

Knowing Your Audience: Exploring the Latent Attitudes and Values of Environmental Stakeholders

Recent months have witnessed a surge in campaigning for governments, business and individuals to take action in the face of anthropogenic climate change. Speeches and media articles by prominent campaigners such as Sir David Attenborough and Greta Thunberg have sought to highlight the ‘irreversible damage to the natural world and the collapse of our societies’ (BBC, 2019), urging everyone to ‘unite behind the [climate] science’ (Reuters, 2019). Yet, whilst such pleas are undeniably laudable, a clear disconnect exists between this blanket ‘call to arms’, based primarily on the global scientific effort, and the immeasurable complexity and diversity of the attitudes and behaviours of publics.

Multiple disciplines in the social sciences and humanities have sought to address this challenge through empirical studies at local-national scales aimed at exploring the values and attitudes that underpin different forms of environmental behaviours and practices. Arguably, the context-specific nature and depth of such research offer the crucial means of exploring participant’s ways of seeing the world, and as such, provide a potential avenue to promote environments for shared learning, consensus building, or targeted interventions to improve recruitment to environmental causes or to enhance the potential of environmental management plans.

There are also important reasons for conducting such research when considering the role of science in environmental debates and societies as a whole. ‘Traditional’ expert-led approaches to science communication exhibit an epistemic hegemony (Hulme, 2009; Barr, 2017) that rejects the often valuable experiential and place-based knowledges of environmental stakeholders and typically results in a lack of engagement from intended audiences. At the same time, the politicisation of science has led to an increasing distrust by publics of scientific institutions (Mooney, 2005) and even individuals working within the sector, as in the case of the 2009 Climategate scandal (Nerlich 2010; Mann, 2012). Yet, most alarmingly of all, the recent rise of populist politics, particularly in the US and the UK, has further hampered the credibility of scientific evidence through the emergence and increasing public acceptance of ‘fake news’ through social media outlets. Accordingly, if environmental policy is to be successfully implemented, it is essential to explore ways in which people come to understand their environments – not necessarily through scientific mediation, but through culture, morality and social interaction (Eden, 1996). These elements can be encompassed by the term ‘value’, which may be seen as ‘conceptions of the desirable, ordered by relative importance, that influence the way people select action and evaluate events’ (Schwartz and Bilsky, 1987: 550, cited in Steg et al. 2015).

The contribution of many disciplines to the study of environmental values has led to the employment of a wide range of research methodologies. Consequently, a rich variety of studies has emerged with regard to environmental context, use of theory (theory or data-led research), geographical scale, methodological scale (extensive or intensive/individual or community) and data type (quantitative/qualitative). Although each approach to research has made a valuable contribution, perhaps one of the most interesting developments has surrounded the growing importance and prevalence of stakeholder participation in deliberative studies of environmental controversies. These projects highlight the role and the potential power of social learning in unearthing community values to environmental concerns and opportunities. A broad concept in nature, social learning is 'a process of iterative reflection that occurs when we share our experiences, ideas and environments with others' (Keen et al., 2005). It necessitates a change in understanding at the individual scale and beyond within a broader community of practice (Reed et al., 2010; Benson et al., 2016). For example, in a move to foster the creation of co-management partnerships and knowledge networks to enhance natural resource management in South African communities, Cundill (2010) illustrates the power of reflexivity in social learning for actively encouraging changes in worldviews, perceptions and behaviours to enable a shift in traditional community decision-making structures and processes.

The principal reason for highlighting this particular form of engagement is that it provides an opportunity for researchers and practitioners to engage with publics in an environment that recognises both ontological diversity and the contested and provisional nature of knowledge (Barr and Woodley, 2019). Therefore, it directly tackles the problems marring science communication by working with a community to develop shared practices, concepts, tools, symbols and material artefacts embedded in a context of meaning (Pahl-Wostl, 2006). Importantly, this co-production of new knowledges about a specific environmental issue does not seek to reject science, but to include (on an equal footing) the tacit knowledges of environmental stakeholders and the values that collectively underpin their environmental behaviours and practices. One of the most prominent challenges to which this method has been applied is that of natural hazards and particularly resilience at the community scale to flooding in the UK. Whilst operating at a small scale, the co-production of a negotiated set of knowledges on flood risk for a specific place has been shown to lead to tangible changes in the ways in which communities work together and sustain action to manage a common threat. For example, in bringing together local stakeholders, academics and government agencies in a series of deliberative, co-constructive community workshops, Lane et al. (2011) illustrate how scientific and tacit (place-based and experiential) knowledges can be combined to design effective flood defences for Pickering, UK. This kind of research is illustrative of the modes of working social science and humanities

researchers are engaging with to elaborate new ways of ‘knowing and seeing’ the environment. In so doing, such enquiry opens up avenues of research that need to become knowable for decision makers, a task that requires a realignment of epistemological and methodological understandings in policy, governance and practice.

This issue of *Environmental Values* contains five empirical studies that seek to explore the ways in which environmental issues are conceptualised outside of a scientific context, and the role that latent values play in influencing environmental behaviour and practice. In the first paper, Partridge, Thomas, Pidgeon and Harthorn illustrate the value of deliberative workshops for engaging publics on the future meanings and potential impacts of shale extraction (fracking). Working with participants at UK and US localities that have been identified as potential sites for future shale extraction, this research nicely illustrates the benefits of bringing together new information and diverse perspectives to better understand conceptualisations of the deep underground. In dealing with emergent technologies at a resource frontier, questions understandably arise about the potential risks of fracking and of ‘new species of trouble’, which embody relationships between technical risk and social processes, uncertainties and conflicts of value. Participants demonstrated concerns about the stability of underground environments, their fragility, and the potential negative consequences of extraction. Interestingly, despite the opacity and mysterious nature of a world that is often seen as beyond comprehension, participants drew clear ecosystem links between the deep underground and life on the surface in relation to health and wellbeing. With further intensification of extraction processes and the anthropogenic transformation of the subterranean world, it is clear that there is a growing need for studies such as this that can provide valuable insight into how interventions in frontier environments are seen and known by different groups of stakeholders.

