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## Destabilizing Environmentalism: Epiphanal Change and the Emergence of Pro-Nuclear Environmentalism

Caroline McCalman & Steve Connelly

Department of Urban Studies and Planning, University of Sheffield, Sheffield, UK

ABSTRACT George Monbiot, the prominent British radical journalist and environmentalist, shocked his readers and contemporaries by responding to the nuclear power station accident at Fukushima in March 2011 by becoming actively supportive of nuclear energy. In this paper we present a discourse analysis of Monbiot's published articles which document this epiphanal transformation in his identity from orthodox to pro-nuclear environmentalist. Using a narrative theoretical approach which draws on Charles Taylor's conceptualization of identity as arising from the telling of (moral) stories, we show how an individual can actively draw on the complexity of existing discourses in a given field to create new discourses and so recreate their own, and potentially others', identities. Monbiot's story matters because of his role, as an environmental 'movement intellectual', in shaping environmental discourse to a greater degree than most individuals, as well as being an example of how any individual can make new sense of even deeply held convictions. We suggest that a new environmentalism is developing, painfully born from and through conflicts within the orthodoxy, embodied in and shaped by the personal struggles of the movement's own intellectuals.

KEY WORDS: Environmental discourse, narrative identity, movement intellectual, nuclear power, epiphanal moments

#### Introduction

On 11 March 2011 the combined effects of a massive tsunami, poor safety design and regulatory capture resulted in a serious accident at the Fukushima Daiichi nuclear power plant in Japan (Aoki & Rothwell, 2013). The material and cultural effects rippled across the world. In most places anti-nuclear positions strengthened: Germany announced the immediate shutdown of her civil nuclear

Correspondence Address: Caroline McCalman, Department of Urban Studies and Planning, University of Sheffield, Western Bank, Sheffield S10 2TN, UK; Tel.: +44 (0)114 222 6900; Email: CMcCalman1@sheffield.ac.uk

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programme, and most countries stopped to take stock of their own nuclear liabilities (Joskow & Parsons, 2012). However, in the UK—where the government was intent on a new generation of nuclear power stations—one leading commentator made a distinctive shift in the opposite direction. The campaigning environmental journalist George Monbiot announced that the incident in Japan had finally tipped him over the edge to become pro-nuclear *on environmental grounds*. '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,' while 'on every measure (climate change, mining impact, local pollution, industrial injury and death, even radioactive discharges) coal is 100 times worse than nuclear power' (*Going Critical*).<sup>1</sup>

In this paper we present a discourse analysis of Monbiot's published articles on nuclear power from 2006 to 2013 to explore this 'epiphanic transformation' (McDonald, 2008). In part our aim is to use this public, well-documented metamorphosis to illuminate current changes within the UK environmental movement. Monbiot's transition points to the emergence of a newly legitimate identity—that of an active but pro-nuclear environmentalist. While a high-technological 'wing' of the environmental movement has always existed, the mainstream campaigning organizations across Europe have traditionally been resolutely antinuclear (Pak, 2011; Van der Heijden, Koopmans, & Giugni, 1992). As another influential British environmentalist recently put it:

...it's all but impossible for me to understand how any thoughtful, intelligent environmentalist could possibly suppose either that a so-called nuclear renaissance is ever going to happen; or even in the improbable circumstances that it did, how it could possibly deliver the kind of safe, secure, low-carbon energy the world needs so desperately. (Porritt, 2014)

Moreover, as a prominent 'movement intellectual' (Eyerman & Jamison, 1991, p. 98), Monbiot's work—disseminated through his wide-reaching media platform—plausibly shapes and legitimizes environmentalist discourses as well as expressing them, and so also enables others' conversions. He is not the only environmentalist to have undergone this transition in recent years, and we cannot assess Monbiot's individual contribution through an analysis of this type. However, in a context in which public acceptance of nuclear power hangs in the balance (Poortinga, Pidgeon, Capstick, & Aoyagi, 2014), Monbiot's epiphany seems significant, as an exemplar of a potentially seismic change within the UK's environmental movement, and as a contributor to building support for nuclear power.

We also aim to show the utility of narrative/biographical analysis for investigating changes in environmental discourses. A change in environmental ism involves a change in what it is to be an environmental ist, and we draw on Taylor's insights into how people actively exploit the complexity of existing discourses in a given field to create new discourses, and so recreate their own and others' identities (Taylor, 1989).

After describing the context within which Monbiot was writing, we briefly present the narrative theoretical approach, narrative's relationship to identity, and our key structuring concept of the *epiphany*. The central section of the paper comprises a discourse analysis of a corpus of the articles from Monbiot's archive (monbiot.com/articles) tagged with the keyword 'nuclear', starting from the mid-2006 when he begins to question orthodox environmentalist

anti-nuclearism. We show how he draws on a range of existing nuclear and environmental discourses to present and defend his struggle with himself and his opponents to articulate a new pro-nuclear identity. The paper closes with a discussion of the substantive implications of this and reflection on the utility of an individual's narrative in analysing discursive change.

