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12 The religio-spiritual and sacred dimensions of climate-induced conflicts

A research agenda

Joram Tarusarira and Damaris S. Parsitau

Introduction

The impacts of climate change are increasingly undermining human, national, and international securities. Scholarly and practical responses prioritize secular and modern technologies such as earth-observation technologies and market-based mechanisms to understand how and under what circumstances climate change influences the risk and dynamics of violent conflicts. Conversely, the influence of human and cultural factors such as religion, spirituality, and the sacred in dealing with climate-induced conflicts is sidelined. Yet religion, spirituality, and the sacred shed critical theoretical light on the motivations and positionings of conflicting parties. This chapter charts a research agenda that transcends established perspectives of responding to climate-related conflicts by arguing for the interrogation of how religion, spirituality, and the sacred influence violence and conflicts that are induced by climate change.

In what follows, we first discuss the relationship between climate change and violence. We then consider the current scholarly, practical, and policy responses and the place of religion in them, before pointing out the lacunae in the existing literature, as well as in practical and policy responses. After exposing these gaps and their scholarly and practical implications, we bring religion, spirituality, and the sacred into the discourse on climate change and violent conflict. To ground our discussion, we focus on African indigenous communities, especially the Shona in Zimbabwe, and their sacred relationship with their natural environment to distil the cognitive, emotional, and moral meanings that emerge from that relationship and show how they mediate climate-related conflicts. Drawing on our findings, we conclude by re-stating the need for a research agenda that critically considers how religion and spirituality or any similar phenomena, such as traditional knowledge of ecological systems, mediate climate-induced conflicts. We argue that marginalizing the influence of religious, cultural, spiritual, and moral orders not only results in a failure to comprehend why some climate-induced conflicts become intense, impassioned, and intractable, it also hinders the development of locally grounded sustainable peace-building and conflict transformation strategies. This chapter contributes to advancing SDG13: take urgent action to combat climate and its

impacts. We argue that addressing SDG 13 should not only be about mitigation and adaptation, but also about the consequences such as climate-induced conflicts when climate change exceeds adaptive capacities of the communities.

Climate change-induced collective violence and its potential to increase

The heated debate over whether climate change is directly connected to conflict and violence has resulted in an avalanche of quantitative (Meirding 2013, Salehyan 2014, Buhaug 2015, Seter 2016, Ide 2015) and qualitative studies seeking to measure how climate change may translate into violence and under what conditions it is likely to do so (Fjelde 2015, De Juan 2015, Alvarez 2017). Some scholars argue that, rather than precipitating a violent conflict, climate change results in resource scarcity which, on the contrary, might foster cooperation over resources rather than trigger a conflict (Buhaug et al. 2008, Buhaug 2010, Koubi et al. 2012, Wischath and Buhaug 2014). Likewise, resource abundance can also precipitate violent conflict (Ostrom 2007; Young 2011). However, there is increasing evidence indicating that climate change is causally associated with collective violence, generally in combination with other causal factors such as poor economic or governance systems. Numerous studies have shown that the risk of violent conflict in East Africa increases during periods of unfavourable climatic conditions for agriculture and pastoralism (van Baalen and Mobjork 2016, Ember et al. 2012, 2014, O'Loughlin et al. 2012, Releigh and Kniveton 2012, Maystadt and Ecker 2014, Maystadt, Caledrone and You 2015). To be clear, we do not suggest that climate change is always a trigger (De Chatel 2014). Analysts should also consider other socio-economic and political factors, like the strength of political institutions, for a thorough examination. For instance, in the Sahel region, the success of jihadi groups and political militia is attributed to weak state authority, an abundance of firearms and the steady erosion of local mechanisms of dispute resolution. However, research shows that climate change and the resultant collective conflict and violence are set to increase (Reuveny 2007). It is on this basis that we argue that SDG 13 on climate action should also include addressing climate-related conflicts.

It is estimated that by 2100, people living in coastal areas (ca. 20% of the global population) or in small-island nations will suffer the greatest impact of the expected rise in sea levels. Some island nations may disappear and other coastal areas may become uninhabitable, which may force many people to become internally displaced within their own countries or refugees in neighbouring countries. Elsewhere, sea-level rises will damage cropland, create salt-water incursions into river deltas and groundwater aquifers, and cause shortages of food and fresh water. As a result, there will likely be major political, economic, and social disruptions, sometimes associated with violence, as people compete for control of land and other depleting resources (Levy, Sidel, and Patz 2017). It is thus imperative to understand the dynamics between climate

and possible alternative practical intervention strategies, both theoretically and conceptually.

