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The Idea of Climate Change as a Belief System

Why Climate Activism Resembles a Religious Movement

The idea of climate change has been enforced by its similarities with belief systems. It may come as a surprise to scientists, the media and climate activists participating in climate change discussions that they are unconsciously following models rooted in belief systems. These models include an emphasis on existential anxiety and the public expression of commitments. The discussions around the severity of climate change and individual sacrifices through everyday moral choices, however, show that addressing climate change may require a shift of focus from political leadership to more grassroots activism.

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The Idea of Climate Change

The rise of climate change in public consciousness has prompted scholars to analyse climate change as an *idea* that is changing society in novel ways and, in turn, being changed by the society's perceptions and representations of, and responses to, climate change (Hulme 2010). The scholarly work on the idea of climate change has included analysis of its media representation, cultural responses and ethical and moral dimensions of climate change (e.g., Hulme 2009, Boykoff 2011, Jaspal et al. 2012). We argue that the discussions on climate change influence public opinion and action in the same way as belief systems gain popularity and mass support. The secular individuals and communities who take part in spreading the idea of climate change are unconsciously following the models deeply rooted in belief systems – this may be particularly unsettling to them. Yet, the *modus operandi* of the spread of the climate change idea follows models that are similar to the spread of belief systems.¹ As Noble (1997) points out, the secularist polemic since the 18th century Enlightenment has created an artificial divide between the “religious” and the “secular” when

in fact religious concepts may be central to seemingly secular human societies.

Research on the evolution of belief systems suggests that they may have evolved as a byproduct of cognitive, emotional or psychological mechanisms characteristic of the human mind and are integral part of its make-up (Atran 2002, Boyer 2003). Atran and Norenzayan (2004) identify four themes that are common to belief systems:

1. belief in supernatural concepts (gods, goddesses, ghosts);
2. emphasis on existential anxiety (death, disease, catastrophe);
3. public expressions of commitments (offerings of goods, property, time);
4. institutionalised rituals that originate from co-ordination of 1, 2 and 3 above (congregation, ceremonial gatherings, intimate fellowship).

Atran and Norenzayan (2004, p. 714) suggest that these themes form a working framework that “delimits a causally interconnected set of pancultural phenomena”. This engagement with the belief systems framework (Atran 2002, Boyer 2003, Atran and Norenzayan 2004) helps us to illuminate a different side of climate change by examining each of these themes in the context of the discussions on climate change. We further argue that the similarities between climate change and belief systems may in fact be its strength because they help spread the idea of climate change, influence public opinion and trigger public action in just the same ways as belief systems gain popularity and mass support – with

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¹ Our use of the term “belief system” as opposed to religion is deliberately broad and encompasses mainstream, alternative, indigenous and other spiritual faiths.

the complement that mitigating climate change may require more grassroots activism than political leadership.

Similarities between the Climate Change Discourse and Belief Systems

Supernatural Concepts

Concepts beyond experienced nature are often attributed to objects that have unordinary properties but have close physical resemblance to ordinary objects (Cornwell et al. 2004). In many cultures gods and goddesses who are similar to humans in appearance, also possess some unusual qualities that humans do not (Schoen 1990). Equally, demons, ghosts or spirits also take human-like forms and are believed to possess extraordinary powers (Gilmore 2003). In many traditional societies, weather and climate are considered the domain of gods or spirits whom humans may seek to influence but have no ultimate control over (Strauss and Orlove 2003). All these concepts attempt to explain phenomena beyond experienced nature. As Atran and Norenzayan (2004, p. 8) point out, “supernatural agents are readily conjured up because natural selection has trip-wired cognitive schema for agency detection in the face of uncertainty”. Such supernatural concepts are also used to describe the phenomenon of climate change: scholars often refer to a statement attributed to the well-known climate scientist, Wallace Broecker, that expresses a similar sentiment: “The climate system is an *angry beast* and we are poking at it with sticks” (e.g., Hulme 2009, p. 14, Weitzman 2012, p. 221, Bauman 2014, p. 70). The phrase “angry beast” invokes an animistic concept to describe the relational and agentic context of climate change, wherein humans perturb a powerful being, which responds in force. What is interesting is the shared subtext between many traditional societies’ views of climate as the “domain of spirits and gods” and the scientists’ metaphor of “angry beast”, both of which describe natural phenomena in terms of supernatural concepts, animism and agency.