#### Policy and Public Opinion in the UK

The possibility and relevance of Monbiot's epiphany emerge from the context of UK policy and wider societal discourses about nuclear energy. In the UK a long period of mistrust fuelled by the secrecy of nuclear authorities and industry, and zealous media reporting of nuclear mishaps (Pidgeon & Demski, 2012) was followed, between 1990 and 2010, by an upswing in pro-nuclear sentiment (OECD, 2010). Memories of the Cold War and the accidents at Three Mile Island (1979) and Chernobyl (1986) were fading, and climate change emerged as a dominant threat in public discourse and environmentalist campaigning. Allied with concerns over energy security, nuclear power's claim to be a low-carbon energy source (Butler, Parkhill, & Pidgeon, 2011) led to the so-called nuclear renaissance, with an 'expectation that the world was on the verge of a major new program[me] to invest in a large fleet of new nuclear power plants ... something that had not been seen since the 1970s' (Joskow & Parsons, 2012, p. 7).

Immediately post-Fukushima a sharp decrease in pro-nuclear sentiment was the norm worldwide (Ramana, 2011). Yet the UK experienced merely a brief 'dip'; two years later public concern and opposition to nuclear power had slightly decreased, with around half the population supporting new nuclear power stations if they would improve energy security and tackle climate change (Poortinga et al., 2014). Public trust in the regulation of nuclear power was 'surprisingly resilient' and did not conform to the 'trajectory that could have been expected after a major nuclear accident' (Poortinga et al., 2014, p. 3). Others were similarly surprised, and suggested that 'the same factors that influenced that future trajectory of nuclear generation pre-Fukushima are likely to continue to dominate' (Joskow & Parsons, 2012, p. 25).

The relationship between public opinion and government policy is clearly complex, particularly given the significant and politicized role of the media (Hajer, 2009), and is beyond the scope of this paper. However, public ambivalence, and the post-Fukushima resilience of the conditional and 'reluctant acceptance' of nuclear power (Bickerstaff, Lorenzoni, Pidgeon, Poortinga, & Simmons, 2008) are presumably both enablers and effects of UK energy policy, which has remained steadfast in its pro-nuclear position. A greater proportion of nuclear electricity in the future energy mix is supported by all leading political parties (with the exception of the Green Party), partly on the environmental grounds that it is 'low-carbon' but more reliable than wind and solar power, the principal renewable alternatives favoured by most environmentalists. The climate change argument has a long pedigree in Britain, having been introduced by Conservative Prime Minister Thatcher in 1988 (Doyle, 2011). However, it was a Labour government that committed Britain to a new generation of nuclear power stations (BERR, 2008) after the long post-Chernobyl hiatus. Joskow and Parsons have commented that 'it does appear that the UK government is going to great lengths to support nuclear power as part of its GHG mitigation strategy' (2012, p. 23). The nuclear industry also draws heavily on climate change discourses (see Nuclear Industry Association, 2014), echoed in increasing and highly publicized support from scientists from outside the environmental movement, often casting 'environmentalists' as irrational opponents (Connor, 2015).

Despite the uncertainties, it is clear that the media are significant in shaping public opinion on the environment. The communication of 'elite' positions—as opposed to the bare facts about climate change—seems to be particularly influential (Yin, 1999). In the context of a government with a pro-nuclear energy policy, explicitly justified in environmental terms but opposed by a resolutely antinuclear environmental movement, and a public more or less equally divided between support, opposition, and uncertainty (Poortinga et al., 2014, p. 14), authoritative voices dissenting from the environmentalist orthodoxy might be expected to be influential. To understand this dissent, we turn to the discursive resources they have available.

#### Discourses and Narratives

We consider discourses as 'shared ways of apprehending the world' which while going beyond text are 'embedded in language' (Dryzek, 2005, p. 9) —in particular in government policies, scientific reports, and public debate. Salient amongst their effects are the definition of possible identities—the 'subject positions' which individuals may occupy (Frosh, 2003). The literature on nuclear power and the environment reveals some key discourses central to academic and political debates.

Introduced here in increasing level of abstraction are the principal nuclearrelated discourses drawn upon by Monbiot in his writings, to which we have assigned 'names' for convenience of reference. Although these may be associated with either a pro- or anti-nuclear stance, a characteristic of the debates is that most can be deployed on either side, making feasible the development of new arguments by creative agents. Energy gap and energy security are related politico-economic discourses. In the context of nuclear power, the former encapsulates an overall concern that a future shutdown of nuclear plants will create an energy shortage. *Energy security* is most often couched in terms of the need to ensure a secure energy supply able to withstand external shocks, such as those occurring due to instability in oil- and gas-producing regions. More abstract discourses include the nuclear dualism discussed by Doyle (2011) —a collection of ideas, phrases and imagery which inextricably link civil and military uses of nuclear technologies—and nuclear exceptionalism (Hecht, 2006), in which nuclear power is represented as being 'fundamentally different', posing 'qualitatively and quantitatively distinct, never-before-encountered dangers' (2006, p. 321). Finally, there are broader nuclear-relevant discourses about the role of science in society. *Techno*rationality in this context refers to the manner in which scientific progress (with nuclear science as its technological and theoretical pinnacle) becomes synonymous with social progress (Irwin, Allan, & Welsh, 2000). Abstract faith in science is related to techno-rationality, but emphasizes the hope that future scientific progress will solve the problems of today (Bickerstaff et al., 2008).