The current scholarly and practical response to climate change and associated conflicts

Statistical analyses of large N-studies and propositions for technological and economic problem-solving currently dominate research on the climate–conflict nexus (Ide and Scheffran 2014, Ide 2017). Policymakers and scholars perceive climate change as a subject for climatology, physics, chemistry, oceanography, physical geography, and integrative earth sciences (Scheffran et al. 2012), leading them to deploy hyper-techno-rational, economic and military responses that are exclusively secular, mechanistic, and modernist (O’Sullivan 2017, Werrell and Femia 2017). No wonder SDG 13 emphasizes to reduce greenhouse gas emissions and strengthen resilience and adaptive capacity to climate-induced impacts, which is the focus of natural sciences. This promotes “the illusion that problems in our natural agency mostly can be solved by technical innovations” (Bergman 2009: 107), thereby underestimating the human and cultural dimensions of global climate change. Prominent publications such as those of the IPCC do not account for the human, cultural, and ethical dimensions of climate change. Religious, spiritual, and sacred interpretations are not factored in because climate-linked conflicts are perceived as a scientific problem, a physical phenomenon that can be described without reference to cultural influences and that can be dealt with by mapping, measuring, and recording using technological instruments (Nordqvist and Krampe 2018, O’Brien 2017). Policy and practice pay no attention to inhabitants’ interpretations of climate change, nor do they consider the potential strategies for conflict resolution and transformation that have been used traditionally or are currently being used, of which religion, spirituality, and the sacred are part (Barnett and Campbell 2010: 21; de Wit 2014, Ulloa 2011).

However, the preferred scientific or positivist approaches and methodologies are shaped by the limits of contemporary mechanistic and economy-oriented world views that tend to externalize nature (Bergman 2009: 98). Regardless of how ecologically informed and sustainable they are, these approaches are inherently unsuitable for integrating religio-spiritual factors that are hard to quantify but are nonetheless crucial in understanding the dynamics of climate-related conflicts such as identities, narratives, or perceptions of threat. Furthermore, they cannot take different users’ perceptions into account, nor the role of their attitudes and beliefs in understanding climate challenges. As Bergman argues, “anthropogenic environmental problems cannot simply be ‘fixed’ by technical and economical systemic solutions and environmental ‘management’” (Bergman 2009: 99). Religion, spirituality, and the sacred are central and determinative driving forces in human practices and ideologies with regard to both mitigation and adaptation (see Bergmann 2014), and are

therefore also capable of influencing how climate-linked conflicts are analyzed and dealt with.

Merely dealing with climate change and conflicts through the frame of technology is thus insufficient. Climate scientist Mike Hulme argues that the idea of climate exists as much in the human mind and the matrices of cultural practices as it is an independent and objective physical category. Climate change takes us well beyond the physical transformations that are observed, modelled, and predicted by natural scientists (Hulme 2018). The idea of climate change carries quite different meanings and seems to imply quite different courses of action depending on who one is and where one lives (Hulme 2018). Among indigenous communities, this means recognizing and addressing the impacts of emergent climate-induced conflicts on indigenous rights to the traditional use of land and on their historical and spiritual connections with the land, their rights to traditional ways of living off the land, and the right to protect the sacredness of the land that has been their home since time immemorial (Kerr-Wilson 2017).

Consideration of the human and cultural dimensions of this problem is nonetheless beginning to find its way into the debate, thanks to the “constructivist and poststructuralist turn,” which has opened up new ways of looking at why climate change translates into violent conflict (Froelich 2012). Local perceptions of climatic and environmental changes can differ considerably from the data provided by technical methods and are essential for understanding social actions in specific localities (Chirongoma and Chitando 2021). However, they can hardly be incorporated into large-*N* studies (Ide 2017) because they are non-quantifiable. Rainfall or temperature figures are often based on satellite readings, but there can be a considerable difference between the perceptions of local inhabitants and the findings of scientific experts or orbiting satellites on the causes of environmental changes (Ide and Scheffran 2014; see also Tarusarira 2017). Non-positivist local perceptions and rationalities could contribute to theoretical understandings of why people act the way they do (their motivations) in an environmental or climate-linked conflict (Froelich 2012). What is needed is qualitative and ethnographic research to capture non-quantifiable crucial elements such as religion and spirituality and thus shed light on different aspects such as human modes of perception, action, and thought, as well as motivations, thereby increasing our understanding of the potential links between climate and violent conflict (see Bergmann and Gerten 2010). Qualitative techniques can complement statistical analysis by detecting causal pathways indicated by correlations, or by explaining why these correlations are misleading.

