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## **RESEARCH ARTICLE**

# Imagining socioecological transformation: An analysis of the Welsh Government's policy innovations and orientations to the future

# Anna Pigott

This article explores how the Welsh Government's recent policy innovations in climate change and environmental sustainability can be read in terms of their imaginative capacity for transformation. The Welsh Government is one of only a few governments in the world to have a legal duty to sustainable development, which includes the pioneering Well-being of Future Generations Act (2015). The legislation has received international attention and praise from the United Nations but, as yet, the Welsh Government's imaginaries of socioecological transformation have received little scrutiny regarding the kinds of ideas about the future and possibilities for change they set in motion. The article considers imaginaries as providing the very grounds of possibility for transformation, being comprised of stories and narratives about what kinds of futures are possible and desirable, intermingled with emotional-affective "atmospheres" that can promote or hinder people's engagement with environmental issues. The article focuses on three aspects of the Welsh Government's imaginaries related to socioecological transformation, namely; resilience and anticipatory discourse, linear time, and "conspiracies of optimism". A number of tensions are drawn out that highlight how the Welsh Government's seemingly progressive rhetoric risks being undermined by the conceptions of time and change it employs. Thus, the article contributes to wider critical analyses of how new politics and modes of governance of and for the (proposed) Anthropocene are taking shape.

Keywords: Imagination; Wales; Governance; Time; Transformation; Anthropocene

#### Introduction

The Welsh Government is one of only a few governments in the world to have a legal duty to sustainable development (under the Government of Wales Act 2006, section 79(6)) and it has recently introduced a pioneering Wellbeing of Future Generations Act (2015). This legislation has received international attention and praise from the United Nations (UN), and the UN's head of Sustainable Development, Nikhil Seth, announced in 2015 that "we hope that what Wales is doing today the world will do tomorrow". The Welsh Government's imaginaries of socioecological transformation are therefore worthy of some closer scrutiny regarding the kinds of ideas and possibilities for change they create and reproduce.

Although the Welsh Government itself uses the term "sustainable development", in this article I use the term "socioecological transformation" as a means for looking more broadly at the Government's vision (of which the notion of sustainable development is a part). The term "socioecological transformation" is increasingly used to signify the kinds of wholesale changes—in thinking and

practices-that are deemed necessary to address some of the most pressing environmental challenges of the 21st Century (see, for example, Braun, 2015; Hawkins et al., 2015; Wainwright and Mann, 2015). As a concept it attempts to understand social and ecological realms as thoroughly interconnected, and the world as constantly changing and in flux, marked by non-equilibrium and complexity (Zimmerer, 1994). In contrast, sustainable development, an earlier (and variously defined) paradigm for addressing environmental problems, has been criticized as a contradiction in terms, the emphasis on "development" a disguise for continued economic growth that rests on ideas about the environment as a relatively stable background "stock" of resources (Robinson, 2004; Holden, 2010). Thus, my intention is not to ask whether and how the Welsh Government is fostering sustainable development (because this is a highly contested term with regard to whether that is actually what is needed), but is rather to explore the ways in which the Welsh Government's vision might foster (or not) some more fundamental socioecological transformations regarding the ways that people imagine and behave towards the environment.

In taking a broader socioecological perspective, the article contributes to ongoing research into how new politics and modes of governance of and for the Anthropocene (a proposed new geological epoch that is "functionally and stratigraphically distinct from the Holocene" (Waters et al., 2016 p. 137) are taking shape (e.g. Anderson, 2010; Wainwright and Mann, 2013; Braun, 2014; Wakefield and Braun, 2014). While several studies address the diffusion and implications of emerging environmental legislation (e.g. Rayner and Jordan, 2013; Massey et al., 2014), fewer studies have focused on environmental policy in terms of the kinds of socioecological imaginaries they set in motion (some exceptions include Braun, 2014 and Swyngedouw, 2010). To date, no studies have engaged specifically with the Welsh Government's recent policy innovations in this regard, and as such this article provides a novel analysis of the Welsh Government's activities, particularly in terms of their implications for the ways in which socioecological futures are imagined, enacted, and governed, and how this rebounds on how life unfolds in the present (Anderson and Adey, 2012). In what follows I describe how I have engaged with concepts of imagination and imaginaries and why these are useful for thinking about environmental policy. I then introduce the Welsh Government's policy innovations, before moving onto the empirical sections of the article.

## Conceptualizing imagination

Why approach environmental policy from the perspective of imagination? To answer this question, I begin from an understanding that imaginaries are not opposed to "the real" but rather, as Dawney (2011 p. 535) describes, imaginaries are "produced by bodies through practices and technologies and constitute the way in which we experience the world". In this sense, imaginaries are "central to an understanding of how bodies, individually and collectively, act on the world in order to manage affects, bring about change and in doing so produce subjects" (ibid.). I approach imagination as a "social faculty" (Stoetzler and Yuval-Davis, 2002 p. 325), which highlights how individual experience is situated in (and made possible by) a wider collective experience (Castoriadis, 1994; Stoetzler and Yuval-Davis, 2002). This is especially relevant in relation to climate change, where competing imaginaries formed from many intermingling sources (from scientific reports to disaster movies, for example) combine to inform various impressions of "who we are and what we can become in times of climate change" (Sjögren, 2016 p. 27). This is increasingly a position adopted in the literature, and in wider debates about climate (and other environmental) change, which argue not only that imagination matters for how societies respond to such issues, but also that it requires a concerted effort to understand and deconstruct current (ailing?) imaginaries of environmental futures in order to reclaim new ones and disrupt hegemonic imaginaries that can make it difficult to imagine alternatives (e.g. Hurley, 2008; Yusoff and Gabrys, 2011; Levitas, 2013; Harris, 2017b). Thus, Appadurai (1996) p. 4) sees imagination as a "space of contestation in which individuals and groups seek to annex the global into their own practices". This is an important part of how fields of possibility delineate what people consider "possible and desirable to do, to know, to think, to feel, to dream at a certain point in time in a specific society" (Sjögren, 2016 p. 26). Yusoff and Gabrys (2011 p. 516) also define imagination "as a way of seeing, sensing, thinking, and dreaming that creates the conditions for material interventions in, and political sensibilities of the world". This material and political potential of imaginaries for transformation is why I afford it central importance in this article as a way of approaching the Welsh Government's practices and asking, essentially, what kinds of "economies of affect and imagination" (Rossiter, 2002 p. 84) they produce in relation to socioecological futures. More specifically, geographical imagination refers to ways of knowing and making sense of the world, a way of encompassing the known and the unknown in our understanding of the world (Massey 1994). In turn, such imaginaries can either limit or expand our perceived place in the world—be that as individuals, communities, nations, or as a species. As Beck writes, the "cultural 'horizon' of people's expectations and values, born out of social experience and mediated via cultural symbols, history, and material conditions, must be the main point of reference for understanding ecological concern" (Beck, 1995 p. 43).

Storying and narrative are also important aspects of imagination, and a means through which imaginaries are structured. As Harris (2017a p. 647) contends, stories "matter in the traditional sense in that they are symbolic; they provide us with much needed motivation and orientation. However, they also matter in the sense that they animate the world around us; they carry with them material-discursive weight". Collard et al. (2015 p. 327) therefore refer to stories as "practices [that] bring worlds into being; different stories enact different worlds that may be co-emergent, partially connected, or in conflict." In addition, Lejano, Ingram, and Ingram (2013 p. 2) suggest that stories and narratives are also how "people both analyze and realize personal relationships with land, animals, rivers, air, and even bacteria." From this perspective, it is possible to see why stories and narratives might be central to socioecological transformation, for they engage people's capacities-individually and collectively-to speak into existence alternative worlds and ontologies (Blaser, 2010). Consequently, they "matter", not only in the sense that they create meaning and are meaningful in people's lives, but also in the sense of the "mattering" effect of stories; experiences of reality are created through the discursive privileging and processing of certain materials, and thus stories might be considered just as agential in relation to environmental crises as humans, rocks, and CO<sub>2</sub>, for example (Barad, 2003; Harris, 2017b). Thus, environmental policy can be considered a major character in such stories, because policy shapes discourse by constraining and enabling what can be said about what is possible or desirable, and by privileging the telling of some stories over others (Foucault, 2002; Barad, 2003).