While the literature abounds with differing categorizations, a broad consensus posits two opposing environmental discourses or 'environmentalisms' (Pak, 2011): one which privileges human needs and endeavour ('anthropocentric', 'technocentric', 'Utilitarian', etc.) and the other which recognizes 'Nature's' intrinsic value ('ecocentric', 'Arcadian', etc.). While the first arguably dominates the

worlds of policy and everyday practice, the latter is central to the modern environmental movement (Pak, 2011). Arcadian positions have accommodated diverse understandings and politics regarding the promise of technology, with mainstream environmentalist energy solutions uniformly rejecting fossil fuels while embracing an enormous range from low- to high-tech renewable technologies. Yet despite this flexibility, a constitutive component of the Arcadian identity has been its anti-nuclear stance. Modern environmentalism emerged in the mid- to late-twentieth century in conjunction with the anti-war and anti-nuclear movements (Litmanen, 2010; Pepper, 1984, p. 16). Powerful 'risk' discourses of nuclear exceptionalism and nuclear dualist arguments about links between civil and military uses have been ever-present in the mainstream and its organizations such as Friends of the Earth (FoE) and Greenpeace, as well as 'Green' political parties (Van der Heijden, 2014).

This has had serious consequences for what it means to be an environmentalist. As Pak puts it:

The fact that the Arcadian school dominated the initial phase of the current wave of environmentalism has had several consequences... [one] has been that the Arcadian dominance has tended to obscure other environmentalist perspectives, to the extent that those who do not share its views sometimes find it difficult even to identify themselves as environmentalists. (2011, p. 6)

This 'green orthodoxy' has remained relatively static, arguably contributing to the movement's current 'stagnation' and 'isolation' (Anderson, 2010). Heterodox positions on nuclear issues have been excluded, and suggestions that the mainstream might change have been rapidly suppressed. When a senior FoE-UK executive inadvertently suggested in 2014 that the organization was rethinking the nuclear issue, rebuttals and recriminations abounded (Bennett, 2014). However, we suggest that despite this organizational response, the orthodoxy is increasingly open to challenge. A pro-nuclear environmentalism is emerging as an alternative, enabled by the salience of the climate change discourse and the associated rise of ideas that nuclear power might provide relief from this overriding environmental problem. This discourse legitimizes a new identity: an environmentalist who is still credible as part of the movement, but who is also pro-nuclear. Because of the foundational place of anti-nuclearity in the movement, for an individual to adopt this is more than a shift in policy preference—it involves an identity change, which can be challenging and painful. To better understand the emergence of this once unthinkable identity, we take a narrative methodological turn.

While definitions of 'narrative' vary (Wells, 2011), their family resemblance rests on a concern with stories of events and/or experiences, temporally ordered and meaningful to an audience (Wengraf, 2001). In particular, following Taylor's claim that 'we must see our lives as a story' (Taylor, 1989, p. 52), much attention is paid to how people use stories to make sense of their lives in moral terms (Frank, 2008). The self is achieved through narrating stories which develop and define an orientation to the social 'background of things that matter' (Taylor, 1991, p. 41) —identity is inherently narrative *and* moral. It is also social rather than purely individual, co-created dialogically with an audience (Frank, 2008) and so dynamic and contestable—a (sometimes uneasy) mix of what is claimed and what is ascribed by others (Jenkins, 2008).

While it might seem that there is a tension between the social scale of 'environmental (policy) discourses' and the individual (auto) biographies of narrative studies, they are closely enmeshed. Understanding the processes of discursive change requires paying attention to how individuals (who in Gamson and Modigliani's terms 'sponsor' discourses (Gamson & Modigliani, 1989)) use and are constrained by the discursive resources available to them (Schmidt, 2008). In particular, while the relationship between discourse and identity is much contested theoretically, we take the position that while discourses construct identities, by constructing legitimate subject positions, individuals are also more-or-less powerful agents who can utilize available discursive resources to both recreate their own subjectivity and create new discursive positions for others (Frosh, 2003). In recounting not just what happened but why, even an individual's story presents the interaction of agency and context in ways which are both intricate and flexible. Storytelling about the self is always also about the values and beliefs embodied in discourses present within the wider society (Frank, 2008), and is therefore also inherently emotional, revealing affective along with cognitive motivations and struggles which are both essential to understanding discursive change and otherwise inaccessible through less individual and more formal approaches to discourse analysis (Fischer, 2009). Finally, looking at narrative typically implies looking at change over time, and how episodes of change interrelate. This emphasis on overall, dynamic patterns adds to analysis of the discursive components of a process: an inherent part of narrative analysis is identifying the overall 'plot', which is typically one which recurs in many stories (Wells, 2011).

#### Studying George Monbiot's Epiphany

While in most cases any individual's role in reshaping—as opposed to reproducing—important discourses is likely to be minimal, there are people whose impact is potentially greater. In the context of environmentalism, some of these can be described as 'movement intellectuals', whose 'cognitive praxis' shapes the discursive practices and identities of the movement (Eyerman & Jamison, 1991). 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: these are amongst the authoritative voices whose media presence appears to be influential (Yin, 1999).

However, the causal complexity of the relationships between elite opinion, the media, and the public creates methodological and analytical problems. For any individual movement intellectual, it is impossible to determine the extent to which he or she is an agent of change, or alternatively merely reflects and reproduces existing discourses. This is an intractable issue, but our argument here is that given that discursive change happens and it now seems possible to publicly articulate a pro-nuclear position and maintain credibility as an environmental campaigner, George Monbiot fulfils criteria which suggest he both articulates and enables this new identity. He is not alone in this: a number of other prominent environmentalists have recently adopted similar positions, perhaps most visibly in the open 'Letter to [UK Prime Minister] David Cameron' signed by Monbiot and four others. Amongst these, Monbiot attracts our attention for three reasons.