No research to date addresses how religion and spirituality mediate in dealing with climate-induced conflicts. What exist are studies of how religion can contribute to climate change mitigation and adaptation, research that is theological, pastoral or normative and specific to particular faiths, and that draws on resources internal to the specific faiths (Haluza-Delay 2018). This is how scholars of religion and the environment are trying to advance SDG 13. These

studies are located within and start out from the “greening religion” discourse, in which religious traditions become more pro-environment, a topic we revisit below (Taylor et al. 2016). Research on the greening of religion provides accounts of how religious traditions such as Judaism, Christianity, and Islam are becoming more pro-environment and are sharing strong doctrines of creation, such as the assertion that God created the world and made it good. Thus, the careless and unintentional altering of the climatic balance is deemed disrespectful and blasphemous. Engaging with religion is seen as beneficial because religions may be able to encourage a response to climate change through their influence on believer’s world views or cosmologies and the moral duties they promote. Religions can engage a broad audience which accepts their moral authority, may have significant institutional and economic resources, and can provide social capital through the connectivity they generate (Haluza-Delay 2018).

However, it would be naïve to conclude that the existence of pro-environment doctrines of creation means that religious traditions are entirely pro-environment. An apocalyptic perspective that sees climate destruction as the point in time when God is beginning the final overthrow of extractive empires might lead to political inaction regarding climate change (ibid.). How religion and spirituality shape, haunt, interpret, inspire, or attend to human ways of being has become entangled with climate change. Religion, spirituality, and the sacred operate in the background of climate change conversations, where underlying concepts about places, environments, humans, and other animals generate particular expressions of environmental concern (Jenkins, Berry and Kreider 2018). From the extant literature, we lack knowledge of how this cosmovision mediates how actors position themselves in climate-related conflicts or how interveners factor it into addressing emerging violent conflicts. A lacuna thus exists regarding how ideas about religion, the spiritual and the sacred, which underlie concepts about places, environments, humans and other animals, influence positioning and affect how conflicts over natural resources, which embody the effects of climate change, are conceptualized and dealt with.

Analysing climate-induced conflicts through religion, spirituality, and idea of the sacred

Religion and spirituality are conspicuous by their absence from research into the possible mechanisms and conditions that shape how climate change does or does not translate into violent conflict. Despite this, most studies are undertaken in contexts in which religion, spirituality, and claims of the sacred are significantly present and intertwined with such conflicts. A case in point is local diviners in Tanzania, who say prayers of blessing and protection for cattle raiders (*ngingoroko*), with whom both the elders and traditional religious leaders have close connections. Inter-pastoral conflicts, including violent livestock-raiding, are on the increase due to more frequent and prolonged droughts, which, in combination with socio-economic changes, are increasingly overwhelming

existing adaptive capacities (Schilling et al. 2012). This chapter therefore hypothesizes that understanding people's religious, spiritual, and sacred perceptions of climate and the environment is essential to understanding how climate change translates and how actors position themselves in climate-linked conflicts, thus presenting creative alternatives to addressing such conflicts. While populations that are most severely affected by climate change, like those in sub-Saharan Africa, depend heavily on rain-fed agriculture for food production and income, resulting in market-based intervention strategies, this chapter suggests that it might not only be economic factors that translate climate change into violent conflict. Religion, spirituality, and ideas of the sacred have the potential to impact on patterns of climate-related conflict because they offer cognitive, emotional, and moral meaning regarding the human-environment relationship. They explain why things are what they are (cognitive), how and what people should feel and under what circumstances (emotional), and how they should act (moral) (Campbell 2010: 167), in this case, concerning the environment and associated climate-related conflicts.

As already mentioned, the focus on the influence of religion on the human-environment relationship gained traction through the "greening of religion hypothesis" (religions becoming more environment friendly), which was precipitated by Lynn White's seminal publication "The Historical Roots of Our Ecologic Crisis" (1967). He argued that Judeo-Christian ideas have negative environmental impacts because of the dominion argument, which gives humans authority over the earth because they are the only beings that were created in God's image. Dominion also entails the use of natural resources for human benefit. The development of science and technology and the subsequent destruction of nature have Occidental and specifically a Christian origin (Eckberg and Blocker 1989). This thesis dovetails with the conceptualization of nature as a resource, a material good for human survival, in environmental sociology (van Koopen 2000). Critics and analysts have responded variously to White's argument. Some have agreed with his thesis of a peculiarly Western form of exploitation. Others have argued that the account in Genesis 1 meant something different from White's interpretation and that later chapters in Genesis offered a "stewardship" orientation towards nature. Yet others have questioned the relationship between theology and culture. Others went on to argue that culture does not operate in the straightforward manner that White proposed. Capping it all are firm denials that the Occident is especially exploitative of the environment (for an overview, see Barbour 1973; Shaiko 1987: 244-46).