Emphasis on Existential Anxiety

Sociological history of belief systems suggests that doomsday stories, which put emphasis on people’s existential anxiety, are common in traditional societies (Friedrich 1986). Many Western cultures rooted in Christianity have also been fascinated with end-of-the-world scenarios (Chandler 1993). Doomsday stories have captured people’s imagination throughout history, with numerous dates being proffered for the end of the world (Wojcik 1996). Boyer (2003) argues that the possibility of death is a powerful force in shaping many belief systems because mortality produces strong emotions such as fear, scare or terror which the promise of life after death then offers to allay. Belief systems have arguably appropriated people’s existential anxiety, a fundamental characteristic of human mind, to communicating a certain world view. Similarly, the emphasis on existential anxiety is seen by journalists as an effective tool in communicating the severity of climate change (e.g., Boykoff 2011, Butler et al. 2011, Jaspal et al. 2012),

just as many belief systems have communicated a certain world view through doomsday stories.

Offerings and Sacrifices

Offerings and sacrifices in many traditional societies involve foregoing one’s own possessions to placate a religious deity. Seen as “gifts” to gods, which are made in the spirit of charitable donation, Van Baal (1976, p. 178) suggests that such acts of giving form “real and effective means of communication, cementing togetherness and confirming security” in social groups. Acts of such charitable offerings are ways of participating in social groups as a member who is committed to the group’s cause. Such offerings and sacrifices also have moral connotations because, as Hubert and Mauss (2003, p. 93) argue, they “modify the condition of the moral person” or of the objects that the person is concerned about. The acts of offerings and sacrifices are increasingly becoming common in discussions on climate change. For example, the reduction of carbon footprints often involves giving up or curtailing actions that emit CO₂. In some sections of society, reducing CO₂ emissions has become a moral pursuit and these moral connotations to climate change concerns have given rise to a whole new lexicon, which Koteyko et al. (2010) refer to as “creative carbon compounds”, some of which have strong moral connotations, for example, carbon detox, carbon guilt or carbon morality. Simultaneously, popular literature has sprung up on low-carbon lifestyles, cities are driving their infrastructures towards low-carbon transition, and climate activists organise worldwide protest marches (figure 1, p. 96). *Carbon Rationing Action Groups (CRAGs)*, for example, have started in North America and the United Kingdom (Howell 2009). Individuals in these groups act together to reduce their own as well as their group’s collective carbon footprint by setting annual emissions targets and then tracking them over time. The development of such self-rationing schemes for the mitigation of climate change involves giving up certain lifestyle choices as a means of making an offering for a common cause and also involves significant sacrifices toward specific eco-ethical ends.

Institutionalised Rituals

Rappaport (1999), in his landmark work on the evolution of belief systems, considers rituals as one of the main components of belief systems. He argues that rituals, through collective participation in symbolic action, connect realms of experience and feeling that may become disconnected in day-to-day routine. The *Oxford English Dictionary* defines performance of ritual acts as “repeated actions or patterns of behaviour having significance within a particular social group” (OED 2010). Such social actions towards communitarian goals need not be supported by religious rituals per se; they can be bolstered by secular ones of similar social and symbolic calibre. In both cases, social gatherings, which often are prerequisite for performing rituals, force individuals out of their day-to-day pursuits and create the possibility of a connected society interested in the greater common good. Thus, people’s individual actions for reducing CO₂ emissions, informed by the science of climate change, and reinforced by the media represen-

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tation of climate change, can manifest in institutionalised rituals – gatherings, meetings or protests – which arguably have considerable social significance to the members of climate action groups. Furthermore, the rapidly growing movement of climate change groups at local and community levels has become increasingly interested in forming networks with other such groups in order to rally a greater support for their cause. The *Low Carbon Communities Network*², for example, defines their mission as to encourage the adoption of low-carbon and zero-carbon technologies and lifestyles at a community level, and to enable groups engaged in this to be as effective and efficient as possible. This network is active in organising and advertising conferences and meetings of low-carbon communities around the United Kingdom, including gatherings, meetings or protests. Such communities provide acceptance, legitimacy and support to individual efforts whilst also encouraging more individuals to join them and to contribute to a collective change in behaviour (Heiskanen et al. 2010). Institutionalised rituals are therefore an important factor in the societal spread of the idea of climate change and public response to and action on it.