Firstly, for 25 years he has been a well-known writer of articles and books on environmental issues—an investigative journalist who describes himself as fighting (inter alia) environmental destruction, injustice, and inequality (Monbiot, 2014). Secondly, he has long had probably the most public platform for any environmentalist in the UK, through a regular column in *The Guardian*, the UK's only centre-left national daily newspaper aimed at a well-educated, middle-class readership (Greenslade, 2012), and which has an impressive global reach (*The Guardian*, 2014). He also has his own website (www.monbiot.com), which hosts the archive from which our corpus was drawn. Finally, for no other individual do we have a detailed, publicly accessible yet personal account of the transition from orthodox environmentalism to the pro-nuclear position, written more or less as it happened.

As with most narrative research, there are two narratives in this study (Frank, 2008) —Monbiot's and our own. Ours is present in the overall structuring in terms of epiphany, within which we have explored the discourses we identify in his narrative. The corpus is akin to a diary, providing a set of 'snapshots' rather than an overall retrospective view, and is intensely autobiographical. This does not, of course, give us unmediated access to what he was thinking at the time. He is constructing a narrative himself, engaging in retrospective sense-making both on a week-by-week basis and also through his selection of the archive. Furthermore, these are the public writings of a journalist/activist, part of the cognitive praxis of a movement intellectual, despite the very personal style which invites the reader to feel as though they have been allowed access to his thought processes. From this 'diary' we construct our own biographical account of discursive change.

Our first analytical step was to identify the overall plot. We did not set out to tell a simple, linear story: on the contrary, we anticipated 'messiness', given that we were examining texts produced over several years, rather than a single document of autobiographical, retrospective sense-making. Of course, as noted above, Monbiot is a storyteller, purposefully introducing a modicum of linearity in order to make his work accessible. Yet we were still surprised at the extent to which the corpus revealed a coherent overall story, which fitted extraordinarily well with McDonald's model of epiphanal change.

A core concept of narrative inquiry, epiphany in its modern (metaphorical and secular) sense was defined by Denzin as 'life experiences that radically alter and shape the meanings persons give to themselves and their life projects' (Denzin, 2001, p. 34). Here we draw on McDonald's generic schema for how such sudden and abrupt personal transformations occur, which he derived from a 'thorough and wide-ranging review' of the literature on epiphanic moments and transformations (McDonald, 2008, p. 89) which itself built on earlier, more limited reviews by Jarvis (1997) and Miller and C'de Baca (1993, 2001). His content analysis of this large and disparate literature led him to posit six central characteristics of an epiphany: an antecedent state; suddenness; personal and profound transformation; illumination/insight into 'something that the individual had previously been blind to'; Meaning making; and an Enduring nature. 'Although the actual epiphany is a momentary experience, the personal transformation that results is permanent and lasting . . . . ' (McDonald, 2008, p. 93).

Such epiphanies are a recognizable type of change, a plot type, attested to in a range of contexts—though environmental activists seem particularly prone to epiphanal experiences (Hards, 2012). The concept is useful to us in providing an

internal analytical structure for a significant and enduring change in an individual's world view.

Taking the corpus in the order in which it was published, we then divided it into sections according to the aspect of the epiphany they present. This neat sequencing is not inherent in McDonald's schema—beyond the bracketing by an antecedent state and indefinite effects—but was something which emerged from the analysis, again somewhat to our surprise. (The exception was 'suddenness', which is descriptive of a temporal change, and has thus been folded into the second section of the analysis which deals with the epiphanal 'moment' itself.) In the following section, we use this structure to organize the detailed discourse analysis of the corpus. This followed the 'discourse within narrative' approach which focuses on how discursive objects and subject positions are constructed, and on subjective experience within those positions (Wells, 2011, p. 91). We used thematic coding (Braun & Clarke, 2006) of the discourses 'sponsored by' Monbiot, moving backwards and forwards between 'coding down' (Fielding, 2001) from the primary themes drawn from the literature's nuclear discourses, and 'coding up' from Monbiot's writings where we identified developments of the primary themes and new discourses.

#### Analysis of an Epiphany

The Antecedent State

This first period starts around the time of the ascendancy of climate change in UK policy and the reopening of the nuclear new-build issue. McDonald describes this state as one of 'anxiety, depression and inner turmoil' (2008, p. 93), and the latter two are certainly discernible in Monbiot's articles. He begins questioning some elements of the orthodox green position on nuclear power in the subtitle of Thanks But We Still Don't Need It: 'some of the arguments against nuclear power are no longer valid, but it remains the wrong technology'. This article contains a number of discursive 'firsts' for him: open questioning of the orthodoxy's nuclear position; describing nuclear power as a source of 'low-carbon energy'; noticing environmentalists' credulousness ('Anti-nuclear campaigners have a tendency to believe anything that casts the industry in a bad light'); and the first grudging example of the nuclear techno-rationality discourse ('I am forced to admit that an accident like Chernobyl's could not take place in a new nuclear power station'). Thanks... is the beginning of a long discursive journey: the first time he says 'I hate nuclear power, but  $\dots$  ', although there is as yet no sign of abandoning his long-held opposition.

