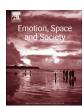


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Keeping the heart a long way from the brain: The emotional labour of climate scientists



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ABSTRACT

This paper contributes to increased understanding of emotions and climate change through a study of the emotional management strategies employed by a sample of Australian climate scientists. We bring three broad areas of literature into conversation in order to think more productively about climate change and emotion: recent applications of the concept of emotional labour, studies of the role of emotion in science, and feminist perspectives on the performative role of emotions. In response to contextual drivers that include the social norms of science, a strong climate denialist influence and the preservation of self and family, these scientists mobilize a range of behaviours and strategies to manage their emotions around climate change and the future. These include emphasizing dispassion, suppressing painful emotions, using humour and switching off from work. Emotional denial or suppression of the consequences of climate change worked to enable the scientists to persevere in their work. This study suggests that painful emotions (anxiety, fear, loss) around climate change need to be acknowledged and discussed.

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1. Introduction

There is consensus among the majority of scientists that anthropogenic climate change is already leading to increased temperatures and the 'likelihood of severe, pervasive and irreversible impacts for people and ecosystems' (IPCC, 2014, p. 8). Despite this, there is little evidence of effective political or social change; it is very much 'business as usual'. In order to avoid two degrees of warming over pre-industrial levels requires that a third of known reserves of global oil, half the gas and over 80% of coal remain unused (McGlade and Ekins, 2015). Yet many scientists think it may already be too late to avoid two degrees of warming due to the lag effects of emissions already in the atmosphere (Anderson and Bows, 2011), which means we are on track for four to six degrees of warming with an increase in extreme events, and fundamental changes to society and its ecological underpinnings. It would be surprising if these predictions did not generate emotional responses, but the ways in which emotions are discussed in relation to climate change are quite circumscribed. In particular, emotions are commonly separated from the construction of climate change as a scientific, rational issue. Media depictions of climate change rely on science as the ultimate knowledge source, legitimizing predictions and reinforcing the social power of scientific certainty (Carvalho, 2007; Cass and Walker, 2009). The expectation from policy-makers and the public is that the engagement of science with environmental and other issues will not be emotional (Cass and Walker, 2009). Yet only relatively recently have there been calls for greater attention to the emotional dimensions of climate change and climate science. These calls suggest relationships between these themes and the management of mental health and well-being in daily life (Farbotko and McGregor, 2010; Consulo Willox, 2012).

An emerging literature identifies a number of emotional dimensions to climate change: emotions as a source of denial or blocking of information (Norgaard, 2006, 2011), widespread feelings of anxiety and loss (Randall, 2009; Berry et al., 2010; Doherty and Clayton, 2011), mourning for lost places or relationships with the natural world (Furberg et al., 2011; Adger et al., 2013; Drew, 2013), recovery from the impacts of climate events (Convery et al., 2008; Mort et al., 2005; Tapsell and Tunstall, 2008) and a generalised grief about the future. Researchers are increasingly prepared to discuss their own emotional responses to traumatic

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subject matter related to climate change and associated environmental disasters (Willis, 2012; Dominey-Howes, 2015). Nonetheless, painful or troubling emotions receive little attention in the western cultural context of the practice of science, which is dominated by the importance of scientific rationality. When considering the uncertainty of environmental futures the focus has tended to be on ideas that emphasize resilience, adaptation and risk management, which one could argue are associated with a positive emotional outlook (Rickards et al., 2014).

In this paper we seek to contribute to increased understanding of emotions and climate change through a study of the emotional management strategies employed by climate scientists. Climate scientists provide an important empirical study because they experience the intensity of the issues and debates on a day to day basis, in a rational scientific context which requires them to downplay their emotions. Some key questions for us are, what kind of emotional management is being undertaken by those at the heart of the rational endeavour (Whittle et al., 2012)? What kinds of feeling rules are they following (Hochschild, 1979), and what are the tools in their toolkit of emotion management (Norgaard, 2006)? Before proceeding to the empirical study we outline three broad areas of literature that the paper brings together; recent applications of the concept of emotional labour to climate change, studies of the role of emotion in science, and feminist perspectives on the performative role of emotions.¹

1.1. Emotional labour and climate change

The concept of emotional labour was originally developed by Hochschild (1979, 1983) to focus on the processes by which people manage their emotions in different contexts or situations in order to conform to what is deemed socially appropriate. Initially, the work of managing emotions was viewed differentially through a demarcation of the private and the public sphere and named as either work or labour. A diverse range of literature has examined the emotional management of self and others, and the ways this can serve the interests of, and be used by, other parties, for example the capitalist commodification of emotions in the service industry (Blackmore, 1996; Fineman, 2000; Mann and Cowburn, 2005). Whittle et al. (2012) argue that:

