

**The Future Produced, Perceived and Performed:  
Reading *Green Futures***

**Renee Lertzman**

Cardiff University, School of Social Sciences

**Renee Lertzman is the research associate for an ESRC Professorial Fellowship, 'In Pursuit of the Future' with Professorial Fellow Professor Barbara Adam, at the School of Social Sciences, Cardiff University. Website: <http://www.cf.ac.uk/socsi/futures>, Email: [LertzmanR@cf.ac.uk](mailto:LertzmanR@cf.ac.uk)**

**ABSTRACT:** This paper is part of a larger project, 'In Pursuit of the Future', which investigates how the future is theorised, conceptualised and practiced across multiple disciplines and communities of practice. This paper focuses upon how the future is perceived and produced in one issue of *Green Futures*, a magazine published by 'Forum for the Future'. What is discovered is that the future of 'green futures' exists as innovations and solutions; phenomena which are often in the threshold of becoming. This kind of futurity is then contextualised briefly within a discussion of sustainable development. Finally, the paper concludes with reflections upon the importance of looking at approaches to the future, in light of contemporary future-producing industries (biological, nuclear, genetic). **KEY WORDS:** futures, environment, discourse, sustainable development, solutions

*It's the UK's largest solar powered motorway sign. It's a pointer to the future, as well as to the A483.*  
- 'Seeing the solar light in good time', *Green Futures*, No. 41 (July/August 2003).

### **Introduction**

Speaking of the future is a human necessity. From scenario planning to divination, humans have devised endless tools for knowing 'the' future, and these tools are woven seamlessly into our daily practices. As much as futurity is an implicit feature of human existence, rarely do we examine what *kinds* of futures are being constructed. That is, precisely how as social, cultural and subjective beings we extend ourselves into future, and what ethics and values we choose to take with us. Ethics and values become paramount when considering the costs to future beings in the form of health hazards, genetic modifications and climate change, to name but a few ways futures exist within our present practices. How the future is imagined has material consequences; how we speak of the future reveals and conceals what aspects of futurity we wish to recognize. As a profoundly tacit dimension of temporality, the future is both an imaginary and a materiality; it is produced and envisioned along the contours of expectations, desires and fears. As this paper will show, in order to unravel how the materiality of the future meets imagination, we must explicate the many ways 'the' future is engaged and conceived. This leads to a discursive exploration, to surface the production of futures in daily practice.

In this paper, an environmental magazine, *Green Futures*, is explored to understand how a futurity is discursively imagined. This exploration is based upon a desire to ascertain how a publication purportedly about the future, 'does' the future. What are this future's characteristics, its qualities? How do we know when the future is being invoked? Is it possible the publication *performs* a kind of futurity, through its objectives, mission and underlying conceptual logic? These matters are significant when considering the

enormous range of ‘futures’ that are produced in our everyday discursive practices, and yet when explicated, reveal a surprising specificity in terms of how the future is actually conceived.

This paper is situated within the larger project ‘In Pursuit of the Future’ which is concerned with these matters of how the future is approached and produced across disparate knowledge spheres.<sup>1</sup>

Specifically, the project seeks to explore how futurity is engaged politically, economically, scientifically and across a range of academic disciplines in the context of industrial societies, where long-term futures are increasingly produced by technological means (reflected in developments such as those of the chemical, electronic, biological and nuclear industries). This specific focus encourages a new way of thinking about and theorising the future, which takes note of the gaps that exist between the ability to a) produce long term futures, b) know the multiple impacts of those futures of our making and c) take responsibility for those long-term effects. Through the way the future is talked about and the way it is ‘enrolled’ in writings that are explicitly oriented toward the future (a publication about ‘green futures’) we can gain access to this future production at both the explicit and implicit level.

How the future is approached in this project has distinct departures from how the future has been theorised in social sciences and studies of ‘temporal orientation’. Clearly, theories about ‘how we talk about the future’ abound, from semantics (Koselleck, 1985), to environmental philosophy (Goodin, 1992; de-Shalit, 1995) to psychology (Hellström and Hellström, 2003). There are many fruitful conceptual tools for describing particular stances to the future, for example in terms of a ‘future horizon’ (Jaques, 1982), ‘time horizon’ (Ebert and Piehl, 1973) or ‘temporal horizon’ (Fraisie, 1964). However, as most of these theories reflect, future orientation is most often articulated in terms of temporal orientation. Generally speaking, the future (if it is theorised at all) is theorised along particular axes, in which futurity is positioned in terms of ‘how far’ and in terms of scenarios (utopian/apocalyptic). In this paper, as part of the larger project, I aim to go beyond these axes and get underneath what conceptual frameworks, and ontological (what is the future) and epistemic (how we know about the future) foundations futurity is built upon. Indeed, we wish to surface the ‘habits of mind’ that so often tacitly inform our concepts of futurity.