Monbiot betrays uneasiness about questioning the orthodoxy through a thinly-veiled attempt at distancing. He portrays 'the movement' as *self*-questioning, though it seems he is speaking from personal experience:

In public, we will line up to attack the energy review published by the government today. In private we will reserve some of our venom for each other, as we start to ask ourselves whether we have made the right decision. (*Thanks...*)

His reluctance is clear. Monbiot recognizes that anti-nuclearity is so deeply embedded in his own and other environmentalists' identity that even examining it prompts challenges. His personal narrative becomes a fraught dialogue where Monbiot not only defends but also redefines his identity, as his interlocutors charge him with heresy. Through this period Monbiot became increasingly beleaguered. In Nuked by Friend and Foe he defends his new opposition to unthinking anti-nuclearism by a claim of objectivity, as environmentalist friends 'take shots' at him and another pro-nuclear environmentalist, Mark Lynas: 'An unsentimental appraisal of our energy choices doesn't boost your popularity.' His anxiety is clear at the end of *Nuked...*: 'I realise that this will provoke hostile responses from almost everyone - including my friends - but we do ourselves no favours by obscuring the choices we face.' Caught between the orthodox anti-nuclear discourses which moulded his own and the movement's identities and the persuasive power of alternative discourses, he evinces a growing pressure to make what he comes to see as a hard, but necessary, decision. Cynics might suggest that Monbiot pursued this particular issue merely to be provocative and gain media attention. However, one needs only to look at the hostility he faced—and knew he would face then and ever since—to understand that this was not a decision taken lightly. Publicity was also not an obvious incentive: as a movement intellectual with a well-established public platform he arguably had more to lose than to gain.

#### The Epiphanic Moment

While the epiphanic transformation started many years before, the moment itself came suddenly. Five days after the Fukushima accident on 11 March 2011, he states 'I have not gone nuclear' (*Atomised*). Yet in *Going Critical*, published just one week later, Monbiot finally declares 'I am no longer nuclear neutral. I now support the technology.'

Atomised is initially confusing, apparently reflecting Monbiot's turmoil. The prose is uncharacteristically opaque and the argument the most contradictory in our corpus. The reader comes away feeling <code>unresolved</code>—a situation which is rectified in <code>Going Critical</code>. In <code>Atomised</code>, Monbiot still tries to maintain a semblance of anti-nuclearity, and is clearly anxious about having his green credentials excised. He writes:

I despise and fear the nuclear industry as much as any other green ... but, sound as the roots of the anti-nuclear movement are, we cannot allow historical sentiment to shield us from the bigger picture ... Even when nuclear plants go horribly wrong, they do less damage to the planet and its people than coal-burning stations operating normally.

Going Critical swiftly clarifies his stance, suggesting that his position on the fence in *Atomised* had very quickly become too uncomfortable. Despite the ironic reference to Dr Strangelove in the tagline ('How the Fukushima disaster taught me to stop worrying and embrace nuclear power'), the rest of the article is less than enthusiastic.

The discourses within *Atomised* and *Going Critical* are unclear. Perhaps the epiphany was so disorienting that it took time to marshal his new arguments. There are some clear elements of nuclear techno-rationality, which dismisses accidents 'as part of the technological learning-curve or else viewed as a consequence of non-scientific design choices' (Irwin et al., 2000, p. 82). Monbiot highlights that 'no one has yet received a lethal dose of radiation', despite a 'crappy old plant', 'inadequate safety features', and the 'monster earthquake and a vast tsunami'

(Going Critical). Monbiot's learning-curve is both generic and personal: the direct mortal consequences of a nuclear disaster were simply not as disastrous as he had expected. Other elements of techno-rationality appear in the way he carefully picks apart alternative energy generation scenarios to construct nuclear power as the only realistic option. By 'not proposing complacency here [but] proposing perspective', he both reinforces the 'necessity' of nuclear and irrationalizes the alternatives and those people that support them—a common techno-rational rhetorical trope (Irwin et al., 2000). Immediately post-epiphany, Monbiot reserves irrationalization for those environmentalists who have not 'seen the light' like himself; later on the nuclear industry and government come back into his sights as he reinforces his green, anti-establishment credentials.

#### Illumination and Insight

Following the epiphanic moment, Monbiot refines his new identity dialogically with several audiences. These include his anonymous and silent readers, a vocal minority who responded in electronic media, and (previously) fellow environmentalists. Here the dual nature of identity as something both claimed by oneself and ascribed by others is clear (Jenkins, 2008). While structured debate is possible with some, others deny his repeated claims to still be 'green' as they abuse him or write him off: he became an unperson to the Turkish environmental activists who simply 'stopped translating him' (Mert, A., pers. com., 30 October 2014).

Claims to better insight than his opponents become crucial, and in preparation for the predicted battles Monbiot did a *lot* of research into nuclear power. Again he irrationalizes critical responses as 'lurid' accusations and underlines the idiocy of his opponents by denying being 'an undercover cop, a mass murderer, a eugenicist or ... "the consort of the devil" (*Seven Double Standards*). Rhetorically, this humour lifts Monbiot out of the mire created by his accusers, contributing to his self-construction as a paragon of journalistic virtue. He is not one to 'stand by while misinformation is spread', but will 'winnow fact from fiction', helping people to 'form a more accurate view of the world' (*Why This Matters*). His implication is that we, his readers, should support and follow his example, in particular through trusting good science rather than emotions. In *Seven Double Standards* Monbiot consolidates his new position by explicitly scrutinizing the *nuclear exceptionalism* discourse that has long been associated with the orthodox green position, asking the question 'Why don't we judge other forms of energy generation by the standards we apply to nuclear power?'