² www.lowcarboncommunities.org

Climate Change Myths

Climate change can be viewed as stories or myths that “embody fundamental truths underlying our assumptions about everyday or scientific reality” (Thompson and Rayner 1998, p. 160). Hulme (2009) has elaborated climate change myths which also resonate with the four themes common to belief systems. Borrowed from Judeo-Christian mythology Hulme’s myths include “Lamenting Eden”, “Presaging Apocalypse”, “Celebrating Jubilee”, and “Constructing Babel”. They adopt biblical metaphors to associate human emotions of nostalgia, fear, justice and pride with the discussions on climate change. There are similarities between the four themes common to belief systems and the four myths of climate change. The idea of climate change is rooted in the nostalgia for “pristine” climate, quite like that of the Garden of Eden, the original benchmark to describe pristineness. Media reportage of climate change often uses the metaphor of apocalypse playing with people’s innate fears. It has been supposed that the environmentalists may exaggerate the risks and hazards to humans because of the failure of governments and intergovernmental organisations to act on environmental issues. The idea of climate change has ethical and moral connotations to many. As Hulme (2009) suggests, in people’s minds carbon emissions are equated to sin and

FIGURE 1: Are faith groups natural allies of climate change activists through a shared belief system? Buddhist monks taking part in *People’s Climate March* on September 21, 2014, in Brooklyn, New York.



reducing emissions a form of repentance. The framework of sin and repentance is found in belief systems around the world, and offerings and sacrifices are often used as a means for repentance. Therefore, in pursuit of jubilee – the idea of justice and freedom for fellow human beings – people are prepared to make such sacrifices as reducing their own CO₂ emissions so as to prevent climate change. The motivation is perhaps initiated by a confident belief in human ability to control nature. Actions range from technologically intensive solutions such as geo-engineering to sequester carbon in oceans (Lovelock and Rapley 2007), to individual management of carbon footprints by low-carbon communities (Heiskanen et al. 2010). Hulme (2009) refers to this as “Constructing Babel” – a mythical tower reaching up to heaven.³

The Interconnectedness and Interdependence of Climate Change Actors

The four themes common across belief systems can be demonstrably identified in the discussions on climate change and they broadly correspond with Hulme’s (2009) four myths of climate change. We argue that the interconnected and interdependent nature of the four themes makes climate change an environmental issue that has risen substantially in public consciousness and imagination (also see Butler et al. 2011). To analyse this interconnectedness, we attribute each of these themes, principally, but not exclusively, to an actor:

- supernatural concepts to scientists who model the climate system, make and test predictions,
- emphasis on existential anxiety to media who communicate the severity of climate change,
- offerings and sacrifices to individuals who make ethical and moral choices in their everyday lives, and
- institutionalised rituals to communities who form collectives and groups to trigger public action on climate change.

The interaction between these four actors arguably helps to propagate the idea of climate change in a fashion similar to the spread of belief systems.⁴ Each of the four actors – scientists, media, individuals, communities – plays a certain role in the discussions on climate change. While scientists generate knowledge about climate change, media and activists play a leading role in communication of the idea of climate change and its human implications. Individuals are active in taking action on climate change, while communities reinforce, network and amplify individual actions and their consequences. These interactions arguably reinforce and propagate the idea of climate change as a consequential but affectable force, leading to broad-based public support for a move against the established cultural, political and social systems. The four actors identified here – scientists, media, individuals, communities – act within this broad context. This backdrop makes the discussion on climate change especially intense and profound, drawing interest from a large number of people and a variety of actors.

Conclusions

Climate change has become the most prominent environmental issue of the 21st century and it has galvanised public support for many other environmental issues including, but not limited to, agriculture and food security, biodiversity conservation, deforestation, desertification, land degradation, and poverty alleviation. However, when it comes to the intergovernmental agreements on legally binding targets for the reduction in carbon emissions, the political process has been disappointingly slow and frustrating. Our analysis of climate change as a belief system suggests that addressing climate change may require a shift of focus to a very different level and through the grassroots actors rather than political leaders. The interconnected and interdependent interaction between the actors we identify will mediate – quite independent of the political process – the spread of the idea of climate change in a fashion similar to the spread of religious beliefs. Although this may be particularly unsettling to the predominantly secular actors of climate change we argue that this mode of spread will help to influence public opinion and further action on climate change.