What presents a considerable challenge is in the ways in which the future defies observation; unlike the past, where we can at least attempt to uncover traces and clues for understanding, we do not have the equivalent for tracing the future. We can predict, forecast and project to our heart’s content, but if one

thing is certain, the future is uncertain. With the rise of contemporary industrial environmental threats, we have seen the dimensions of futurity that defy discursive representation: latency, indeterminacy, and the invisible – all attributes of such threats (Adam, 1998). These attributes present linguistic and discursive challenges (not to mention conceptual challenges, which are addressed in the larger project). Therefore we wish to raise questions about the ways in which the future is produced, through use of a discourse analysis. Our objective is two-fold: first, to introduce the future as a necessary site of investigation within the social sciences (through the discursive focus) precisely due to its invisible and taken-for-granted nature. Second, through this kind of ‘futures reading’ we aim to demonstrate the ways in which our popular discourses produce and reify ‘habits of mind’ regarding how we come to terms with, make sense of, and extend ourselves into ‘the future’.

### **The Text**

In this paper, we examine one issue of *Green Futures* (Number 41, July/August 2003). *Green Futures* is a bi-monthly magazine published by the organization ‘Forum for the Future’. Forum for the Future is an organization based in the United Kingdom, founded in 1996 by three leading ‘environmental advocates’ for the purpose of promoting and advancing environmental sustainability. As a charity and advocacy group, the Forum for the Future has ‘Foundation Corporate Partners’ of approximately fifteen organizations, including the Royal Mail, Sainsbury’s, Sun Microsystems, GlaxoSmithKline, and the Royal Bank of Scotland. Contributions from the partners of Forum for the Future also constitute about one fourth of the magazine’s editorial content, in the form of *Partners’ Viewpoints*.

Within each bi-monthly issue of *Green Futures*, the contents are organised generally into three main sections: *Features*, *Regulars*, and *Partners’ Viewpoints*. Within *Regulars* are ‘Briefings’, covering up to twenty-five pages of short (300-500 word) pieces related to, but not restricted to, the central theme of the magazine (such as ‘Hydrogen’ (July/August, 2003) – the issue we have looked at in more detail), ‘Sustainable Cities’ (May/June, 2003), ‘Ecological Design’ (January/February, 2004), and so on). *Features* often contain up to fifteen separate feature articles, varying in length but generally from one to three pages, and with at least one colour photograph accompanying the text.

The criteria for selecting this publication were two-fold: to analyze a text where the future is handled

‘explicitly’ (that is, where it is the explicit focus of attention, in order to explore consistency and diversity of usage as well as implicit assumptions). Secondly, to investigate a popular text that is aligned with sustainability, precisely to illuminate a kind of futurity that often falls below a reflexive radar. Within environmental discourse, and particularly that of sustainable development, the conception of the future is often handled as implicit and taken-for-granted. It is commonly assumed sustainability is about the future, and is therefore a necessarily future-oriented enterprise, ideology or philosophy. This paper seeks to complicate and trouble this assumption.

### **The Future in *Green Futures***

In the discussion that follows, two central modes of futurity are identified in the magazine, through which the future is ‘performed’. In the first mode, the future is engaged through the presentation of solutions, as responses to existing (past-based) problems. Little emphasis is given to the actual problems (such as pollution, wildlife extinction, resource depletion) that require solutions; rather, the solution is the primary focus. As maintained below, the stalwart focus upon solutions *is* a kind of futurity. The second, and related mode is the future as articulated as a threshold phenomenon – plans, events or innovations that have either just taken place, are about to take place, or may possibly take place. This threshold then becomes a ‘pivot’ upon which the future is invoked. Related to this ‘threshold’ is the mode of future as solutions. These modes of futurity are explored below, and then situated within the broader context of sustainable development.

### *Solving the Future*

The audience for *Green Futures* is reflected in its mission statement: industry, the corporate social responsibility (CSR) community, environmental professionals, educators and concerned (and presumably educated) United Kingdom citizens. As the *Green Futures* mission statement reads,

*Green Futures* is the flagship publication of Forum for the Future. It aims to be a leading source of information, opinion and debate on progress towards sustainable development. Its focus is on communicating solutions and best practice to business, central and local government, universities, the voluntary sector and society as a whole (July/August, 2003: 2).