During this period we see the introduction and expansion of a new discourse for Monbiot. We call it *Science First!*, and through it Monbiot increasingly asserts his identity as a rational, scientifically-informed environmentalist, who believes in the authority of the peer-review process and relies on this in his battle against misinformation spread by Arcadian environmentalists. Although he originally trained as a zoologist, this is the first time that we see explicit exhortations for claims to be underpinned by rigorous science. Thus alongside quotes from *Scientific American*, Monbiot writes:

We [environmentalists] emphasise, when debating climate change, the importance of the scientific consensus, and reliance on solid, peer-reviewed studies. As soon as we start discussing the dangers of

low-level radiation, we abandon that and endorse the pseudo-scientific gibberish of a motley collection of cranks and quacks, who appear to have begun with the assumption that it must be killing thousands of people every year, and retrofitted the evidence to match it. (Seven Double Standards)

Going beyond rhetorical irrationalization, this constitutes a new discourse with associated irrational and rational subject positions. It constructs orthodox green environmentalists as using bogus and unscientific arguments, and distances Monbiot from them—he is no longer willing to participate, even tacitly, in spreading misinformation, and will actively oppose it on moral grounds and not just because he disagrees on the substance. In subsequent articles *Science First!* is prominent, as Monbiot dismisses 'the world's foremost anti-nuclear campaigner' Helen Caldicott's claims as 'ungrounded in science, unsupportable when challenged and wildly wrong' (*Evidence Meltdown*). He deplores her 'questionable scientific claims', 'scarcity of references to scientific papers', and misguided reliance on a translated volume which, we are assured, 'has not been peer-reviewed' (*Evidence Meltdown*, *Why This Matters*). Monbiot adds a moral dimension by worrying that the misinformation spread by such unscrupulous greens might cause 'years of unnecessary terror and distress' (*Why This Matters*).

He presents a televized debate with Caldicott as destroying his last illusions about the green movement and its stalwarts. This theme of disillusionment is entwined with the emergence of *Science First!* and the new rational, scientific environmentalist identity. In *The Lost World* Monbiot writes that:

The battle among environmentalists over how or whether our future energy is supplied is a cipher for something much bigger: who we are, what we want to be, how we want society to evolve... We choose our technology—or absence of technology—according to a set of deep beliefs; beliefs which in some cases remain unexamined.

Monbiot still includes himself in 'we' environmentalists, but shows that the identity is based on 'divisive' contradictions: 'These questions are so divisive because the same world view tells us that we must reduce emissions, defend our land-scapes and resist both the state and big business. The four objectives are at odds' (*The Lost World*). Here he prepares the way for a new, more 'honest' environmentalist identity, presenting himself as a lone crusader, a paragon of objectivity, and a slayer of sentimental claims. 'I hope that by laying out the problem I can encourage us to address it more logically, to abandon magical thinking and to recognise the contradictions we confront' (*The Lost World*).

#### Meaning Making

During this penultimate section, Monbiot draws together discourses which reinforce his new position and the rationality and righteousness of his 'honest' environmentalism. He continues with the theme of 'crisis in the environmental movement' and with his *Science First!* discourse. We also begin to see a far greater reliance on *techno-rationality*, an introduction of *abstract faith in science*—albeit in a quite specific form—and a few small references to *energy gap* and *energy independence* arguments. Monbiot's maturing *techno-rationality*—and opposition to the blanket 'risk' narratives of nuclear exceptionalism—is evident in his

discussion of how Fukushima Daiichi's neighbouring nuclear plant was able to withstand the earthquake and tsunami. 'What we see here is the difference between 1970s and 1980s safety features' . . . 'using a plant built 40 years ago to argue against twenty-first-century power stations is like using the Hindenburg disaster to contend that modern air travel is unsafe' (Corporate Power? No Thanks).

A nuanced version of abstract faith in science is developed, and links made to other pro-nuclear environmentalists such as Tom Blees who share it. Rather than a generalized resentful dependence on science (Bickerstaff et al., 2008), or the policy establishment's faith in existing nuclear technologies, Monbiot speaks excitedly about the possibilities of 'the replacement of conventional nuclear power with thorium or integral fast reactors' (*Crushing Dilemmas*). These 'fourth-generation' technologies are presented as an achievable holy grail, designed to consume radioactive waste and plutonium from other reactors, while also being proliferation resistant and inherently safe. A thorium reactor 'could melt down only by breaking the laws of physics' (*A Waste of Waste*).

Monbiot also begins to sponsor the *energy gap* discourse. He refers explicitly to a possible 'generation gap' and asks 'Where will the balance come from?' (*The Moral Case . . .*), but this is a variant of the normal *energy gap* discourse, and a clear break with green orthodoxy—it posits a gap produced by switching from fossil fuels to renewables. More usually, the *energy gap* is seen as a consequence of the UK's nuclear fleet ageing and not being replaced in time (e.g. Goodall, 2009). Monbiot seem least sure about the associated *energy independence* discourse. He only refers to it in those texts associated with the *Letter to [Prime Minister] David Cameron* that he joint-authored with Stephen Tindale, Fred Pierce, Michael Hanlon, and Mark Lynas. As a counter to an earlier anti-nuclear letter to Cameron from 'four prominent environmentalists', the five write:

We believe their advice to be wrong in both fact and interpretation, and feel that if you act on it without further consideration of the alternatives, you risk threatening both the energy security of the UK and our climate-change targets. (*Letter...*)

Monbiot's disquiet stems from the presence of two closely intertwined discursive strands: one protectionist and nationalist, speaking of ensuring that the UK has an *independent* energy supply which will withstand external pressures, and the other focused on the idea of having a *secure* energy supply. Monbiot tries to separate these two, as despite his sponsorship of the 'stable and secure' thread he abhors the 'jingoistic tone' of the anti-nuclear letter's reference to the French energy company Électricité de France (EDF) (then in negotiation over the construction of the UK's first new generation reactor).

