading materials associated with the cause.

The second important way that movement intellectuals alleviated the burden of Eco-Guilt was by providing inspiring, *individualised* examples of ways to be environmental. Many of the individuals discussed in this section were raised by my participants when asked to describe 'environmentalists'. Monbiot and perhaps Lovelock were certainly writers I had expected to see in my data, but I had not anticipated that David Attenborough, might be considered in the same vein. In the following sub-sections I have discuss loose 'types' of movement intellectuals providing guidance for my participants.

7.2.1. Eco-prophets: 'Monbiot and Co.'

'Monbiot and Co.' was quoted directly from a participant (Tom) but could easily be 'Klein and Co.' given that Naomi Klein was the least controversial, and one of the few intellectuals that participants felt comfortable saying they were "super inspired" (Jenny) or "quite influenced" (Sandra) by. Klein's work, explicitly linking the maturing climate crisis and our inability to address it to the entrenchment of capitalism, struck a chord with those participants who referred to her work and fed directly into the Eco-Guilt discourse package and its subsidiary discourses, especially Infrastructural Lock-In. In contrast to Monbiot and Lovelock, no participants who discussed her work expressed disappointment or lack of empathy – possibly because *This Changes Everything* can be read as broadly against nuclear power without explicitly taking that stance. According to Klein, "Nuclear is a heavy industrial technology, based on extraction, run in a corporate manner, with long ties to the military-industrial complex. And as renowned psychiatrist and author Robert Jay Lifton has noted, no technology does more to confirm the notion that man has tamed nature than the ability to split the atom" (Klein, 2014: 57). In this extract, Klein is negative about nuclear power merely through linking it expressly with key elements of modern capitalism; using the terms 'heavy', 'extraction', 'corporate', and referencing the hubris of humanity's assumption of dominance over the planet.

Being anti-nuclear is not a controversial position for environmentalists, and none of the participants discussing Klein's book supported nuclear power or showed an inclination towards re-thinking that stance. The positions outlined by Monbiot and Lovelock regarding nuclear power, however, were treated as highly controversial. Even participants who accepted the arguments in favour of nuclear power as a stepping-stone towards a low-carbon energy future made it clear that

they understood how controversial those opinions were to the majority of those within the environmentalist spectrum. Tom likened Monbiot's very public pro-nuclear conversion article in the Guardian to a call to arms: "I mean, Monbiot and Co., that was quite sort of like, *listen up!*" Sue described it as "all a bit shocking" and "very confronting." Richard used similar language to explain his reaction to reading James Lovelock's work: "Lovelock's quite shocking to read… It's the *vehemence* with which he says what he says about nuclear: people were quite shocked by how far he'd gone..."

Sue and Richard reacted differently to the "shocking" nature of their chosen movement intellectuals' pro-nuclear pronouncements. Richard explained that he "wasn't sort of convinced straight off" – implying becoming more persuaded once the shock wore off. Indeed, Richard was a recent convert to nuclear power as a means of climate change mitigation, saying that despite still feeling "reserved", he was "probably stating [a pro-nuclear position] more strongly than I've stated anywhere else now…" The reservation expressed probably links back to the controversial nature of a pro-nuclear environmental position, and the awareness that Monbiot, Lovelock, and Mark Lynas who have publicly 'come out' as pro-nuclear have been viciously attacked by environmentalists holding an orthodox, anti-nuclear position. Thus, Richard was anxious about the evolution of his views on nuclear power: "I feel that in my bones that my views are changing. Because I used to be very anti-nuclear, but I'm not so sure now. Um, and well you saw, James Lovelock when he changed his views on it, how he got pilloried by the environmental establishment... so."

Sue, however, did not experience an epiphany from Monbiot's pro-nuclear declaration: "I'm quite an admirer of his... and that was just, very confronting; I did look at it again as a result of him saying that…" Monbiot's argument was not sufficient to change Sue's anti-nuclear stance. In her prominent position with the local Green Party Sue might have found it challenging to maintain a pro-nuclear stance, as those in positions of authority might feel an increased obligation to outwardly conform to the wider organisation they represent. However, the term 'confronting' indicates that depth the anti-nuclear position had been entrenched in Sue's psyche, and despite a re-evaluation she remains staunchly anti-nuclear. Overall, Sue felt the need to defend her choice to remain anti-nuclear rather than being persuaded by Monbiot's rhetoric. She felt guilty for having contravened the teaching of an environmental prophet she admired greatly. Participants felt compelled to acknowledge the different position, and to possibly re-evaluate their own, simply because of who the movement intellectuals were, demonstrating the mechanism through which movement intellectuals assert their authority over discourse: "I mean people like that you do think

'*Oh, what are they saying*', so you don't necessarily change your mind but it makes you think *'what's all that about'*..." (Pam)

7.2.2. The professional scientist

In the summer of 2008, David MacKay, a physics professor at the University of Cambridge published *Sustainable Energy Without the Hot Air*. Initially, the book had little interest, but sales picked up from favourable online reviews, and MacKay's work eventually broke into the Top 60 Bestsellers list on Amazon.co.uk. The book contains a 'pragmatic' look at the energy options facing us, their potential effect on the climate, and the overall effect on the future of humanity.

MacKay's scientific credentials could not be doubted; and as *Sustainable Energy Without the Hot Air* was a labour of love produced because MacKay saw a need, rather than an opportunity for profit, his ethical credentials were bolstered significantly. In an interview with the Guardian newspaper in April 2009, he said:

> "I was distressed by the poor quality of the debate surrounding energy; I was also noticing so much greenwash from politicians and big business. I was tired of the debate – the extremism, the nimbyism, the hairshirt. We need a constructive conversation about energy, not a Punch and Judy show. I just wanted to try to reboot the whole debate. Most of physics is about energy, and physicists understand inefficiencies. I wanted to write a book about our energy options in a neutral, human-accessible form." (Guardian.co.uk; 2009)[26]

The frustrations that MacKay articulates are expressed by many of my participants. Participants were alert to the effects of corporate greening in the debate on energy options in the UK and viewed it as an attempt to manipulate the masses for economic rather than climate gain (Nuclear [Mis]Trust). Participants also felt frustrated by their lack of knowledge, alluding to a feeling of being edged out of the discussion by the way that the debate was framed as something only experts could usefully engage in (*abstract faith in science*). Accusations of the debate being too 'black and white,' 'simplistic,' and 'idealistic' (Dave, Charlie, Nancy) were voiced, as was the term 'hairshirt' (Charlie) when describing what was felt to be unhelpful aspects of the environmental movements' contribution to energy discussions.

These ideas about modern environmentalism being 'too black and white', 'simplistic' and 'idealistic' were widespread and signified a frustration with how the climate change and energy debate was being framed; the same frustration voiced by MacKay. Participants felt the debate did not reflect

[26] https://www.theguardian.com/environment/2009/apr/30/david-mckay-sustainable-energy

the reality they were seeing – that a 'black and white' debate could not accurately map the complexities of a 'shades of grey' world (Nancy), and therefore it wasn't a useful framing of the various problems associated with the climate crisis they were concerned about. Into this sea of frustration stepped David MacKay with his dry, pragmatic, overtly scientific, well-researched and clearly calculated discussion on the various energy options available to us. The contribution of *Sustainable Energy Without the Hot Air* was welcomed as a breath of fresh air. As one reviewer said, "this is how environmental science should be communicated; crystal clear text and honest graphs, with simplified theory and ballpark calculations that anyone can follow, backed up by empirical data as a check on results, real examples, frequent references, and explanations of limitations."[27]

Only two of my participants spoke about David McKay's work in any detail (Ken, Steve), and as they both knew each other, one may have recommended the book to the other. Another participant, an academic, also mentioned MacKay's contribution to the debate on nuclear power in passing, saying that he "sat on the fence" about fast breeder reactors (Gary). However, MacKay's role as an unwitting movement intellectual is intriguing due to his uniquely accidental fulfilment of the role. His ethical credentials remained intact as he encouraged the curation of a free online directory (www.withouthotair.com) rather than following a profit motive. His aim to spread knowledge and facts in the face of obfuscating environmental extremism, has endeared him and his work to many.

It was clear which aspects of MacKay's work struck my participants. They were both impressed with his professional scientific credentials: "he was chief scientist with the Department of Energy and Climate Change" (Ken) and "Physicist at Cambridge" (Steve). Ken and Steve were also impressed by MacKay's preference for "numbers and not adjectives" and his worthy quest for "precise measurements." Both participants were pleased to impart wisdom from the book, happy in the knowledge that what they were saying was correct and justifiable, and originally written by a man whose cleverness and scientific credentials were irrefutable. Many movement intellectuals play a largely ideological role, using scientific evidence to back up often emotive arguments, whereas MacKay's influence is based on providing scientific evidence as unassailable ammunition to those wishing to engage in the climate change debate.

Given the drift towards scientific rigor within the environmental movement (Yearley 1992), and alluded to by my participants, it is likely that intellectuals such as MacKay may play an even greater role in discussions of climate change and energy futures in years to come. When asked about his

[27] (as quoted on https://www.withouthotair.com/reviews.html)

belief in the necessity of the scientific peer-review process to underpin research, Craig explained that recourse to such is crucial to his group's campaigns:

> "**It's essential** (…) So all of those results that Anthony Ingraffea does are all peer reviewed, [he] will go on television against somebody from, we'll say a fracking firm, and he'll let the fracking man have his say and then he'll just turn around to him and say; "**he's not a scientist, he's a PR man**, he's never been peer reviewed in his life and he's gonna tell you what his boss is telling you to tell him to tell you"; they're pitching against the man who has had over a hundred and sixty peer reviewed papers on methane alone… it just falls flat."

The accusation Craig felt able to level at his hypothetical 'fracking PR man' that "he's not a scientist" is a powerful one, and one that has been levelled at contributors to this debate on all sides. It completely devalues the type of lay-knowledge that Craig himself possessed – but this didn't concern him. Craig had absolute faith in the ability of the organisation for which he spoke to employ suitably qualified – and ideologically compatible – people to do the research and, possibly, the thinking for him.

The importance of scientific credentials and using 'proper scientific methods' are underpinned by participant comments on Monbiot. Monbiot made his career as an investigative journalist primarily: but his transition through an epiphanic moment of pro-nuclearity increased his recourse to science as the underpinning of his arguments against the environmental orthodoxy (McCalman & Connelly, 2014). The efficacy of Monbiot's approach is seen in my data, where even those who reject his version of environmentalism acknowledge that he is respected and that he at least *tries* to underpin his decision with science: Lisa explained that "he's very respected… And I think he does *attempt* to be scientific, doesn't he?" while Ken said "he does actually do his homework, which I approve of."

7.2.3. Naturalists: voices in the wilderness

A few participants drew a connection between individuals described as 'naturalists' and environmentalists, "names that are commonly in the media associated with environmental protection" (Dave), such as David Attenborough, David Bellamy, and Bill Oddie; as well as Chris Packham and celebrity gardener Geoff Hamilton. The implication being that a person dedicating their life and career to the study of nature must be aware of the climate crisis. As Mark explained, "I suppose most naturalists become environmentalists; it's one of these things where you get to know about it and you see the reality then you are quite concerned about it…"

Of the naturalists mentioned by my participants, Attenborough has the clearest claim to movement intellectual status, while others – Packham, Oddie and Bellamy – provide examples of what happens when someone with movement intellectual potential gets it wrong. Of the latter, Packham's career did not suffer scandal of any kind, maintaining a role as a public figure through diversification, gaining recognition as "a naturalist, television presenter, writer, photographer, conservationist, campaigner and filmmaker."[28] Packham's chances of becoming a movement intellectual were never great: he was awkward with audiences and described as a 'Marmite' presenter by the Guardian newspaper in 2016; "he had many doors closed in his face simply because with his shock of spiky blond hair, which was modelled on the rocker Billy Idol, he looked different. After his contract with the *Really Wild Show* was up in 1995, his outspoken views and outlandish dress sense resulted in the BBC letting him go with only very occasional work" [29]. The Guardian notes rather drily that the BBC is "sensitive" to "any accusation of political campaigning" now more than ever (ibid.).

David Bellamy makes an interesting choice of "an environmentalist" for these participants. Although certainly having spent his life and career in a suitable manner for an environmental movement intellectual – working first as an environmental consultant, publishing scientific papers on the effects of pollution, then moving into conservation, environmental activism and television presenting – his career abruptly ended when he publicly came out as what is now referred to as a 'climate change denier'. Like the orthodox anti-nuclear stance that seems to be required of most environmentalists, the acceptance of man-made climate change is now a pre-requisite. When Bellamy commented on the 'reality' of climate change and the shrinking of glaciers his public platform dried. In an interview with the Telegraph newspaper in January 2013 he said "They froze me out, because I don't believe in global warming. My career dried up. I was thrown out of my own conservation groups and I got spat at in London" (Telegraph, 2013)[30].

The BBC is the most powerful televisual broadcaster in the UK, of which Packham and Bellamy have both fallen afoul. Bill Oddie suffered depression and suicidal thoughts after having been 'axed' by the BBC: an interview in the Telegraph newspaper reports that "he telephoned his producer and said: "It's as if you've been told not to talk to me". She replied: "We have."[31] The prestige of the BBC allowed Bellamy, Packham, and Oddie to make names for themselves as

[28] http://www.chrispackham.co.uk/chris-packhams-biography
[29] https://www.theguardian.com/media/2015/sep/09/bbc-chris-packham-countryside-alliance
[30] http://www.telegraph.co.uk/culture/tvandradio/9817181/David-Bellamy-tells-of-moment-he-was-frozen-out-of-BBC.html
[31] http://www.telegraph.co.uk/news/celebritynews/9121086/Springwatch-presenter-Bill-Oddie-BBC-investigated-me-after-mystery-incident.html

'naturalists' – as they were referred to by my participants – but once they became perceived as a liability they were cut loose. BBC destroyed their platforms thus cutting short any future roles as true 'movement intellectuals', as described by Eyerman & Jamison (1991).

David Attenborough is the only naturalist mentioned by my participants who has managed to maintain his good favour with the BBC and thus retain and build his personal public platform. His pronouncements on issues relating to the environment and to climate change have always echoed the prevailing scientific and popular opinion. He never 'rocked the boat' in the way that Bellamy did by dismissing fears of man-made climate change as 'poppycock' and has cultivated the correct aesthetic. It's entirely possible that Attenborough's previous career as a senior manager at the BBC during the 1960s and 1970s provided an insight into the institution's identity that has allowed him to weather the changes better than his compatriots. His wide recognition as a 'national hero' (Dave) also lends him some protection.

For my participants, the importance of having a public figure who championed their cause was felt very strongly, and it tended to be these figures that were mentioned when discussing elements of acceptable environmental behaviour or concern. For example, James described the struggle he and his wife experienced when they turned their small-holding organic 'before it was cool'. The turning point, he felt, was when the main presenter of the popular programme Gardener's World publicly championed the organic method of gardening and growing vegetables:

> "we'd open the garden up and say, "we're organic gardeners", and people didn't know what that meant, they had no idea. And then Gardener's World was on TV, with a guy called Geoff Hamilton. And I can remember it – Geoff Hamilton said, "I've turned my garden organic" and it was great, the organic movement was growing, it was becoming less freaky and weird and more mainstream..."

The ability to use a public media platform to sponsor, promote or create discourse is a key factor that a movement intellectual their status. Geoff Hamilton's moment of influence in the 'organic movement', as James calls it, was fleeting: but the effect of his pronouncement and actions has had a lasting effect, contributing to a then growing broader environmental movement and incorporating a fear of chemical pesticides entering the food chain, thanks in part to Rachel Carson's *Silent Spring* (1962). The movement intellectual's contribution ought to be in step with the overall direction of environmental thought and they should be willing to 'go the extra mile' for the cause. Attenborough has achieved this extra mile and is admired for working tirelessly past when most would retire. Hamilton's 'extra mile' is humbler, but clearly struck a chord with James: "[Geoff Hamilton] said "You can't be half organic. You're either it or you're not." And in a way,

I feel that environmentalists are like that – you're either for it or you're agin it [sic]. You understand it, or you turn your back on it. You can't be half of it."

7.2.4. Green politics

In general, politicians' commitment to environmental principles is not widely accepted – although there seems to be a left/right bias. Jeff explained that on his "continuum of scepticism," he'd believe a left-wing politician's environmental claims more than those of a right-wing politician and felt that personal politics correlated with environmental concern. Despite the general distrust of politicians, the UK Green party, then led by Caroline Lucas, were notable exceptions: "Caroline Lucas comes to mind: that's clearly someone who I think is an environmentalist" (Brenda).