As stated above, the central communicative mandate of the publication is upon *solutions* and *best practice*. In terms of temporal horizons, solutions are bound to a rather tight frame, in which the past and future are referenced, but are centred upon the *now*. That is, to have a solution is to meet a need arising from (past) problems, errors or issues, in order to move forward (into a future). A solution is confined to this frame, and conceptually and linguistically answers to a need for a 'fix'. 'Best practice' is industry jargon, coming into corporate parlance in the mid-1980s to mark a particular stance in relation to technological change and innovation. It is a term that twins efficiency and economic profitability.

The emphasis upon solutions is reflected and reinforced in the discursive representation of the magazine in its self-promotion. Towards the back of the issue of *Green Futures* can be found the full-page advertisement to subscribe to the magazine (53). What we see is a photo of an empty, crumpled (used) plastic bottle, with the word 'Problem.' in bold over it. Next to the bottle, we see a young boy; around age ten, holding his hands face up to the camera, wearing a yellow fleece jacket, with a baseball hat turned backwards, shorts and sporty shoes. His facial expression is positive, happy, perhaps triumphant. His hands are, by implication, held high and open, 'clean' of the 'problem' – similar to a child showing his mother his hands have been washed. There is no contamination to be found on this child. Over his image is the word, 'Solution.'

In the text that follows below, the first two lines read:

What happens when you turn waste bottles into high fashion fleece? How can we live well, without destroying the environment? For some inspiring and imaginative answers, take a look at *Green Futures* – the leading source of information and debate on the latest in sustainable development.

The first question is posed: what happens when you turn waste into high fashion? In the following line, we are provided with a hidden answer: 'we can live well without destroying the environment'. Although posed as a question, it's more of a clarification. In other words, when we can turn waste into high fashion, we *can* live well without destroying the environment. These two lines perhaps best reflect the sentiment and underlying ideology of what is called sustainable development: with industrial solutions, such as converting

plastic bottle material into wearable plastic clothing (that is fashionable as well) we can *both* live well and not destroy the environment. The dissonance occasioned by modern reflexivity (risks, unintended ecological consequences) is thereby smoothed over.<sup>ii</sup>

The advert continues with a description of the magazine's editorial content: '[*Green Futures*] combines hard news with inspiration, practical policies with long-term vision. And it covers everything from city to countryside, business to ethics, education to energy, in the UK and worldwide.'

Here we have a series of categorical contrasts, each with their own specific significations, and presented as binaries. In placing such binaries together, the text effectively produces tensions that the magazine is positioned to resolve, bridge, or suture. Thus, the setting up of categorical contrasts is *performative*. What is performed is: *we are broad in scope, and we are not narrow-minded or gloomy. We will take your considerations into account*. It is assumed these categories are not customarily taken together in a common context (for example rural/urban, business/ethics), and therefore the magazine overcomes them, is wide in scope, and 'covers all of the bases'.

To develop a sense for the kind of future the publication is producing, the first categorical contrast is key: '[*Green Futures*] combines hard news with inspiration...' Hard news implies 'hard-hitting journalism' – facts, problems, issues. As opposed to 'soft' news, hard news is no frills, and not designed to 'feel good'. The implication being, we will give you the facts (*hard news*), but will never lose sight of what is being done to amend, correct, solve – and most importantly, *inspire*. This is a publication about 'the future', and therefore it must be forward thinking and dynamic. What affect is better suited to this form of future, than inspiration?

'Inspiration' appears twice in the short text of this advert, suggesting its enrolment in the rhetorical function and performance of this publication. The discourse of inspiration may suggest a particular kind of future-orientation taking place. The Latin root of inspire is *inspirare* – to 'breathe or blow into', and usage of the word has a rhetorically strong spiritual resonance, that of life or spirit being 'breathed into' one. The *Oxford English Dictionary* defines inspiration as

[t]he action of inspiring; the fact or condition of being inspired; a breathing or infusion into the mind or soul... A special immediate action or influence of the Spirit of God (or of some divinity

or supernatural being) upon the human mind or soul; said *esp.* of that divine influence under which the books of Scripture are held to have been written (*OED*, 2004).