His uneasiness may also arise from appearing to support a right-of-centre government. Throughout this period Monbiot's non-nuclear writing shows his environmentalism in some ways growing more radical. He gives up on climate change multilateralism, and affirms his commitment to 'rewilding' (Monbiot, 2012) with its echoes of Thoreau's 'in Wildness is the preservation of the world'. Here the link to his faith in fourth-generation nuclear technology becomes apparent, in that it both resolves the tension between concern for the environment and pro-nuclearity, and demarcates his position from that of industry and government.

The Enduring Nature of the Epiphany

The first article in this final section, *Out of Steam*, is a low point in Monbiot's transformation. Following the rejection of plans for a national nuclear waste disposal facility, Monbiot's tone is one of dismay, hopelessness, and increasing bitterness. It seems that his crusade to change people's minds about nuclear power has failed: '... atomic energy is finished in the UK. As I've spent much of the past two years defending it, this is a hard admission to make' (*Out of Steam*). Monbiot continues to sponsor the variant of *abstract faith* in (fourth-generation) technology, but even this is tinged with defeat: 'The whole thing was misdirected anyway: it was a waste of waste' (*Out of Steam*). His frustration at the apparent idiocy of some positions regarding the energy options bubbles over into sarcasm:

Germany also decided to shut down its nuclear power plants after the Fukushima crisis, due to the imminent risk of tsunamis in Bavaria. Last year, as a result, its burning of 'clean coal – otherwise known as coal – rose by 5%. (*Out of Steam*)

Nevertheless, Monbiot retreats from rejecting nuclear power: climate change remains the greatest threat, and nuclear power is still part of the solution, albeit as 'a choice of two evils, but one is much worse than the other' (*Out of Steam*).

Fully half a year passes between *Out of Steam* and the next article, *Fiscal Melt-down*. Monbiot quickly allays any fears that the insight of his epiphanal moment has been abandoned. He writes,

I still support nuclear power. I believe that to abandon our primary source of low carbon energy during a climate change crisis would be madness. It would mean replacing atomic energy plants with something much worse ... The hard reality is that less nuclear power means more gas and coal. (Fiscal Meltdown)

Techno-rationality is still prominent: 'It astonishes me to see people fretting about continuing leaks at Fukushima, which present a tiny health risk even to the Japanese, while ignoring the carcinogenic pollutants sprayed across our own country.' There is a reminder of Monbiot's version of abstract faith, with references to the 'promise' of thorium and integrated reactors. The distancing from government and the nuclear industry positions persists, exacerbated by a controversial agreement with EDF on a high guaranteed price for electricity from the new reactor.

In the final article, *Power Crazed*, Monbiot is once again his post-epiphanal self. Again, he reconstructs the orthodox *exceptionalism* discourse, asking 'Why do we transfer the real health risks inflicted by coal onto nuclear energy?' He irrationalizes the 'lurid claims about Fukushima', and derides energy xenophobia: 'You're picturing filthy plants in Poland and Romania, aren't you?' (*Power Crazed*). The corpus concludes with some expert normalization of nuclear energy: 'You don't have to be an enthusiast for atomic energy to see that it scarcely features as a health risk beside its rival.' In *Out of Steam* Monbiot may have had a brief moment where he reconsidered his position on nuclear power, but by the time he closes the corpus with *Power Crazed* the enduring nature of the epiphany is clear. Nuclear energy issues then virtually disappear from his writing, but his position remains unchanged: a recent diatribe against the British state mentions in passing that 'getting rid of fossil fuels is a much more important task than

getting rid of nuclear power, which is orders of magnitude less dangerous' (Monbiot, 2015).

#### Conclusion

We have traced the story of an epiphany, setting out our narrative of the transformation of one man's identity from an 'orthodox green' to something new and uncomfortable. Two and a half years after Fukushima, Monbiot is still a passionate and very public environmentalist and movement intellectual, but pronuclear. He achieves this by weaving together existing discourses to create a new subject position: his identity as an 'honest' 'nuclear environmentalist' is defined against his familiar opponents in the nuclear industry and the UK government as well as his erstwhile comrades in the environmental movement. Despite the emotional challenges of both the personal transformation and the abuse he suffered, he maintains his public profile, albeit quieter on nuclear issues and throwing his weight behind radical nature conservation (Monbiot, 2012).

Anderson suggests that in order to gain wider acceptance, modern environmentalism should be less doctrinaire, more flexible, and able to incorporate disparate and even contradictory elements—in his terms, like a coyote (Anderson, 2010). However, as a movement intellectual this is probably too ambivalent a position to be publicly embraced by Monbiot. While the candid struggle over his transformation gave Monbiot's decision credence, he worked quickly to solidify his position and the constitutive elements of his new environmentalist identity. He uncoupled the foundational anti-nuclear and environmental discourses of the Arcadian green position, which were only contingently associated through the politics of the era yet became fixed in discourse and the environmentalist identity (Pak, 2011). The new discourse is equally coherent and potentially persuasive, ingeniously reworking nuclear exceptionalism to identify coal as the outstandingly destructive energy source which threatens both people and planet, in contrast to nuclear's *relative* benignity.