A related dimension is the attribution of divine agency to environmental change, whether welcome, harmful, or catastrophic. For some Christians, natural disasters are often seen as God's punishment for sins committed by humans (Steinberg 2006, Rosenau 2015). Indigenous people attribute hostile climate to the shunning of their traditions, gods, and ethical obligations (Awuah-Nyamekye 2014). Muslims perceive God as the controller of the environment, who changes it when he sees it fit (Bell 2014). In Buddhism, some argue that

the adverse effects of climate change are due to various offences against gods or spirits (Manandhar et al. 2013). On the other hand, White averred that Asian religions, indigenous traditions and nature-based cosmologies and value systems, unlike the Judeo-Christian religions, appear to foster pro-environmental perceptions and behaviour.

After being treated as a truism for about 30 years, from the 1980s to the present, White's hypothesis that religion was a causal driver in shaping environmental attitudes and behaviour started to be vehemently contested from different angles (see Taylor et al. 2016). One criticism, for instance, was that White's thesis was based on Abrahamic traditions that included Judaism and Islam, but in practice was limited to Christianity in the United States. The argument from humans' mastery or dominion over nature varied among the Christian denominations, whether they were liberal or conservative being more determinative (Taylor et al. 2016: 319). Eckberg and Blocker (1989) argued that four factors expressing "environmental concern" were correlated with four religious variables: whether one is Jewish or Christian, being conservative Protestant, believing that religion is essential, and believing in the literal interpretation of the Bible. The net result of factoring in and considering the background and religious variables was that the crucial predictor of lower levels of environmental concern was biblical literalism, that is, belief in the literal interpretation of the Bible (see also Greely 1993). Other studies did not see a necessary connection between attitudes and behaviour: they argued that previous studies had emphasized environmental attitudes rather than environmental behaviour. Yet others focused on church attendance, which they found to have differing effects on environmental behaviour. The argument that the complexity of biocultural systems makes it difficult to make conclusive statements about what, if any, role religious ideas have in shaping environment-related perceptions and practices, and if so which, was distilled from these criticisms. Pro- and anti-environment perceptions and behaviour, behaviour without such perceptions, and vice versa, among many others, can be found in various religious, spiritual, and sacred traditions (Taylor et al. 2016).

The case of indigenous sacred beliefs and practices

Indigenous sacred beliefs and practices can hinder attitudes of respect for non-human animals and environmental systems. However, they have developed what is known as traditional ecological knowledge (indigenous knowledge, knowledge systems) in which stories and perceptions about plants, animals, and sometimes supernatural agents and forces are entwined with ecological understandings, ceremonies, customs, and cultural practices that promote environmental conservation and sustainable livelihoods (Mauro and Hardison 2000, Bannister and Hardison 2006, Watson and Kochore 2012), which would contribute to advancing SDG 13. The land is seen and felt as an experience of the sacred in daily life, as adherence to sacred life (Smith 1999). It is therefore invested with a profoundly religious and emotional meaning, so much so that

collective sentiments strongly resist any attempt to alter the setting. Climate-related conflicts thus become place-protective actions, founded upon processes of place attachment and place identity (Devine-Wright 2009).

Land is not only a scientific but also a human phenomenon, linking politics, structural violence, and religious phenomena. Land, rivers, water, and cattle are not merely economic but also social, cultural, spiritual (or religious), and ontological assets that structure the social identities and lives of communities. “The land is the charter on which indigenous culture is based, the resting place of ancestors, and the source of spiritual power” (Goldsmith and Hildyard 1984: 29). It is understood as being alive and agentive, a collective material and spiritual benefit that must be preserved for future generations (Lutz 2005). Some indigenous sacred beliefs and practices promote perceptions of non-human organisms as persons to whom they have ethical responsibilities and with whom they are in a relationship, sometimes even as kin. Subsequently, this results in the promotion of biological diversity and the protection of specific habitats of linked human–natural systems (Abram 1996, Nelson 2011, Kimmerer 2013, Whyte et al. 2015, Cruikshank, 2005). Land is fundamental because it is connected to the sacred or non-human, escalating conflict over it to cosmic levels (see Juergensmeyer 2000).

As we have seen, since Lynn White’s hypotheses the notion of the greening of religion has focused on pro- or anti-environment perceptions and behaviour, or in today’s language a focus on pro- or anti-mitigation and adaptation to climate change perceptions and behaviour. The influence of religion, spirituality, and the sacred when climate change exceeds the capacities of communities and results in violent conflict remains underresearched. As we have suggested, current discussions of climate change have focused on “expert” knowledge, informed by the “device paradigm” – a belief that human-made problems can be controlled and fully managed and solved by technological progress (see Bergmann 2009) – at the expense of local religion, spirituality, or indigenous knowledge systems. Yet processes connected to climate change affect indigenous people’s cultural identities and relations with the non-human. Climate-related knowledge is dependent on each culture’s perspectives of the human and non-human beings that make up the non-human world. How indigenous communities deal with climate change is shaped by an understanding of the world that can be described as more than human and as cosmological.