*Green Futures* is explicit in its function as an ‘inspiring’ publication. As a ‘futures’ publication, inspiration provides momentum; a sense of looking ahead. Negative attributes commonly associated with environmental ‘hard news’, are *doom and gloom*, paralysis and inaction: oppositions to inspiration. As a solutions-oriented and inspiring, the publication functions as a counter-discourse to mainstream environmental news, providing a more ‘palatable’ (e.g. ideologically congruent) entrance into environmentalism for those in industry, technology and the private sector at large. It is also a counter-discourse to apocalyptic narratives pervasive in environmental discourse dating from the 1970s to present.<sup>iii</sup> The emphasis on action, as seen in the barrage of books published in the 1980s and 1990s on ‘what you can do to save the earth’<sup>iv</sup> has reached its corporate pinnacle in sustainable development and a solutions-based publication. To inspire is to lead; to be inspired is to become potentially active, responsive to the call.

An emphasis upon inspiration and solutions serves a psychic function, as technological and industrial solutions (such as wind turbines, fleece clothing and electric cars) effectively ‘stitch’ together or smooth over potential disjunctures between our current Western lifestyles and ideologies of progress, and the subsequent damage done to the physical environment in which we are embedded. This smoothing-over can also be seen as part and parcel with the invisible and latent consequences of our technological innovations. That is, by operating within the dominant logic of progress and techno-industrial innovations, we do not have to question the very real - yet invisible and latent - dimensions of the kind of future we are producing, facing, and prospecting. The publication effectively presents a future that is full of ‘green’ innovations, thereby suggesting we need not look too far into the future: the future is ‘here’ and in our hands. And, as the boy in the advert indicates, these hands are relatively clean.

The categorical contrast of ‘practical policies and long-term vision’ in the advert speaks precisely to the kind of tensions which are produced and reified in spheres of environmental planning, policy and issues of accountability. Placing such subjects (or qualities) together effectively evokes the familiar tension between practice and vision, specifically ‘long-term’ vision. Placing practical policy next to long-term vision, along with city/countryside, business/ethics, education/energy, UK/worldwide reinstates a series of

conceptual and practical dualisms that is smoothly congruent with logic of the marketplace and the private sector. It is important to recall the partners, which constitute both editorial content of the magazine (in ‘Partner Viewpoints’), and financial support of the organization Forum for the Future. Seen in this light, the logic of solution-based green consumerism is coherent.<sup>v</sup> What is at stake in the consistent promotion of ‘good news’ and ‘solutions’ is certain kind of eliding of the indeterminacy and uncertainty that make long-term, or ‘deep’ future orientation so difficult.

### *Sensing the Future*

Furniture recycling, wind turbines, and fuel cells: all these headings point towards a solution-based, can-do discourse of innovation. In the world of *Green Futures*, the future is indeed in our hands: it resides in our *techne*, the tools through which we respond to, manipulate, and shape our world. If industry and technology and the correspondent value systems got us into trouble, then a sustainable and healthy future is most certainly quite literally in the same hands. Technologies possessing both *actual* and *potential* application constitute a large portion of the magazine’s editorial focus. For example, in the *Briefing* ‘Tide Turning for Energy’ (4), Marine Current Turbines (MCT) are presented as simultaneously taking place *now* and in the future – the lexicon is one of ‘capability’, with ‘plans to provide 40% of power’, and ‘in future applications’ (4). The current prototype of one new turbine technology, the Sea Snail ‘is *capable* of generating up to 150kW, and RGU has *plans* for a full size version, five times as powerful, *if* the trials go well (emphasis added).’ This news item is presented almost entirely in terms of capability and plans, and hinges upon ‘if the trials go well’. In another *Briefing*, ‘Two Pronged Technology,’ a wavepower device is ‘currently being developed’ and its manufacturers, Engineering Business (EB) ‘hopes the innovation will assist in the rapid development’ of a new wavepower technology. We are told, ‘EB has high hopes for its offshore power station concept, and aims to start installing a grid-connected 5 MW ‘Stingray Farm’ as early as next year’ (5).

The majority of the *Briefings* content is presented in terms of prospects and plans. Expressed in the *Briefings* are hopes and aims, capabilities and potentials. For example, in ‘Power In a Nutshell’ (5), ‘some lucky Queenslanders are expected to be getting power and heat’ from macadamia nut shells’ and ‘there are plans to double’ the operation within two years. The general manager for the company notes

there is ‘potential to replicate the idea across a range of other industries’ (p. 5). The entire piece is organised around ‘expectations’, ‘plans’ and ‘potential’. What the future-as-threshold does is to present a clear and short-term temporal horizon, upon which the future can be ‘seen’ in action. The future can be felt as a toggle between what is taking place now, what has taken place in the very recent past, and what is likely, or hoped, will take place in the near future. The future is then manageable, graspable and ever so slightly visible.