Methodologically, we can see here the utility of personal narrative in illuminating discursive change. We have shown how an individual can actively draw on existing discursive resources to form new discourses and so reconstruct his or her own, and potentially others', identities (Frosh, 2003). This process is creative and unpredictable: while the rising salience of climate change discourse might reasonably encourage a shift to environmental pro-nuclearity, for the events at Fukushima to have that effect seems perverse, yet Monbiot's case shows the creativity which makes this possible. It is the narrative analysis which makes this visible, in particular the aspects of emotional and moral struggle which are inherent to storytelling (Taylor, 1991) yet which are easily missed in less personal accounts of discursive change. Moreover, while mindful of our own interpretive work and the possibility of other interpretations (Wells, 2011), it does seem that McDonald's 'epiphanic moment' model of transformative personal change has value. We confess to some surprise over this: the 'fit' between the corpus and the schema, and so the latter's analytic usefulness, was far closer than we expected.

But why does this one individual's story matter? Firstly, he is simply an individual environmentalist, as are the other movement intellectuals who share his views, and if he can undergo such a transition, then plausibly so can others less in the public eye. Given the previous dominance of anti-nuclear feelings within the mainstream of environmentalism, this is in itself significant, as it signals the

emergence of a new strain of environmentalism, some of the implications of which we explore below. Moreover, his vocal 'movement intellectual' role also argues for the potential influence of his public epiphany in legitimizing and prompting others' conversions—perhaps a topic for further research.

Such a development has implications for government and the environmental movement itself. For the former it suggests that the movement may become less of an opponent than it has been—both if elements within it support government nuclear energy policy and simply if it is weakened by divisions. In the context of the UK public's ambivalence about nuclear power, the strengthening of the pro-nuclear climate change discourse and the reworking of nuclear exceptionalism to stigmatize coal might well be significant, especially if articulated by figures respected by those—such as readers of The Guardian—not generally sympathetic to the current UK Government. This suggests two practical responses. As regards Monbiot (and other prominent converts) the politicians' response should be to do nothing. Given Monbiot's enduring self-defined identity as an environmentalist campaigner, in opposition to this (and perhaps any) government, any attempt to reach out would surely be rejected. More broadly, attempts to gain support from environmentalists should recognize that decisions to abandon years of anti-nuclear orthodoxy are inherently emotive and involve identity change. Current approaches based on rational argumentation and scientific facts (Owens & Driffill, 2008) will continue to be relatively ineffective without engagement also at an affective level—while nuclear fear itself may never be satisfactorily addressed, individual environmentalists' fears of being pro-nuclear could be.

Monbiot's epiphany—both as a public statement and as a symptom of change—is awkward for an orthodox environmental movement already struggling to maintain itself as a movement yet also to connect to the political mainstream (Anderson, 2010). While Anderson sees the solution in terms of building a bridge on a *less* coherent (and so less off-putting) environmentalism, Monbiot articulates an *alternative* coherent position which the orthodox fear may be attractive to 'a willing audience among the broader middle-class' (Theo Simon in *Heart of the Matter*). If a number of movement intellectuals actively support pro-nuclear environmentalism, it seems likely that there have been concurrent shifts within the rank and file of the environmental movement, or at least a propensity towards them. How many are in the anxious pre-epiphanal state, fearful of climate change yet 'instinctively' anti-nuclear, and so ready for a transformation legitimated by a public epiphany such as Monbiot's?

This poses a choice between three unpalatable alternatives for the movement. Embracing pro-nuclearity seems, currently, to be impossible, even if it might potentially open up environmentalism to a wider constituency. As Monbiot remarks, 'some of the most effective environmental organizations—Greenpeace for example—could not drop their opposition without falling apart' (*Crushing Dilemmas*). Yet challenging pro-nuclear heresy is also risky—public dissent is damaging, and seen as damaging by the movement, both for revealing internal weaknesses and giving publicity to the unorthodox views. The final option is to do nothing, to ignore the issue—which also risks appearing weak and isolationist but avoids the dangers inherent in the other alternatives. This is thus, perhaps, the least dangerous horn of this trilemma. Whichever path is chosen, however, an uncomfortable future surely lies ahead for orthodox environmentalism.

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#### Note

 Monbiot's articles are referred to by italicized titles throughout and listed with publication dates in the Appendix.

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21 October

16 December

#### Appendix. The corpus (www.monbiot.com/articles/)

Antecedent state 11 July 2006 Thanks, But We Still Don't Need It 12 September 2006 A Catalogue of Idiocy 20 November 2007 Ban the Bomb – But Only in Iran 29 July 2008 Nuking the Treaty 11 August 2008 Picking Up the Gauntlet 19 August 2008 The Magic Pudding 20 February 2009 Nuked by Friend and Foe 23 March 2010 War With the Ghosts Sudden, personal, and profound transformation (2011) Atomised 21 March Going Critical Illumination and insight (2011) Seven Double Standards 31 March 4 April Evidence Meltdown Interrogation of Helen Caldicott's Responses 4 April Why This Matters 13 April 2 May The Lost World Meaning making 2011 5 May Our Crushing Dilemmas 27 May Turning Together 4 July Corporate Power? No Thanks 8 August The Moral Case for Nuclear Power 22 November How the Greens Were Misled 5 December A Waste of Waste 2012 Nuclear vs. Nuclear vs. Nuclear 2 February 15 March Press Release - Why We Have Written To Cameron 15 March A Letter to David Cameron 15 March No Primrose Path 9 October The Heart of the Matter The enduring nature of the epiphany (2013) 4 February Out of Steam

> Fiscal Meltdown Power Crazed