Finally, the notion of "affective atmospheres" (Anderson, 2009 p. 77) is also useful for conceptualizing imagination. Distinct (although deriving) from a physical science definition of "atmosphere" as a mixture of gases enveloping the earth, invisible and changeable, affective atmosphere

refers to the kind of "background hum" of conscious and unconscious factors that contribute to our experiences of the world (Thrift, 2004). These are the kinds of ambiences, moods, feelings, and tones which are central to our experiences of the world but which we may be aware of only subliminally or tangentially. Affective atmospheres, as Anderson describes, are "intensities [which] may remain indefinite even as they effect. Perplexingly, the term atmosphere seems to express something vague. Something, an ill-defined indefinite something, that exceeds rational explanation and clear figuration. Something that hesitates at the edge of the unsayable" (Anderson, 2009 p. 78). Affective atmospheres—like the air we breathe—provide the very conditions of possibility for life while simultaneously remaining more or less intangible (Anderson, 2009). Importantly, Dufrenne (1973) sees atmosphere as something of a collective consciousness that governs individual consciousness during times of change. In the context of this special issue, this is helpful for thinking about what imagination is and what its role might be in socioecological transformation: in addition to understanding imagination as a cognitive skill to be developed or applied, the notion of atmosphere invites us to understand imagination as something more collective, consisting of shared affects, emotions, moods and tones which spread through and weave in and out of the tapestries of life. It is also useful as a starting point for thinking about how the Welsh Government's actions and language produce emotional and affective meaning (Jupp, Pykett, and Smith, 2016) and how these enable or disable imaginative capacities for transformation: what kinds of atmospheres make socioecological transformation possible?

Although this conception of atmospheric imagination is rather vague and indeterminate, this is not to say that vague and indeterminate atmospheres are not important, for they exert forces on life in important ways. The atmosphere of a particular place or event, as we all will have experienced, can profoundly influence our moods, thoughts, and emotions. Such indeterminacy does, however, present challenges in terms of using an "atmospheric lens" to consider an empirical case study. It is not possible to measure an affective atmosphere, and often not even possible to translate an atmosphere into words. Moreover, the ways in which an atmosphere is felt and experienced differs between people—if, indeed, we are conscious of it at all. My aim in this paper is therefore to draw attention to some key themes in the Welsh Government's approach that provide clues as to some of the particular atmospheric "moods" gathering around socioecological transformation in its rhetoric. The empirical materials presented here are perhaps best thought of as proxies for the atmospheric conditions which I aim, with help from social theory, to elucidate. As such, I have chosen to focus on the Welsh Government's imaginaries and stories-and the ideas about socioecological transformation they convey-rather than focus on its measurable "impacts". This is because, as Gerlach (2017 p. 15) puts it, "given the desperation of the late Holocene, societies need to intensify the experimental tenacity of ideas", and with this there is a need to critically engage with the "affective lives" (ibid. p. 11) of these ideas in terms of the kinds of socioecological futures they make possible. Such an analysis is, essentially, the task I have set myself in this article. In what follows I introduce the Welsh Government and outline why such an approach is relevant for an analysis of its policy innovations on environment, sustainability, and well-being.

## Overview of the Welsh Government's approach

Wales is a small nation with big ambitions. It has a population of just over 3 million people and is known, amongst other things, for its rugged coastlines and mountains, an emphasis on bilingualism (Welsh and English have equal status), a proud rugby tradition, and its role in the industrial revolution from the 18th century onwards: from copper to coal and slate, Wales was a powerhouse of production and its ports bustled with trade. Industrial and economic decline in the late 20th century—particularly after the collapse of the mining industries in the 1970s and 80s-has created high levels of unemployment and poverty in relation to the rest of the UK (Joseph Rowntree Foundation 2015, 2016). Given these pressures, the Welsh Government's decision to include legislation on sustainable development as part of the the Government of Wales Act (1998, section 121) demonstrated considerable foresight and ambition. This legislative move was influenced by a range of global developments on sustainability around the same time, namely the Brundtland Commission's coining of the term "sustainable development" in 1987, the United Nations Conference on Environment and Development (Rio Earth Summit) in 1992, and the Treaty of Amsterdam in 1997 which saw sustainable development become part of the legal framework of the European Union. The Welsh Government's legislative commitment was strengthened in the subsequent Government of Wales Act) (2006, section 79) which made sustainable development a statutory duty of the Welsh Government, and in 2009 the One Wales: One Planet Sustainable Development Scheme (OWOP) of the Welsh Assembly Government confirmed that sustainable development would be the central organizing principle of its administration. It remains one of just a few administrations in the world to have done so, and indeed this is often referred to as a key part of Wales's "distinctiveness" in its devolution journey. OWOP (2009 p. 17) states that its vision of a sustainable Wales is one where Wales:

- lives within its environmental limits, using only its fair share of the earth's resources so that our ecological footprint is reduced to the global average availability of resources, and we are resilient to the impacts of climate change;
- has healthy, biologically diverse and productive ecosystems that are managed sustainably;
- has a resilient and sustainable economy that is able to develop whilst stabilizing, then reducing, its use of natural resources and reducing its contribution to climate change;
- has communities which are safe, sustainable, and attractive places for people to live and work, where people have access to services, and enjoy good health;

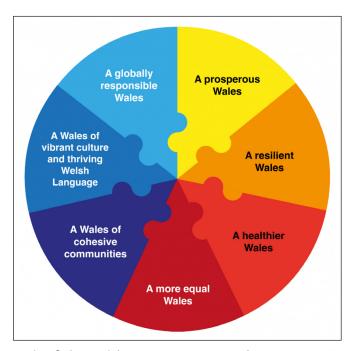
 is a fair, just and bilingual nation, in which citizens of all ages and backgrounds are empowered to determine their own lives, shape their communities and achieve their full potential.

In 2015, the Welsh Government's stance on sustainability was cemented through the introduction of a pioneering Well-being of Future Generations Act (2015) (WFGA). The Act places a duty on all public services in Wales to act in accordance with a set of "Well-being Goals", and has been accompanied, and shaped, by a nation-wide consultation exercise called The Wales We Want, involving around 7000 people. Public communication about the Act provided in the document *Well-being of Future Generations (Wales) Act: The Essentials*, states that the Act:

is about improving the social, economic, environmental and cultural well-being of Wales. It will make public bodies think more about the long-term, work better with people and communities and each other, look to prevent problems and take a more joined-up approach. This will help us to create a Wales that we all want to live in, now and in the future. To make sure we are all working towards the same vision, the Act puts in place seven well-being goals. (Department for Natural Resources of the Welsh Government, 2015 p. 3)

The Welsh Government's vision can be considered an ambitious one for a number of key reasons. First, its stated aim to reduce the country's ecological footprint to a globally sustainable 1.88 global hectares per person, within the lifetime of this generation, appears to acknowledge the scale of transformation in western

lifestyles that is required compared to current rates of consumption. Second, the cross-party nature of the WFGA and its acknowledgement of long-term needs in its "ways of working" (see Department for Natural Resources of the Welsh Government, 2015 p. 7) is an attempt to challenge and avoid the pitfalls of transient four-to-five year political cycles. Third, through a focus on future generations, it promotes a notion of "intergenerational solidarity" which has recently been the subject of a United Nations report (2013) and recommendations. Only a handful of countries currently have national institutes or commissioners for future generations (Wales and Hungary have perhaps the most comprehensive of these, while several other governments have constitutional references to future generations in one form or another).1 Fourth, the Welsh Government's stated aim to take an integrated, "joinedup" approach to sustainability appears to respond to calls for systems-thinking in response to socioecological problems (see, for example, the agenda of the new Future Earth initiative which is a collaboration between the UN Environment Program, UNESCO, the International Council of Science, the International Social Science Council, and the Belmont Forum<sup>2</sup>). Its merging of the environmental, social, and economic legs of the classic sustainability "stool" to form seven Well-being Goals (Figure 1) is emblematic of this integrative approach. It is worth noting here that although the Welsh Government's climate change targets correspond to UK and international frameworks, they are perhaps the least ambitious component of the Welsh Government's vision: its commitment to 3% reduction in greenhouse gas emissions per year relative to 2011 fall significantly short of the 6-9% annual reductions deemed necessary to avoid extremely dangerous warming of 2 degrees Celsius or more (Anderson and Bows, 2008).