The way in which the future is conveyed through a threshold phenomenon is exemplified in hydrogen technologies, the theme of the particular issue of *Green Futures* that has been analysed. In addition to the *Briefings*, the issue has five feature articles relating to hydrogen. Hydrogen is arguably an icon of futurity – an emergent technology, afforded to human use only through the technological advances in separating the hydrogen from its molecular context. It presents the potential to replace (destructive and potentially catastrophic) CO<sub>2</sub> emissions, and has the connotations of being ‘clean’ and efficient. Hydrogen as ‘the energy of the future’ and its powerful symbolic resonance has become, as Managing Editor Roger East notes in his editorial, ‘in many ways an advertiser’s dream’ (p. 3). East continues,

[Hydrogen] presses so many positive buttons – energy, simplicity, abundance, purity – that designing the sales literature should be a doddle. Say bye-bye to the polluting, war-torn and corrupt old oil economy; we’re off to the spanking new fuel cell future.

In his editorial, East acknowledges the symbolic potential of hydrogen to enlist all manner of fantasies about a clean future, while noting the suspiciously grandiose nature of such fantasies. This attempt to present both the thrill of new innovation with the reality of slow policy reform and implementation is seen throughout the issue. For example, in the feature ‘Follow the Leader’ (p.30), East gives a progress report of how and where hydrogen technologies are being implemented, notably by ‘little islands’ such as Iceland, Vanuatu (a Pacific island nation), and Islay (an island off the coast of Scotland). The storyline of the piece is that although such innovations are exciting, they are not likely to help the cause of implementing larger scale projects among the ‘bigger players’ such as major Western European cities and Japan. The UK, the EU and the US are all quite woefully slow to catch up (‘In fact, the EU is quite noticeably limping along behind the USA’ (p. 31). The question being raised and addressed, in this feature and in all of the hydrogen

features, hinges upon the variables and factors related to the future implementation of hydrogen technologies. As East writes,

Of course, it's not just a matter of how much public money is pumped in. More important still is the response that government policy engenders – whether it instils business confidence that there'll be a return on effort and investment in hydrogen technology, infrastructure and applications (p. 31).

The central point, then, of the future 'Follow the Leader' rests upon a contingency to be determined in the future, of government policy's ability to instil confidence in investing in a technology with long-term returns and uncertain immediate benefits. The timeframe is left unaddressed. It is thus not clear whether the propositions mentioned need to take place in the next year, a few years hence, or next month. Without an explicit timeframe, the future remains vague. Again in another article, 'Power and the Glory' (p. 32), East and co-author Hannah Bullock describe various innovations in hydrogen technology. The subject itself occupies an in-between status of 'close at hand' (32), 'beginning to appear' (32), 'currently in test marketing' (32) and 'apparently on the threshold' (33). The technologies are framed as liminal objects in that they are in design, in process, in motion – indeed, hovering on the threshold between the potential and the actual. It is in this *threshold* that the future is sensed in *Green Futures*.

What are the implications of a futurity represented in terms of a threshold? How *far* we extend ourselves into the future, and how we chart our course is what determines our roles as ethically involved, social beings. To dwell in a perpetual threshold can evoke a sense of future, while circumventing issues of implementation and longer-term consequences and concerns. The threshold has an affective function, as speaking to the need to think of the future, but in ways that are distinctly manageable.<sup>vi</sup> The threshold also may present a sort of mimetic function: to discuss what is almost at hand can look and feel like a taste of actuality – when in fact, it is hope, dream, expectation and anticipation. Perhaps what anthropologist Michael Taussig (1993) writes about *mimesis* has salience to how the future is performed in the pages of *Green Futures*, that is, as within reach and manageable. The future in this world is in the hands of our ingenious innovators, and contingent upon politicians who must become 'inspired' to actualise our dreams.

Yet, the future is comprised of possibility, potential, plans and intentions. It is both real and ‘not real’.

Taussig writes,

Now the strange thing about this silly if not desperate place between the real and the really made-up is that it appears to be where most of us spend most of our time as epistemically correct, socially created, and occasionally creative beings. We dissimulate. *We act and have to act as if mischief were not afoot in the kingdom of the real and that all around the ground lay firm.* That is what the public secret, the facticity of the social fact, being a social being, is all about... (Taussig, 1993: xvii-xviii, emphasis added).