The case of the Shona indigenous religion

In most African contexts, caring for the environment and the climate has always had religious and spiritual roots in human motivation (Tarusarira 2017). Citing the example of Shona indigenous religion in Zimbabwe, Mapara argues against applying the term “green religion” to indigenous religions, which, he opines, have always been pro-environment (Mapara 2016). He also avers that the term “green religion” should only refer to

religious movements that have had a recent reawakening, in that they have not always embraced humanity's stewardship over the earth, and have only chosen, after realizing the dangers of global warming to abandon, or moderate, their greed, which derives from the misconception that humanity is to have dominion over everything on earth.

(Mapara 2006:83)

The Shona believe in ancestral spirits (*midzimu*) who mediate between themselves and the Creator, Mwari or Nyadenga (the Heavenly One), who is himself an ancestral spirit and the arch-ancestor. Chiefdom or territorial ancestral spirits (*mhondoro*) are referred to as guardians of the land. They concern themselves with maintaining harmonious relations between people and the land and respect for sacred places and with issuing and enforcing directives about the community's use of its environment (Byers et al. 2001). Hence, it is they who are usually associated with traditional African ecological religious beliefs. The Shona also believe in *mashavi* (alien spirits), which are the potentially spiteful and malicious spirits of deceased non-relatives and other animate beings that are not necessarily human. The *midzimu* and *mashavi* guide humans in how to live with one another and the environment, and in how to derive benefit from nature, while also warning humans of the consequences of non-compliance with their advice (Mapara 2006). This pro-environment perspective, however, should not obscure Taringa's (2006) warning that we should not romanticize the positive influence of African indigenous religions on perceptions and behaviour regarding the environment. Problematizing the view that Shona traditional religion is environment friendly, he argues that Shona attitudes to nature are discriminatory, ambivalent, and based more on fear of or respect for ancestral spirits than on respect for nature itself (Taringa 2006). The jury is still out on whether this is the case, but whatever the verdict may be, it will not dislodge the view that indigenous religions influence the protection of the environment.

In Shona cosmovision, therefore, relationships between nature and humans, spirits and nature, are not dichotomized or compartmentalized but are integrated into an interdependent system of existence that is tied together through spiritual interactions (see McDonnell 2014). This epistemology and cosmovision see the physical world of the land, rocks, vegetation, rivers, and the spiritual worlds of ancestral spirits (*midzimu*), and alien spirits (*mashavi*) as integrated, giving initiates a deep respect and reverence without exploitation of and for nature and a commitment to conserve and enrich it. Nature and the environment are part and parcel of life, forming a unity with the Shona people because there is no separation between them. Adherents of Shona indigenous religions express feelings of belonging and connection to the earth, thus perceiving themselves as bound to and dependent on the earth's living systems. To destroy nature and the environment is to destroy oneself. Thus, for the Shona to defend their natural resources means defending oneself and one's life, as well as existence itself, a matter of defending one's identity and being. Living

in harmony with the natural world translates into living in harmony with the spiritual world, as they are interconnected and mutually dependent. Thus, natural phenomena, such as plants, rocks, and bodies of water, are respected and revered as vehicles connecting one to the spiritual world (*axis mundi*) (Eliade 1957) and as having both visible and invisible powers (Haverkort and Reijntjes 2007). Nature and the environment are thus protected from violation, desecralization, and conquest by enemies. This review of religion, spirituality, and the sacred in the context of Shona indigenous religion serves to demonstrate the attitude and motivation with which the Shona position themselves in conflicts related to climate change.

Towards resolving and transforming climate-linked conflicts

The religious, spiritual, or sacred quality of the natural environment can only be sustained as long as the resource is integral and therefore cannot be divided. Communities that consider the natural environment religious, spiritual, or sacred thus strongly resist any attempt to alter the context. Conflicts over natural environments that are considered religious, spiritual, or sacred can therefore not be resolved through partition, sharing, or side payments, as would ordinary disputes (Hassner 2009: 38–43). Unlike other conflict resolutions over what are divisible resources, the sacred land and natural environment that are at the centre of climate-related conflicts are perceived as indivisible, irreplaceable, inviolable, and impossible to monetize. The usual trade-off strategies are thus unworkable and lead to what are called *indivisible disputes* (ibid). They are indivisible in two distinct ways. First, the resource at the centre of the conflict, like the land, is perceived as indivisible in and of itself; it cannot be taken apart. Second, the resource is indivisible from those who own it, signifying that they will not tolerate parting with it. Dividing them or allowing enemies to take them over undermines their symbolic coherence because they are sites at which believers can expect to communicate directly with the divine. In times of competition – for instance, over depleting resources – the people will put their all into it, resulting in impassioned, intense, and intractable conflicts. Resolving such conflicts by establishing a value for the damaged or lost resource, negotiating a monetary settlement, or trading, among the dominant options in traditional positivist conflict-resolution strategies, may be considered insults and abhorrent by religious adherents who defend sacred sites and resources in the context of climate-linked conflicts (ibid.).

