"Doing my bit for the Planet": Understanding the enacted sensemaking of SME managers in relation to climate change

Sarah Williams, Anja Schaefer and Richard Blundel
Open University Business School

Abstract:
SME managers are continually bombarded with messages, advice and demands. Amidst that noise, how do they interpret the complex, intermittent and contested discourses of eco-efficiency, green business and climate change? SMEs have a decisive role to play in the UK's transition to a low carbon economy so it is important to understand how their managers conceptualise climate change and its implications for their businesses. The main aim of the study on which this paper is based is to gain a better understanding of managerial sensemaking (Weick, 1995) in the specific context of climate change and business greening. The paper reports a number of provisional findings that describe a complex interplay of motivations linked with self-identity and values along with a rapidly changing business environment. Respondents link their environmental behaviour to various agendas and loosely describe sustainability in terms of economics and environment. In particular, respondents are found to be critical of climate science and perceived inconsistencies in climate change and other policy messages that attempt to engage them with business change.

Keywords
Sensemaking, personal values, climate change, Business Greening, small and medium sized enterprises

'Well it's just me; I just want to do it. I'm not going to be here when it goes * up but if it's going to go wrong, I don't want to contribute to it. I can't cut down on everything I do but I can do my bit and if everyone done a little bit, it would add up to a lot but if we all do nothing then it won't add up to anything' (M12)***

1. Introduction

In this paper we explore how the personal values of managers of small and medium sized enterprises (SMEs) may be related to their construction of climate change and enactment of green business behaviours. Climate change is currently seen by many as one of the greatest social and economic challenges facing the world today (e.g. DEFRA 2009; Parry et al 2007; Stern 2006) with business organisations accorded a major role in both the mitigation of climate change and adaptation to its consequences. In this paper, we start by outlining why climate change is an issue for SMEs and what actions owner-managers might deliver if they recognise such an imperative. We go on to argue that SMEs are influenced by the personal values of their owner-managers and, with climate change viewed as a socially constructed issue, how sensemaking theory (Weick, 1995) can provide a useful lens through which to explore the owner-manager's perspective.

2. Climate change as a business issue for SMEs

Small and medium sized enterprises (SMEs) are an integral part of modern economies, in terms of employment, technological and economic innovation and as contributors to greenhouse gas emissions. While the role of small and medium sized firms in efforts to address climate change has been somewhat neglected in the past (Bradford & Fraser 2008; Revell & Blackburn 2007; CCC 2008) they constitute 99% of UK businesses, provide 43% of private employment (BERR 2007) and may account for 20% of total UK carbon emissions (AXA, 2008). This makes SMEs a highly important group of social actors, in terms of their economic, social and environmental impact. It also suggests a clear need to address the collective impact of SME activity on sustainability in general and climate change in particular (Gadenne et al. 2009; Revell & Blackburn, 2007).

2.1 SME engagement with business greening

Although research into SMEs' environmental engagement remains far less extensive than similar research into larger firms (Carr 2003; Spence and Rutherfoord 2003) a body of work has been built up over the last decade. Much existing research into SMEs' environmental engagement has been motivated by an objectivist concern to determine the extent, as well as motivations for and barriers against such engagement. The findings have mostly suggested that the business case for environmental activity is not widely accepted among SMEs (Gadenne et al. 2009, Simpson et al. 2004; Revell and Blackburn 2007; Ackroyd 2002; Purvis

et al. 2000; Hillary 2000). External pressures such as regulation (Simpson et al 2004; Bradford and Fraser 2008; Environment Agency 2007; Gadenne et al. 2009) or customer pressure are seen to be common drivers (Masurel 2007; Dawson et al. 2002; Stohs and Brannick 1999). The most important barriers were found to be scarce managerial and financial resources (Biondi et al. 2000; Gerrans and Hutchinson 2000) as well as low levels of eco-literacy and limited access to environmental information (Williamson et al. 2006; Hillary 2000; Tilley 2000).

The 'transition to a low carbon economy' in the context of Ecological Modernisation (Vickers, 2009) presents a prescriptive policy to SMEs that describes what they 'need' to do; what 'must' happen; how they 'should' be responding (Newton, 2002) but managers show scepticism (Revell, 2007) and question the relevance of these ideas as well as recognising contradictions between what they are told they should be doing and how they see larger businesses, local authorities and Government operating (Williams, 2009). Managers construct their own reality of this and understand that they cannot green alone: they can only do as much as society allows (Tilley, 1999). In this, managers are part of the inter-relationships of power (Newton, 2002) that define the workings of capitalist societies in the Western world. Talk of greening in the context of 'should's' and 'must's' along with competitive advantage, vested interests and supply chain partnerships and pressures help to make these power relations explicit (Etkin and Ho, 2007).