Continuing with the benefits of engaging with individuals and broader communities, the paper by Tănăsescu and Constantinescu provides a fascinating account of the complexity of human-animal interactions and focuses on understanding how people living in the littoral Danube Delta (Romania) come to know the Golden Jackal (*Canis aureus*), a species which has been associated with negative impacts in the local environment by attacking livestock. Through a year-long camera monitoring of the jackal, alongside regular interviews and group discussion with local residents, the research aimed to focus on the spatiality of human-jackal interactions, placing human and non-human participants on the same ontological plane. In so doing, the methodology was highly successful in engaging human residents in a positive way and crucially, in making the jackal ‘count’ in a meaningful and symbolic manner which stimulated interest in future studies. Whilst this work highlights the benefits of understanding how knowledge is created and how values are embedded in environmental debates, it also serves to emphasise the potential for in-depth research with

communities to create the institutional and territorial conditions required for successful reintroduction of species to areas under rewilding practices. Such debates on rewilding feature extensively in a Special Issue of *Environmental Values* (Drenthen 2018a, b; Gammon 2018; Wynne-Jones, Strouts and Holmes 2018). Finally, this study reminds us of the need to move beyond the advances of theoretical considerations in the field of animal–human relations to a more engaged practice based on post-structuralist ideas.

The importance of rich qualitative data in revealing latent values is continued in the article by Uzzell and Rätzzel, who examine the role that individuals play in transforming organisations. Their focus on trade unions in the UK owed much to the requirement for these organisations to transform their policies in the face of rapidly evolving environmental issues, but also for the individuals within such settings to adapt their self-perceptions as well. Through life-history interviews with trade unionists whose portfolios included environment, the research reveals the subtle social, economic and historical influences on an individual's world views and their decision making. The findings show that religion played an important role in the lives of many participants through either early experiences in life, which have a significant effect on the lifelong values adopted by an individual, or through a more culturally embedded influence on language and memory. In both respects, it is clear that religion had informed a worldview in some participants which had influenced the direction of decision-making and which had served to bridge ideas surrounding justice for workers and justice for the environment. As such, this research is important in demonstrating that mainstream worldviews in the labour movement may be expanded to encompass other ways of seeing and understanding the world from a worker's perspective.

The final two articles in this issue adopt quantitative methodologies to investigate the values that underpin potential and existing members of, and contributors to, environmental organisations. In the first of these articles, Wrenn provides an engaging exploration of atheism in the American animal rights movement through analysis of online surveys completed by American vegans. The research demonstrates that those identifying as atheist and agnostic vegans have a greater disposition towards veganism out of concern for other animals. Strikingly, whilst atheists make up a significant proportion of the demographic of the non-human animal rights movement, vegan atheism has largely been overlooked by both scholars and policymakers, with research in this arena tending to focus on other demographic factors such as race, class, gender and social and political attitudes. In tracing the historical relationship between religion and anti-speciesism, Wrenn nicely illustrates the changing tensions and societal drivers that have impacted the movement, from the dualism between religion and science to the rise of secular reasoning. In addressing why non-human animal rights groups have not acted to recognise and strategically engage with the atheist community, there exists the probable

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explanation that because religiosity remains core to membership and acceptance in American culture, leaders may be hesitant to take action that might break with mainstream cultural values. This research therefore provides an excellent foundation for further in-depth qualitative studies to learn more about the values and motivations of individuals within non-human animal rights groups, and importantly, of the politics within the movement that may have led to a hostility toward the adoption of atheist frameworks.

In a further quantitative study on environmental values, Lundberg, Vainio, Ojala and Arponen use an online survey to consider the drivers of philanthropic behaviour among potential donors to environmental causes in Finland. Such behaviour can be classed as pro-environmental in nature and can take the form of monetary donations or the action of volunteering time to help non-government organisations. The primary aim of the study was to assess whether materialism and awareness of environmental consequences lead to different types of philanthropic behaviour. Findings indicate negative associations between materialism and giving and a propensity for higher earners to give money rather than time to environmental causes, both of which are supported by previous studies on pro-environmental behaviour. The strength of this research lies in its power to inform environmental organisations of the ways in which potential donors are driven to contribute to causes, and as such, it makes a significant contribution to conservation marketing by illustrating the possible benefits of tailoring messages to specific target audiences. It is undoubtedly the case that information of this nature will become more important if non-governmental environmental organisations are to effectively recruit both funding and time-resource to sustain their activities.

In concluding, the articles in this issue of *Environmental Values* highlight the power of different methodologies in probing the values and attitudes that underpin a wide range of environmental behaviours and practices. Whilst the immense contribution (positive and negative) of scientific knowledge and understanding to human existence cannot be ignored, these articles serve as a poignant reminder that 'expert' knowledge is often insignificant in people's conceptions of environmental issues because of the power of other ways of seeing and knowing that are constructed by individuals or communities. In this manner, the role of social scientists has never been more important in designing research frameworks that allow for a better understanding of knowledge controversies within the context of rapidly evolving environmental debates.

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