The sacred or spiritual relationship between people and the environment (Wabule and Tarusarira 2019; Smith 1950) mediates how the former position themselves in conflicts related to climate change. The idea of the sacred can harden boundaries between conflicting parties, thereby defining the conflict in zero-sum terms and facilitating the demonization of one's opponents. The belief is that the enemy is morally inferior as well as dangerous, and so must be dealt with harshly (Pape 2005, Chitando and Tarusarira 2017). Environmental practitioners are often trained within a scientific system which situates humans

as the observers or managers of nature, rather than as components within a complex and interrelated socio-ecological system (Sachdeva 2016, Alberti et al. 2003; Atran and Medin 2008; Grimm et al. 2000, Medin and Atran 2004; Tress et al. 2001). As a result, this perspective might not align well with those eco-theologies who emphasize the inseparability of religious, spiritual, and ecological knowledge (Pandya 2014; Pierotti and Wildcat 2000).

Climate-induced conflicts, religion, and spiritualist: a research agenda

Religion, spirituality, and the idea of the sacred thus provide us with insights into how human and cultural factors frame human-environment relationships. They present cosmologies or world views that contain the most fundamental assumptions about the world and the place of humanity in the cosmos (Haluza-Delay 2018). It is thus vital to have expertise in religious imagination in order to understand the way people interact and all the relations involved in and revolving around climate change (Hulme 2018). The latter thus emerge from the former and are critical in confronting climate-related conflicts in contexts where religion, spirituality, and the sacred are critical variables. First, religion, spirituality, and the sacred help set the institutional dimensions of everyday environmental management, establishing rules in use, routinized practices, and sets of rights and responsibilities. These institutions are enmeshed in culture (Watson 2009). In the context of conflicts linked to climate change, they provide the cultural archive on the basis of which people act.

Second, religion, spirituality, and the sacred influence the qualitative nature of human relations with the environment - how people perceive it, how they feel about it, how they value it, how they treat it. They influence the degree to which the environment is respected, revered, or considered either dispensable or indispensable, structuring how relations with others are constructed and negotiated. Religious, spiritual, or sacred connections between communities and the environment are instrumental in the different kinds of inter-group relations (Watson 2010), including in contexts of inter-pastoral conflicts that are precipitated by climate change. Religion, spirituality, and the sacred are assumed to be important influences on adherents' attitudes and subsequent behaviour, as well as being powerful social actors (Haluza Delay 2018). It is thus essential to pay attention to the influence of religious, spiritual, and sacred beliefs and practices in structuring movements and engaging with space, especially during climate-related conflicts. The human-environment nexus is lived, inhabited, performed, and experienced, impacting qualitatively on individual subjectivity, forms of identity, and relations with others (Watson 2010).

Third, religion, spirituality, or the sacred may be sources of social capital. Most studies have focused on the ability of religion, spirituality, or the sacred to encourage a response to climate change through their influence over believers' world views or cosmologies and the moral duties that they promote. They can engage a broad audience, many of whom accept and respect their

moral authority and leadership. Sometimes they have significant institutional and economic resources at their disposal, and thus the potential to provide the connectivity (e.g. in the form of social capital) that fosters the achievement of collective goals (Watson and Kochere 2012). This organizational function is particularly relevant in the case of collective violence induced by climate change, which will require just the type of collective action that religion, spirituality, or the sacred can help promote.

Fourth, religion, spirituality, or the sacred seek to provide explanatory conceptions of and narratives regarding general orders of existence. Explanatory narratives for climate change are crucial to how problems are identified and causes diagnosed, and hence to how particular solutions are designated as appropriate. It explains how the world was created, why, what the role of humans within it is, and maybe even when natural disasters occur (Pierotti and Wildcat 2000; Spilka et al. 1985). If religious, spiritual, and sacred ideas and teachings shape locals' explanatory narratives, they will consequently also powerfully shape the selection and implementation of different practical responses, not only to mitigation and adaptation, but also to climate-related conflicts. Religion, spirituality, and the sacred represent a powerful force that offers a framework in which world views and cultural imaginaries frame practical actions, understandings, and relations. Religion's influence reaches far beyond the personal and spiritual to other realms of human action (Watson and Kochore, 2012).