The future that is discursively produced in *Green Futures* may indeed be a kind of in-between place, between the real and the really made-up. This is not to suggest the possibilities and innovations in the publication are fabricated or ‘made-up’ in the fantastical sense, but rather that the future is presented as within our grasp, and on the threshold. This vision of the future is necessarily partial and contingent. It is important to interrogate what is being silenced, what is bracketed, and what is being held at bay in this ‘kingdom of the real’.

### *Designing the Future*

To understand the future as animated through solutions and techno-industrial innovations, it’s important to acknowledge the ethos and pathos of the sustainability movement. Where the emergence of a finite planet in the 1970s emphasised ecological limits and subsequent crises – largely through the use of projective tools such as exponential growth – the evolution of sustainable development became a dominant environmental discourse in the 1980s. In sustainable development discourse, the issue of finite resources raised in such works as *The Limits to Growth* (Meadows, et al, 1972) is rendered through the lens of industrial ingenuity and technological innovation.<sup>vii</sup> The shift from a focus on finitude and limits, to innovation and solutions is illustrated in *Our Common Future*, published by the World Commission on Environment and Development (1987), where sustainable development is rolled out as a central concept of working *with* limits. The affective tenor of inspiration has given way to the earlier one of fear and panic. As the authors of *Our Common Future* write in ‘A Threatened Future’,

We have... found grounds for hope; that people can cooperate to build a future that is more prosperous, more just, and more secure; that a new era of economic growth can be attained, one based on policies that sustain and *expand the Earth's resource base*; and that the process that some have known over the last century can be experienced by all in the years ahead. But for this to happen, we must understand better the symptoms of stress that confront us, we must identify their causes, and we must *design* new approaches to *managing* environmental resources and to *sustaining* human development (WCED, 1987: 28, emphasis added).

This marks a discursive shift from one of restraint in *The Limits to Growth*, to one of *innovation* and *management*. The operative terms in the sustainability movement of the 1980s and 1990s are those of 'design', 'managing' and 'sustaining' (Hawken, 1993). Sustainable development emerged in dialectic with a finite future – a future in which ecological limits dictate human behaviour – by taking an approach informed by ingenuity and optimism in the face of limits. The sustainable future is more malleable than the *finite futures* of the 1970s. Proponents of sustainable development argue that we can economically prosper, while not destroying the Earth's habitats or ourselves.<sup>viii</sup> The concepts of growth and development are redefined in ways, which render obsolete the simple projections of the limits discourse (Dryzek, 1992: 14).

As stated in *Our Common Future*, 'sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs' (43). (It is the definition of the future's 'needs', which has been the source of much controversy and contention around sustainability.) Seminal writers on sustainable development such as Hawken (1993), Brundtland (1987), Harrison (1992), and Porritt (1984), one of the founders of Forum for the Future, are well aware of current ecological limits. However, their future is articulated in terms of *growing within limits*. As Hawken, Lovins and Lovins (1999) write,

There is no longer any serious scientific dispute that the decline in every living system in the world is reaching such levels that an increasing number of them are starting to lose, often at a pace accelerated by the interactions of their decline, their assured ability to sustain the continuity of the life process. *We have reached an extraordinary threshold* (4, emphasis added).

The term ‘threshold’, as discussed above, is a clue as to where these authors diverge from previous environmental critics focused on ‘ends’ and ‘limits’ – and the context in which *Green Futures* exists. The threshold is precisely the in-between place, where the end of one thing leads, either perceptively or invisibly, into the next stage. The pace of human impact upon the life process is seen as an opportunity to move into a new era, rather than a stopgap barrel towards disaster as detected in earlier *finite* rhetoric. The rise in population growth is interpreted and framed as an *opportunity* for a ‘remarkable transformation’, rather than the signal of catastrophic ecological collapse:

In the next century, as human population doubles and the resources available per person drop by one-half to three-fourths, *a remarkable transformation* of industry and commerce can occur. Through this transformation, society will be able to create a vital economy that uses radically less material and energy. This economy can free up resources, reduce taxes on personal income, increase per-capita spending on social ills (while simultaneously reducing those ills), and begin to restore the damaged environment of the Earth. These necessary changes done properly can promote economic efficiency, ecological conservation, and social equity (Hawken, Lovins and Lovins: 1999: 2, emphasis added).