**Figure 1: The Well-Being Goals of the Welsh Government.** A graphic representation of the Well-Being Goals of the Well-being of Future Generations Act (Wales) 2015. This is the image used in most public communications about the Act. Source: Well-Being of Future Generations: The Essentials (Department for Natural Resources of the Welsh Government 2015, 3). DOI: https://doi.org/10.1525/elementa.315.f1

Although unique, these policy innovations have not emerged out of a vacuum, and reflect some broader, international developments in socioecological transformation. The United Nations (UN), for example, have promoted debate and issued guidance on the theme of intergenerational solidarity in its Secretary General's report on Intergenerational Solidarity and Future Generations (2013). The Welsh Government's national consultation exercise, The Wales We Want, also echoes the UN's The World We Want web platform that seeks, as it states, to "build a collective vision that will be used directly by the United Nations and World Leaders to plan a new development agenda launching in 2015, one that is based on the aspirations of all citizens!." In addition, the Welsh Government's decision to use Well-being Goals as a framework for the Act mirrors the UN's own Sustainable Development Goals. The intention that the Act should provide an overarching framework for public governance in Wales is also consistent with the "process-outcomes" model recommended by the Organization for Economic Cooperation and Development (OECD) for embedding sustainable development within government (see Davies, 2017 p. 167). Finally, the Welsh Government is a key member of the Regional Governments for Sustainable Development Network (a support and sharing network for subnational and regional governments that are working on sustainability transformations), which it helped found in 2002, and for which it acted as vice-president between 2015-2017. In April 2015, this involved the Welsh Government hosting academics, lawyers, human rights specialists, civil society organizations, senior UN officials, youth representatives, and representatives of national institutions for an international conference that responded to the aforementioned UN Secretary General's report on Intergenerational Solidarity and Future Generations (2013). In this sense, the Welsh Government might be thought of as creating a "transformative niche" (Moore et al., 2014 p. 5) where policy innovations can be tested and developed, but which has wider relevance for approaches to socioecological transformation, not only in terms of the kinds of actions taken, but also in terms of the *ideas* it promotes. What becomes of the WFGA, is therefore, of intense interest not only to other nations and governments considering similar approaches, but also for those of us concerned with how new forms of governance are emerging in response to socioecological

However, due to the relative newness of the Act, there has so far been very little academic scrutiny of it (or indeed, of the Welsh Government's approach to socioecological transformation more generally). Existing research (the work of one author), focuses on the legal implications of the Act, and its potential to effect the kinds of changes it aspires to. Davies's (2016, 2017) work is instructive in this regard. He finds that, despite a language of "must" and "shall" and "duties" (2017 p. 171), the Act itself has relatively few "teeth" when it comes to enforcement. As Davies points out, the Act is very much couched in "exhortatory rather than mandatory terms" (ibid.), and its efficacy will depend mainly upon the Future Generation

Commissioner's (FGC) and the Auditor General's abilities to hold public bodies to account (via a process of reporting to the National Assembly once every four years), and the political will and personalities of those people. In addition, the budget for the office of the FGC (which oversees the implementation of the Act) is relatively small, at £1.46 million per annum, a figure that, as Davies (2017 p. 175) says, "is smaller even than the budget for the Children's Commissioner for Wales, despite the fact that the [Future Generations Commissioner is overseeing the 'central organizing principle' of Welsh governance". Given these constraints, the power of the Act will depend largely on the ability of the office of the FGC and the Welsh Government to persuade public bodies to co-operate. Therefore, what it is asking people to do-that is, the vision and aspiration for the nation that it is asking people to join—is central. Interestingly, despite a common refrain that "actions speak louder than words", given the Act's lack of legal power it might be that words are, in fact, its most powerful element, with the potential to shape people's imaginaries about possible and desirable futures. This discursive power can influence the forms that socioecological transformation takes, and warrants close attention because the Welsh Government's rhetoric about the WFGA (and related policies such as the Environment (Wales) Act 2016) form a "grand, regional narrative" (Murphy, 2013 p. 131) about what's possible. It is also important because—as Nikhil Seth's comment in the introduction to this article implies—there is international interest in what the Welsh Government is saying.

In what follows I draw on document analysis, in-depth interviews with key government staff, and observational material from events and workshops during the period 2013-2015. The main body of the article focuses on three key themes. The first of these discusses the concept of "resilience" as it features in the Welsh Government's approach; the second explores the ways in which time is imagined and constructed; and the third section section explores the possibility that some of the Welsh Government's imaginaries of the future amount to "conspiracies of optimism" (Hirt, 1996). The final two sections examine some contradictions and tensions apparent in the Welsh Government's approach to socioecological transformation, particularly with regard to balancing a values-based approach with a need for new and imaginative ideas about time and change.

#### Resilience and anticipation

Sustainable development provides us with the route to developing a sustainable and strong economy that operates within environmental and financial limits, which meets the needs of all our citizens now and in the future, and is resilient to future change (One Wales: One Planet, 2009 p. 5)

A resilient Wales: A nation which maintains and enhances a biodiverse natural environment with healthy functioning ecosystems that support social, economic and ecological resilience and the capacity to adapt to change (for example climate change). (Goal 3 of the Well Being of Future Generations Act, Department for Natural Resources of the Welsh Government, 2015 p. 6)

Resilience emerges as a key framing in the Welsh Government's approach to the future, as the two extracts above highlight. This is perhaps not surprising: resilience is a notion which has taken off over the past several years and can be found in a whole host of political discourses, practices and academic debates (Pugh, 2014), particularly in relation to climate change and adaptation, in regional right through to global contexts (O'Hare and White, 2013). Resilience theorists use the term to describe a system's capacity to absorb disturbance and undergo transformation (by way of self-organization, learning and adaptation) so that it may retain essentially the same function (Holling, 1973), or transform into a new system (Walker and Salt, 2006), and accordingly it has become a popular concept amongst many scholars thinking about sustainability transitions (e.g. Pelling, 2010; Folke et al., 2010; Walker and Cooper, 2011; Biggs et al., 2012). The term has also been adopted by several international platforms working in this field, such as the Stockholm Resilience Centre (http://www.stockholmresilience.org/), the Resilience Alliance (https://www.resalliance.org/), and Future Earth (http://www.futureearth.org/). In my analysis, however, I engage with some of the critical literature around the concept of resilience because the ways in which the Welsh Government deploy the concept seem to diverge somewhat from how "resilience" is generally intended by many resilience scholars (and how it is intended in this special issue). Indeed, resilience-like sustainability-often remains a notoriously vague and fuzzy term in public use, mobilized in a broad variety of agendas. For example, the Welsh Government's publications and communications regarding sustainability are peppered with the word "resilience", but little is offered in the way of a definition or specific applications. This ambiguity is often key to the term's apparent success; it can be passively received as a broadly helpful concept "upon which a host of strategies may converge to help society and cities better prepare for a range of risks" (O'Hare and White, 2013 p. 275). Resilience names a seemingly positive future (after all it seems counter-intuitive to argue that we should not become more resilient to potential shocks or stresses) and yet it makes no promises (Simon and Randalls, 2016).