Overall, six participants mentioned Caroline Lucas directly (Mark, Dave, Mike, Lisa, Brenda, Jeff) but more possibly knew of her through their personal connections with the Green Party. "The person I admire most is Caroline Lucas, I think that she embodies a very clear belief that the environment is fundamental, and she has a way of connecting it to everyday politics and making it not sound irrelevant; she's very knowledgeable… she's got what it takes" (Lisa). Dave felt concerned that perhaps generally she was not as well-known as he would have preferred ("I think if you went to a lot of people in the street and said who's Caroline Lucas, they wouldn't have a clue"), though no other participants seemed to share that worry. There was a clear correlation in most participants' minds between membership of the Green Party and 'being an environmentalist'. Nonetheless, Sue, who at the time of being interviewed was prominent within the local Green Party, said that she had never met anyone who automatically assumed she was an environmentalist. When asked if she had ever considered herself in that light, Sue replied "Not exactly, no, which sounds really odd, doesn't it?" The issue of ascribed and rejected environmentalist identities has been discussed in Chapter 6.

Lucas, while lacking the scientific and journalistic qualifications that form the groundwork for other movement intellectuals' influence, has ethical credentials that give her pronouncements and actions huge weight in the eyes of her admirers. Her dedication to such concerns as the rights of 'deprived and minority communities', animal welfare and the environment help to establish her as someone with integrity and virtue in stark contrast to those politicians who use environmental rhetoric as a "whitewash" (Tim). Movement intellectuals have the important ability to inspire others in a manner sometimes unattainable by large collective organisations. Lucas herself cites Jonathon Porritt's environmental manifesto *Seeing Green* as her inspiration for 'dedicating her life to [the Green Party]' (Lewis, 2007). Caroline Lucas and the Green Party as an organisation have a clearly defined anti-nuclear stance; one that Lisa was concerned had been formed on 'principle'

rather than 'science'. Such is the strength of Lucas' integrity that even staunchly anti-nuclear participant Mike said that if she were to reverse her opinion on nuclear power, he would follow: "if Caroline Lucas stood up and said, 'do you know what, I've done the research, this is OK, this isn't too bad'; then I would listen to someone like her, I'd believe her. Whereas I don't believe a lot of the people who say there's no environmental damage from nuclear power."

Lucas' ethical credentials are bolstered by being prepared to 'go all the way' in support of her chosen campaigns and protests. Mike seemed proud that Lucas had been arrested on a fracking protest, explaining that showed "she's living it a bit more, isn't she, rather than just being a politician". The implication is that Lucas has a measure of trustworthiness from valuing her environmental principles more than her personal freedom. Mike's assertion that he would 'listen to someone like her' on a topic such as nuclear power indicates the power of the movement intellectual to shape the discursive landscape. Lisa also mentioned Lucas' willingness to take part in and defend direct action campaigning as a reason why she is admirable and an 'embodiment' of environmentalism. Curiously, this stands in contrast to participants' own unwillingness to be associated with that type of environmentalism. The wider impression given is that Green Party politicians are a different breed than the majority of those to be found in Westminster. Caroline Lucas was held up as an epitome of what it means to be a Green Party politician, of what it means to live by your principles, and broadly of what it can mean to be 'an environmentalist'. This makes her an extremely influential movement intellectual.

7.2.5. Divine Authority

Often the credence of movement intellectuals prominent in the overall dataset is rooted in a discrete, well-received piece of work – a book, a political campaign, a television programme. Often, my participants themselves introduced me to these works and the movement intellectuals themselves. I had expected some mention of Monbiot, for example, but was surprised to hear so much about Lovelock whom I had viewed as being of a previous era, or Naomi Klein and her book *This Changes Everything* prior to commencing the second stage of data collection. Similarly, the faith participants introduced me to a written text which of great importance to them, as was its author: the *Encyclical Letter Laudato Si' of the Holy Father Francis on Care for our Common Home* (Pope Francis, 2015).

Firstly, it is crucial to note that discussion of the Encyclical was not limited only to those participants who were Roman Catholic, as might be expected. The Encyclical itself was addressed to all people of the earth, something which Mark (Roman Catholic) found very heartening: "he has addressed that to everybody in the world; whereas most encyclicals are to Catholics that one's

addressed to everybody... which was a recognition of something that loads of people have thought for a long time that this is an issue for the whole of humanity, we have this one common home." However, there were only two non-Catholic Christian participants and the main contributor for this topic, Ken, was very distinctive. Ken discussed the Encyclical in the greatest detail, describing it as one of the most "hugely encouraging things" to have happened in recent years regarding the environment. He explained that in particular, "the tone struck there was one of the most encouraging things that has happened, largely because it was reinforced – shot through – with a profound humanity."

Those Roman Catholic participants who mentioned the Encyclical were generally unable to speak in detail about it, giving the distinct impression they had either not read it or hadn't read past the first few pages. It is a daunting document: "they all have names in Latin…" (Mark). Sharon's description of the Encyclical as a "massive list of things about looking after the environment" is so inaccurate it was clear that either she had not read it, not understood it, or skipped crucial sections.

The Encyclical's argument is most concisely described as a non-secular mirror of Naomi Klein's *This Changes Everything*; obviously an oversimplification but the key themes are strikingly similar. The religiosity one expects is toned-down: perhaps purposefully to make the Encyclical more accessible to a global audience. Pope Francis calls for what he terms an 'integrated human ecology,' explaining that since "We are faced not with two separate crises, one environmental and the other social, but rather one complex crisis which is both social and environmental," we need to seek strategies which incorporate "an integrated approach to combating poverty, restoring dignity to the excluded, and at the same time protecting nature (Encyclical, 2015: 104)."

It was unclear to what extent the content of the Encyclical drove the opinions and behaviour of my participants with regards to how they interacted with the environment or with environmental thought, especially considering the lack of in depth reading of the text itself. What was clear, however, is that each person who mentioned the Encyclical knew that Pope Francis was telling the world that we should all care what happens to the environment. This Encyclical, while not being the first to mention environmental or ecological issues, is certainly the first to be wholly focused on this one issue, as well as being the first addressed to the entire world, rather than just Catholics. To my participants, it was these factors which impressed on them the importance of what they felt Pope Francis was trying to convey – that the environment should be the main priority for our times.

Regardless of the content of the Encyclical, my participants still felt it was important, and it was important because it came from Pope Francis. While Monbiot and Klein have credentials based on journalistic good practise and built on years of textual outputs in various books and columns, Pope Francis was relatively unknown until his ascendance to the papacy in 2013. His credentials for these participants rely partly on his occupying a position that has held power over the thought of Catholics for millennia, but also partly through his actions since taking office. On his ascendancy to the papacy he was seen worldwide as a new sort of pope, a breath of galvanising and modernising fresh air after the conservative papacy of Benedict XVI – regardless of whether his papacy results in drastic changes in key areas of church policy. Pope Francis has ethical and moral credentials, which give his words weight, or give weight to the topics that you know he views as important. As Sharon said to me, "I do consider the Pope more my leader than the leaders of the countries I live in, 'cause I think he follows a much higher leader who I believe in; he doesn't only preach it, I think he lives it..."

The data indicated that participants had absorbed some of messages contained within the Encyclical. Firstly, the idea that creation is a gift from God and that to squander that gift is sinful; "I'm Roman Catholic and to me the whole notion of creation and of a creator means that I can't reconcile the idea of my faith and not having some degree of care for the environment" (Debbie). Secondly the notion that as society changes we become more aware of how the world fits together and how our actions can have far-reaching consequences; as Mark explained, "I suppose we think in a different way than people centuries ago who didn't know all the world there was. We know there is this finite world, there's this one globe and there are global impacts on it."

It is reasonable to suggest that for these participants, Pope Francis embodies the role of a movement intellectual on the environment alongside other issues which the church is more traditionally concerned with. It's often hard to imagine that pronouncements by a Catholic leader not resident in the country could have an impact in Britain's increasingly secular society. It's easy to forget that the Catholic Church is, and has always been, immensely powerful in many countries around the world. Even 'modern' states like the USA have not managed to separate church and state, despite their constitution. Officials are sworn into office with their hand on the Bible, and not one president of the USA has been anything other than Christian. Many presidential candidates make their religious affiliation obvious as an appeal to the overwhelmingly conservative, Christian society which they hope to govern. Although Britain has managed to slough away some of these overtly religious markers, there are still many who grew up in a society when going to church and Sunday school was just what many people did, with little thought perhaps to whether God, heaven or hell truly exist or not. This still affects the society we live in today. Lynne-White, the progenitor

of the dominion/stewardship debate discussed in §2.4.3, put it perfectly: "We continue today to live, as we have lived for about 1700 years, very largely in a context of Christian axioms." (1967: 1205)

7.3. Chapter conclusion

All the discourses presented in this Chapter are deliberately presented using religious terminology, vocabulary and metaphors. The purpose of this has been to make the possibility for viewing environmentalism as an implicit religion clear through the use of analogy, and to ensure both researcher and reader are primed to see where new insights become available as a result of this research approach. Through this approach the chapter sought to address the sub-questions "What evidence of Christian inheritance can we see in participants use of environmental discursive resources?" and "In what ways can we identify environmentalism as fulfilling the function of religion in participants' lives?"

In terms of what specifically Christian inheritance is visible in participants' environmental discourses, Original Eco-Sin stands out in particular. It re-purposes Christian *mythoi*: specifically the story in Genesis of Eden, the temptation of Eve and the subsequent fall from Grace, and the doctrine of original sin drawn from this story by St Augustine. Participants commonly expressed a belief in some previous golden ecological era when humans had not pursued a harmful and exploitative relationship with the environment. Likewise, many expressed the view that in the pursuit of technological progress, humanity had blindly given in to greed and temptation without considering the long-term consequences for both the species and the planet. This applied both to nuclear energy processes and to other energy technologies that came into the conversation, such as fracking. Very pessimistic statements about the likelihood of humanity overcoming its inherently selfish tendencies permeated the dataset – which I have elsewhere referred to as 'societal pessimism' – were indicative of an enduring notion of humanity having fallen irrevocably from grace, hence the title of the discourse. Drawing the key points of the Original Eco-Sin discourse together like this emphasises how the religious framing adds new insight: without the religious interpretation the content of the three main factors discussed here do not so obviously form a single societal narrative. An alternative analysis might not have linked these themes and indeed my initial thematic analysis (see §5.5.5.) did not group these themes together.

The E'pocalypse discourse also re-purposed examples of Christian *mythoi* – most obviously through themes that occur throughout the Book of Revelation. It was, in aggregate, functioning as an implicit eschatology for my participants. I heard stories about how the world would end; either in fire and damnation as the world heated beyond the ability of any life to survive (with a

penultimate period of trial and tribulation as humanity crowded onto ever smaller inhabitable land masses), or through a process of transformation through which some life may survive but "it won't be us" (Richard): "I mean obviously the planet over a millennia will heal itself, once the causes that are producing the problems (humans) have been eradicated" (Steve).

The interaction between Eco-Guilt and Infrastructural Lock-In is of particular importance, as without the contribution of Infrastructural Lock-In, it seems that Eco-Guilt may have stood a chance in producing eco-action. As my data shows, however, the motivation towards environmental action that participants felt due to Eco-Guilt was effectively negated through both the reality of Infrastructural Lock-In, and its discursive power in their lives. Mark was struggling with the reality of his economic situation preventing him from achieving personal coherence (Ruiz-Junco, 2011), and Pat discovered (through her blueberries dilemma) that discursive Infrastructural Lock-In meant past consumption choices had not been as environmentally superior as she had thought.

The combined result of Infrastructural Lock-In, Original Eco-Sin and E'pocalypse meant that rather than feeling motivated, participants were discouraged and felt that environmental action at the individual level (which often involved personal sacrifice of some kind) was not worthwhile. Eco-Guilt did not produce eco-action – and as mentioned at the end of §7.1.3., this is in direct contradiction to the findings of those scholars such as Mallett (2012). The key differences between my approach to this issue and that used by Mallett and others are methodological. The eco-guilt literature[32] I have found is largely from behavioural psychology and is overwhelmingly quantitative, and as such far removed from the type of research and analysis I have performed here. As a result, the studies were unable to ask the 'how questions' that Foucauldian discourse analysis is so well placed to investigate (Hajer & Versteeg, 2005: 176). Also, none of the eco-guilt papers I could find discussed the issue of religion. Further discussion of this issue and of how the notion of Catholic Guilt might provide additional insight is left for Chapter 9, as part of the answer to Principle Research Question Three: "What new ways may be illuminated for the social sciences to engage with and understand environmental controversies and debates?"

The existing eco-guilt literature also does not touch on the possible role of specific individuals in providing guidance for discouraged lay environmentalists as analysed herein as movement intellectuals. §7.2 and its subsections shows that movement intellectuals as varied as journalists, scientists, politicians, naturalists and even the pope functioned implicitly as spiritual leaders or prophets for my participants. Through reading their books and columns, watching their shows and

[32] Not capitalised, as not referred to as a discourse in the extant literature.

generally engaging with their output, my participants were able to feel intellectually engaged in, active in, and connected to an environmental movement, which they otherwise found frustrating or alienating.

The following chapter first presents a breakdown of how the nuclear discourses reviewed in §4.3.3 were used by my participants and presents discourse packages of the key discourses that my participants reached for when discussing nuclear power. The analysis brings out the inter-relational structure of the nuclear discourses and ensures that the second half of Chapter 8 is read with an awareness of the specific discursive resources my participants had to mind when debating the role of nuclear in the environment.

Chapter 8 | Doctrinal Challenge: the nuclear issue

8.1. Introduction

As an emblematic issue for environmentalism, nuclear power is extraordinarily appropriate for an implicit religion discourse analysis, as it draws together both environmental, scientific and religious discursive themes. The complexity of the issue was well-understood by my participants; the majority indicated a good understanding of the multiple factors which contribute to the nuclear debate – despite the foundational anti-nuclearism which many of them confessed to having grown up with. Methodologically, nuclear power was used to help participants navigate the philosophical ideas of environmentalism and apply them to the issue at hand. 'Nuclear' discussion inevitably involved debate on how humanity should – as opposed to could – act in relation to the environment and what this might mean for being 'an environmentalist'. Furthermore, participants felt able to discuss what they felt this might imply for the future of environmentalism; whether discursive struggle over the environmental credentials of nuclear power might damage or diminish the environmental message.

In the following chapter the nuclear issue is analysed first in isolation, and then in combination with the environmental discourses discussed in Chapter 6 and 7. In sections 8.2 to 8.6 I present an analysis of data which pertained to the nuclear discourses which were identified as extant in the literature review (§4.3.3.). Then, in §8.7 I present a synthesised analysis section which looks at how the nuclear discourses were creatively incorporated into the environmental discourses by my participants.

8.2. Nuclear discursive landscape

Following the literature review, I was expecting six key nuclear discourses to be represented in my data, alongside the Nuclear Exceptionalism meta-discourse documented by Gabrielle Hecht (2006). Those six discourses – Nuclear Dualism, Nuclear Stigma, Techno-Rationality, Abstract Faith in Science, Energy Gap and Energy Independence – were, as expected, all present to varying degrees. Nuclear Exceptionalism was also conspicuous, but as my analysis progressed it clearly worked better as one of three cross-cutting themes: along with Nuclear (Mis)Trust and Western Superiority. At the point where each theme intersects a specific discourse, key discursive statements or markers were found, examples of which I have included Figure 3. The quantity of data for each discourse varied a great deal (e.g. lots of Nuclear Dualism, very little Energy Independence) while the bigger themes ran all the way through the data. Therefore, the chapter is structured according to those themes, rather than the six discourses which seemed so important in the literature review.

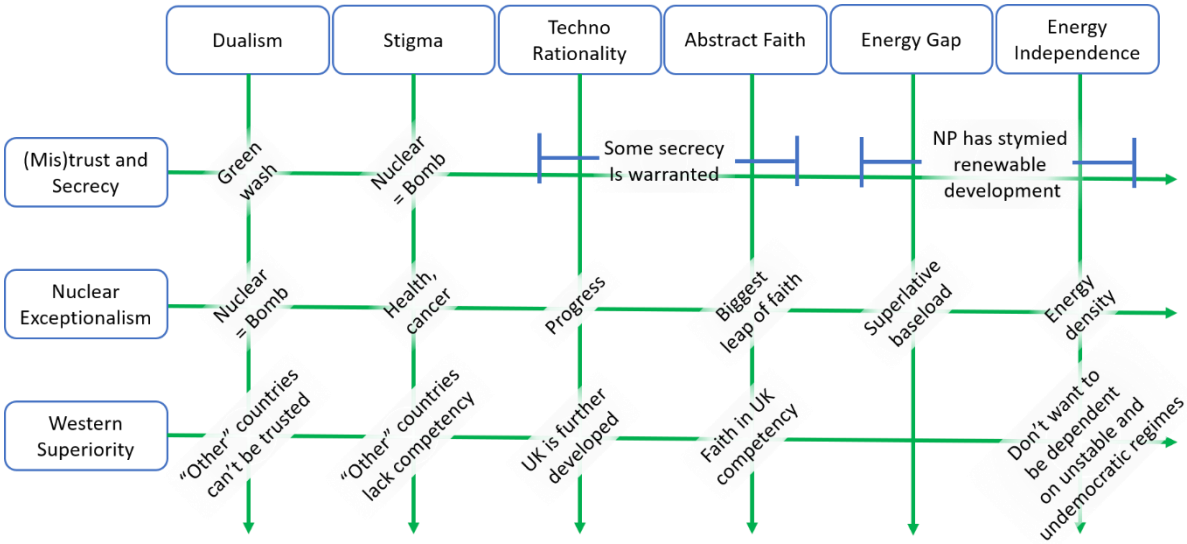

FIGURE 3: NUCLEAR DISCOURSES AND CROSS-CUTTING THEMES

One of my initial aims had been to use the data I gathered to update the discourse packages found in the literature. Given the relative paucity of data on some of the discourses, this is not entirely feasible. Instead, this chapter includes updated discourse packages for those that are most strongly supported in the sample.