It is these characteristics and features of religion, spirituality, or the sacred about human–environment relations that should inform the interrogation of how adherents position themselves in conflicts over the natural environment as a result of rapid climate change. Some research shows that religion, spirituality, or claims of the sacred are shaping climate perceptions and behaviour concerning climate mitigation and adaptation, which is in line with SDG 13's climate action agenda. However, we lack knowledge of how they shape climate perceptions and behaviour in connection with violent conflicts induced by climate change, especially when it is now clear that climate change has exceeded adaptive capacities, thus engendering impacts and responses such as social instability and conflict. Further research that factors in and connects religion, spirituality, and idea of the sacred to social instability and violent conflict induced by climate change is thus required to answer corollary questions such as the following: How are religion, spirituality, and ideas of the sacred the key to understanding climate-induced conflicts? How do they influence the particular preferences, perceptions, and attitudes of actors in climate-related conflicts? How do actors engage with and mobilize religion, spirituality, and claims of sacredness to position themselves in conflict situations? To what extent do religion, spirituality, and the sacred cause the onset, intensity, or de-escalation of climate-induced conflicts? What does this say about the distinction between the religious and the secular? How can religion, spirituality, and ideas of the sacred enrich and complement positivist, secular, technical, and market-oriented conflict-handling mechanisms? How do climate-change challenges change religion, spirituality, and the idea of the sacred? How does climate

change challenge and change the conceptualization of religion, spirituality, and local epistemologies and ontologies? These questions constitute the research agenda that this chapter calls for. They will require interrogation of how religious, sacred, spiritual, and moral orders mediate conflicts that are induced by climate change. Thus, extend the focus of SDGs beyond mitigation and adaptation to include dealing with conflicts that are induced by climate change.

References

- Abram, David. 1996. *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*. New York: Pantheon.
- Alberti, M., Marzluff, J., Shulenberg, E., Bradley, G., Ryan, C., & Zumbunnen, C. 2003. "Integrating Humans into Ecosystems: Opportunities and Challenges for Urban Ecology," *Bio Science* 53, 1169–1179.
- Alvarez, Alex. 2017. *Unstable Ground: Climate Change, Conflict, and Genocide*. Lanham, MD: Rowman & Littlefield.
- Atran, S., & Medin, D. 2008. *Life and Mind: Philosophical Issues in Biology and Psychology. The Native Mind and the Cultural Construction of Nature*. Cambridge: MIT Press.
- Awuah-Nyamekye, S. 2014. *Managing the Environmental Crisis in Ghana: The Role of African Traditional Religion and Culture with Special Reference to the Berekum Traditional Area*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Bannister, K., & Hardison, P. 2006. *Mobilizing Traditional Knowledge and Expertise for Decision-making on Biodiversity*. (IMoSEB Case Study).
- Barbour, I. (Ed.). 1973. *Western Man and Environmental Ethics*. Reading, MA: Addison-Wesley.
- Barnett, J., & Campbell, J. 2010. *Climate Change and Small Island States: Power, knowledge and the South Pacific*. London: Earthscan.
- Bell, D. 2014. "Understanding a 'Broken World': Islam, Ritual, and Climate Change in Mali, West Africa," *Journal for the Study of Religion, Nature & Culture* 8(3), 287–306.
- Bergmann, S. 2009. "Climate Change Changes Religion," *Studia Theologica - Nordic Journal of Theology* 63(2), 98–118, <https://doi.org/10.1080/00393380903345057>
- Bergmann, S. & Gerten, D. (Eds.). 2010. *Religion and Dangerous Environmental Change: Transdisciplinary Perspectives on the Ethics of Climate and Sustainability*. Studies in Religion and the Environment, Vol. 2. Münster: LIT.
- Bergmann, S. 2014. *Religion, Space, and the Environment*. New York. Routledge.
- Buhaug, H. 2015. "Climate–conflict Research: Some Reflections on the Way Forward," *WIREs Climate Change* 6, 269–275.
- Buhaug, Halvard. 2010. "Climate Not to Blame for African Civil Wars," *Proceedings of the National Academy of Sciences of the United States of America* 107(38), 16477–16482.
- Buhaug, Halvard, Gleditsch, Nils Petter, & Theisen, Ole Magnus. 2008. Implications of Climate Change for Armed Conflict. *Social Dimensions of Climate Change Workshop*. Washington, DC.
- Byers, B. et al. 2001. Linking the Conservation of Culture and Nature: A Case Study of Sacred Forests in Zimbabwe. Retrieved from https://www.fs.fed.us/rm/pubs_other/rmrs_2001_hudak_a002.pdf
- Campbell, Collin. 2010. "The Easternization of the West: Or How the West was Lost," *Asian Journal of Social Science* 38: 738–757.
- Chirongoma, Sophia & Chitando, Ezra. 2021. "What Did We Do to Our Mountain? African Eco-Feminist and Indigenous Responses to Cyclone Idai in Chimanimani and