Nonetheless, Simon and Randalls (2016) maintain that there is, at least, one theme of commonality across the diverse ways in which resilience is engaged with, and that is a certain notion of flexibility. In one sense this feels appropriate: the postmodern era has been characterised by conditions of uncertainty, accelerating change and complex, perpetually-in-flux global circumstances (e.g. Bauman, 2000; Tomlinson, 2007). Bauman (2000) uses the term "liquid modernity" to describe these conditions of fluidity, constantly changing circumstances, and a propensity for flexibility and mobility. Under such conditions, resilience seems to offer a tempting tool with which to stay afloat and navigate this perpetual change, a way of

shifting with the sands, rather than being swallowed up by them. As Simon and Randalls (2016, 4) point out "resilience is being offered as the solution to incredibly challenging societal problems and a key organizing concept in the zeitgeist of uncertainty".

At the same time, however, the notion of resilience can be used to infer a certain sense of standing still, of enduring and staying put. The risk is that when the resilience discourse is used to this effect, it can imply that there is something about the conditions of the present that ought to be protected and preserved. Indeed, in contrast to social movements which welcome radically different futures that genuinely surprise, anticipatory politics aim to ensure that "no bad surprise happens" (Anderson, 2010 p. 782). While this might indeed be desirable in terms of seeking to avoid potentially catastrophic effects of climate change, and maintaining Holocene-like conditions, it is not so useful if resilience serves as a concept with which to preserve a different kind of status quo-that is, the political, economic and social arrangements which are creating socioecological crises in the first place (e.g. White and O'Hare, 2014; Gillard, 2016). If resilience implies the ability to "field", "absorb" or "bounce" back from extreme events in such a way that life can go on as before (Braun, 2014 p. 56), then Walker and Cooper (2011) suggest that there is an "ideological fit" between this co-option of resilience thinking and neoliberal philosophies. As MacKinnon and Derickson (2013 p. 254) write, "resilient spaces are precisely what capitalism needs-spaces that are periodically reinvented to meet the changing demands of capital accumulation an increasingly globalized economy". From this perspective, socioecological transformation and resilience seem to be quite at odds with one another, because resilience be-gets responses to the environmental predicament that are organized within the horizons of a liberal-capitalist order (Swyngedouw, 2013). The concern is that, despite the potential of resilience to usher in new ways of thinking about human-environment relations in terms of complexity, non-linearity and non-equilibrium (Gillard, 2016), in practice resilience, depending on how it mobilized, can serve to ensure that the neoliberal order survives somewhat longer. Worse still, the "fuzziness" and ambiguity of the concept of resilience risks conflating neoliberal hegemony with ecological sustainability. I single out neoliberal capitalism here because there is an increasingly compelling case that this particular economic system (and the ideologies which sustain it) has been at the heart of ecological degradation since the industrial revolution, and will continue to be pivotal to how socioecoloigcal transformations transpire in the 21st Century (for better or for worse) (e.g. Smith, 1984; Harvey, 1996; Kallis, 2011; Klein, 2015; Moore, 2015). As Jones (2009 p. 300) puts it, new forms of capitalism are "denuding cultural, psychological, and ecological diversity to the extent that we are witnessing 'ecocide' on a global scale." Thus, the complicity of some uses of resilience in continuing neoliberal practices is something that needs to be challenged.

The Welsh Government's use of terms such as "building resilience" and "[becoming] more resilient to the consequences of climate change impacts" also feed into a corresponding narrative that enacts the future as a threat. For example, the OWOP agenda (2009 p. 14) states that "climate change threatens the basic elements of life for people around the world-access to water, food production, health, and use of land-it also threatens our wider environment". As Anderson (2010) contends, across many domains of life the future is problematized as a disruption or surprise, something to be preempted and prepared for, with liberal democracies forging atmospheres of anticipation in relation to the future. Groves (2016) suggests that the future thus becomes charged with emotion and affect-it is not simply anticipated, but anticipated with anxiety. The resilience concept is thus tightly bound to the idea that we now live in a "time of crisis" (Simon and Randalls, 2016 p. 3), and this has implications for the ways in which futures are disclosed, related to, and governed. For example, Braun (2015) suggests that there has been a shift in the ways in which the future has been related to (at least in Western cultures), describing how whereas "in modernism time was seen to flow from the present to the future, today we increasingly experience time coming towards us, from the future to the present" (Braun, 2015 p. 239). Beck (1999) has characterized today's proliferation of anticipatory actions as a "world risk society", and points out that today's risks are calculated in relation to what is essentially unknown about the future, as opposed to the pre-modern known dangers (such as famine and plague) that would have haunted the lives of people in the past. This marks a significant shift from a situation in which dangers were understood as strokes of fate, attributable to Gods or Nature, to a far more politically charged context in which today's "risks" are intimately linked with human decision-making, accountability and responsibility, and which are often global in their scope. The concept of the Anthropocene, and associated ideas such as planetary boundaries and safe operating spaces, are often associated with narratives of resilience and security (Randalls, 2015), and the reconfiguration of public life around temporal registers of uncertainty, adjustment and repair (Barnett, 2015). Alongside a consensual setting in which environmental problems are staged as universally threatening, the contemporary condition is one woven through with fear and danger, creating "ecologies of fear" (Swyngedouw, 2013 p. 3; Neocleous, 2012). Following Badiou (2008), Swyngedouw argues that this mobilization of the future as a universal threat is a kind of opium for the masses, whereby "the nurturing of the promise of a more benign retrofitted climate ("resilience") exhausts the horizon of our aspirations and imaginations" (Swyngedouw, 2013 p. 3).

Framing the future in terms of threat and resilience therefore risks legitimizing particular kinds of governance and knowledge production, conditioning how the future can be intervened into, by whom, and with what objects of concern in mind. With regards to the Welsh Government, a host of measures, registers, apprehensions, engagements and movements are involved in making the future present through anticipation. For example, the WBFG Act (2015) requires Assembly Ministers to produce a Future Trends Report twelve months before an Assembly

election. The report includes predictions of likely trends in social, economic and environmental indicators in Wales. The Welsh Government states that:

It's important that we understand the challenges that we will be facing, and have a clear picture of where we are heading. (Department for Natural Resources of the Welsh Government, 2015 p. 10).

In addition, it has devised a suite of National Indicators (46 in total) in order to measure progress towards the Well-being Goals. Ministers set milestones in order to establish expectations and chart progress. Thus, by enacting the future as a threat, and resilience as an appropriate response, *knowledge about the future* becomes a valuable asset—anticipation is the name of the game (and this is itself in conflict with principles of non-linearity, uncertainty and emergence stipulated by resilience theorists). This desire to know the future (as though it is already determined) might therefore have the effect of overshadowing an imaginative capacity for transformation, and a belief that the future might be otherwise (Prigogine, 2003). The (then) Future Generations Commissioner for Wales demonstrated this tension when he told me in 2015 that:

... corporate organizations undertake risk assessments in terms of what are the risks that the organization is facing—and in some respects for me the Future Trends Report is part of our risk assessment as to, you know, what are the external factors that are going to be impinging upon our ability to, you know, create the Wales ... we want. Some of which we can work with, positively, as opportunities, but some of which are trends or things that happen to be managed and that we have to build resilience ... to respond to.