8.3. Nuclear Exceptionalism

As discussed in the literature review, Nuclear Exceptionalism is known mainly through the work of Gabrielle Hecht, who described how nuclear power was constructed as being exceptional through a frequently reinforced perception that the materials, people, research, scientific acumen, lethal and energy potential are all "fundamentally different" from other energy sources (Hecht, 2006, p. 321). The presence of this theme in my data was expected: its presence was indicated from *superlatives* as discourse markers. Participants dealt with the difficulty of describing something which is so 'fundamentally different' by modifying the adjectives they used, to figuratively place all things nuclear at the upper or lower limits of whichever quality they were discussing. Nuclear power was therefore 'the best' or 'the worst,' the 'most dangerous'. the presence of superlatives helped me to distinguish the elements of the six nuclear discourses most closely linked to nuclear exceptionalism.

8.3.1. Total annihilation (Nuclear Dualism)

"The historical development of civil nuclear power is intimately linked to military nuclear weaponry" (Doyle, 2011: 109). Doyle took her inspiration from Gamson and Modigliani's emotive declaration that "The culture of nuclear power has been indelibly marked by Hiroshima and Nagasaki. Public awareness begins with the images of sudden, enormous destruction, symbolized in the rising mushroom cloud of a nuclear bomb blast. Even when discourse focuses on the use

of nuclear reactors to produce electricity, the afterimage of the bomb is never far from the surface" (1989: 12). My data strongly supports Gamson and Modigliani's statement; participants from varied age groups and occupations clearly used the Nuclear Dualism discourse to make sense of nuclear power. For many, the first impression or memory of 'nuclear' was extreme warfare. For example, "I knew about nuclear power from Hiroshima" (Liz) and "…the ideas that I associated with nuclear would have been about the bombs… Hiroshima and stuff associated with the Second World War" (Nancy). Liz was in her late 60s, had lived through the Cold War and had family members who had been engaged in nuclear weapons research. Nancy was in her mid-30s and had no such experiences – yet both used the same explanatory event, the bombing of Hiroshima in Japan at the end of WW2, as a fixed point of knowledge from which to extend their explanation of how they felt about nuclear power. For many of my older participants, their "earliest memories of nuclear were not about power – they were about nuclear weapons." (James)

Although there were no explicit superlative discourse markers used when discussing the bombing of Hiroshima and Nagasaki, those events function in this context as superlatives in and of themselves. Those bombings are the only time nuclear weapons have been used in warfare; the impact in terms of loss of human life, material destruction, and global psychological trauma from a single weapon has never been surpassed. Their example was enough to keep the Cold War 'cold', and the fear of nuclear war and nuclear weaponry remains a global issue. In my sample, those participants over the age of 50 (give or take) had all lived in a world that was overshadowed by the threat of nuclear war. Thanks to the examples of Hiroshima and Nagasaki, they had all been aware nuclear war meant total and immediate annihilation. Two participants gave examples of having experienced that fear when they were very young. Donna recalled the Cuban Missile Crisis: "I remember going to bed one night and wondering if I should be there in the morning. It was very, very frightening. I was old enough to have an idea about the implications..." Kathy reminisced about having nuclear drills at school on 'duck and cover' and how the 4-minute warning permeated daily life: "There were articles in newspapers about "*What Would You Do*" in the 4 minutes; it was horrible. But I mean I was a kid, and it was scary for quite a long time. There used to be this debate about whether you'd be better off actually dying than trying to survive." The inevitable result of this was fear. My dataset contained frequent examples of extreme, *consistent* fear directly linked to the prospect of nuclear war. Liz explained that she had been "Frightened. That's the word, frightened: seriously frightened. And I've never changed from being 20, to being 66." Kathy was "really scared," and her sister was "really traumatized."

Aside from the direct and obvious problems that participants had with the existence of nuclear weaponry, the real power of Nuclear Dualism lies in how the civil and military aspects of nuclear

technology become conflated in people's minds. In aggregate, although it was rare for participants to equate nuclear reactors with nuclear bombs (although this did happen once or twice) the most common discursive trope was to equate the destructive power of a potential accident with the destructive power of a nuclear bomb. Participants were looking at it from the perspective of how they might be affected should either event occur – and they saw little difference between the devastation of the area surrounding Chernobyl and the devastation of Hiroshima at the end of WWII[33]. Donna gave one of the clearest examples of Nuclear Dualism when she explained that "there isn't another form of energy which is so closely linked with destruction. I really think that you know, certainly in my generation, nuclear is a bomb. It's so closely linked."

The potential for destruction – either bomb or reactor accident – was described as "dangerous beyond description", "incomparable" (Mary) and "inherently and absolutely overwhelmingly dangerous" (Richard). Even participants like Richard, who were more willing to accept future civil nuclear development to reduce carbon emissions, were unable to forget the potential for destruction: "it's that fundamental thing about how potentially dangerous it is because it isn't just a small accident, you have a bloody massive one. You can hardly say you've solved England's energy problems if you end up devastating the north of England or wherever it happens to be." When discussing the potential effects of a nuclear incident, participants used superlatives in a variety of ways. Some were quite simple: for example, describing the potential consequences as "catastrophic" (Nancy, Pam). Others were more complex: Mark explained the exceptional nature of the danger presented by nuclear materials through his discussion of waste disposal options. He'd read an article discussing various methods for the disposal of radioactive materials and had been shocked to discover that even a volcano – one of the most destructive natural phenomena on our planet – would not be enough to neutralize the elements involved:

> "It's quite amazing to have something so dangerous that even if it went through a volcano we would still be scared of it… you know, I can't think of any other thing. Like why, why are we even making that, you know? It's much more dangerous than the stuff we mine in the first place; we've done something to it to make it really, really unstable and scary."

Mark's relatively obscure example – that nuclear power contains more potential risk than a volcano – becomes merely a convoluted way of using a superlative. Other participants spoke about the "worst-case scenario" and how nuclear power is "incomparable in terms of the level of consequence" (Nancy). The consensus was clear among those who disliked all things nuclear: "it's

[33] In truth, the lasting effects on the two areas are not very comparable; but it's the perception which counts here.

too dangerous, it's far too dangerous" (Craig), because "when it goes wrong it's going to be disastrous" (Kathy).

8.3.2. Health fears (Nuclear Stigma)

When Nuclear Exceptionalism intersects with Nuclear Stigma, the key discursive marker in my data became that of health concerns. The stigmatisation of nuclear technology due to health links had only directly been experienced by two participants. Karen and Maggie both brought up the issue of health concerns linked with nuclear power in the context of child death. Maggie linked the health problems and subsequent death of a cousin's child to the family's proximity to the Sellafield nuclear site, saying that the child had been born with "changed DNA" and that it was "all to do with Sellafield." Karen explained that she had been in northern Spain when the Chernobyl incident occurred and linked the miscarriage she had at the time to the fallout from the reactor drifting across Europe: she also mentioned that she had been unaware of the reactor incident and the radiation cloud until she had returned home to England. The implication being, that she had been exposed to radiation unknowingly during her time in Spain, and that was the reason for her having lost her baby.

The issue of radiation being un-knowable – and therefore unavoidable – was brought up by other participants in the context of a specific health concern; cancer. People were aware that 'nuclear = radiation' and that 'radiation = cancer'. Cancer has become one of the most feared diseases in wealthy countries, terrifying because it is (relatively) indiscriminate and very difficult to treat, even by highly developed healthcare systems. The threat of cancer becomes the superlative that links nuclear exceptionalism to the nuclear stigma discourse. As Tim complained, "You cannot sense it. Our senses are not geared towards picking up radiation." The intangible nature of the risks associated with radiation were summarised as "You can't see it, you can't touch it, you can't measure it... you get it. Or you don't get it" (James). And, "everybody knows that exposure to nuclear material causes cancer, and cancer equals panic" (James). Tim told me about Wilhelm Röntgen, who was awarded a Nobel Prize for discovering X-rays. Tim explained that Röntgen had "used his wife as a guinea pig and of course, both of them died of cancer", "of course" being used by Tim to indicate that death was the inevitable consequence of researching X-rays. Tim was vehemently against nuclear power and hailed from Germany, a country known for its fiercely anti-nuclear stance, and its decision to phase out nuclear energy in the wake of the Fukushima incident (Ho, 2014: 966). Craig, a staunch Greenpeace supporter and unsurprisingly anti-nuclear, explained in detail how "radioactive material" was "responsible for bone cancer, skin cancer, breast cancer, liver cancer, etc." Mike also mentioned cancer when asked about concerns had about greater development of nuclear facilities in the future, saying that cancer was always "in the background,

all the health issues around it; people don't know the full damage that it's doing, there's a lot of unexplaineds; it's the unknown."

Again, we came back to the 'unknown' issue. James expanded on the problem of being unable to tell if we are being exposed to radiation using the example of smoking: "exposure to nicotine causes cancer doesn't it? But if you live near a nuclear power plant you haven't got a choice. If something's happening and you don't know about it, you're going to be exposed to it and you don't know. You've got this little worry bead in the back of your brain that thinks about it." If a person happens to live near a nuclear facility, the intangible nature of radiation and its effects on human health are unavoidable risks: if an accident occurs, someone living in the vicinity cannot choose to be unaffected. When researching nuclear industry attempts to normalise the risks associated with nuclear power I found discussion of 'death statistics': papers arguing for the expansion of nuclear energy output would state that the probability of a person dying as a direct result of a nuclear incident was several orders of magnitude lower than the likelihood of the same person dying in a car crash, or other relatively mundane event. Other than the obvious distastefulness of telling people the various ways they could die when living their lives, these papers often neglect the point James makes in his smoking analogy. There is a concern that nuclear power and its effects are *unavoidable and uncontrollable* – a person cannot choose whether to be affected and cannot control the effects once they realise they may have been irradiated. This fear surfaced momentarily in statements which likened nuclear knowledge to a 'caged beast' (Dave), a genie that could not be returned to its bottle (James), or one of the great evils to have escaped Pandora's box that we hope we might be able to "keep a lid on" (Dave).

8.3.3. "Not beyond the wit of man…" Abstract Faith In Science and Techno-Rationality discourse cluster

The point at which the Techno-Rationality and Abstract Faith discourse cluster intersects with *nuclear exceptionalism* is one of the most complex discursive nexuses in this chapter. In Figure 2, the connecting points are labelled with 'progress' (Techno-Rationality) and 'biggest leap of faith' (Abstract Faith). Easily detectable 'Exceptionalism' discourse markers – like the use of superlatives – are less obvious in this subset, because nuclear science is itself an implicit superlative. The perception exists that because of the extraordinary risks of nuclear technology, nuclear research requires the best minds the world has to offer. Similarly, a researcher must be exceptional if they work on nuclear technology. The myth of progress is so deeply embedded in our society that those working on the 'cutting edge' of scientific development are seen to lead the way into the future. For over a century, the energy contained within the atom has been constructed as a key facet of a future technological utopia, wherein all the past problems with reactors and radioactive waste will

be solved through the efforts of those extraordinary, exceptional scientists. As we forget the basic scientific understandings of how the universe works taught in school, the bigger the leap of faith required to feel comfortable living in a world where a tea-kettle could be powered by a nuclear reactor.

In my data, Techno-Rationality and Abstract Faith combined to create a discursive situation where participants expressed faith that (undoubtably exceptional) nuclear scientists were working to solve current problems with nuclear power (an exceptional energy issue), and were certain that with enough time, effort and funding, these efforts would pay off. Participants often accessed these discourses together within the same statement or paragraph. Some expressed a feeling of certainty that technology would 'move on', progress or evolve, thereby indicating an assumption that technological problems of today would be solved in future. The certainty of future nuclear progress was not limited to those with pro-nuclear positions: Sue and Karen both expressed themselves as being staunchly anti-nuclear in all its current forms yet felt certain that "there will be advances where ultimately one day nuclear might be relatively, whatever safe means…" (Sue) and "surely the technology will have moved on, so the new ones will be a better class of thing than the old ones..." (Karen). On the pro-nuclear side participants were less grudging with their faith in future progress: reactors would "continue to get safer and safer" (James) since "what's normal for technology is that what we did in the past was not the best idea. Of course, it's always going to evolve" (Charlie). Besides as Richard explained, "…most of the criticisms that you get of nuclear power stations are criticisms of what were the old second generation nuclear power stations and we're moving towards the fourth generation now."

Some participants were so confident in Progress that they expressed certainty that some problems had already been solved. The example commonly reached for was that of waste disposal. Lindsey happily declared that "as with past problems," nuclear waste was something she was "sure they've worked out." Richard was sure that issues with nuclear waste, such as how to render it safe and how much there was in the UK, were "exaggerated." Kevin explained that although he knew that nuclear waste was considered "the biggest limiting factor" preventing civil nuclear development, he felt that "they're better at dealing with nuclear waste now than they used to be: that's my perception of how things are, anyway. I think I'm quite happy that we've probably solved that…"

A curious aspect of the combination of Techno-Rationality and Abstract Faith In Science was that participants linked the extraordinary feat of successfully splitting the atom with the exceptional intellectual qualities of humanity in general. Richard declared that nuclear reactor safety was "not beyond the wit of man" and Pam declared that since "we're very, very clever, you know" there

was no reason why humanity can't "harness that to generate the energy we need" whether by nuclear or other means. The problems were surely "not insurmountable" (Kathy), and besides as Donna exclaimed, "presumably they're working to make these things safer all the time, I've no doubt there's research going on all the time for that. I guess someone is working on it!" That 'someone', was "a whole lot of people that are a whole lot smarter than me" (Charlie), whom he trusted "to do the best job possible." An intriguing extension of the glorification of scientists was the devaluation of participants' own intellectual contribution and opinions. Much of my data was littered with expressions of "you know?", "do you know what I mean?", "I don't know" and "it's not for me to say". For clarity many of these have been edited out but the resulting collection of anacoluthia gave both the impression of a struggle for articulation and an underlying sense of personal insecurity. Participants felt they were ill-qualified to be talking about these topics; that because they didn't have a degree in particle physics or hadn't studied environmental management their opinions were not as important as those of 'real' scientists. A good example was Richard exclaiming "you've been studying it so why for God's sake should I be saying this?!" when he was one of the most well-informed participants regarding the current state of nuclear technology and energy policy.

8.3.4. The best baseload (Energy Gap & Energy Independence)

In the literature on nuclear discourses a common trope is that nuclear energy is the best option for 'baseload' power and the exceptional 'energy density' of nuclear fuel materials makes it less susceptible to disruptions in supply, such as with carbon fuels. The terms 'baseload' and 'energy density' are key discursive markers for the Energy Gap and Energy Independence discourses but were almost entirely – and conspicuously – missing from my data. With hindsight this likely to be an unintended sampling artefact: they are relatively technical terms that I would be more likely to hear from individuals active in the energy industry. It's unsurprising that Richard, who had retired from a long career in the UK coal-energy industry, and Charlie (a geologist currently working in environmental consultancy) were the only participants to use those terms. Another participant who was working as a research scientist specifically interested in nuclear power as a means to move on from coal referred to the ability of reactors to generate a "constant stream" of power (Gary), a clear reference to baseload power.

Despite participants not using these technical discourse markers, the data revealed that many participants, by discussing the relative immaturity of renewable energy technologies, accessed the Energy Gap discourse by proxy. The key discourse markers used were terms like 'intermittency,' 'inconsistent,' 'steady' or 'stable'. For example, Joe expressed his concern about "fluctuations in the grid," with "inconsistent" renewables available to us currently having "significant drawbacks."

Whereas, "You can turn a coal power station on and off, and obviously a nuclear power station just hums along steadily." Lindsey concurred, saying that while solar power was "not brilliant" and wind power was "dodgy," "You get sustained use with nuclear." While conducting some research on community energy projects in a local town, Pat explained that nuclear power was there to "provide grid stability in relation to the instability or temporal variance of the renewable sources of energy." Mark was concerned about how an intermittent energy supply from renewables might affect daily life: "…wind power and solar power are very, very intermittent and we don't really all want to have a light that goes on in our house and says when you can or can't make a cup of tea; we need a more stable electricity supply." Richard was scornful of the idea that the UK could completely replace fossil fuels with renewables at any point soon:

> "it's just foolhardy to think that you're going to generate a lot of energy by putting wind farms everywhere. I mean the coverage would absolutely have to be enormous to match a big coal-fired power station or oil-fired power station, you know, you're talking square mile after square mile of wind farm to provide the equivalent... and of course then you haven't ruled out the need for baseload because it's still an intermittent."