Emotion work can therefore be internal or external, and involve either evocation (trying to induce a desired feeling) or suppression (trying to quash a feeling that we consider to be undesirable). (Whittle et al., 2012: 62)

While some literatures distinguish between the concepts of emotional work and emotional labour, depending on whether a domestic or professional context respectively is being discussed, we prefer to consider emotional management as a set of broader coping strategies that incorporate both emotional work and emotional labour at different times and to different degrees. We agree with Whittle et al. (2012) that the boundaries between work and home, or physical and emotional recovery, are often blurred and that there is much crossover in how, where and by whom emotional management is deployed.

As Hochschild's original paper discussed, there can also be varying levels of authenticity in the performance of emotions, and later critique and counter-critique (Brook, 2009) has increased the nuance with which the performativity is analyzed (Bosco and Joassart Marcelli, 2015). As such, in this paper we also consider how emotional management strategies may be aligned with authenticity, that is how climate scientists view their underlying personalities in relation to the performance of emotion as they deal with the stresses of climate change knowledge.

One of the most important studies of emotional management in relation to climate change has been Norgaard's (2006, 2011) ethnography of the pseudonymous Norwegian town of Bygdaby. She argued that climate change denial was not a matter of individual psychology but was socially organized and reproduced.

To say that there were unpleasant emotions associated with global warming is not enough to explain the lack of social movement activity in Bygdaby— especially as such emotions can also serve as the impetus for social action (Norgaard, 2011, p. 94).

Norgaard recognized that Norwegians were in a dilemma; they did not dispute the validity of climate change science yet their economy had benefitted significantly from North Sea oil reserves. Norgaard coined the term 'double reality' to describe the social process of everyday denial that took place through norms of conversation and norms of emotion - the 'tools' in their toolkit of emotional management. In response to the emotions of fear and helplessness, the norm for townspeople was to be optimistic and maintain control. They employed 'selective attention' as an emotional management strategy (controlling exposure to information, not thinking too far ahead, focusing on something you can do). When dealing with guilt, townspeople employed 'perspectival selectivity' to reinforce national pride (we are not as bad as the Americans, and Norway is a little country anyway) (Norgaard, 2006, Table 4). The understanding of denial as selective attention has also been put forward by Opotow and Weiss (2000, p. 479); 'denial is a form of selective inattention toward threat-provoking aspects of a situation to protect a person from anxiety, guilt, or other ego threats'. It is clear that when dealing with the emotions associated with climate change that individual management strategies are embedded in wider social understandings of how to appropriately respond.

1.2. Emotions, climate change and science

At the political level a discourse of fear and risk has been influential in framing global climate change (Beck, 1999, 2002; Hartmann et al., 2005; Pain, 2009), even in the face of a lack of political action. Yet some have argued that 'fear won't do it' (O'Neill and Nicholson-Cole, 2009), and that emotions such as fear, anxiety and grief are paralyzing rather than productive (Roser-Renouf and Maibach, 2010). Nevertheless the documentation of emotions around loved places (Adger et al., 2013; Barnett and Campbell, 2010; Drew, 2013; Hastrup, 2009; Moser, 2013) or degraded and diminished natural environments (Brown and Pickerall, 2009; Consulo Willox and Harper, 2013; Wiseman et al., 2010) are important aspects of this literature. These studies illustrate the importance of emotion in how people negotiate everyday spaces and social processes which are ultimately situated within wider policy arenas (Anderson and Smith, 2001; Davidson and Milligan, 2004; Parr et al., 2005; Smith and Pain, 2008).

When we bring this evidence into conversation with the dispassionate norms of science we can better understand the influential role of climate scientists in framing our understanding of

¹ This topic is of broad interest. A number of journalists have interviewed climate scientists about their emotional responses to the future, as in this example titled 'When the end of human civilization is your day job' (Richardson 2015). At the Melbourne Writers Festival in August 2015 an exhibition of 22 handwritten letters from some of Australia's leading climate researchers describes how climate change makes them feel (Melbourne Writers Festival, 2015). A similar website (http://www.isthishowyoufeel.com/this-is-how-scientists- feel.html) includes Australian climate scientists among an international group.

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