Where the primary instruments of apprehending a future of finitude were based in cybernetic tools of exponential growth (Meadows et al, 1972), the emergent vehicles for knowing the future of opportunity lie in the hands of industrial invention and human ingenuity. (This may not be so far a field from the Club of Rome after all, who were hired by Italian industrialist Dr. Aurelio Peccei to chart the long-term problems of the environmental future and used nascent computer technology.) As reflected in *Green Futures*, we see a reliance upon the mechanisms of the Enlightenment to get us through the ‘dark’ – science, mathematical tools, industry and technology, all infused with a deep sense of the human capacity for progress and creativity. The future remains the province of the known, which draws upon human ingenuity in order to imagine what lies ahead.

### **Reflections**

In seeing language as discourse and as social practice, we are not only committed to analysing texts and the processes of production and interpretation of these texts, but the relationship between texts, processes, and their social conditions; or pared down as ‘texts, interactions and contexts’ (Fairclough 1989/2001: 21).

This approach to discourse is necessarily partial and exploratory. First, we are engaging a text-based approach, which has limitations to what can be explicated. We cannot know how futurity is constituted subjectively in the readership of the magazine, the ways the text circulates, nor do we know the demographic composition of the magazine’s readership. Likewise, we do not locate this publication in the broader ideological, social and political contexts that Fairclough (1989) and other critical discourse analysts call for. However formidable the limitations, it is our sense something important can be gleaned from a tour through the contexts of this magazine, and that this tour invites a rethinking and reflection upon the ways futurity figures in our everyday discursive practices.

Commensurate with this broader context, the discourse of *Green Futures* produces a future that is manageable, partially or wholly known through this lens of human innovation and ingenuity. In its hybrid actual/potential ontology, the ‘long-range’ future can be interpreted with high variance, to mean anything from one year to fifty years to beyond. It is precisely this slippery quality of the future that we seek to make more explicit, visible, and transparent. Tampering with the far future through technological innovations – via biotechnologies and nuclear industry, to name a few – requires conceptualising a temporal horizon of many thousands of years. Within an industrial-capitalist framework, the planning horizon is articulated in terms of months, years, and possibly decades.

It is this *disjuncture* between the futures of our making, and how the future figures in our current practices that is our central concern. The work of Forum for the Future is extremely valuable towards educating a wide range of audiences about what is taking place on the sustainability front, and being an organ of ‘good news’. Too few media outlets report on developments and victories in the environmental sector. It is not the argument of this paper that sustainable development is necessarily negative, nor should the private sector not be encouraged to think in ecological terms. However, this paper endeavours to highlight the need for new ways of articulating the future – a semiotics of the future – that can somehow

take into account the real issues of latency, unintended consequences, and the fact that we are producing futures right now that none of us have any clear sense of what the long-term implications may be. Our Western habitual models and socio-cultural frameworks for futurity, based on a largely on a scientific/causal model of time and prediction, are no longer suitable for our current techno-industrial capacities.<sup>ix</sup> We need to get more clear, soon, on how to manage our own capacities for producing futures which extend into futures beyond our conventions currently allow.

Our productions of the future as reflecting, incorporating or enhancing these ‘forgotten’ or disavowed dimensions of futurity therefore demand our attention on the discursive level: it is in language we forge new meanings and practices. Perhaps this evasion of the longer-term future becomes more coherent when seen through the lens of sustainability: an approach which arguably operates within an active ideological basis informed by technological progress, capitalism and free markets, where innovation is equated with progress, which in turn is equated with positive futures. It is ideologically convenient to avoid addressing the longer-range future. Regardless of the ideological dimensions, the future becomes more central for our attention as we move into greater capacities of producing long-term impacts with our present-day actions.

What we find through this close reading is that, in fact, the future is the ‘black hole’ in the centre of *Green Futures*. The short-term, ‘doable’ future brackets all other futures. The magazine performs a double function of speaking about the future while never directly speaking *explicitly* of it at all. This is a particular kind of future presented here that is in many ways a ‘non-future’. The future is mediated through the present and what is on the threshold of being.

This particular absence or ‘bracketing’ of direct and explicit address of the future requires our attention as scholars concerned with an ethically informed, viable future world for those not only in our own time-span, but for those who cannot give voice: the future generations of humans and the larger biotic community of which humans are a part. As we have seen, and continue to see with the advent of such technologies as biotechnology, genetically modified organisms and nuclear energy, dimensions of the invisible, latent and time-space distantiated cannot be avoided. It remains uncertain if discourses of sustainability can adequately addresses the impacts we have upon others distant in space and time. Where

we look for ‘*Green Futures*’ may reside in our imaginative capacities to speak to – and on behalf – of the future beings whose ‘present’ the people today are making.