Steve agreed with Richard's position, stating that "it will be impossible for Britain to get all its energy from renewables because there just isn't enough land surface." With the widely-held perspective that there was, undoubtedly, an energy gap looming and that renewables were not a realistic possibility, many participants felt that the urgency of the climate situation warranted nuclear power becoming a necessary evil. Doing nothing was simply not an option, because "we're running out of time. We've got to do exceptional things now" (Richard). For a core group of participants, nuclear power was the exception now warranted due to "the frustration and the urgency; something needs to be done now" (Sharon). "Moving on from fossil fuels" was "the single most important thing environmentally that we can and must do immediately," (Dan) and for that to happen nuclear power was needed as a "bridging technology" (Dan, Joe).

The term "bridging technology" is very important. Energy Gap discourse was widely accepted by my participants because of the perception that is was *pragmatic*, since "any sane person would know that nuclear is just a temporary solution" (Karen). It provided a way for participants to accept the unacceptable, since it would only be "short term" (Nancy), a "stop gap" (Karen) "on the premise that they would then be developing optional energies" (Liz). There was a deeply held idea that smaller evils were acceptable if they contributed towards the greater good of a more sustainable future. As Craig exclaimed, "there is no real win or lose, it's either win or we don't have a planet,

we lose it." Despite the urgency of the situation, Craig still felt that bridging with nuclear power was a step too far. Not so for Ken, for whom "the nuclear nightmare has been replaced by the climate nightmare." He explained his reasoning as the following: "we just have to do nothing, and it will be a nightmare. If we go on as we are, we are going to screw the planet. With the nuclear thing, somebody had to say, 'Press that trigger'. It required a positive act. All we need to do now to mess up the planet is to go on as we are."

8.4. Nuclear (Mis)Trust

Due to the exceptional nature of nuclear technology and nuclear risks/benefits, participants often found themselves expressing frustration. They felt a) totally powerless in the face of nuclear threat, b) totally dependent on faceless authorities and experts and c) that they had no options other than either to trust or to live with mis-trust. Due to the specific nature of this cross-cutting theme, there was an abundance of data linked to the Abstract Faith In Science discourse, as participants expanded their uncomfortable faith in scientific experts to include their total *lack* of faith of government and regulatory authorities.

8.4.1. Secrets and lies: faith and progress

In my data, there were very clear examples of participants struggling with issues of trust regarding both the nuclear industry and the government. When speaking of civil nuclear power in the UK participants often seemed to conflate the industry with the state, despite there being a clear understanding that the nuclear industry is, more than ever, a private industry. Rob worried about the extent to which the nuclear energy industry was "embedded in the state security apparatus," and Richard worried that privatisation had resulted in loss of control over standards and security:

> "At the end of the day it's private companies behind these nuclear power stations. You do have to ask yourself the question 'what level of control on standards and so on?' Are the nuclear inspectorates adequate? I mean you can't deny the fact that it is such a potentially dangerous fuel – it's a worry that it's in private hands. Can we be held to ransom in any way?"

The concern over the 'adequacy' of the regulator was likewise referred to by James, who made the point that people have "good reason" not to trust as "they're not exactly independent" and because "Some government agencies have been known to toe the government line even though they knew better." Participants can be forgiven for confusion about the level of state participation in the private nuclear industry, due to numerous examples of state meddling (for example, the furore over the strike price agreement with EDF for electricity generated by Hinkley Point C, which has

yet to be built) and because of the strict need for state oversight and regulation of an industry trading in such a dangerous power source.

Participants felt justified in their mistrust, relating it directly to past instances of industrial and governmental dishonesty. For example, Mike accused the government of participating in a 'shocking' "cover-up" regarding various issues which had occurred at Dounreay power station in Scotland: "there were lots of cover ups; the government denied it for years and then suddenly it all came out how much damage there is up there. So, that clouds my judgement now…" Mike's distaste over the "dishonesty" he associated with the nuclear industry in the UK was widespread. Even Richard, one of the most pro-nuclear participants, expressed frustration at the amount of "misinformation", saying he felt it was "a hangover from the things that happened and went wrong." Most participants accepted that a certain amount of secrecy had been necessary during the Cold War, but admitted it made it hard to trust they were being told the truth now. Explanations of nuclear mistrust varied: Brenda was initially generous, explaining that she felt "most governments don't really like to talk about it because it's just so blooming unpopular." Unfortunately, that logically led to the conclusion of "I'm sure loads of decisions are made in secret and nobody knows what's really going on with what" – a situation which didn't inspire confidence. Tom agreed, saying that he felt sure information was being suppressed: "I don't think we know even the tip of the iceberg." Some participants were even more jaded and embittered: Karen, who implied that she had miscarried due to the fallout form Chernobyl, complained that there were "too many dangers and too much hiding; secrecy and misinformation." The most scathing comments on both the nuclear industry and the government's role in controlling information flow came from Craig, the Greenpeace stalwart: "they treat you like mushrooms, they keep you in the dark and feed you plenty of shit."

Expressions of trust were only ever partial and qualified. Nancy said she "naïvely" trusted the "double-checking systems of the Civil Service and of regulatory frameworks," giving the impression she felt foolish for having any trust at all. Dave was confident that the UK had the requisite "technical competence and capability," but was suspicious of the aims and motivations of the industry. The mistrust of the *motivations* of the nuclear industry was a particularly strong theme in my data, especially in connection to sustainability and 'corporate greening'. 'Corporate greening' is a process involving "the introduction or reformulation of policies, practices, products, and/or processes in order to address key environmental issues such as pollution, recycling and resource minimization" in business and industry (Crane 2000: 673). Some authors are sceptical about the extent of real environmentalist feeling attached to such transformations, linking it to a process of 'amoralization' (Crane 2000) and finding that "concern for external recognition is often

the reason underlying" the adoption of 'greening' systems such as the internationally accepted ISO 14001 certification (Boiral 2014: 127), which promises to "help businesses remain commercially successful without overlooking environmental responsibilities" (BSI Group 2014).

Participants were incensed by the nuclear industry's attempts at corporate greening: Will spoke sarcastically about people being "victims of PR" about how "fantastic" nuclear power is. Aside from the motivations of industry public relations managers, much of the nuclear mistrust boiled down to a general lack of trust in governments and politicians, as the following exchange with Kevin shows: "Carbon neutral? I wouldn't know if it was or it wasn't, I'd have to trust them on that." When asked "Do you trust the government?" Kevin responded fiercely with "No!". Kathy described arguments in favour of nuclear power centred on environmental issues, such as carbon emissions, as "manipulative" and went on to say "I believe very little that this government says and does, because I don't think it is for the greater good of the community. It's for their rich friends." Kathy was particularly frustrated by the idea of pro-nuclear environmentalism because she could see how it might actually be successful: "But see, [this approach] is clever; we're all socially conscious now. People will [believe them]. There'll probably be a little snazzy advert on Channel 4, won't there... This is the future, and it's nuclear!" She could see how the 'carbon neutral nuclear" argument might tap into this generation's version of the environmental zeitgeist.

Kathy's sarcasm – "This is the future, and its nuclear!" – was not an isolated discursive event. Overall, the feeling was that dressing nuclear power up in environmental goodness insulted the British public. It was looked upon with the same kind of derision that has been levelled at 'poverty porn' (Hirsch, 2017). Something that was morally unimpeachable – the desire to protect our environment – was being used to 'sell' something that was morally dubious at best, and downright evil at worst. "What really, really annoys me is they've got this façade of being environmentalists, and about caring for things, and in reality, they've got nothing…" spat James, while Tim described the use of environmental rhetoric in support of nuclear power as "a white wash". Environmental pro-nuclear arguments were not perceived to be "deeply rooted in any belief system" (Kathy) when truthfully, those making the arguments "couldn't care less" (Tom) and were simply "trying to do is, 'ooh look, aren't we good because we're doing this environmental thing' … doesn't it make us look all green and shiny and everything?" (Sandra).

Tom perfectly summed up the issue when he said, "you can't be serious if you pull the rug out from under everything else that's climate change mitigation and carbon reduction, and then just use the argument when it suits… *it's a contradiction*.". It's impossible to say one thing and do another without jettisoning the basis for trust in any society. To summarise the Nuclear (Mis)Trust thematic

discourse, I have constructed a package which encompasses the ideas brought forward by my participants on these issues:

> *It's hard to know who to trust when it comes to nuclear power. I don't really trust the industry because, at the end of the day, it's a private industry and you can't be certain of the oversight. I know there's a state regulator but there's such a legacy of entanglement with the state in this country that I'm not really sure I trust the government on this issue either. There have been many issues in the past with secrecy, cover-ups and deliberate misinformation; it's hard to let go of that and trust what they're saying now. I don't really trust politicians anyway, but I certainly don't trust their motivations when it comes to calling nuclear power 'carbon-neutral' and all that. They're just using the environment as a rhetorical tool for their own ends – and so are lots of private companies.*

8.4.2. Ban the bomb: (dualism & stigma cluster)

*"Immediately all I think is: Bomb." (*Ken*)*

Aside from the health concerns covered in the first section of this chapter, the other key reason why nuclear power is stigmatised is *because* of *nuclear dualism* – which is why the two discourses are sometimes hard to distinguish and act as a discourse cluster. The military capabilities of the technology stigmatised the use of civil nuclear reactors in the eyes of many of my participants. Aside from those participants who had personally experienced fear of nuclear annihilation there were many who had no such life experiences, but who still made an explicit assumption that 'nuclear equals bomb'. Sue was suspicious of claims that energy-poor countries had abundant electricity as their true nuclear goal, explaining that "the reason that a lot of countries want nuclear power is in order to produce the right type of plutonium for weapons..." Rob and Jenny made similar statements that explicitly linked nuclear power and nuclear weaponry. Pam also mentioned plutonium, describing it as a "by-product of the whole nuclear generation industry."

When my participants made these explicit statements of Nuclear Dualism I sometimes challenged them to see if they were receptive to new information or if their adherence to the discourse was principled rather than evidenced. For example, I asked Sue where she had got the idea that civil reactors in the UK are producing weapons-grade plutonium. She explained that she had recently read an article from The Ecologist Magazine. I searched using the phrase "UK Plutonium stockpile Ecologist Magazine" and found the likely culprit: an article titled *Can PRISM solve the UK's Plutonium Problem?* by Jim Green, the editor of the *Nuclear Monitor* (2014). From the perspective of a discourse analyst, the article is a masterpiece: it's packed with emotive statements and stock phrases designed and included purposefully to invoke specific emotions and responses from readers. For example, the tag line reads: 'PRISM – bending light, or bending truth?' Frequent use of the phrase "nuclear

white elephants" helps readers understand that nuclear projects and facilities are useless or troublesome, expensive to maintain and difficult to dispose of. The industry is accused of taking a "business as usual approach," implying that maintaining the status quo is deemed most important and Movement Intellectuals such as Monbiot, Fred Pierce and Stephen Tindale are referred to dismissively as "cheerleaders." Something that particularly stands out is the description of how plutonium is being "stored in drums" – a massive, blatant and surely deliberate oversimplification of the many complex security and safety layers involved with the safe storage of stockpiled plutonium in the UK. In comparison, the 2016 POSTnote *Managing the UK Plutonium Stockpile* (2016) is both dry and informative: "the UK's civil plutonium is secured behind multiple barriers, protected by armed guard and a number of organisations are responsible for its security and regulation" (p. 2). Participants who mentioned The Ecologist Magazine were all staunchly anti-nuclear: their choice of reading material would certainly reinforce that position (Sue, John, Brenda). Sometimes it was extremely clear that a specific organisation, movement, individual or text had had a direct influence on a participant's opinions regarding nuclear power. Craig, who was heavily involved with Greenpeace, noticeably used key stock phrases employed by Greenpeace in their communications on nuclear power such as "spanner in the works." These sorts of distinctive phrases are markers which indicate the influence media platforms can hold in this arena, raising the possibility for future research on how the notion of movement intellectual might be broadened to encompass the role of specific publications or organisations which work to present unified positions.

A few participants referenced the existence of Nuclear Dualism while remaining supportive of civil nuclear power development. Richard expressed frustration that there was a widespread assumption that "if anybody's doing anything nuclear, then it's got to be about nuclear weapons." Charlie described the association of the civil nuclear energy industry with the weapons industry as "unfortunate," and made an analogy with another fuel source that is now widely viewed as problematic: "The advent of nuclear radiation is associated with the end of the world war, as the advent of coal is associated with the industrial revolution." Liz (who wasn't happy to support future nuclear development) was also highly aware of the dual possibilities inherent to nuclear technology and research, explaining that a pair of twins in her extended family had both pursued nuclear research: one "for good" (radiation therapy for cancer treatment) and the other "for bad" (nuclear submarines). Again, Liz explained herself using analogy: "it's such a destructive thing… but so is salt in your diet, although it's delicious if it's used in the right portion. You know what I'm saying? So, it's how things are used."

The understanding that so much depends on the use to which a specific technological innovation is put, by whom it is used and for what purpose, was omnipresent in my data. Every participant made some comment referring to concerns over who was in control of the nuclear reactors, the fissionable material, or the technological research; participants were concerned whether those in control were capable enough, regulated enough, had the right intentions, were independent enough to be able to say 'no' or 'this is unsafe', were funded well enough to be able to invest in the best equipment, and so on. The existence of such widespread *concern* throughout the dataset fed directly into the problems of *trust* in the context of nuclear power.

8.4.3. Unnecessary nuclear: Energy Gap/Independence

Some participants expressed scorn when confronted with ideas from the Energy Gap/Independence discourse cluster that nuclear power was necessary for maintaining the baseload or for bridging the energy gap. That an energy gap was coming or was inevitable was still accepted, but the idea that nuclear power should be accepted because renewables weren't ready or weren't developed enough was rejected. Overall, there was a feeling that renewables, if they *were* unfeasible, were only in that situation due to government policies regarding subsidies or choices over what research efforts to fund. Basically, that the 'necessity' for nuclear power had been manufactured – thereby reducing trust in the pronouncements of government and industry authorities when they argued for further investment in civil nuclear. As Will noted, "all this infrastructure that's been put in place; if the same amount of effort and resources had been put into developing wind turbines, and solar panels and geothermal, we would be at a similar stage, if not a better more efficient strategy, with completely renewables…" Kathy was similarly frustrated that so much human ingenuity had been used on nuclear power rather than alternatives: "I mean if we can design very sophisticated nuclear power stations, surely we can find a way to store energy until the sun doesn't shine and things like that." The consensus was that regardless of whether you supported nuclear power as an interim option or not, "scientists have got to look at other things" (Maggie) because "there's no doubt that the technology's there – if someone was brave enough to do it" (James). Liz was frustrated because she knew that "technologies have moved on and that there are other options" available, like "wind power and all the rest of it – they are the dawn of the future you know" and asked, "why can't we put some money into those?"

There was a diffuse understanding that research funding and energy infrastructure investment was not being misused as such, but perhaps *misallocated*. Will wanted to see more investment in carbon capture and storage (CCS) technologies: "They could be investing in Carbon Capture from our own coal reserves in this country but they're not, not doing it enough." Others expressed frustration similar to Tom's issue with the 'contradiction' between government rhetoric and the

concrete outcomes of energy policy: Sue explained that she was irritated by the argument that renewables "wouldn't provide us with the amount that we need" because "the government reduced subsidies significantly to the [renewables] industry" – thereby implying that if that had not been the case, we might be better able to do without nuclear power. Karen concurred, explaining that the rhetoric was all very well but that "at the same time they're preventing it" through policies that prioritised fossil fuels and nuclear power. Underlying these statements was the perception that nuclear power was a black hole into which money and ingenuity that could be better spent elsewhere kept disappearing:

> "You see I just can't help feeling that if there was no possibility of nuclear energy then we'd *have* to be better at other things, and I do think that would be possible. Because if all that money that's gone into nuclear energy was all poured into subsidies for other forms of energy –then I think we wouldn't need it, you see. But as long as we've got that possibility, that won't happen." (Donna)

8.5. Western Superiority

In comparison to other themes in this chapter, there is relatively little data on 'Western Superiority.' However, this theme is very important because of how it links in with the issues addressed in the following chapter. I was initially surprised and somewhat dismayed by how much data indicated remnants of the British Imperialist psyche. Looking back at the literature, I realised there had been hints of what was to come. A passing comment within a passage on Techno-Rationality: "accidents are dismissed as part of the technological learning-curve or else viewed as a consequence of non-scientific design choices (*frequently seen as occurring in 'other countries'*)" (Irwin, Allan, & Welsh, 2000: 82, emphasis added). Looking at this theme in the context of environmental implicit religion throws the issue into relief: that participants viewed 'other countries' as being incapable, untrustworthy, uncivilised or their governments too unethical to be granted access to nuclear technology is a relic of the mindset, and inevitable consequence of, the western imperialist Christian civilizing mission.