The Welsh Government's framing of sustainability transformations in terms of risk-management also reflects a wider tendency to reduce climate imaginaries to cost/benefit-style analyses (e.g. Shaw and Nerlich 2015), a kind of "climate reductionism" (Hulme, 2011 p. 245) which focuses predominantly on impact and prediction rather than on more imaginative accounts of social life and visions of the future. This particular gaze on tomorrow can permit recasting future social and environmental issues as techno-managerial issues of today, with science and technology held up as keys to adaptation and resilience. In the course of such reductionism, the problem (which, in reality is complex, nebulous, and messy) appears to crystalize around particular objects of concern. In what Beck (2010 p. 263) calls the "technocratic iron cage of environmental politics", CO<sub>2</sub> is the "thing" around which which environmental dreams, aspirations, and policies crystalize (Swyngedouw, 2013). Similarly, the Welsh Government's focus on risk-calculation, self-assessment, quantification and bench-marking of performance, risk keeping climate politics as an "elitist and expert discourse" (Beck, 2010 p. 254), removed from the lives of most people. This conflation of resilience with anticipatory politics also risks undermining the Welsh Government's efforts to engage citizens, as it has tried to do through its The Wales We Want National Conversation (see Cynnal Cymru/Sustain Wales 2015).

As mentioned, resilience, on the face of things, is a difficult notion to find fault with, as it points to a vague yet seemingly optimistic aim (White and O'Hare, 2014). And yet it is precisely this "common sense", consensual, framing which is questionable in terms of its imaginative capacities for transformation. Nordmann (2014), for example, argues that "if we think of the future as something to be anticipated, expected, prepared, or braced for, and, at best, modulated as it comes upon us, we postulate ourselves as fundamentally unfree with respect to the future" (Nordmann, 2014 p. 93). In contrast, he suggests that an ability to "freely envision a future world that accords to our values and needs" (ibid.) is what is needed in order to break the mold of anticipation which reproduces neoliberal horizons, allowing us to judge scenarios according to desirability rather than inevitability. This is not to deny that, as with everything, there are particular path dependencies and historical contexts which shape and constrain the Welsh Government's response. It would be unreasonable to expect it to come up with entirely "free" and unbounded future imaginaries. But equally, it is important to remember, as Prigogine (2003) reminds us, that the future is not entirely given, either, and this is an imaginative possibility that the resilience discourse—if co-opted in the ways it appears to have been in the Welsh Government's approach—risks closing down.

# Trajectories of time

A second aspect of the Welsh Government's approach, and in many ways related to resilience and anticipation, has to do with the shape of the future and how trajectories of time and change are imagined and represented. The predictive orientation of the Welsh Government's anticipatory politics entails a linear conception of time (Inayatullah, 1993), and this is reinforced by a tendency to employ language which underpins a sense of forward motion. As already mentioned, the WFGA is founded on seven well-being "goals", and the legislation includes language of "milestones" and "future trends" reports. In addition, the Welsh Government frequently refers to its legislation in terms of a "journey". For example, "[T]his Strategy is a critical step on a journey to meeting that bigger challenge" (Climate Change Strategy for Wales, Welsh Assembly Government 2010, p. 3) and "the road to achieving the vision" (e.g. OWOP, 2009). Phrases such as "working towards" (WFGA, 2015 p. 3) and "route map" (OWOP, 2009 p. 9) are also indicative of a particular way of relating to the future.

One of the most striking aspects of the idea of being on a journey is the notion of collectivity (and consensus) attached to it. For example, public communication about the Act (WFGA, 2015 p. 3) states "To make sure we are all working towards the same vision, the Act puts in place seven well-being goals", and, in a video about the Act<sup>3</sup>—featuring protagonist Megan—the closing lines announce

"This is the Wales that Megan wants. It's the Wales we all want" (emphasis added). One government official involved with the formation of the Act told me, in 2015, that the language around goals and collective visions was chosen to align with the language and framing used by the United Nations, both in terms of its Sustainable Development Goals and its The World We Want web platform which states that "we will bring the priorities of people from every corner of the world to the forefront and help build a collective vision". A potential problem with this kind of forward-facing, consensual framing is that it leaves little room for the articulation of divergent, conflicting, or radically alternative trajectories. As Swyngedouw (2013 p. 6) notes, "disagreement is allowed, but only with respect to the choice of technologies, the mix of organizational fixes, the detail of the managerial adjustments, and the urgency of their timing and implementation, not with respect to the socio-political framing of present and future natures." Consequently, the Welsh Government, although attempting to engage people in a collective vision, may risk depoliticizing them because there is very little room for its vision to be contested or alternatives articulated.

The idea of progress and a sense of moving forward towards the future are also part of a particularly Modern imaginary-the Modern era is often defined by an orientation to the future which is invested with a collective sense of purpose and improvement, a sense of leaving the past behind. Empowering visions of the future are central to such an imaginary. Indeed, following various diagnoses of contemporary societies being marked by a loss of utopian thought about the future, and therefore a fading of any belief that there could be any alternative, many have argued that a resurgence of the utopianism of the modern era is necessary (e.g. Harvey, 2000; Levitas, 2013). Proponents of so-called Green Modernity (e.g. Nordhaus and Shellenberger, 2007) urge that aspirations for continuous improvement, innovation, novelty and progress are precisely the aspects of the Modern project which must be held on to if we are to have any hope of mobilizing the political and social will (and energy) to transform to more sustainable arrangements. As Latour (2008) contends, the thrusting-forward arrow of time towards a picture of an attractive future, and its associated emotions of enthusiasm, frontier spirit and optimism, is unparalleled in its ability to unlock political passions, and to develop a politics of possibility necessary for overcoming the depoliticizing effect of doom and gloom environmentalism. Now is the time "to develop, not withdraw" says Latour (2008 p. 13). Hebdige (1993 p. 278) adds that although the metaphor of the journey is "the most trite, overused, banal metaphor imaginable for the way we move through time", it is undeniably powerful as a focus for collective as well as personal identification within historical narratives. The Welsh Government appears very much to be buying into this sentiment. Indeed, its depictions of desirable future goals to aim for seem to want to defy the shifting sands of these times and to regain some sense of the apparent stability of earlier Modernity. In such a stance towards the future, Inayatullah (1993 p. 242) suggests, "humans are not left alone wondering aimlessly in a universe that has no certainty". Linear time is, according to Bauman, an imaginary more hospitable to life as a pilgrim, that is, orderly, predictable, determined, ensured. And even though he argues such a life is no longer feasible in today's "liquid-modern" world (Bauman, 2000), it nonetheless remains an attractive narrative. Bauman (1996 p. 22) describes how:

Pilgrimage is what one does of necessity, to avoid being lost in a desert; to invest the walking with a purpose while wandering the land with no destination. Being a pilgrim, one can do more than walk—one can walk to. One can look back at the footprint left in the sand and see them as a road. One can reflect on the road past and see it as progress towards, an advance, a coming closer to; one can make a distinction between "behind" and "ahead", and plot the "road ahead" as a succession of footprints yet to pockmark the land without features. Destination, the set purpose of life pilgrimage's, gives form to the formless, makes a whole out of the fragmentary, lends continuity to the episodic. (Emphasis in original)

Ideas of continuous development, progress, innovation and a sense of limitless human potential fuelled the rise of modern industrial-capitalist societies, and this way of relating to the future (as though it where "empty" and ours for the taking (Adam and Groves, 2007) has a complex range of emotions and affects associated with it (Latour, 2008), ranging from a hopeful, utopian drive to improve society and the belief in a better world, to a preoccupation with unfettered growth and feelings of perpetual craving. Indeed, in the same way that the fuzziness of "resilience" can foster neoliberal ideologies, so too can ideas of progress: standing still would imply the death knell of a capitalist growth mentality. In addition, a linear perspective of the future as "a space of points and plotted trajectories" (Grove, 2016 p. 5) can have the effect of closing down choices and justifying particular forms of power-quite the opposite of a politics of possibility (Nordhaus and Shellenberger, 2007). In linear perspectives, Inayatullah (1993 p. 250) contends, "time is largely reductionist with efficiency as the primary goal", and this risks legitimizing, as with "resilience", a range of techno-managerial policy actions in the present.