2.2 Pro-environmental SME behaviour

While the business greening literature argues that SMEs are generally resistant to environmental engagement and only engage where there are financial benefits to be made, the pilot project for this research into pro-environmental SME behaviour (Williams, 2009) identified actions over and above those that would be explained solely by cost reductions or an engagement shaped by business arguments. This suggests a wide range of positive actions and behaviours that could both be delivered by SMEs and act as a benchmark against which business greening can be described.

Pro-environmental managers in the pilot project (ibid) explained how an holistic approach meant that environmental considerations were thought about as part of every decision and, by doing so, a wide range of less obvious, deeper actions were addressed. Managers described

how every stage of their operations was thought through in terms of environmental impact. Managers sought to identify points at which their activities had an environmental impact and proactively sought the least harmful option. In cases where large capital investment was required, it was not always possible to immediately pursue the most environmentally desired outcome yet the approach meant that the option was identified and the next best option explored. All managers in this earlier study demonstrated an ability to recognise and consider the relevance of the environment as a stakeholder in decision making. While it was acknowledged that such an environmentally proactive approach took time to pursue, each of the managers considered the investment to be worthwhile from a business perspective. It was also argued that, if the issues were considered properly and thoroughly, the environmentally best option would always be the best commercial option.

The findings suggested that managers constructed climate change not only as part of wider environmental issues but as part of wider sustainability arguments and enacted greening behaviours as part of a perceived sense of personal responsibility. Managers spoke of social, environmental and economic actions and clearly demonstrated a perceived interconnectedness between issues. For example they described how reducing transport movements by buying locally produced goods reduced local air pollution and carbon dioxide emissions and supported local businesses and communities. They also recognised their own potential role in educating customers and peers about what they were doing and looked to ensure consistency between what they did and said when engaging staff, customers and their communities of interest.

2.3 SME owner-manager values

In understanding the greening of SMEs it is important to consider the personal values of their owner managers (Schaefer et al, 2011). Unlike managers and leaders of large firms, founders of small business organisations often build firms that are in line with their personal aspirations and philosophies. They often have greater strategic and operational discretion over their business, and it is usually within their power to disseminate their own vision to permeate organisational values and culture (Hamann et al., 2009; Heugens et al., 2008; Schein, 2004; Dawson et al., 2002). Thus, personal ethics and business ethics may be more closely aligned in SMEs than in larger firms (Jenkins, 2004; Spence, 1999; Werner, 2008; Vyakarnam et al., 1997). The owner-manager is widely recognised within the SME literature as the dominant

focus of the company with the company developing to reflect their individual persona (Lloyd-Reason and Mughan, 2002; Baden et al, 2009; Gray, 2002; Hammann et al, 2009).

Most SME founders report going into business in order to be independent and Gray (2002) suggests this may link with SMEs being seen to be generally reluctant to accept outside advice. This raises other questions about motivation. In addition to internal intrinsic motivation, Parker et al (2010) discuss two forms of external motivation: integrated regulation and identified regulation. Integrated regulation relates to the enactment of behaviours as an expression of personal values that helps to bring about a long term vision of the self. Identified regulation accepts that externally identified goals are important for the benefit of others so that the individual takes on personal responsibility and ownership of the actions required and thus internalises external values. These findings are supported by Williams (2009) whereby participants in the earlier pilot project to this study described how the enactment of environmental actions enabled an expression of personal values related to how their understood climate change as an ethical and emotional issue of concern to them.

3. Social construction and understanding of climate change

From a social-constructionist perspective, climate change is not merely a physical phenomenon with social and economic implications but a developing and shifting social idea (Hulme 2009) that is influenced by local socio-political contexts and individual and collective values (Baxter and Eyles 1999). Rather than seeing environmental and climate change issues as an objective reality which social actors perceive with varying degrees of accuracy, such ideas are considered to exist through social organisation (Adams 1995; Stallings 1990). In this sense "climate change is not simply a fact waiting to be discovered…or a problem waiting for a solution… [it] is an unfolding story of an idea and how this idea is changing the way we think, feel and act" (Hulme 2009: xxviii).

Understanding the business related issues emanating from climate change is therefore less a linear process of acquiring and using information but an iterative, socially and culturally mediated process of sensemaking (Hulme 2009). Individuals are continuously and actively involved in making sense of their experiences based on mental models that emerge from social interaction, where sensemaking is a key managerial and organisational activity

consisting of assigning meanings to experiences, most commonly through story telling (Weick 1995).