There was little explicit Energy Independence discourse in my data, but the statements that did catch my attention also fit the western superiority theme. A comment from Richard was regarding his concern about having energy plants in the UK that were owned and operated by overseas companies like EDF: "can we be held to ransom in any way?" Dave was the only participant who mentioned energy 'security' (independence) without prompting: "Then the pragmatic bit of me kicks in a little bit and thinks you've then got to look at energy security… where is it coming

from?" In the rest of this section the presence of different discourses is indicated within the text, rather than through using separate subsections.

Participants made a range of seemingly benign comments directly comparing the capabilities of the West or Europe with those of other, un-named places, creating a form of geographical Nuclear Stigma. For example, Richard, while accepting nuclear power stations operating in the UK, was concerned that some were "bound to be in places that aren't as careful as elsewhere..." Liz was incrementally more specific, worrying that "smaller powers that aren't as robust in their containing of nuclear waste may have an accident." Often, these 'occidentalisms' came into the conversation when I asked about possible concerns participants might have about nuclear power. When considering the management of safety risks, Joe felt that "if you're thinking of it within the context of use within European countries who have the controls in place to manage that side of things, I see it as negligible, I suppose." On the issue of waste management Debbie felt reassured that "at least in western countries, the technology's in place to contain any waste and make sure it's treated properly without any lasting effect." The lingering assumption from these kinds of comments is that the UK and other similar 'western' or 'European' countries are better able to deal with the complexities of a civil nuclear programme because they are more 'developed' – a politically correct way of saying *civilized*. This links the comments with the myth of Progress, and thus with Techno-Rationality.

The specific places stigmatised by participants regarding their abilities to deal appropriately with the challenges of nuclear technology were, unsurprisingly, those which have major nuclear or industrial disasters in their histories: "places in India… places in Russia…" (Dave) and Japan (Lindsey, Nancy) were foremost in participants minds. The incidents which brought these countries to mind were probably the Bhopal disaster (1984, India – a pesticide factory leaked toxic material into the surrounding informal residential areas), the Chernobyl disaster (1986, Soviet Ukraine – the world's worst civil nuclear accident) and the Fukushima disaster (Japan, 2011 – the most recent nuclear incident). Participants felt that these countries had problematic socio-political cultures which might mean that safety procedures and issues of collusion (for example, between the energy companies and the national regulator) might not be addressed properly leading to unsafe facilities. Dave explained that he felt "there are places where corners just get cut and I think quite a big part of it does come down to culture and approach to safety… and rules." Likewise, Nancy felt "more confident" about civil nuclear power in the UK than in Japan, because "I do feel that the regulatory systems in the UK are better… if it was on the news about Fukushima and it was in the UK, I wouldn't believe it." That last statement is rather extraordinary, since the UK is not without its own history of nuclear disasters. My participants were not unaware of the chequered

history of the Windscale (now Sellafield) facility in Cumbria; many of them brought it up in it the interviews and used it as a reason for their distrust in the UK civil nuclear industry. They just didn't use it as a reason to say, "the UK should not be trusted with civil nuclear power," while feeling perfectly justified to use the Fukushima incident to justify comments like the following from Lindsey: "the only place you really shouldn't put them is in Japan! Or have a load of idiots running them, like they did at Chernobyl, or an earthquake zone, like they did at Japan. I mean Chernobyl, that was... idiots running a badly built plant in Russia." Again, the stigmatisation of place occurs together with the glossing over of problems with similar programmes in 'places like home' run by 'people like us.'

The indirect nature of participants' discursive statements on this topic can initially hide the subversive nature of what is being said, but a careful reading shows us that the undercurrent that there are some places that can be trusted with nuclear power, and some places that can't: "it's only going to be a matter of a few years before regimes that... regimes that would be prepared to use nuclear weapons will have them" (Donna, Dualism). The assertions that some places are not as careful as others, or that some places might be less able than the UK with regards to nuclear technology do not seem directly problematic. Of course, there are places with lesser capability than the UK, just as there will be places with greater capability. The problematic nature of these statements is that they create a hierarchy: specific countries and nations are deemed insufficient in a variety of ways. Linked to this was an implicit energy-tech hierarchy. Lindsey dismissed renewables as a realistic option for the main energy grid in the UK because they "really don't give the quantity that an industrial nation needs to keep going" but supported civil nuclear in the UK as being capable of providing the requisite amount of energy. Richard also didn't want to see field of solar panels or hills dotted with wind turbines in the UK, but happily suggested "farming the deserts" in other countries where supposedly the natural landscape was not as valuable as our green and pleasant land. Countries in Africa, Asia and South America were deemed as not developed or civilized enough to understand the long-term consequences of their energy choices (Liz, Pam, Maggie) or their politico-cultural idiosyncrasies made them unsuited to fulfil the requirements of a safe nuclear industry (Richard).

> "They are hundreds of years behind us in their development, of their structure. And yet they want to jump to being like us. They want to jump from the 17th, 18th century to being modern and having technology. Naturally, they're misusing the world because they're only trying better themselves. Their countries are trying to better themselves. But they're not reading the signs that by doing so they're abusing the world." (Maggie)

Maggie was concerned not to be pejorative about "the nations of Africa or the nations of China," yet still managed to be racist. Liz was similarly so assured of British superiority that she later expressed the opinion that we ought to be 'educating' 'underdeveloped' countries in how to better manage their environmental and energy resources: "they're being hoodwinked by all the other powers into selling things for nothing... why can't we educate them, why can't they be educated so that in their own communities, they can have people that can make a difference?" Even when defending the right of Iran to have a civil nuclear industry, Lindsey managed to be unthinkingly obnoxious: "I mean, poor old Iran ought to be able to do that. I've known Iranians. Perfectly ordinary people. In fact, some of the nicest people I've worked with are from Iran." Of course, what Lindsey was (deliberately?) failing to remember is that with examples such as Iran and North Korea, the IAEA (International Atomic Energy Agency) is not worried about ordinary people from Iran or North Korea: the problems relate to the political regimes in power and how their goals might affect the way they manage their nuclear programmes, civil or otherwise. Richard connected the incident at Chernobyl with the type of political-cultural regime governing the nuclear facility: "Chernobyl – hardly surprising in a communist state-run enterprise as it was at the time, where it's very difficult to stand up and be counted for saying 'look this is wrong this is dangerous' etc." in contrast, liberal western democracies were lauded as positive examples of 'how to do nuclear': "The French are quite sensible and quite developed and liberal; they seem to do it and they're OK…" (Brenda) Taken individually, each statement linked to this theme of 'Western superiority' is relatively benign. The problematic nature of this discourse becomes clearer when we view the data in aggregate: then, an insidious, underlying discourse takes shape: '*brown people can't be trusted with nuclear power; non-western countries are not careful, intelligent or educated enough to deal with the complexities of a nuclear programme in a safe manner.*' It is undeniably, uncomfortably, racist.

8.6. Updated discourse packages

To conclude this chapter and to provide a platform for the following discussion chapter, I present updated versions of the key nuclear discourse packages that were first discussed in the literature review (Chapter 4). I have excluded *energy independence* as there was too little data to include that discourse as a meaningful product of this analysis.

Nuclear dualism

> *There is no other form of energy which has such potential for destruction. Nuclear power is a bomb – regardless of whether the programme is 'civil' or 'military' – because the effects are so catastrophically dangerous. The very existence of nuclear reactor technology puts the entire world under constant threat of annihilation. The inherent potential for weaponization means that we can't fully trust that any*

nuclear energy programme is solely a civil enterprise, and the idea of having such dangerous material in the hands of humans – greedy, malicious, forgetful, culpable humans – is terrifying.

Nuclear stigma

Sure – nuclear power is scary because of its links to extreme weapons programmes, but at east you'd know if a bomb went off or a reactor exploded. I'm more worried about being irradiated without knowing – of developing some weird, rare and incurable form of cancer because I ate some Japanese fish or swam at the wrong Cumbrian beach. For regular people like me, there'd be no way to tell if you'd been infected until it was too late. There are some places and certain countries I would be worried about visiting because of these concerns.

Techno-rationality → Progress

Science and technology continue to advance. There is no doubt that the problems of the past will not plague us in the future. Concerns about technical aspects of energy generation and waste disposal are greatly exaggerated by people who don't understand the science; I'm sure most of those problems have already been sorted out. The scientific and technical capability is assured: it's merely the political will that is lacking. There's no doubt that research should and will continue – we owe it to future generations. The possibilities for our future are truly exciting.

Abstract Faith in Science

Humanity is really very clever – we've already achieved great scientific feats. It is not beyond the wit of man to address the issues we're currently facing regarding our energy and climate. We certainly have people capable of researching and finding solutions to these issues. Scientists are the best qualified to guide us on these issues, they know what they're talking about. Sometimes I worry that they're not focusing on these issues enough – but what do I know? I guess we just have to trust that they know what they're doing.

Energy Gap/~~Energy independence~~

There is an impending energy gap looming. It may be that nuclear power is required as a necessary evil for an interim period as renewables development progresses to the point where we can become fully sustainable. That might have already been achieved if it were not for the misallocation of research funding and irresponsible subsidisation of the fossil fuel and nuclear industries at the expense of alternative energy options. On an international scale, we cannot let developing countries pursue economies based on fossil and nuclear fuels: they are used to living with less energy and are better placed to take advantage of renewables.

8.7. Nuclear Synthesis

The nuclear discourses presented above can all be used to support both pro- and anti-nuclear positions. They are not so flexible cosmologically, however, and as a group they demonstrate a clear Technocentric, Mechanistic bias. One *might* hypothesise that those participants who favoured a Technocentric cosmological blend (with an emphasis on the Mechanistic point of the classical cosmological triangle – see Fig. 2) would be more inclined to seriously consider the merits of nuclear power as a means of climate change mitigation or might indeed lean more towards pro-nuclearism in general. This would then imply that those who favour an Organic or even Divine Order cosmological blend – and who might therefore tend towards ecocentric environmentalism – would be less willing to debate on the issue and more inclined towards steadfast anti-nuclearism. Only a very small number of participants provided data that supports those binary assumptions. I present an analysis of their rejection of nuclear power below, before moving onto data which indicates the more complex thinking on nuclear issues demonstrated by the rest of my participants (§8.7.1).

The staunchly anti-nuclear ecocentrics were Craig, Jenny, and John. All three were associated with Greenpeace, and Craig especially struggled to converse on the topics in question without resorting to regurgitating Greenpeace anti-nuclear rhetoric:

> "Well, from a Greenpeace point of view, we actually see it as like a spanner in the works. A lot of people say that nuclear is an important tool in the box to limit carbon emissions and stop climate change, but nuclear power is inadequate and unnecessary, as well as dangerous."

Craig's opening statements were intriguing because they were unusually articulate and possibly rehearsed responses to the 'starter questions'. The phrase 'spanner in the works' was a term that I remembered reading on the Greenpeace website section on nuclear power. Hearing it in this context made me wonder if what I was hearing was really Craig's personal opinion. I noticed he had some pages printed out from the Greenpeace website with him and asked about them:

> "This is a Greenpeace thing from the Greenpeace site, yeah, so this is the stance from Greenpeace."
>
> Q: And, is that something that you personally adhere to?
>
> "Yes. Everything that Greenpeace says I implicitly believe..."

John also refused to countenance any notion of nuclear power in his environmental philosophy, saying it "can't deliver on climate change, it's exceedingly expensive and it's dangerous." Likewise, he was vocal in his support for Greenpeace's anti-nuclear stance and, after the interview, began

forwarding me emails from Greenpeace canvassing for their anti-nuclear campaigns. John also preferred to have me "copy whatever I wrote in that email to you to save me [laughs] regurgitating it now." The email in question had contained much of the same phrases I heard from Craig and read on the Greenpeace website. Jenny was John's daughter and had apparently absorbed much of her father's environmental philosophy and opinions, and rejected nuclear power and any serious debate about it in a similar fashion to Craig and John. What was immediately striking about these participants' stance and the discussions I had with them was that they all were explicit about how "we're actually sold on virtually everything that they say. In the past we've had no reason to believe [otherwise], and we still don't" (Craig). Greenpeace[34] had provided an anti-nuclear creed, and they were pleased to accept it and believe wholly uncritically – and even attempted to 'convert' me[35]. From an implicit religion perspective, these participants were quite conservative in their anti-nuclearism, as they cleaved to the orthodox position.

The majority of my participants, however, were more complex in the ways they thought about nuclear power and the environment and used (or at least alluded to) a wide range of discursive resources when making sense of the topics under discussion. In general, although the eco- and technocentric cosmological binary broadly matched with inclinations against or towards constructive debate on the issue of nuclear power, it was not a good indicator of a participant's stance on nuclear power. Overall, this seemed to be due to the exceptional nature of both nuclear technology and the climate crisis: people were willing to consider the unacceptable, and to debate on the 'lesser of two evils' (e.g. Tom, Liz). As Ken explained, "the nuclear nightmare has been replaced by the climate nightmare. The difference is that with the nuclear thing, somebody had to say, 'Press that trigger'. It required a positive act. All we need to do now to mess up the planet is to go on as we are."

The complexity of these discussions is shown below. §8.7.1. looks at how participants' environmental philosophies coped with the challenge presented by pro-nuclear environmentalism and what this meant for their ideas of the 'proper' role of humanity in relation to the environment. §8.7.2. looks at how pro-nuclear stances were incorporated (or not) into ideas about environmentalist identity and how participants felt the environmental pro-nuclear rhetoric disseminated by government bodies, nuclear industry representatives and pro-nuclear environmentalists might affect environmentalism and change the impact of its message.

[34] John also mentioned FoE in much the same vein, while Craig was dismissive of FoE.
[35] Craig, in particular, assumed that the nature of my project meant that I was not as anti-nuclear as I ought to be and that I required persuasion. Much of his interview constituted an impassioned attempt to bring me into the fold.

8.7.1. Nuclear Materiality in Environmental Abstraction

Investigating issues of cosmology in the context of a guided conversation (semi-structured interview) immediately brings to the fore practical issues of framing. Cosmology, in the sense I use it in this thesis, functions as a foundational discourse, providing resources for people to think about and construct ideas regarding universal *telos* and the role and fate of humanity (and the environment). Regardless of how clear this framing is to the researcher, it is not good practice to confront a member of the public with questions such as "How do you conceive of humanity's role in the universe and our ultimate fate?" Such abstract questions can be very frustrating for an interviewee and can result in an abortive interview.

In this thesis, one of the primary roles of the nuclear power topic was therefore as a means by which participants (and the researcher) could navigate these complex abstract and philosophical questions. Nuclear power provided a concrete, material focus for discussion that I assumed my participants would know something about or have an opinion on. Precursory discussions before beginning my fieldwork with peers and colleagues made it clear to me that nuclear 'neutrality' is a very rare position, and that the majority of people had some knowledge of nuclear power or radiation issues from a wide variety of sources.

Nuclear power as E'pocalyptic risk

> "*It just felt, you know, like this clashing of elemental forces, ocean against nuclear power*" – (Pat) on Fukushima

My data showed a very strong link between the Nuclear Exceptionalism cross-cutting discursive theme and the E'pocalypse environmental discourse. There were also small indications of Original Eco-Sin, as participants spoke of humanity as being incapable of overcoming our inherently flawed nature: "it's still run by humans at some stage. So, an error must inevitably be built into it" (Kathy). Mary felt that the "possibility of failure" was ever-present, and when questioned on whether that referred to the failure of humans or the technology, she replied "Both. Then the result is just terrible beyond description."

An overwhelming majority of my participants, when discussing safety issues pertaining to nuclear power, spoke of the possibility of extreme, catastrophic, world-ending civil nuclear incidents. I challenged the assumption of a nuclear incident being a high probability with Kathy, by noting that in the entire history of nuclear power, most people could only think of two or maybe three nuclear accidents. She was unconvinced and made the valid point that "you only need two or three." Liz raised the bar, saying, "We only need one mistake in the future… It's going to be

horrendous if we're going to have nuclear power stations all over the place as well... I thought we were closing them down for a reason."

The key issues pertaining to the apocalyptic future envisioned by these participants when discussing the possibility of nuclear failures were to do with scale and time. Richard noted, "it isn't just a small accident, you have a bloody massive one," and Brenda concurred, saying "It's not just [that] there'll be an explosion and, boom, people get killed in that moment; it's the fact that it has that long-term and unknown effect on the food chain, on the whole of the natural environment." Those issues of scale, whereby "even if it's very unlikely to happen, if it happens it's just catastrophic; out of scale" (Tom), and time mean that, as Mark realised, "the nuclear issue takes on a very strange moral dimension." The morals of the situation were of widespread concern: "We shouldn't even pursue this avenue when there are other ways that are not as inherently dangerous" (Debbie).