However, there is also something of a tension between the Welsh Government's progress-orientated narrative and the resilience narrative outlined in the previous section. While the former appears to strive to transform the world anew, the latter seeks to preempt and prepare for a future which is seemingly already determined. It is as though these two impulses pull in opposite directions along the same linear trajectory. This tension is compounded by a corresponding discourse of limits employed by the Welsh Government in relation to human—ecological relations. In its ambition to achieve the goal of "an innovative, productive and low carbon society which recognizes the limits of the global environment and therefore uses resources efficiently and proportionately" (Department for Natural

Resources of the Welsh Government, 2015 p. 5), as well as repeated references to "living within environmental limits", the Welsh Government echoes wider discourses on environmental limits which have been influential in the environmental movement since the 1970s. Whereas Modern attitudes to progress celebrated the transcendence of environmental limits, the environmental politics which emerged after the 1972 Club of Rome report, Limits to Growth (Meadows et al., 1972), warned that growth was inescapably limited by the physical facts of existence, and urged that current trajectories of growth were no longer tenable. Despite recent efforts aligned with Green Modernity to re-vamp environmental politics to have a more forward-looking, optimistic feel rather than a conservative one (for example, the UN's The World We Want project), an interest in environmental limits has resurfaced of late (Rickards et al., 2014), particularly associated with ideas such as planetary boundaries and safe operating spaces for humanity (Rockström et al., 2009). The Welsh Government, then, appears to be juggling two contrasting imaginaries of transformation: one which encourages progress and innovation, and one which calls on society to reduce and limit itself.

While a preoccupation with progress and development can be criticized for some of its deleterious effects on both human and environmental life (in as much as these are pretenses under which capital "must" always grow), the "limits" narrative also comes in for some bad press. Latour (2008) argues that, paradoxically, the limits discourse risks paralyzing politics and curtailing people's emotional responses to environmental crises. Beck (2010 p. 263) adds that the portrayal of limits leaves "citizens with nothing but gloomy asceticism [and] a terror of violating nature", and that this fear and terror is manipulated for particular political ends. Indeed, the resilience narrative in many ways relies on the idea of environmental limits and the possibility of shocks in the form of environmental thresholds being breached (Cooke, West, and Boonstra, 2016).

Imaginaries of environmental limits that must be "pulled-back" from not only reinforce a particular conception of linear time—that somehow ceasing to destroy the environment implies a stepping back in time, a reversion to a bygone era-but it may also compound an assumed separation and incompatibility between humans and environment. It is perhaps ironic that, just as societies are realizing how entangled humans and nonhumans really are (the concept of the Anthropocene signifies this, if nothing else), the limits discourse has come along and put the breaks on, urging us to believe that the solution to environmental problems lies in a kind of "re-separatization" of culture and nature. In other words, the notion of limits (and the reactionary discourse that often accompanies it) risks presupposing some kind of external environment from which humanity has the option of retreating, and therefore reinforces a natureculture binary (Latour, 2008) that does little to promote new (and more accurate) ways of conceptualizing human-environment relations.

The Welsh Government's imaginaries and narratives of socioecological transformation are, therefore, somewhat

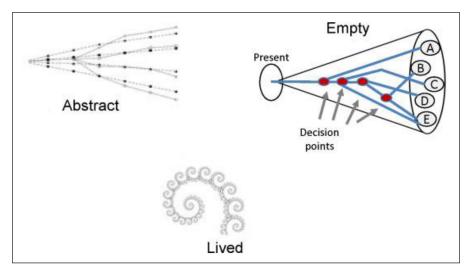
contradictory in terms of how they frame capacities for transformation. While the progress-oriented narrative seems to imply, or encourage, limitless human capacity to transform, the invocation of environmental limits risks creating a false separation between humans and environment, and a sense in which humans must back-track to a previous time when humans encroached less into the environmental realm. Perhaps, given this state of tension between backwards and forwards, this is why resilience emerges as usefully ambiguous term in the Welsh Government's narrative, capable of occupying this terrain as a relatively *atemporal* concept, alternating between progressive and conservative as required.

It is also useful to consider the kinds of imaginaries created by a linear conception of time more broadly. In particular, I am interested in the kinds of subjectivities created by linear time, and also how conceptions of linear time correspond to lived realities. Romanyshyn (1989) describes how linear perspective initially developed as a technique in Renaissance art, and subsequently moved off the canvas to become a pervasive "habit of mind" for western-Enlightenment societies. The perspective, he argues, is tightly bound to the emergence of technological worlds and to sociotechno-imaginaries (Jasanoff and Kim, 2009). In addition, he argues that the emergence of linear perspective was significant because it saw space organized according to vanishing points and located objects on the same plane, rather than the multiple perspectives evident in earlier Medieval art. Linear perspective is therefore one in which "the observer is positioned as a spectator outside the space thus represented" (Groves, 2016 p. 5). Thus, in linear time, subjects are always somewhat divorced from the future (the future is always "over there"). Finally, it is highly questionable whether a linear imaginary is capable of fostering the kinds of transformation needed, when a more nuanced and complex understanding of society and ecology-and transformation-are warranted (e.g. Prigogine and Stengers, 1997; Urry, 2005; Morton, 2010). Inayatullah suggests that what is needed is a "multiple

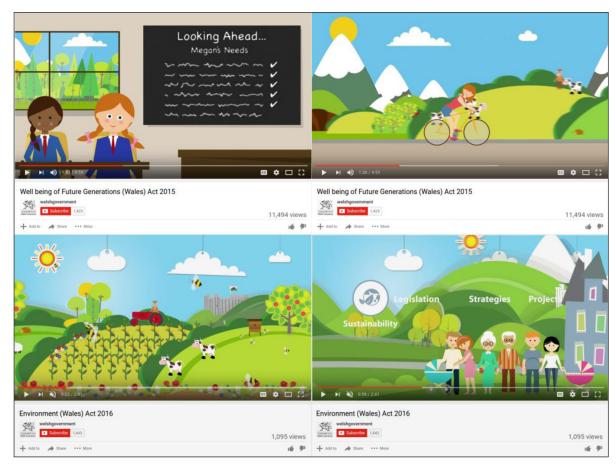
theory of time and space" (1993 p. 249), and he points to the existence of other temporalities and metaphors of time, including cyclical, spiral, and decline, perspectives. Such "heterotemporality" (Klinke, 2013 p. 678)—the existence of multiple temporalities alongside one another affords a richer imagination of time and transformation and corresponds more closely with the lived experiences of people, that is, time which appears to go slowly or speed up, time which stands still, time which repeats (as in the routines of our daily lives), not to mention time which surprises. As such, lived time tends to be experienced as spiral and fractal, rather than linear (see Figure 2) and incorporates multiple objects of concern such as other people, places, and communities-an "interdependence of linked narratives spiralling on through time" (Groves, 2016 p. 7). It is from within *lived* futures, rather than from abstracted perspectives on the future which flatten and linearize, Groves contends, that society will be better able to cope with uncertainty through relations of connection and attachment.