While there appears to be strong scientific agreement that human activity is contributing to climate change, from the lay person's perspective climate change may be intangible and difficult to grasp and require high sensemaking efforts. This sensemaking is made more complex by the number of different discourses and accounts available, by the disparity between scientific and lay discourses, and by the politicisation of the climate change debate (Hulme 2009).

3.2 SME construction of Climate Change

Generally there is little existing research on SME managers' construction of climate change specifically and what there is tends to be fairly general, focusing on SME managers seeing climate change as an abstract concept and not something with much relevance to their own business (Purvis *et al* 2000; Crichton 2006). From a social constructionist perspective, the question is less one of whether SME managers understand climate change 'correctly', in line with scientific expertise, or respond 'appropriately' to it, but what their own understanding of climate change is, how it is developed and what actions it might engender. If lay people's understanding is given a more privileged role in climate change research, then the challenge is to understand their sensemaking of climate change 'from within' and take seriously their perceptions of the phenomenon and how it may or may not affect their understanding of their own business actions. This is important from a policy perspective, too. In order to develop policies to address climate change it is important to gain an in-depth understanding of how sectors of society understand the phenomenon and what it means to them. Policies based on an outside, 'expert' view on how people 'should' respond to the climate change, which often fail to take seriously lay person's own experience of these phenomena are unlikely to succeed, at least in a deeper way.

Williams, (2009) found that the environmentally pro-active SME owner-managers in the pilot project for this current study viewed climate change as an extension of pre-existing environmental and social issues which were enacted as part of holistic approach to sustainability within the business. While all managers were commercially-minded first and foremost, business strategy was not just about saving money and was not value-free. In this,

the role of personal values, and the need for a fit between personal and professional values, was essential in underpinning the construction of climate change and encouraging personal responsibility. Managers' construction of climate change drew more on the popular discourse identified by Adger (2001) than the diametrically opposed official, global view and emphasised respect, justice and the intrinsic value of humankind's relationship with nature.

3.3 Sensemaking theory as a lens on the social construction of climate change

Sensemaking theory is an appropriate and useful lens with which to explore the social construction of climate change by managers. Weick (1995) explains that problems do not just present themselves but need to be constructed and actively engaged with for a person to make sense of them. As a complex, 'messy' problem (p9) climate change is a problem that meets that criteria and where participants in this current research need to manage a large number of potential information cues in order to make decisions about how to respond. Weick explains that in managing such an ambiguous quantity of conflicting information, participants will begin the process of sensemaking by omitting information that does not fit with their own beliefs and values. In this way, warnings that are 'unbelievable' are missed as they are immediately omitted. This relates to ideas expressed in the pilot study (Williams, 2009) where participants expressed a need to 'believe in climate change' in order to act.

Sensemaking is also a process whereby 'people discover their own inventions' (Weick, 1995, p15) and construct a world around them that is based on, and reinforces, the world as they see it. Sensemaking as described by Weick (1995) is based on retrospective reflection, identity construction, values and beliefs, expectations of what is going to happen, the enactment of behaviours, and is about how the world is authored in the mind of the person trying to make sense of something and how that authoring reinforces behaviours. Central to sensemaking and climate change are values, emotion and self identity. As an issue with ethical dimensions, new cues and information about climate change trigger and invoke different emotional reactions which colours how information about climate change is received, filtered and acted upon. Self identity reflects how people see the world, and their place within it. In this current research, self identity fits closely with the frames used to describe climate change and, in particular, whether, how, who and how far respondents describe responsibilities to act on climate change. Beliefs about responsibility link directly with the actions people are prepared to

undertake and the policies they will support and therefore has important implications for the socio-economic consequences of climate change.

4. Research Design

The research design for this study is based on in-depth case studies with managers of different types of SMEs, in different industries and of various degrees of environmental pro-activeness. It takes into account both managers contested constructions of climate change and the power relations that both inhibit and enable enactment. In recognising these views of reality, this research gives voice to managers to express and describe their own values, emotions and beliefs through an interpretivist research design (Tellis, 1997) that enables deep understandings to be explored.