A linked moral issue was about global environmental democracy: "I don't like the idea of a small number of humans choosing [nuclear], and then there's the whole of the rest of the living planet that could be affected by that in a big way…" (Brenda). Participants were concerned about "the legacy for generations" (Tom) and often resorted to using comparative examples, much as they had done for the environmentalist stereotypes: "[if] you look at an explosion at a gas plant, then that has a very limited, albeit devastating, impact… it will be geographically limited. The potential impact of nuclear is much, much greater and much more widespread" (Dave). Nancy used coal energy as her comparative example;

> "If a coal-powered plant goes wrong the worst thing that will happen is several hundred people die in a dramatic explosion. There may be an even more extreme consequence, but if a nuclear power plant goes wrong, the worst-case scenario is, you know, Europe is uninhabitable for the next several centuries… And, I might have those consequences wrong by a factor of ten, but they're incomparable in terms of the level of consequence. (Nancy)

Participants worried we (humanity) were playing "a game of probabilities" (Dave), which became even more concerning in light of the fact that "we're such poor judges of risk, and nuclear is a classic case… we're not very good actually, at calculating risk" (Charlie). Mike shared these concerns and described the problem in terms of an economic model: "they try to predict the future for stocks and shares and there'll be forty scenarios, and they're all built into a big computer model… it never works because [in reality] there's always an infinite number of options, isn't there, there isn't just forty. And that's the problem: there's always something they haven't thought of…"

The extent to which these apocalyptic nuclear visions of future global devastation were prevalent throughout the sample was extraordinary. The combination of Nuclear Exceptionalism and E'pocalypse boiled down to one pertinent and unassailable point: "It is so catastrophic, potentially" (Pam). Tim made the point more emphatically:

> "I mean of course there is natural radiation out there, but if we make [more] out of a conscious decision we are putting the shit out there to destroy ourselves! We are killing ourselves. At some point we will drown in our own shit." (Tim)

The utilisation of the E'pocalypse/Nuclear Exceptionalism cluster was not a reliable indicator of either a participant's cosmology or their stance on nuclear power. Charlie, for example, who worried so much about humanity's capacity for calculating risk, was staunchly pro-nuclear and rather eco-centric – having spoken earlier in his interview of his fondness for and relationship with the 'wilds'. Pat, Mark and Brenda, all mentioned in this section, also contributed data for the following section, wherein nuclear power was incorporated in to Practical Stewardship as the 'lesser of two evils'.

Nuclear power as necessary evil

MacCulloch described the ancient Greeks as "people of a book – more precisely, two books – their common cultural property" (2010: 22). Given the foundational role of Greek thought in Western European culture (see §3.2), those two books – the Iliad and the Odyssey, both attributed to Homer – have become the common cultural property of all Western Europe. In the Homeric epic the Odyssey the hero, Odysseus, having successfully navigated past the Sirens, must make a choice between Scylla and Charybdis. These are described in the epic as sea monsters, situated close enough to each other that avoiding one means sailing too close to the other. Odysseus chooses the lesser of the two evils, and sails close to the six-headed monster Scylla knowing that he will lose some of his crew, rather than losing his whole ship to the whirlpool Charybdis. This choice – total or partial destruction – has been remembered ever since in idiomatic phrases like 'between a rock and a hard place' and thus Odysseus' choice became immortalised. Participants used this framing to explain their feelings about having to be 'realistic' about whether to accept nuclear power as a part of the future energy mix: "if we're concerned with climate change but we still want power... if we still want the electricity and we're not prepare to go back to say to the middle ages, then that's what we've got to have" (Lindsey).

Participants felt guilty about having more complex reactions to nuclear power than the standard anti-nuclear ecocentric position promoted by the orthodox environmental movement. This was demonstrated by their consistent need to justify their (often very mild) pro-nuclear positions in

terms of some other possibility being much worse. Many chose to compare the climate consequences of a safely run nuclear programme with a fossil fuel counterpart: "there are quite a lot of negatives but still, in my eye, none of those compare with those of fossil fuels" (Dan). James used the analogy of a balance sheet, saying:

> "If you balance up continuous burning of fossil fuel, and mining it, drilling it, shipping it all across the world in big tankers, against a nuclear power plant, then I think the nuclear power plant comes out on top. I don't think it's a very nice option – I think there are greener options. But I think in reality the greener options will never happen. That's why I'm not against nuclear power. I just thing you've got to be a realist, and if we're going to go down any route, instead of being against it all the time we've got to say there are better things than it, but if we're going to have it then let's make it as safe as we possibly can." (James)

The statement of "you've got to be a realist" was very common. Participants needed to be clear that nuclear was never the preferred option – it had become the only realistic option thanks to lack of timely action. As Richard explained, "we're running out of time to do anything else worthwhile," as anthropocentric climate change advances and extreme climate events that used to be "natural events now could happen catastrophically quickly?" The concern with the speed of climate change was widespread and was one of the most obvious themes right from the very beginning; the initial thematic coding theme was titled "urgency of climate change" and included data from nearly half my sample. The mix of participants was very heterogeneous: a fairly even spread of explicit religion cases, EMO members and academics. The aggregate idea of this theme was summed up by Brenda: "climate change is a massive problem that humans are contributing to and it's going impossibly fast. It's more of a threat than problems at nuclear power stations, I suspect."

This 'lesser of two evils' framing for nuclear is an extension – or a distortion, depending on your view – of the Practical Stewardship discourse discussed in Chapter 6. In some participants, it was very unexpected – for example I was very surprised to hear it from Rob who was, out of all my participants, one of the few who seemed to be consciously straining for 'personal coherence' (Ruiz-Junco, 2011). He acknowledged that he was ideologically very strongly opposed to the idea of nuclear power, but that "on my more realistic and pragmatic days I think nuclear energy is probably gonna be needed if we're gonna avoid the worst of climate change. I guess the consequences of climate change are gonna be a hell of a lot worse [than the consequences of nuclear power]. It's gonna affect a lot more people." I was less surprised to hear this element of Practical Stewardship from someone like Joe, who worked for the Environment Agency and who seemed less orthodox

in his environmentalism: "really, the benefits that we get out of nuclear power far outweigh [the negatives], especially when you think of the impact that climate change will have on countless millions of people's lives... so the risk on that side, to me, the way I see the world, seems very, very small." Richard, pulling together discursive threads from Practical Stewardship, E'pocalypse and Nuclear Exceptionalism provided a clear example of the rationale behind pro-nuclear environmentalism: "I mean you really have to say 'wait a minute, we've got to do exceptional things now'..."

8.7.2: Double standards

For my participants, the issue of what nuclear power might mean for the fate of the world and the advancing climate crisis was discursively separate from what nuclear power might mean for environmentalism and environmentalists. While many were willing to consider nuclear power within the context of "impossibly fast" climate change, the same participants were unwilling to allow nuclear power to be discursively re-branded as "a green solution" because of its ability to "devastate environments and the planet" (Brenda). In interviews, the 'carbon-neutral-nuclear' narrative was discussed in terms of its provenance from two key types of actors: politicians/government and pro-nuclear environmentalists (movement intellectuals). Both pro- and anti-nuclear participants were resistant to the discursive reframing of nuclear power being attempted through the carbon-neutral-nuclear narrative, mostly because they felt it was deliberately misleading, and thus added to the Nuclear (Mis)Trust cross-cutting discursive theme (Pat, Mark, John, Karen, Dave, Mike).

Participants' outraged responses varied depending from whence the reframing seemed to originate. If the narrative was presented as coming from politicians or government – in the form of a White Paper, or newspaper article on energy policy – then it was rejected with anger. "That just immediately makes me angry and makes me think, 'OK, there is politics behind this, it's all about politics.' It has nothing to do with environmentalism or sustainability, it's just politics of power; pun intended" (Pat). Speaking of government statements in favour of nuclear power, Karen was openly derisive: "They're stupid. They're stupid. They don't want to bite the bullet and admit that we can't go on living the way we do, can't continue consuming in the way we do." John said it made him feel "bloody angry" and then went on to refer to "this lot of politicians" as "climate change deniers, so it's very easy for them."[36] John demonstrated a very low level of trust in the political structures of the UK, and inferred that the pro-nuclear policies were a result of collusion:

[36] John was referring to the Conservative administration of David Cameron post-2015.

> "I mean one of the big problems is the revolving door thing for government advisors. Most of the Ministries have advisors from very vested interests who come in and, and say, 'nuclear's the only way we're gonna have energy security in Britain,' whereas people from, say, renewable energy industries don't have anything like the same say influence. I mean Sir Bernard Ingham, who was Margaret Thatcher's right-hand man, he's a spokesperson for the nuclear industry in this country, just as an example; and he's behind the Countryside Alliance that have gone around rubbishing wind farms."

This aspect of my data seemed to show, therefore, that government attempts to promote nuclear power to mitigate against the effects of climate change (to reduce dependence on fossil fuel energy technologies) were doomed to fail thanks to the climate of political mistrust and apathy in the UK. For example, Mike said the carbon-neutral-nuclear narrative "makes no sense to me, but I don't trust politicians anyway…" and Kevin was apathetic, saying "I don't know, maybe I've not got enough faith in politicians…"

Participants felt the public were being deliberately misled for political gain: "when I hear it talked about in that context I go, it's not true, it's simply not true. It's a mistruth is my perception; these are falsehoods that are being sold" (Dave). Participants felt justified in making these accusations through an appeal to facts: generally, facts about the nature of the nuclear fuel cycle. "So they always call it renewable energy and I always think, yeah maybe it's not a fossil fuel 'cause it's not carbon-rich stuff you're digging up, but you *are* digging up stuff in a mine and burning it in a plant" (Mark), and Dave "you've got to mine this stuff, you've got to transport this stuff, you've got to build these humungous facilities; it's not carbon neutral; maybe *in operation* it's quite low carbon, but it's certainly far from being carbon neutral." Pat was more vehement in her refutation of the narrative: "It's not carbon neutral, that's a nonsensical statement. Nothing's carbon neutral, for fuck's sake."

The 'double standard' referred to in the section title becomes clearer when considering the parallel reactions to the sponsorship of pro-nuclear narratives by some of the movement intellectuals discussed in §7.2. To an extent, despite the anger directed at 'political' sponsorship of the same narratives, the carbon-neutral-nuclear narrative was expected, or even accepted, by participants as almost an inevitable part of the political situation in the UK. It was part of their Infrastructural Lock-In. In contrast, responses to sponsorship of those same narratives from environmental movement intellectuals were tinged with moral outrage and in some cases were quite personal and vitriolic. The movement intellectuals to which these types of responses applied were those referred

to in §7.2.1. as 'eco-prophets'. The adoption and sponsorship of certain discourses by a movement intellectual such as Monbiot is powerful and influential. Sandra tacitly referred to this soft power:

> "I don't like it and (sighs) I suppose part of me wants to say it's dangerous because then you've got this following of people who think '*ooh that's who I'll look to, to work out what I'm supposed to think as an environmentalist*', because people do that kind of thing, and pro-nuclear isn't what I would think of as a traditional environmental belief." (Sandra)

Movement intellectuals can promote, sponsor and shape discourse because they have social authority: they have the right credentials. People take note of what they say and do because they have established themselves as leaders in their field, albeit not leaders a movement. The perceived credibility of movement intellectuals makes them influential, regardless of how successful they are in changing minds. When viewed with the perspective of implicit religion, Sandra's concerns develop another level of significance. She was worried that pro-nuclear environmental movement intellectuals were peddling a dangerous heresy, acting as false prophets; instead of encouraging eco-saintliness, by promoting nuclear power they normalise eco-sin.

The key credentials these movement intellectuals need are both ethical and scientific. Those making pro-nuclear pronouncements had their scientific credentials questioned: Sue was pleased to explain that there have been "plenty of rebuttals since to suggest that [Monbiot's] arguments were based on incorrect statistics," and John said he felt that "James Lovelock had misled himself on the available scientific evidence, I mean, he's not a pathologist or an ecologist…" John also dismissively referred to Mark Lynas as a "so-called environmentalist," viewing Mark Lynas' pro-nuclearism as a form of apostasy. When asked "If you were to apply your own definition of an environmentalist, would you say that Mark Lynas had forfeited his environmental credentials?" John replied: "Yeah, I would say he had really." Naomi Klein remains within the environmental orthodoxy on the issue of nuclear power: her lack of scientific credentials was not seen as a reason to dismiss her claims about the environment, and scientific claims made in her book were not subjected to the same level of suspicion as Lovelock and Monbiot.

Those who had been convinced of the necessity of a nuclear future were more positive when discussing the apostate movement intellectuals. Charlie both congratulated Monbiot and disparaged his detractors: "I thought it was very sensible. I think I applauded him at the time; it was a brave thing to do. I think it lost him a lot of respect in some quarters, but he must have gained it in probably other, quieter areas of society." The "quieter areas of society" slyly refers to the 'shouty' types of environmentalists that many of my participants were displeased to be associated with (see §6.3.1).

Implications of nuclear heresy for environmental identity

As indicated in the above discussion, the incorporation of nuclear power into environmental discourses had a varied impact on the perceived environmental identities of politicians and movement intellectuals. Politicians were the least affected, as most participants displayed high levels of cynicism regarding their environmental 'credentials' regardless of their promotion of nuclear power (e.g. Kathy). The implications for movement intellectuals' perceived or ascribed environmentalist identities were dependent on participants' own nuclear stance and their levels of environment orthodoxy: more orthodox participants were the most unwilling to extend the 'environmentalist' label to those such as Mark Lynas or George Monbiot (e.g., John).

The impact on participants' own environmentalist identities was simultaneously more complex – because so many rejected the environmentalist identity – and yet simple in that there was very little impact. Essentially, those participants who were willing to incorporate nuclear power into their versions of Practical Stewardship did not find pro-nuclear environmentalism a challenging or "confronting" identity; they tended to have a more flexible idea of what 'being an environmentalist' could include and thus would not rescind others membership of the environmental (implicit) religion, even if they themselves ultimately decided against nuclear. For example, Pat accepted that there were different ways of being an environmentalist and felt that her core assumptions were changing: "I feel (laughs) that if you're an environmentalist you're anti-nuclear but now I'm not so sure anymore." Those who were very orthodox in their environmentalism rejected the nuclear heresy out of hand, refusing to let it impinge on their ideas of what it meant to be an environmentalist. The implication was that those who allowed pro-nuclearism to infect their 'environmentalism' were no longer environmentalists. They had become apostates/heretics.

8.8. Chapter conclusion

This chapter began with an in-depth analysis of participants' nuclear discourses. Although many of the nuclear discourses that were visible in the extant literature on social attitudes to nuclear power were present and active in my dataset, the more interesting findings were to do with the function of the cross-cutting nuclear thematic discourses Nuclear Exceptionalism, Nuclear (Mis)Trust and Western Superiority. When analysed in connection to the environmental discourses, the impact of pro-nuclear environmentalism and the carbon-neutral-nuclear narrative became clearer.

Participants' use of discourses indicated a discursive link between the Nuclear Exceptionalism cross-cutting discursive theme and E'pocalypse; however, the utilisation of this discourse cluster did not necessarily indicate an anti-nuclear stance. Rather, many participants felt that climate

change was now such an urgent global concern that it had surpassed nuclear power in terms of risk: it has become the lesser of two evils. Participants incorporated nuclear power into Practical Stewardship in order to speak about how using nuclear power as a stop gap might be the only 'realistic' option. Thus, it became possible for the promotion of nuclear power to be part of humanity's 'proper' role in relation to the environment, as it might mean a faster weaning from fossil fuels. Those participants who were willing to allow this discursive reformulation of nuclear power were also those who were more flexible in their application of the 'environmentalist' identity marker, even if it was a term they rejected personally. Those who were the most orthodox in their environmentalism were typically those most strongly associated with orthodox EMOs such as Greenpeace and were exclusive rather than inclusive in their application of the environmentalist identity.

Participants themselves were not, typically, concerned about the future of environmentalism. Some felt that the broadening of the environmental ideology to include things like nuclear power was a positive development (e.g., Charlie) and others were concerned that it meant that incorrect versions of environmentalism – heresies – were being allowed too much publicity (e.g., Sandra) and that this might mislead prospective environmentalists.

Chapter 9 | Conclusions

9.1. Introduction

The focus of this project was to investigate how reframing environmental issues using religious concepts and language can deepen our understanding of people's relationship to the environment and to environmentalism. This goal was addressed using a Foucauldian discourse analysis approach and discovered a range of interrelated discursive resources being used to make sense of environmental issues. Importantly, this research shed light on the foundational assumptions of 'modern' environmentalism by reframing it with a foreground of Western Christianity. As a broad result of the development and convergence of trends in religion, philosophy, natural science and what emerged as 'social science,' it has become increasingly unusual for academics outside of a few select disciplines to engage constructively with religion. This thesis indicates how reintegrating a religious perspective into social sciences may reopen avenues of investigation deliberately closed during the Enlightenment.

The importance of examining these deeper convictions regarding the proper relationship of humanity to the environment is timelier than ever given our move towards cataclysmic and irreversible environmental collapse. Since the beginning of modern environmental concern in the mid-1960s (Pepper, 1984: 16), there has been a steady increase in research on all aspects of environmental damage and attitudes to it, global recommendations, agreements and disagreements on ways to reduce or reverse the damage and similar. Yet despite such leaps forward in both knowledge of the problems and in terms of our abilities to address them, overall concern about the global environment continues to grow. Although some environmental battles have been won (environmental protection policies enshrined in law, recycling etc.) in other areas it seems that environmental concern and action are stagnating (Anderson, 2010). Understanding how people relate to associated issues such as nuclear power will be similarly useful given their extremely long-term nature (see Morton, 2013; Benford, 2000; Adam, 1990).