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References

- Atran, S. 2002. *In gods we trust: The evolutionary landscape of religion*. New York: Oxford University Press.
- Atran, S., A. Norenzayan. 2004. Religion’s evolutionary landscape: Counterintuition, commitment, compassion, communion. *Behavioral and Brain Sciences* 27: 713–770.
- Bauman, Y. 2014. Climate change impacts. In: *Environmental and natural resource economics: An encyclopedia*. Edited by T. C. Haab, J. C. Whitehead. Santa Barbara, CA: Greenwood.
- Boyer, P. 2003. *Religion explained: The human instincts that fashion gods, spirits and ancestors*. London: Vintage.
- Boykoff, M. T. 2011. *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge, UK: Cambridge University Press.
- Butler, R., E. Margolies, J. Smith, R. Tyszczuk (Eds.). 2011. *Culture and climate change: Recordings*. Cambridge, UK: Shed.
- Chandler, R. 1993. *Doomsday: The end of the world – A view through time*. Ann Arbor: Servant.
- Cornwell, B. R., A. K. Barbey, W. K. Simmons. 2004. The embodied bases of supernatural concepts. *Behavioral and Brain Sciences* 27: 735–736.
- Friedrich, O. 1986. *The end of the world: A history*. New York: Fromm International.

³ Such an overlap between Hulme’s myths of climate change and the human emotions of nostalgia, fear, justice, and pride is consistent with the wider societal trends of connecting human emotions with important issues, including but not limited to food safety, environmental disasters, and infectious diseases.

⁴ Climate skeptics describe climate protection as a new, secular religion, with dogmas and declared heretics and with a system of purchasable indulgence analogous to medieval Catholicism. For a theological-ethical critique of climate-skeptical arguments see Rosenberger (2014).

- Gilmore, D. D. 2003. *Monsters: Evil beings, mythical beasts, and all manner of imaginary terrors*. Philadelphia: University of Pennsylvania Press.
- Heiskanen, E., M. Johnson, S. Robinson, E. Vadovics, M. Saastamoinen. 2010. Low-carbon communities as a context for individual behavioural change. *Energy Policy* 38: 7586–7595.
- Howell, R. 2009. *The experience of carbon rationing action groups: Implications for a personal carbon allowances policy. Final report for UKERC demand reduction theme*. www.ukerc.ac.uk/publications/the-experience-of-carbon-rationing-action-groups-implications-for-a-personal-carbon-allowances-policy.html (accessed December 1, 2015).
- Hubert, H., M. Mauss. 2003 (orig. 1964). *Sacrifice: Its nature and function*. Reprinted in: *Understanding religious sacrifice: A reader*. Edited by J. Carter. London: Continuum.
- Hulme, M. 2009. *Why we disagree about climate change: Understanding controversy, inaction and opportunity*. Cambridge, UK: Cambridge University Press.
- Hulme, M. 2010. The idea of climate change. Exploring complexity, plurality and opportunity. *GAIA* 19/3: 171–174.
- Jaspal, R., B. Nerlich, N. Koteyko. 2012. Contesting science by appealing to its norms: Readers discuss climate science in *The Daily Mail*. *Science Communication* 35: 383–410.
- Koteyko, N., M. Thelwall, B. Nerlich. 2010. From carbon markets to carbon morality: creative compounds as framing devices in online discourses on climate change mitigation. *Science Communication* 32: 25–54.
- Lovelock, J. E., C. G. Rapley. 2007. Ocean pipes could help the Earth to cure itself. *Nature* 449: 403.
- Noble, D. F. 1997. *The religion of technology: the divinity of man and the spirit of invention*. New York: A. A. Knopf.
- OED (Oxford English Dictionary). 2010. The performance of ritual acts. www.oed.com/view/Entry/166369?redirectedFrom=ritual#eid (accessed December 1, 2015).
- Rappaport, R. A. 1999. *Ritual and religion in the making of humanity*. Cambridge, UK: Cambridge University Press.
- Rosenberger, M. 2014. Die Ratio der "Klima-Religion". Eine theologisch-ethische Auseinandersetzung mit klimaskeptischen Argumenten. *GAIA* 23/2: 93–99.
- Schoen, E. L. 1990. Anthropomorphic concepts of God. *Religious Studies* 26: 123–139.
- Strauss, S., B. Orlove (Eds.). 2003. *Weather, climate, culture*. New York: Berg.
- Thompson, M., S. Rayner. 1998. Risk and governance part I: The discourses of climate change. *Government and Opposition* 33: 139–166.
- Van Baal, J. 1976. Offering, sacrifice and gift. *Numen – International Review for the History of Religions* 23: 161–178.
- Weitzman, M. L. 2012. GHG targets as insurance against catastrophic climate damages. *Journal of Public Economic Theory* 14: 221–244.
- Wojcik, D. 1996. Embracing doomsday: Faith, fatalism, and apocalyptic beliefs in the nuclear age. *Western Folklore* 55: 297–330.

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