To date 30 out of a planned 40 interviews have been completed. Managers have been engaged to the study via a number of routes, including promotion by third party business support agencies along with the main researcher's own face to face and online networking. To date, managers are predominantly white male (60:40 male to female with eight percent of other ethnic origin), most frequently in the 45-50 age group running a company with an average of 35 employees. While there are four businesses from the manufacturing and logistics sectors, the companies are mainly of service orientation. Three groups of participants are in the process of being interviewed individually in one-to-one meetings at the manager's business using a semi-structured interviewing technique (Easterby-Smith et al, 2002). The first group (completed at a total of 7) comprise of managers from the initial pilot study available for re-interview. These managers are participating in order to apply the new research questions and to bring in a longitudinal aspect that allows for critical incidents within the last two years to be explored. The second group, comprising the majority of participants (currently numbering 16) are owner-managers whose businesses display a range of environmental actions. The final group (numbering 7) consists of environmental champions working at a management, but non-director level, within the business. In each case, the owner-manager / managing director was also interviewed.

5. Early findings

5.1 Climate change as a social construction

As discussed in 3.2 above, Hulme (2009) presents climate change as both a 'mutating' social idea and a physical phenomenon and argues that debates have shifted from the physical to the social to take on new meanings and to serve new purposes. In this first section, we draw on the four main discourses that Hulme identifies to show how our research participants demonstrate the construction of climate change in different ways:

5.1.1 Climate Change as a scientific controversy: Hulme argues that climate change often ends up as a proxy for much deeper conflicts and as such is a battleground between different philosophies and practices of science and between different ways of knowing.

M11: '*personally I'm not entirely convinced of the arguments behind carbon as a driver for climate change but in terms of policies the focus is very much on carbon and my concerns are that research and funding may go into dead ends. When I did geography at university, there was a complete lack of knowledge and I don't believe we've made that leap in understanding… the likes of UEA doesn't help the argument'.*

C1: 'I'm in the camp where I really do believe we're in extreme difficulties.'

M12: 'I think there are very confused mixed messages and it depends on who you listen to today. I don't believe everything I hear because it changes so I make my own judgement'.

5.1.2 Climate Change as a justification for the commodification of the atmosphere (especial CO^2). Here Hulme argues that climate change is understood as the latest rationale for converting a public commons into a privatised asset by giving ownership rights to emit, auction and regulate carbon. Participants in this study reflected this position cynically. Rather than as attempts to reduce emissions, such policies were seen as opportunities to increase taxation or as a justification by other actors with vested political and economic interests, such as nuclear energy. In this, climate change was seen as something to be sceptical about as it became linked with shallowness and hypocrisy and individual disempowerment.

M18: 'carbon offsetting is just an accounting practice. Rubbish, its manipulation. It shouldn't be allowed. But that's government. People can't see it. When values don't align with

something tend to be ignorant about it because don't hear it….everyone needs direction so direct us to the right path. Don't feel empowered enough to do anything about it.'

M12: 'Climate change is a fashion. I do believe it is a reality but it also a bandwagon. Government at all levels is not walking the talk and is full of contradictions '.

M1: 'The REACH Directives have been a lot of work for us and for absolutely no benefit as far as I can see. If these products are identified as substances of high concern they should just be taken off the market. It's one of those regulations that's added very little, and acts as a barrier to innovation and environmental improvement when the problem could have been solved much more simply'.

5.1.3 ***Climate Change as the inspiration*** for a global network of new, or reinvigorated, social movement. Here, Hulme presents Climate Change as a manifestation of the more reprehensible aspects of globalisation and capitalisation. Participants drawing on this construction appear to find empowerment through a personal challenging of those practices to resist consumerism and abhor wastefulness. Participants described a connection with people and places beyond their immediate group and a link with bigger issues including sustainability.

M10: 'I saw the Age of Stupid at last year's XX association conference so I decided to get a copy for the office, burned everyone a copy, and showed it here too'.

C1: 'You look at the planet and see it working as a whole and I get terribly frustrated. You see the floods in Pakistan, Glaciers melting, half the American cities built without sustainable water supplies, Australians making their own bore holes, Indonesians taking away rainforests and working in palm oil plantations and then being sprayed with insecticides. And it's about fairness. And I can't step back. I feel I have to say or do something. I can't let the planet go down on my watch without me doing anything'.

5.1.4 ***Climate Change as a threat*** to ethnic, national and global whereby, climate change is constructed as the 'greatest problem facing humanity' and linked with energy scarcity, mass migration and the need for greater national independence. For example, in a deliberate re-

framing of climate change to appeal to Conservative party members, Caldecott (2010) frames climate change as an issue of energy security, national order, prosperity and independence – claiming that these are deeply held Conservative values. This particular framing could be seen more openly by June, when immediately after the General Election, a Times opinion piece (Ward, 2010) claimed that 'Green is no optional extra: it's essential for protecting security'.