Lastly, environmentalism's inherent religiosity is under-researched. While there are numerous papers available on how explicit religions are incorporating elements of environmental concern into their liturgies or the effect of specific religious fervour on aspects of environmentalism, it seems few scholars have analysed the religious *content* of environmentalism (see discussion in Bartkowski & Swearingen, 1997). The perspective taken in this thesis has shown that there are some important literatures which scholars of environmental and nuclear issues could usefully incorporate into their own work, but which seem to have been bypassed because of their placement in those disciplines to which religion has been relegated by the academy. This thesis has

highlighted these literatures and made a moderate contribution to the study of environmental implicit religion.

This research project sought to answer the following principal research questions:

1. How does reframing environmental issues using religious concepts and language deepen our understanding of people's relationship to the environment and environmentalism?
2. What implications does the pro-nuclear heresy have for environmental*ism* and environmental*ists*?
3. What new ways may be illuminated for the social sciences to engage with and understand environmental controversies and debates?

This concluding chapter demonstrates how the research and analysis conducted in this project has addressed the above questions. In each of the following three subsections, there will be discussion of possible avenues for further research, often arising from allegorical or terminological links which suggest alternate literatures or framings.

9.2. Conclusions from the research: principal research questions

9.2.1. PRQ1: Religious reframing of the human-environment relationship

This research has shown that using the inherent religiosity of environmentalism to analyse the terminology and conceptual vocabulary of social science research lays bare some aspects of the human-environment relationship that otherwise remain submerged beneath Enlightenment assumptions about legitimate knowledge. Consciously embracing the religious lens had a profound impact on this research project and, through the medium of discourse analysis, illuminated discursive links and themes that might not have otherwise been observed.

The core findings from this research project, showing the value of the implicit religion perspective, are;

> a) That environmentalism, like Christianity and other religions, induces guilt in individuals and assumes this will motivate reparative behaviour. However;
>
> b) environmentalism, *unlike* Christianity and other religions, does not provide resources for individuals to cope with their feelings of guilt, and that;
>
> c) rather than motivating reparative behaviour, Eco-Guilt induces agential paralysis on the part of the individual, thereby contributing to the overall stagnation of the environmental movement and slowing the spread of environmental behaviour throughout society.

The discussion in §6.2 on the role of cosmologies indicates that, despite the vast social and cultural changes that have occurred since classical times, elements of the classical cosmologies (Divine

Order, Organic, Great Machine) still inform people's ideas about the environment, and about how humanity ought to relate to it. Approaching the cosmologies as foundational discourses overcame the issue of being unable to distinguish discrete classical cosmological markers, because of how discourses tend to 'bleed' into one another gradually over time. The (relatively) extreme timescales involved with the classical cosmologies accounts for their blending in the data; a participant may indicate a preference for one or another, but generally all three would occur together.

Two other forms of cosmologies were discussed in Chapter 2: the 'modern environmental' cosmologies (ecocentrism and technocentrism) and the Christian cosmologies (Dominion and Stewardship). The implicit religion focus seemed to occlude discussion of the ecocentric and technocentric cosmologies, although the terms have been used occasionally throughout the analysis. Overall, they just weren't as visible as the classical cosmologies in the context of my dataset. With hindsight, the reason for this may be a simple methodological one. Much of the extant environmental discourse scholarship focuses on environmental *policy* discourses and therefore with discourses working at the societal and institutional levels, rather than at the personal level as in my project (Dryzek, 2005; Hajer, 1995; O'Riordan, 1981). It would be far more reasonable to apply the technocentric and ecocentric descriptors to policy discourses, as policies and policy documents necessarily contain identifiable position statements which, by design, correlate with the aims and goals of the organisation or state from which they originate. The type of data I collected is unlikely to contain such clear and consciously constructed position statements, and thus the technocentric and ecocentric binary would not be easily visible.

A notable cosmological omission is that of the Dominion Christian cosmology. As mentioned in §6.4. I found that pursuing a sample universe of lay environmentalists excluded the Dominion cosmology altogether. This indicates that environmentalism itself is strongly correlated with Stewardship. Dominion undoubtedly functions as a cosmology – a foundational discourse providing understanding of the origin and fate of the world and of its relationship with humanity – however although it provides a *perspective* on the environment it does not, in my research at least, form a *type of environmentalism*.

Overall, the key finding which indicates the value of using religious concepts and vocabulary is the manner in which the environmental discourses forced participants to consider their own (environmental) value as human beings; were they fulfilling their requisite environmental role? Were their actions coherent with, or in contradiction to, their environmental ideals? What was preventing them from achieving environmental transcendence? Throughout the project these issues of personal introspection manifested as discourses which either produced Eco-Guilt (Proper

Environmentalists, Practical Stewardship, and Not Worthy) or which were a contributory part of it (Infrastructural Lock-In, Original Eco-Sin, and E'pocalypse). All those discourses have implicitly religious aspects which are clearest when presented like this in their respective discourse clusters.

In §7.3., I showed the explicitly religious nature of the Original Eco-Sin and E'pocalypse discourses. 'Explicit' because of how Original Eco-Sin clearly re-purposed the Christian stories of the Garden of Eden, the fall from Grace and the doctrine of 'original sin'. E'pocalypse provided an environmental eschatology, and undoubtedly a more thorough reading of the Book of Revelation would indicate where more direct analogies could be drawn. However, that is not to say that the other environmental discourses, those both contributing to and producing Eco-Guilt, are without religious facets. Practical Stewardship, for example, is a modern environmental version of the Stewardship cosmology, where the notion of a deity has been (almost) totally supressed. This fits with Alston's point that the suppression or even total elimination of one explicitly religious characteristic, such as "Belief in supernatural beings", does not negate the overall religiosity of one phenomenon or another (see §2.3.1.; Alston, 1967: 142). From the Catholic perspective of this researcher, the 'Not Worthy' discourse has very clear religious overtones echoing a section of the Catholic Mass: 'Lord, I am not worthy that you should enter under my roof, but only say the word, and my soul shall be healed.' However, these religious 'links' raise the question of whether the positionality of the researcher is pushing the analogy too far: only further research will make it clear whether these ideas have merit.

In many cases, however, being able to see the allegorical and terminological links which may provide genuine research opportunities requires a 'religious' lens and perhaps even an unusually (for a social scientist) extensive knowledge of Christian history in Western Europe. For example, I would be curious to pursue a more consciously genealogical (in the Foucauldian sense) analysis of the environmental discourses and combine it with a parallel investigation of the Cathar Heresy. The example of the Cathars provides many interesting avenues for investigation; issues of competing identity claims, conflict due to societal expectations (Infrastructural Lock-In), the threat of schism, and persecution by the orthodoxy. Analogies might be drawn between the Cathar 'Perfects' and Proper Environmentalists, as examples of where individuals did, indeed, manage to totally eschew their Infrastructural (and socio-cultural) Lock-In to become wandering ascetics, achieving personal coherence that was unavailable to the majority of the Cathar laity (see Davidson, 2011 for a discussion of Cathar social identities). The theological content of the Cathar Heresy itself, specifically the dual nature of all materiality (as being simultaneously pure and sinful) is a cosmological theme that could provide fruitful discursive analysis opportunities, especially with regards to the environment. Moving into further conceptual abstraction, it would be interesting to

pursue the notion of 'heresy' as a means of social policing. The issue of an orthodox majority responding reactively instead of inclusively to social alternatives is a continuous theme in modern societies globally.

9.2.2. PRQ2: Implications of the nuclear heresy for environmentalism and environmentalists

While the possibility for schism in the environmental church remains, there seems to be very little of the persecution and conflict which has marked all previous religious schisms and heresies in Christianity. The choices of some few public figures (movement intellectuals) have been subject to debate which has, admittedly, been rather acrimonious at times (e.g., Porritt, 2014). However, this seemed to have little direct effect on my environmental laity. Only the most environmentally orthodox participants chose to rescind others' environmental identities over the nuclear issue: all other participants were pleased to acknowledge multiple versions of environmentalism, even if they were not personally keen on the 'pro-nuclear environmentalism'. The contrasting lack of flexibility in the orthodox approach to environmentalism was a common theme of frustration. Many participants (both pro-and anti-nuclear) bemoaned the "black and white" ethos frequently promulgated by orthodox EMOs such as Greenpeace, as they felt this was both unwelcoming to environmental postulants and alienating to those who were more cosmopolitan in their environmental thinking.

Broadly speaking, this research project finds that the nuclear heresy is unlikely to have much effect on the environmental laity's personal identities. This is for a few reasons: firstly, because many of them reject the environmentalist identity marker for reasons indicated through the utilisation of the Proper Environmentalists and Not Worthy discourses, but also because of the alienation produced through the lack of "shades of grey" in orthodox environmentalism. Secondly, because of the much-researched and evidenced rise of individualism in modern societies globally, and especially in Western European countries (Carvalho, 2007: 239; Doosje et al., 1998: 873; Cosgrove, 1990: 344; Heller, Sosna, & Wellbury, 1986), participants felt very little need to be recognised as part of a specific group or movement and were pleased instead to construct their own environmentalisms through what they considered 'practical' – as indicated through utilisation of the Practical Stewardship discourse.

Also, the nuclear heresy seems unlikely to have a great effect on the environmental movement as a whole since, in the popular psyche (as indicated through analysis of environmental stereotypes – Shouty and Crunchy – in §6.3.) the 'environmental movement' is dominated by orthodox EMOs which are unlikely to waver from their staunch anti-nuclearism, as this would dilute their core message and call into question their moral authority. My analysis tentatively indicates that what is

more likely to happen is that "quieter" sections of the environmental laity, who have resisted formal association with the movement, may gradually absorb pro-nuclearism into their versions of Practical Stewardship. Some of my participants had already done this (James, Liz, Mark, Joe), while others, like Richard, were on the journey: "I feel that in my bones that my views are changing. Because I used to be very anti-nuclear, but I'm not so sure now".

True schism – whereby a significant group detaches from the environmental orthodoxy due to disagreement on a core issue like nuclear power – seems unlikely. Environmentalists may allow themselves to 'lapse', if they feel frustrated about movement stagnation or inflexible policies during a time of increasingly dynamic social change. Or, as Sandra exemplifies, their life circumstances may change: whereupon they may discover that their previously comfortable existence within the orthodoxy becomes untenable. Those on the periphery of the environmental movement, like many of my 'lay environmentalists', may choose to remain there rather than moving closer towards orthodoxy through attempts to achieve personal coherence with 'Proper Environmentalist' ideals. Although the likelihood of true schism is low, the analysis of movement intellectuals in §7.2 indicates that such individuals may present both the variety of options required in a Western society which prises individualism, and the moral authority that guilt-ridden environmentalists crave. The lack of emphasis on membership of a defined group also means that individuals are free to pick and choose which aspects of a movement intellectuals' cognitive praxis to engage with or emulate.

However, as the analysis in §8.7.2 shows, the success of the nuclear heresy is uniquely dependent on what type of social agent (or structure) sponsors the 'carbon-neutral-nuclear' narrative. The Nuclear (Mis)Trust cross-cutting discursive theme (§8.4), combined with the environmental discourses and knowledge of the role of movement intellectuals, shows that when sponsored by government or industry agents, the 'carbon-neutral-nuclear' narrative is treated with suspicion and anger. When sponsored by movement intellectuals, participants – while not guaranteed to accept it – are more willing to listen and debate the merits of the narrative. This finding links up with previous conclusions about the diminished role of orthodox EMOs in lay environmentalists' ecological decisions: the orthodox position on nuclear power is acknowledged, but criticised if it seems too inflexible and 'black and white' in a 'shades of grey' world (Nancy).

When the role of anti-nuclearism as a foundational tenet of modern environmentalism is analysed with a perspective which foregrounds the role of implicit religion, it becomes apparent that the issue of nuclear power is quite extraordinary in how it brings together the various strands of this thesis. If the framing social phenomenon – environmentalism – is viewed as analogous to and an

inheritor of religion it becomes clear that nuclear power is an issue of *doctrine*. From that perspective, there is a wealth of historical precedent for those interested in what happens when a key issue of doctrine undergoes challenge; those who take a different view on, for example, the doctrine of the Trinity, are labelled as heretics and cast out, often after a long and sometimes bloody conflict. Sometimes the heresy all but dies out, living on remote areas; but *sometimes* the church undergoes schism. Given that the environmental 'church' under discussion is operating in a society that generally decries bodily violence, the only 'death' available to nuclear heretics is a metaphorical one.

> "For example, since daring to challenge environmentalist orthodoxy, Freeman Dyson has discovered himself variously described as 'a pompous twit,' 'a blowhard,' 'a cesspool of misinformation,' and 'an old coot riding into the sunset.' For his part, Dyson remains cheerily unrepentant. 'We are lucky that we can be heretics today without any danger of being burned at the stake,' he has said. 'But unfortunately I am an old heretic… What the world needs is young heretics'" (Garreau, 2010: 11).

Luckily for Dyson and others like him, the rapid changes our society has undergone in the last thirty years or so have meant that even a metaphorical death is becoming ever-more unlikely, as the case of George Monbiot shows (McCalman & Connelly, 2015). In fact, Monbiot's pro-nuclear pronouncements of in the wake of the Fukushima incident in March 2011 pull in another strand of this thesis; the use and abuse of science to legitimise differing (and even opposing) positions. Interlocuters use different means of measuring what counts as 'good' or 'bad' science, thereby casting doubt upon the assertions of their opponents. In many respects, the issue of pro-nuclear environmentalism brings to mind the extended conflict in the Catholic Church over the notion of a heliocentric universe. Other scholars have seen these similarities; referring to the rhetoric and discourses employed by EMO members, Garreau notes that "Some observers detect parallels between the ecological movement and the medieval Church. 'One could see Greenpeacers as crusaders, with the industrialist cast as the infidel'" (Garreau, 2010: 11).

9.2.3. PRQ3: New avenues for social science engagement with environmentalism

Generally speaking, the key 'new avenue' for social science engagement with environmentalism advocated in this research is the re-incorporation of religious perspectives to allow for deeper understanding of how and why conflict and disagreement may occur within environmentalism. More specifically, however, this thesis has uncovered new ways for the social science academy to approach environmentalism and issues pertaining to the environmental movement through the discovery of alternative literatures. As mentioned in Chapters 7 and 8, when I discovered the

prevalence of Eco-Guilt in my data I went searching for relevant literature, confident that scholarship on such a clear social phenomenon would exist. I was right: there is an extant literature on eco-guilt (the social phenomenon, not the discourse) and there are some interesting points to take from it. However, there are issues with the literature, and a curious (from the perspective of this research and this project) lack of linkage with religious studies literatures on guilt, and especially the notion of 'Catholic guilt'.

The first key point is that most of the eco-guilt literature is based on quantitative research methods and derives from psychology and its various sub-disciplines such as environmental psychology and behavioural psychology. The quantitative papers all produce findings which are in direct opposition to those from my own research. The psychology eco-guilt literature concludes, in general, that eco-guilt promotes eco-action (or 'reparative behaviour' in the terminology of this literature). Mallett concludes that deliberately bringing to mind instances where one's behaviour does not match up with one's environmental standards "creates eco-guilt which then motivates efforts to protect the environment" (2012: 228). Studies by Doosje *et al.* "clearly demonstrate that guilt can arise from the behavior of fellow in-group members, rather than from one's personal behavior, and that this group-based guilt leads to compensatory behaviour" (1998: 884). Ferguson & Branscombe conclude that "As with guilt based on one's personal behaviours, guilt based on an ingroup's collective behaviours can foster proenvironmental behavior" (2010: 141). Sussman & Gifford (2012), in their study testing whether inducing guilt would lead to reparative behaviour (by putting up signs asking people to turn out lights) found that yes, confronting people with their behaviours and inducing a guilty response produced reparative behaviours – in this case, switching out lights. Rees, Klug and Bamford "were able to empirically demonstrate that the confrontation with human-caused environmental damages led to a guilty conscious which, in turn, predicted environmentally friendly behavior intentions and, more importantly, actual behaviour" (2015: 447-8). The two non-quantitative papers[37] that I found focused more on whether environmental reparative behaviours were of any value beyond that of assuaging individuals' eco-guilt. The framing of both papers suggests that in the authors' eyes, at least, the conclusions were predetermined: both Kotchen (2009) and Struck (2010) took the issue of purchasing carbon offsets as their point of discussion, and broadly conclude that the carbon offsets economy is of little value in terms of actual climate change mitigation.