#### Conspiracies of optimism

My final line of enquiry into the Welsh Government's socioecological imaginaries concerns a particular "aesthetic" at the core of its politics. In particular I am interested in the visual representations used in its public communications, notably in relation to the recent Well-being of Future Generations Act (2015) and Environment (Wales) Act (2016). The Welsh Government has employed what is perhaps best described as a decidedly "cheerful" visual approach to communications associated with these pieces of legislation: bold, primary or pastel colors, cartoonlike symbols and stylized representations of people and places. Short videos designed to explain the Well-being of Future Generations Act and the Environment Act utilize cartoon graphics of happy, smiling people, a backdrop of lush green landscapes and blue skies, and a soundtrack of birdsong (**Figure 3**). The films pan along a left to right trajectory (akin to a platform computer game), thus link-



**Figure 2: Diagrams of temporality.** Illustrations of different conceptualizations of time, including abstracted and emptied versions that follow linear notions of time (top left and right), and a lived temporality that is spiral and fractal, incorporating multiple narratives at once. (Source: Groves, 2016 p. 8). DOI: https://doi.org/10.1525/elementa.315.f2



**Figure 3: Screenshots from videos introducing the Well-being of Future Generations Act and the Environment (Wales) Act.** Screenshots from videos used for public communication about the Well-being of Future Generations Act (top row) and the Environment (Wales) Act (bottom row). Both use cartoon images and pan from left to right to depict society moving towards an attractive, sustainable future in Wales. DOI: https://doi.org/10.1525/elementa.315.f3

ing them to the linear temporality described above. They are narrated by a female voice in a light-hearted, optimistic tone, without complicated language. As mentioned, the WFGA video features a single protagonist, "Megan", and follows the course of her life through a trajectory of birth, school, college, career, family, death, highlighting the challenges she may face in meeting her needs along the way—challenges which the Act is designed to address (such as poverty, climate change, health, and inequality). Notwithstanding an obvious need and desire to make such publications accessible to a wide spectrum of people, it is worth, I think, holding up these aesthetic choices to some closer scrutiny with regards to how they may shape imaginative capacities for transformation.

That the Welsh Government paints a decidedly rosy picture of the future is not especially unusual. As already mentioned, utopian stances towards the future are deemed by many as an essential motivating force for social transformation (e.g. Levitas, 2013), and is a tactic many future-focused organizations and programs seem to be employing. However, the Welsh Government's decision to use simplified, cartoon images means that often the seriousness or scale of the challenge is somewhat glossed over. Climate change, amongst other socioecological concerns, is presented as a mere problem to be dealt with along the (seemingly inevitable?) route towards a happy future. The Welsh Government's proposals to deal with

climate change can come across in rather vague terms. One section of the WFGA film shows a smiling Megan sitting at school with a checklist written on the blackboard, with the title "Looking Ahead: Megan's Needs". The narrator says:

So, over her life, Megan has many needs. The good news is that these needs can be met. However, there are a few challenges in the way. Such as: poverty; an increasingly global economy; an aging population; poor health; and the inequality of health between people; climate change, and pressures on our natural resources; and rising demand for quality public services.

And while this sounds straightforward, it fails to acknowledge that the Welsh Government's own targets on climate change (3% reduction per year), as mentioned, are nowhere near what has been deemed necessary if extremely dangerous changes in climate are to be averted. Similarly, little if anything is said about how socioecological crises are *already* effecting society—rather, they are presented as threats sometime in the future. This presents something of what Hirt (1996) calls a "conspiracy of optimism"—a situation in which the severity of the problem is masked by whoever is doing the representing. Latour (2015) finds this to be a widespread problem, and

contends that never before in history has there been such a mismatch between the requirements of society and the "keep calm and carry on" approach coming from leaders. Similarly, Klein (2015 p. 3) observes how a tendency "to tell ourselves comforting stories about how humans are clever"—particularly in relation to technological "fixes"—is simply a version of climate denial, of "looking away".

What are the emotional effects of obscuring from view, or watering down, the seriousness, loss and tragedy of the current socioecological predicament? What happens to imaginative capacities for transformation? One compelling suggestion is that, contrary to an instinct to want to avoid pain or discomfort, confronting shared vulnerabilities in the face of seemingly overwhelming environmental crises is a crucial element in processes of individual and collective transformation. As Macy and Johnstone (2012) explain, the result of *not* suffering, of not confronting the dystopian possibilities of the current situation, is apathy (meaning, literally, a- 'without' + pathos 'suffering'). Other commentators have also noted the pitfalls of only focusing on the good. Featherstone and Miles (2014 p. 128) remark that "it is only when we confront the worst, and understand that the way things are now cannot continue, that we realize that we must change our situation and invent the new". Haraway (2016), too, believes that "staying with the trouble" necessarily involves the work of, as Kenney (2014 p. 255) puts it "inheriting violent pasts and presents in the process of building more livable worlds". Dystopian imaginaries might be politically unpopular, but they might also be a way to empower individuals and political communities to take action to avert it (Claisse and Delvenne, 2015). This proposition resonates with the original meaning of the word "crisis", which etymologically means the time to make decisions which could secure a turn for the better (Bauman, 1999). Today, the idea of "crisis" is more often associated with an atmosphere of impending disaster or catastrophe and feelings of uncertainty and helplessness-another reason to want to avoid thinking about it.

The Welsh Government is therefore caught in a difficult place: too much talk and imagery of apocalypse risks depoliticizing issues like climate change as an uncontrollable planetary inevitability, while too much utopianism risks preventing people from confronting pain and vulnerability, and thus invokes another kind of depoliticization: apathy. This is a tension not easily resolved, and of course is not the job of government alone. Nonetheless, my analysis suggests that, in the Welsh Government's approach, there is a trend towards an increasingly infantalized, sugar-coated approach to socioecological transformation. The imagery and narratives employed in the recent videos create an aesthetic which belies the complexity of both the problem and the solutions. Solutions are couched in relatively familiar, safe terms-"the cupcake as opposed to the messy and collapsing sponge-cake" (Whyman, 2014, unpaginated). This kind of response to a crisis is reactionary rather than transformative, shutting down possibilities thrown up by the crisis in favour of (re) asserting certain values, and creating child-like subjects. Guattari ([1989] 2014 p. 33) vehemently opposes such a "stupifying and infantilizing consensus", arguing that

what is really needed in response to socioecological crises is *dissensus*, and a cultivation and openness to diverse possibilities.

Finally, the decision to use cartoons and playful graphics to illustrate the most recent policy developments rather than photos of actual people or places (as was the case in earlier publications such as the One Wales: One Planet strategy (2009)) also raises some interesting questions about how imaginations of, and relations to, the future are constructed. On one hand, it is possible to understand why cartoons might have been chosen as relatively neutral, easy-to-reproduce graphic representations which help to build a particular image and "brand" for the Welsh Government's sustainability projects. On the other hand, I suggest that using cartoons, rather than photos of actual people and places, does two, related, things in terms of future imaginaries: first, and related to a linear perspective on time, it implies that the future is somewhat detached from the here and now, the "imagined future is a different world, inhabited not only by different technologies but inhabited by different people, too" (Nordmann, 2014 p. 89). Second, this sense of "otherness" means that the future is essentially unrecognizable in the context of the present—there is little to suggest that things already happening in society are related to possible futures, or that problems like climate change are having or will have an effect on current environments and communities. It therefore reinforces an imaginary in which the future is abstracted, always somewhere ahead or "not-yet", rather than a lived future which is inextricably part of the present (Groves, 2016). Chakrabarty (2009 p. 197) describes how "the current crisis can precipitate a sense of the present that disconnects the future from the past by putting such a future beyond the grasp of historical sensibility". The Welsh Government's future is, in some respects, a "world without us" (Weisman, 2008), in that images of presentday people and places are substituted by idealized cartoon forms. Similarly, Adam and Groves describe how contextual, embedded and embodied futures-in-the-making can be "airbrushed from the picture, traversed and negated" (Adam and Groves, 2007 p. 14). The danger is that this kind of artistic license glosses over the real difficulties of transformative action (Harvey, 2000), and therefore that images "do not identify agencies and processes of change. The result is that utopia moves further into the realms of fantasy" (Levitas, 1993 p. 265). Although this might have the advantage of liberating the imagination from the constraint of what it is possible to imagine is possible, it has the disadvantage of severing utopia from recognizable processes of social change (Levitas, 1993).