M11: 'Oil is running out. We have to plan our way out of being oil dependent. We have to plan our way out of being dependent of all kinds of energy from other nation states that aren't stable. And to an extent, I include our European cousins. You have to look after your own security and energy security is significant. Let's face it we are all competitors'.

M15: 'To me it's just common sense. Oil reserves are running out and costs are going to spiral. It's going to be horrific. But availability needs to be more of an issue, let's face it we're not really impeded at the moment so I think it will get worse before it gets better'.

6. Values at the heart of construction

In this last section, we draw on Hulme's four 'value based myths' regarding climate change to illustrate the values at the heart of each social construction. Hulme does not link particular myths with particular constructions and we will not attempt to do so here. Indeed, the managers in this study drew on more than one construction and demonstrated more than one underlying core value. However, as a tool for starting to explore the data, Hume's four myths begin to show how managers are drawing on predominantly different values in their constructions of climate change and reflecting this in their enactment through business greening.

Hulme (2010 p340-355) describes four myths of climate change that he sees as rooted in the human instincts for nostalgia, fear, pride and justice. These are:

6.1 The Myth of Eden (nostalgia) yearning for a simpler era:

C3: 'My concern started with things that were tangible for me. Logging has been a big issue for me. I came from a forested area and I spent my best times there in the forests, in our log cabin, on the hills, with my dog and then I saw the forests disappearing, and I thought that this is not right and I wanted to do something about it… so I studied the environment at

university and now this low carbon champion role means that I am doing something small but positive for the environment, because I have a daughter who is going to grow up in this world and I want to make it as nice for her as possible'.

6.2 The Myth of the apocalypse (fear) worries about the future – and fear both for ourselves and for own appetite for material consumption:

M10: 'It makes me think about rather frightening changes that are going to affect my children and my children's children, quite severely I think. And it's about food production and water supply and the habitability of parts of the world and potentially massive population movements and it's not going to be very nice. I want to see others adopting a precautionary principle so I take a dictatorial, altruistic, educational approach to influence behavioural change in the business and with our customers.'

6.3 The Myth of Babel (pride) about mastery and control over fellow human beings and nature. Climate change as the new domain of control:

M13: 'Ground source heat pumps were clearly the best solution to save money so I moved mountains to get them in. I got grants to fund the capital investment so it was all about how I could reduce running costs. Nuclear energy is the way to tackle climate change.'

6.4 The Myth of Jubilee (justice) need to respond to call for justice against wilful inequality while clashing with limits of our moral agency:

M12: 'We buy locally. I could source in bulk from China and it would be cheaper but cost isn't the issue: It's about quality, trust and supporting the local economy. It's important to me personally. I'm not doing this from a financial point of view, if it was about that I wouldn't be doing it, it costs time, effort and money and businesses normally spend that time, effort and money on problem solving. I didn't have a problem, I had a conscience which became an environmental conscience that wasn't driven by anyone other than myself and my beliefs about what is right'.

7. Conclusion & Implications

The idea of climate change is everywhere: Indeed this is one of the key differences observed by managers re-interviewed from the pilot project (Williams, 2009). As Hulme (2009) describes, climate change 'is an idea as ubiquitous and as powerful in today's social

discourses as are the ideas of democracy, terrorism or nationalism. Furthermore, climate change is an idea that carries as many different meanings and interpretations in contemporary political and cultural life as do these other mobilising and volatile idea..' (p322)

In starting to explore how senior decision makers in SMEs make sense of climate change, this paper has supported the conceptualisation of climate change as an idea that is socially constructed. Participants in this study clearly constructed climate change in different ways and the four constructions put forward by Hulme (2009) are a useful framework for starting to explore these. In doing so, participants did not necessarily draw on only one predominant construction and it appears that more than one way of thinking about climate change can exist at one time as a part of participants overall constructions. This, along with the idea that there appears to be positive and negative ways of viewing each construction, will be explored further as this doctoral study progresses. For example, thinking of climate change in terms of energy security could empower participants to think about resource scarcity, fairness and the need to moderate their own behaviour. Alternatively energy security could be seen an issue requiring Government leadership and action at a national rather than personal level. This may imply that a personal sense of responsibility is an important part of self identity and sensemaking when it comes to enacting responses to climate change.

Underlying the different constructions of climate change are different values. These values help filter information on climate change and serve as an anchor to which participants make sense of what they hear. Messages to participants from business support organisations focus on the greening of business as a win-win and assume that all managers make rational decisions based on maximising profit. This encourages values related to pride (eg competitiveness and power) and ignores other potential values that could be also, or even more, useful in helping managers enact their constructions of climate change in a way that helps to meet business challenges.

[5,934]

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