This literature shows that eco-guilt is a recognised social phenomenon worthy of further research. The discussions in Doosje *et al.* (1998) and Ferguson & Branscombe (2010) regarding how

[37] I hesitate to call them 'qualitative' since neither contain original qualitative research and read as opinion pieces rather than research papers.

individuals may feel guilt for a group misdemeanour for which they were not personally responsible are especially pertinent, as they describe mechanisms through which people like my own participants may feel personal guilt related to the actions of a (possible very abstracted) 'ingroup' such as Western society (e.g., Mark) or all of humanity (e.g., James) and their consequences for an 'outgroup' – other species, eco-systems, or 'nature'. The contributions by Kotchen (2009) and Struck (2010) are also important as they rightly identify a means through which lay environmentalists (who have enough disposable income) may assuage their eco-guilt through an accessible reparative behaviour (buying carbon offsets).

However, there are some important ways in which the eco-guilt literature, as it currently stands, is problematic. The main issue is the preference for quantitative methods and the limitations that approach builds into the studies and their findings. As Macnaghten explains, "The logic of such research is that by asking people to respond to pertinent statements, one can determine people's underlying values and attitudes" (1995: 135). The authors mentioned here are clear and transparent with their methods, the assumptions built into their research design and with the limitations of their research. However, they all assume it is possible and worthwhile to quantitatively operationalise and measure inherently abstract things: in this case, negative emotions like guilt and shame. This indicates a positivist research paradigm that is anathema to the epistemological foundations of this project. One of the key reasons for adopting a qualitative approach, and indeed a Foucauldian discourse analysis approach, has been in order to capture the complexity of issues that are inherently interrelated, dynamic and possibly even contradictory. The quantitative, attitudinal approach taken by the majority of eco-guilt scholars, with methods based in large scale surveying, "has clear limitations in its ability to clarify the *complexity* of people's views and concerns to particular issues," as they tend to "pre-suppose a one-dimensional model of the person" (Macnaghten, 1995: 136). The inability to capture the complexity of the lived experience is evident in the conclusions drawn in the papers discussed above. They are limited to saying whether the very specific inducements of eco-guilt the authors created did, or did not, elicit the hypothesised response of 'reparative behaviour' (e.g. Rees *et al.,* 2015; Mallett, 2012). The studies do not link to contextual issues or social phenomena which may influence participants' attitudes to environmental harm, such as, for example, whether the local economy is dependent upon some extractive technology, whether the area the sample is drawn from is well-known as a wilderness tourist destination or even the wider environmental movement and environmentalism in general.

My analysis of Eco-guilt, in contrast, discusses the issue both as a social phenomenon – something happening in society – and as an active discourse interrelated with other environmental-religious discourses, providing resources for comprehension of environmental issues and their impact on

individuals. It also, through the incorporation of religious terminology and literatures, has indicated another extant literature which might shed light on the associated lack of eco-action. Simply put, there is a parallel literature on religious guilt and guilt-coping mechanisms also within psychology – none of which the eco-guilt literature draws upon. Albertson *et al.* point out that guilt "has been viewed as both a destructive and unnecessary result of religion," yet also "a normal result of living within a social community" (2006: 67). Religion and guilt go hand in hand. However, Catholicism and guilt have a special relationship: "The Catholic religion is perhaps unique among world religions in its emphasis on remorse, confession, and atonement" (Sheldon, 2006: 209). Again, here my positionality as a researcher had a complex impact on the project; as a lifelong Roman Catholic, the parallel between Eco-Guilt and Catholic guilt was unmistakeable. Simultaneously, I was astonished that the eco-guilt scholarship not interact in any notable manner with the religious guilt literature, despite my assumption that "Most of us are familiar with the "Catholic guilt" stereotype" (ibid.).

Again, the religious guilt psychology literature was heavily quantitative and thus much the same methodological criticisms apply as do for the eco-guilt literature.. Another frustration with the literature was that none of the papers discussed the positionalities of the authors. This is more of an issue where papers specifically deal with Catholic guilt because reading them as a practising Catholic indicated that scholars had mis-understood the role of Catholic guilt and, indeed, the point of the Sacrament of Penance and Reconciliation. This then leads to questions regarding whether, for example, McKay *et al.* are qualified to be recreating "the experience of Catholic confession" and scepticism of their measure of "prosocial behaviour" (donations to the Catholic Church) (2013: 206, 207). On the other hand, just because the lived experience discussed in their study does not match with my own does not invalidate their work: it merely indicates that there is a disconnect worth investigating.

Nevertheless, there were some useful points to be gleaned from the religious guilt literature. Firstly, as with the issue of eco-guilt, in principle the religious guilt literature gives much evidence to suggest that the Catholic guilt stereotype is a real social phenomenon and not merely an urban myth or stereotype (e.g. McKay *et al.*, 2013; Sheldon, 2006). Secondly – and arguably most importantly – the religious guilt literature includes a subset of studies which indicate that "the structure of the Catholic faith might allow for the direct and active expiation of guilt associated with "self-induced" life stress", more so than Protestant religions (Park *et al.,* 1990: 568). Park *et al.* hypothesise that this may be because "one very basic difference between the two groups is the Catholic emphasis on works, compared with the Protestant emphasis on faith" (p.567). Walinga *et al.* expand on this, explaining that

> "The Catholic theology states that guilt is present, but that it can be resolved by penitention or 'doing good works'. Orthodox Catholics learn to deal with guilt in different ways. First, the sacrament of confession gives relieve. Confessing is relieving in itself, and the pastor suggests a fine or gives absolution. Second, the Catholic church offers guilt-solving liturgical rituals: services in which people can personally and collectively confess their guilt" (2005: 118-119).

Fischer and Scott Richards (1998) point out many of the Catholic sacraments are involved with helping the faithful deal with their guilt. "Baptism cleanses of original guilt, Confirmation perfects Baptism, Eucharist wipes away sins, the Mass is a prayer that articulates the need and request for mercy, the sacrament of Penance and Reconciliation involved acknowledgement of sins, and helps people let go of guilt, and the sacrament of Anointing the Sick also provides forgiveness" (Walinga, Corveyleyn, & van Saane, 2005: 119).

The general point being made here is that Catholicism's array of rituals and rites provide emotional resources for people to deal with their guilt, thus acknowledging the importance of helping people to work through guilty feelings and move forward with positive actions. As my research has shown, although environmentalism provides abundant opportunities for individuals to feel guilt over harm done to the environment, it does not provide resources for those individuals to deal positively with their guilt and instead leaves them mired in agential paralysis. This indicates an opportunity for interdisciplinary (qualitative) research; whether there are lessons to be learned from how the Catholic church has institutionalised guilt and guilt-coping mechanisms, and whether there may be ways that environmentalism could incorporate some elements from the guilt rituals inorder to overcome its stagnation and purported 'zombification' (Anderson, 2010).

9.3. Research summary and reflections

The aim of this research project was to show various ways that a 'religious' analysis could improve understandings of the current and possible future states of environmentalism in the UK, using the emblematic issue of nuclear power as a means of focusing the research and analysis processes. This aim has been achieved through the implementation of a novel research approach which incorporated Christian, religious discourses and theories – such as implicit religion (Bailey, 1997, 2010, 2012) – with more standard social scientific environmental discourse literatures. This project has successfully addressed a knowledge gap in the environmental discourse literature through the conscious and deliberate use of religious vocabulary and terminology as a means to bring out the ways in which environmentalism is both analogous to, and an inheritor of, religion: specifically of Western Christianity. It has also addressed an acknowledged gap in the religious studies literature, as indicated by von Stuckrad (2015), who laments the paucity of in-depth, historically-driven

discourse analysis methods being applied to religious topics. From a purely methodological perspective, I am also pleased to have been able to devise, test and fully operationalise a method of Foucauldian-inspired discourse analysis which I hope may be of use to other researchers wishing to incorporate a discursive element to their research. As mentioned by Graham (2011: 663) and others (see §2.2) there seems to be an abundance of models but a lack of precise guidelines for doing Foucauldian discourse analysis. I hope my 'discourse toolkit' (§5.3) may therefore be of use to others.

More specifically, this research project has shown clearly the extraordinary extent to which modern British environmentalism – as espoused by the 'lay environmentalists' who particpated in the project – both incorporates and re-purposes elements of Western Christianity. This was most obvious in discourses like Original Eco-Sin and E'pocalypse, but also evident in the majority of the other discourses discussed in Chapters 6 and 7. It has also shown how environmentalism more generally functions as a religion for its adherents: providing a creed, guidelines for behaviour, a means to differentiate oneself from an 'other,' sects and individual prophets (movement intellectuals) to follow, and an underlying cosmology founded on a blend of the three classical cosmologies (the Organic, Mechanistic, and Divine Order).

The unique approach taken in this thesis has allowed the analysis to transgress disciplinary boundaries and link discursive themes which otherwise may have not seemed obviously connected. The qualitative research paradigm and methodology, predicated on the collection and analysis of rich conversational data, has meant that this project was able to dig down into the 'why' and 'how' questions. The analytical detail that became available as a result means that I am confident in my findings, even when they directly contradict those of the extant literature – the key example here relating to eco-guilt. The early decision to pursue a deliberately heterogeneous sample universe means that my core findings, occurring as they do across such a varied group of participants, are *more* generalisable, not less so (Robinson, 2014). As with all qualitative projects of this type, the analytical detail comes at the cost of a larger sample size, and the conclusions drawn are thereby constrained to a degree. I therefore look forward to further research on the issues and methods presented herein and am hopeful and confident that my overall findings will be corroborated through further research by myself and others.

The most obvious potential criticism of the approach and assumptions built in to this thesis pertain to the positionality of the researcher: nevertheless, that positionality made the novel approach taken in this thesis possible. In some cases, for example in the titles of the discourses, it could easily appear at first that I have imposed a religious perspective. However, the unique story of this

thesis project meant that I resisted the 'religious' approach for a long time, as I was very concerned about allowing my positionality to affect the analysis unduly. I have tried to make it clear how the titles of the discourses are grounded in their content.

I consider the key empirical finding of this research project – aside from the value of incorporating religion back into the social sciences – to be the fact that Eco-Guilt did not produce eco-action, and instead imbued my lay environmentalists with agential paralysis. When considered in the light of environmentalism as an implicit religion, this becomes particularly significant. Many commentators since the Enlightenment have been (rightly) critical of how religions – and especially Christianity – seem to thrive on the guilt of the faithful. What is often missing from that narrative is that they also provide positive services to the faithful – through the ritual assuaging of guilt and the provision of hope for the future. That is what seems to be missing from my participants' experiences of environmentalism: they lack hope. The environmentalism that instils Eco-Guilt does not provide the resources that the Catholic Church, for example, does to help its faithful to cope with their guilt and feel that their good works are worthwhile:

> 'Alas! Alas! Religion is vanishing … We no longer have either hope or expectation, not even two little pieces of black wood in a cross before which to wring our hands … Everything that was is no more. All that will be is not yet.' Alfred de Musset, in Coser (1965: 101)

I suggest, therefore, that future research is required on how religion, and perhaps especially the Catholic Church, has managed to institutionalise guilt and guilt-coping mechanisms, in the hope that some new understanding may be incorporated into future environmental perspectives.

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Appendices

A1: Participant Schedule

Name (anon.)	Participation in…	Gender	Age group	Occupation
Sue	environmental activity; EMO	F	40-50	Politician
Rob	environmental activity; EMO; academy	M	30-40	academic
Pat	environmental activity; academy	F	30-40	academic
Debbie	environmental activity; explicit religion	F	20-30	translator
Tom	environmental activity	M	40-50	sustainability officer
Donna	EMO	F	70-80	retired
Mark	explicit religion	M	30-40	unemployed
Richard	EMO	M	70-80	retired
John	environmental activity; EMO	M	70-80	retired
James	EMO	M	60-70	retired
Lindsey	EMO	F	60-70	retired
Will	EMO	M	40-50	Public Relations
Mary	explicit religion	F	30-40	unknown
Karen	EMO	F	50-60	retired
Dave	environmental activity	M	40-50	sustainability officer
Mike	environmental activity	M	40-50	ethical investments
Charlie	EMO	M	40-50	consultant geologist
Liz	EMO	F	60-70	botanical illustrator
Sandra	environmental activity; EMO; academy	F	30-40	academic
Lisa	environmental activity; EMO	F	50-60	GP
Brenda	environmental activity; EMO	F	30-40	freelance researcher
Sharon	explicit religion	F	30-40	academic
Tim	explicit religion	M	40-50	translator
Joe	environmental activity	M	20-30	Environment Agency
Nancy	environmental activity	F	30-40	Heritage consultant
Pam	EMO	F	60-70	retired
Kevin	environmental activity	M	30-40	academic librarian
Ken	EMO; academy; explicit religion	M	70-80	retired, clergy

Steve	EMO; explicit religion	M	60-70	retired
Jenny	environmental activity	F	20-30	musician
Maggie	EMO	F	50-60	retired
Dan	environmental activity; academy	M	30-40	academic
Craig	environmental activity; EMO	M	40-50	EMO staff
Denise	environmental activity; academy	F	30-40	academic librarian
Jeff	environmental activity	M	30-40	musician
Gary	EMO; academy	M	40-50	academic
Kathy	EMO	F	60-70	retired

A2: Consent form

The University Of Sheffield.	PROJECT TITLE: **'Nuclear Power and the implications for Environmentalism' – (working title)**
RESEARCHER: **Caroline McCalman**	

		Please tick box
1	I confirm that I have read the information sheet, that I understand the purpose of this research and that I have had the opportunity to ask questions	☐
2	I understand that my participation is voluntary and that I am free to withdraw at any time, without giving reasons	☐
3	I agree to take part in the above study	☐

		Yes	**No**
4	I consent to being audio recorded	☐	☐
5	I understand that the audio record will be transferred to the researcher's hard drive and backed up to a secure USB. My personal details will not be stored alongside the audio record.	☐	☐
6	I consent to the use of anonymised quotes/information	☐	☐

Name of participant	**Signature**	**Date**
Name of researcher	**Signature**	**Date**

A3: Information sheet

RESEARCH PROJECT INFORMATION

The University Of Sheffield.

Project: 'Nuclear Power and the implications for Environmentalism' – (working title)

You are being invited to take part in a research project. Before you decide to participate, it is important for you to understand the research purpose and what your participation will involve. Please take time to read the following information carefully and discuss it with others if you wish. Do not hesitate to ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to participate. Thank you for reading this.

Purpose of the project:

I am an ESRC (Economic and Social Research Council) funded PhD student at the Urban Studies and Planning Department at The University of Sheffield. The purpose of my research is to pursue an in depth investigation into public understanding of the government's current pro-nuclear energy policy and in particular the claim that nuclear is a 'low-carbon' energy source. I am especially interested in understanding the reaction of local environmental communities to this policy. This project is a study which started in September 2013 and ends in August 2017.

Why have I asked you to participate?

You have been invited to take part in this research because I am interested in understanding this issue from the perspectives of people who exhibit

- A range of ages;
- A range of perspectives on the environment;
- A range of perspectives on faith/religion.

A pilot study has shown me that these three factors have interesting and important effects on a person's views on my topic.

Do I have to take part?

Your participation is voluntary, so it is your decision whether or not to take part in this project. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form), but you can still withdraw at any time without it affecting you in any way. If you decide to discontinue participation you do not have to give a reason.

What will happen to me if I take part?

If you decide to take part you will participate in one audio recorded face-to-face interview where discussions around nuclear power, climate change and environmentalism will take place. This will take the form of a structured conversation where different topics within this subject area can be explored. This usually lasts about 40 minutes.

Will my taking part in this project be kept confidential?

Yes, all data acquired will be used for interview purposes only and will be kept strictly confidential. The researcher will not disclose or share any personal information of any participants or use information which can reveal participant's identities in any reports, summaries, publications or final PhD thesis.

It is normal practice for all research contributions of this manner to be totally anonymised. Whilst it is highly unlikely, in extreme cases the researcher might need to break confidentiality if their own safety or the safety of others in your group is directly at risk or if you disclose illegal activity.

What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this research will contribute to current debates around the future of nuclear power in the UK and the role of environmentalism and climate change issues in directing energy debates. It is also intended that this understanding could be a positive way to aid policy formation and better inform decision making processes for the future of nuclear energy in the UK.

What will happen to the results of the research project?

The results from the data collection will contribute to my PhD thesis. A PDF format of it will also be available for any participant who wishes to have a copy. It is common for academic researchers to use the data they gather during their PhD project to write and publish journal articles after they complete their thesis. The digital recordings and transcripts will be kept for a period of up to 5 years following the completion of my PhD in order to facilitate this.

Who has ethically reviewed the project?

This project has been ethically approved via the Department of Town and Regional Planning's Ethics Committee in line with The University of Sheffield's research ethics procedures.

What if something goes wrong?

If you wish to speak to someone at the University of Sheffield at any point during or after the research, please contact my academic supervisor, Dr Stephen Connelly (s.connelly@sheffield.ac.uk). If you feel that your query or concern has not been dealt with to your satisfaction, you can

contact the University's Registrar and Secretary on 0114 222 1100, or find further details at www.shef.ac.uk. There are no compensation arrangements.

For further information, please contact:

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