### **Acknowledgement**

This research has been conducted during a three-year research project (2003-6, RES051270049) 'In Pursuit of the Future', which is funded by the UK Economic and Science Research Council (ESRC) under their Professorial Fellowship Scheme. Website URL: <http://www.cf.ac.uk/socsi/futures>

### **References**

Adam, B. (1998) *Timescapes of Modernity: The environment and invisible hazards*. London: Routledge.

Adam, B. (2004) ‘Minding Futures’ Working Paper. Retrieved from <http://www.cf.ac.uk/socsi/futures>.

Beck, U. (1999) *World Risk Society*. Cambridge: Polity Press.

Beck, U. (1992) *The Risk Society*. London: Sage Publications.

De-Shalit, A. (1995) *Why Posterity Matters: Environmental Politics and Future Generations*. London: Routledge.

Dryzek, J. (1997) *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.

Ebert, R.J. and Piehl, D. (1973) ‘Time Horizon: A Concept for Management’, *California Management Review* 15(4):35-41.

Fairclough, N. (1989, 2001) *Language and Power*. Essex: Pearson Education Limited.

Fraisse, P. (1964) *The Psychology of Time*. London: Eyre & Spottiswoode.

Goodin (1992) *Green Political Theory*. Cambridge: Polity Press: 65-73.

Harrison, P. (1992) *The third revolution: environment, population and a sustainable world*. London and New York: I.B.Tauris in association with The World Wide Fund For Nature.

Harré, R., J. Brockmeier, and P. Mühlhäusler. (1999) *Greenspeak: A study of environmental discourse*. London: Sage Publications.

Hawken, P. (1993) *The Ecology of Commerce*. New York: HarperCollins.

Hawken, P., A.B. Lovins and L. H. Lovins (1999) *Natural Capitalism*. London: Earthscan.

Helström, C. and T. Hellström. (2003) 'The Present is Less Than the Future: Mental experimentation and temporal exploration in design work.' *Time and Society*, 12 (2/3): 263-279.

Jacques, E. (1982) *The Form of Time*. London: Heinemann.

Killingsworth, M. Jimmie and Jacqueline Palmer (1996) 'Millennial Ecology: The Apocalyptic Narrative from Silent Spring to Global Warming' in C.G. Herndl and S.C. Brown (eds) *Green Culture: Environmental Rhetoric in Contemporary America*. Madison: University of Wisconsin Press.

Meadows, D., Meadows, J. Randers and W. Behrens III (1972) *The Limits to Growth: A report for The Club of Rome's Project on the Predicament of Mankind*. London: Pan Books.

Porritt, J. (1984) *Seeing Green: The Politics of Ecology Explained*. Oxford: Blackwell.

Smith, T. M. (1998) *The Myth of Green Marketing: Tending our goats at the edge of apocalypse*. Toronto: University of Toronto Press.

Taussig, M. (1993) *Mimesis and Alterity: A Particular History of the Senses*. New York: Routledge.

World Commission on Environment and Development (1987/1990) *Our Common Future*. Oxford: Oxford University Press.

---

<sup>i</sup> 'In Pursuit of the Future' is an Economic and Social Research Council Professorial Fellowship, awarded to Professor Barbara Adam, 2003-2006, Cardiff University.

<sup>ii</sup> See Beck (1992) and (1999).

<sup>iii</sup> Much has been written on apocalyptic tropes in environmental discourse. See for example Killingsworth and Palmer (1996).

<sup>iv</sup> The first publication of *Fifty Things You Can Do to Save the Earth* was in 1989 (Earthworks Group, Pub Group West).

<sup>v</sup> While a discursive and political analysis of sustainable/solution-based approaches is outside the scope of this paper, see Toby M. Smith's remarkable discussion of green consumerism as seen through a discursive lens in *The Myth of Green Marketing: Tending our goats at the edge of apocalypse*.

<sup>vi</sup> The affective aspects of future-orientation are important, but beyond the scope of this present paper.

<sup>vii</sup> See Harré *et al*'s *Greenspeak* (2000) for an in-depth discourse analysis of the Rio Summit.

---

<sup>viii</sup> It would be a worthwhile investigation into the *affective* dimensions of this move towards fixing, solving and inventing, in the context of the fear-blur created by the apocalyptic scenes of *The Limits To Growth* and subsequent texts on finitude and ecological disasters.

<sup>ix</sup> For an extension discussion of these issues, and a downloadable copy, please see Adam, B. (2004).