#### Appealing to values

The ambiguities and tensions I have highlighted in this article may not necessarily prevent people engaging with the Welsh Government's approach, and may in fact be part of the Government's strategy to appeal to as wide a base as possible and to get citizens "on board" with its vision. For example, Verweij and Thompson (2006) suggest that "clumsy solutions"—approaches to social and environmental problems that combine different ways of organizing—are more likely to be accepted precisely because

they are capable of appealing to multiple, often contradictory, standpoints. Indeed, the vision the Government has crafted has been informed by detailed research that it commissioned in 2011, carried out by the Climate Outreach and Information Network (COIN). The resulting report (Marshall, 2014) detailed an approach to climate communications based around shared national identity in Wales, aimed at being inclusive and appealing to people's sense of belonging. In particular, Welsh cultural values of modest leadership and self-reliance were highlighted. Consequently, much of the vocabulary, imagery, and narratives found in the Well-being of Future Generations Act and associated legislation such as the Environment (Wales) Act have been developed to appeal to these (and other) values. This attention to values is certainly something to be admired; the importance of constructing narratives about environmental change that align with people's existing values and worldviews-which are diverse even within one country-is increasingly recognized (e.g. Crompton, 2010; Schwartz, 2012; Hedlund-de Witt, 2014). It has also been shown that catastrophic imagery regarding climate change is more likely to disempoewer and disengage publics than imagery that is more associated with solutions, and that this has important implications for imagining climate futures (O'Neill and Smith, 2013). However, there has been little research regarding the role of cartoons in the cultural politics of climate change. One exception (Manzo, 2012) engages with climate change cartoons as forms of visual commentary (often satire), but this is rather different to the ways in which the Welsh Government has used cartoons to depict a positive future (within which, incidentally, there is very little visual reference to climate change itself). This would certainly be an area worthy of further research with regards to how well such cartoons engage and inspire people.

However, even with successful take-up of the Government's vision, the question remains-what kind of vision are people getting on board with, and is it likely to generate meaningful socioecological transformation? As Anderson (2009) contends, imaginaries provide the very grounds of possibility for transformation, and so exactly what the Welsh Government is envisioning matters. One concern-and this is a problem that applies to environmental communication more widely—is that, in constructing narratives that appeal only to *existing* values, there is little room for new and different values (of the sort that might be necessary for socioecological transformation) to emerge. For example, the notion of resilience seems to be used by the Welsh Government to appeal to people's values of belonging and a desire to protect and preserve their communities against future threats. While this might be appealing to many people who feel somewhat threatened by processes of globalisation and change, it is a narrative that risks stunting a more open imaginary of global interconnectedness and of openness to (as yet unknown) future possibilities. Similarly, the Government's tendency to frame transformation as a profoundly temporal issue, with the future imagined as something "out there", and "yet-to-come" (Groves, 2007 p. 1), is a familiar approach that is likely to resonate with many people's sense of time and progress, but it could prevent more innovative

approaches to transformation that more accurately reflect how change happens. As already discussed, linear temporality can have the effect of severing the future from the present and the past in our imaginations, creating atmospheres of apathy of disengagement. It is also increasingly recognized that so-called "long-threats" created by scientific knowledge of climate change (horizons of 2050, 2100 and so on), are perceived by many to be so distant that they are not worth bothering about (Brace and Geoghegan, 2011 p. 290). Moreover, linear perspective risks creating subjects as observers and voyeurs outside of time, stripped of transformative agency. In light of this, some suggest that more contextualised, participatory, lived, futures-in-the-making (Adam and Groves, 2007; Falk 2016) address this problem of abstraction by understanding the *present* rather than the *future* as the object of transformation. Although this is quite an ontological leap for any Government to make, it may in fact be one that better matches individual's own experiences of time and change which tend to be more immediate, complex, and non-linear. Perhaps this is also how the concept of resilience—as it is generally used by resilience theorists, to incorporate elements of non-linearity, emergence, uncertainty—can be most helpful, as a means to potentially shift from purely temporal imaginaries, to those which incorporate something of the complex, diverse, lived, present.

The challenge, then, seems to be to find ways of using values-based approaches (in order to engage people initially), without reproducing narratives about time and change that-although comfortable-are unlikely to be sufficient for truly thinking and behaving differently with regard to our environmental predicament. This is the tension between seeking to connect with people where they are "now", while also presenting radically alternative visions (and values) for the future. Perhaps it is possible to do both. There is nothing to say, for example, that the idea of lived futures is incompatible with commonly-held values such as belonging and community (two important values also identified in the COIN report). Indeed, many aspects of the Welsh Government's vision (resilience, linear time, and unbridled optimism) that concern me in this article are aspects that could feasibly be altered to reflect more imaginative thinking about time and change, rather than falling back on classically "modern" imaginaries that—as I have argued—are no longer fit for purpose.

## Good intentions, inadequate ideas?

If the notion of the Anthropocene signals, as Delanty and and Mota (2017) propose, a new cultural model which invokes new conceptions of time, agency, knowledge and governance, then the Welsh Government's imaginaries of socioecological transformation present us with some insights into how such a model is currently taking shape. There is a complex interplay of forces that shape futures-in-the-making, and in this short article I have only visited a few. Nonetheless, the themes of resilience, linear conceptions of time, and what I have referred to here as "conspiracies of optimism" (after Hirt, 1996), indicate particular configurations of ideas that are relevant for considering transformation more widely. My analysis raises questions about the kinds of imaginative capaci-

ties and subjectivities that are engendered by the Welsh Government's vision. Meaningful socioecological transformation, amongst other things, is likely to require new conceptions of human progress, of human-environment relations, and of "the future" as something which is actively created in the present, not a point on a timeline to be aimed for or anticipated. These are ideas which are largely lacking in the Welsh Government's imaginaries, although—given the wider political context and a desire to appeal to voters—it is understandable why this might be so.

It is increasingly suggested that there is a "crisis" in imagination when it comes to socioecological transformation (e.g. Buell, 1996; Cheney, 1999; Yusoff and Gabrys, 2011; Wapner, 2016; Magrane, 2017). Harvey (2000) and Levitas (2013), for example, have written at length about a dearth of collective imagination that has resulted in a feeling that "there is no alternative" (Harvey, 2000 p. 17) to social, political and economic conditions. More specifically, Wapner (2016), uses the idea of "Climate Inc." to describe a situation in which responses to climate change seem to be marked by a distinct lack of imagination, revolving only around narrow, hegemonic scientific and economic explanations about what is possible (see also Wainwright and Mann, 2013). Such hegemony closes down the imaginative space necessary to think otherwise about environmental crises, and to create alternative ways of organizing (Harris 2017b). As Gerlach points out, with reference to the Ecuadorian government's 2008 strategic plan called "Buen Vivir" ("living well"), good intentions can risk becoming inadequate ideas if they are appropriated in the name of technocracy (Gerlach, 2017 p. 4). I see the Welsh Government's efforts in a similar light; its Well-being of Future Generations Act is full of good intention but often its imaginaries are inadequate for helping people-psychologically and practically-respond to the complex socioecological challenges of the 21st Century. Nonetheless, my aim in this article has been to begin to open up space for discussion about the Welsh Government's approach, in the hope that the seemingly unquestionable might be questioned, and more diverse socioecological imaginaries considered. The Welsh Government is itself constantly revising its approaches to sustainability (from the original constitutional commitment in Government of Wales Act in 1998, to the WFGA in 2015), and these constitutional foundations could provide an excellent "nursery" for experimental ideas. Perhaps then, with a little more imagination, the Welsh Government's aspirations to develop genuinely innovative environmental policy might yet be fulfilled.

#### **Notes**

- <sup>1</sup> An overview is available at http://www.futurejustice. org/resources/global-view-of-mechanisms-recognising-future-generations/. Last accessed 3 July 2017.
- http://www.futureearth.org/our-vision. Last accessed 3 July 2017.
- <sup>3</sup> Available at http://gov.wales/topics/people-and-communities/people/future-generations-act/future-generations-act-video/?lang=en. Last accessed 4 July 2017.

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The author has no competing interests to declare.

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