- Chipinge Districts, Zimbabwe,” *The African Journal of Gender and Religion in Africa* 27(1), 65–90.
- Chitando, E. & Tarusarira, J. 2017. “The Deployment of a ‘Sacred Song’ in Violence in Zimbabwe: The Case of the Song ‘Zimbabwe Ndeye Ropa Ramadzibaba’ (Zimbabwe was/is born of the Blood of the Fathers/Ancestors) in Zimbabwean Politics,” *Journal for the Study of Religion* 30(1), 5–25. [https://doi.org/\(...\)13-3027/2017/v30n1a1](https://doi.org/(...)13-3027/2017/v30n1a1)
- Cruikshank, J. 2005. *Do Glaciers Listen? Local Knowledge, Colonial Encounters, and Social Imagination*. Vancouver: UBC Press.
- de Châtel, F. 2014. “The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution,” *Middle Eastern Studies* 50, 521–535.
- De Juan, A. 2015. “Long-term Environmental Change and Geographical Patterns of Violence in Darfur, 2003–2005,” *Political Geography* 45, 22–33.
- de Wit, S. 2014. “Denaturalizing Adaptation, Resocializing the Climate: Theoretical and Methodological Reflections on How to Follow a Travelling Idea of Climate Change,” In F. Gesing, J. Herbeck, & S. Klepp (Eds.), *Denaturalizing Climate Change: Migration, Mobilities and Spaces*. Artec Paper No. 200. Bremen: University of Bremen, 56–65.
- Devine-Wright, P. 2009. “Rethinking NIMBYism: The Role of Place Attachment and Place Identity in Explaining Place-protective Action,” *Journal of Community & Applied Social Psychology* 19(1), 426 – 441.
- Eckberg, Douglas L. & Jean Blocker, T. 1989. “Variations of Religious Involvements and Environmental Concerns: Testing the Lynn White Thesis,” *Journal for the Scientific Study of Religion* 28(4), 509–517.
- Ember, C. C., Adem, T. A., Skoggard, I., & Jones, E. C. 2012. “Livestock Raiding and Rainfall Variability in Northern Kenya,” *Civil Wars* 14, 159–181.
- Ember, C. R., Skoggard, I., Adem, T. A., & Faas, A. J. 2014. “Rain and Raids Revisited: Disaggregating Ethnic Group Livestock Raiding in the Ethiopian-Kenyan Border Region,” *Civil Wars* 16(3), 300–27.
- Fjelde, H. 2015. “Farming or Fighting? Agricultural Price Shocks and Civil War in Africa,” *World Development* 67, 525–534.
- Fröhlich, Christiane. 2012. “Reason for Conflict or Catalyst for Peace? The Case of the Middle East,” *L’Europe en Formation* 365, 3.
- Goldsmith, Edward, & Hildyard, Nicholas. 1984. *The Social and Environmental Effects of Large Dams*. San Francisco: Sierra Club Books.
- Greeley, A. 1993. “Religion and Attitudes toward the Environment,” *Journal for the Scientific Study of Religion*, 32(1), 19–28. <https://doi.org/10.2307/1386911>
- Grimm, Nancy B., Grove, J. Morgan, Pickett, Steward T. A., & Redman, Charles L. 2000. “Integrated Approaches to Long-term Studies of Urban Ecological Systems,” *BioScience* 50(7), 571–584.
- Haluza-Delay, R. 2018. “Giving Consent in the Petrostate: Hegemony and Alberta oil Sands,” *Journal for Activist Science and Technology Education* 4(1, 1-6). Retrieved from <https://jps.library.utoronto.ca/index.php/jaste/article/view/21209>
- Hassner, Ron E. 2009. *War on Sacred Grounds*. Ithaca: Cornell University Press.
- Hulme, Mike. 2018. “Climate Change and the Significance of Religion,” *Economic and Political Weekly* 52(28),14–17.
- Ide, T. 2015. “Why Do Conflicts Over Scarce Renewable Resources Turn Violent? A Qualitative Comparative Analysis,” *Global Environmental Change* 33, 61–70.
- Ide, T. 2017. “Research Methods for Exploring the Links between Climate Change and Conflict,” *Wiley Interdisciplinary Reviews: Climate Change* 8, 1–14.

- Ide, Tobias & Scheffran, Jürgen. 2014. "On Climate, Conflict and Cumulation: Suggestions for Integrative Cumulation of Knowledge in the Research on Climate Change and Violent Conflict," *Global Change, Peace & Security* 26(3), 263–279.
- Jenkins, W., Berry, E., & Kreider, L. B. 2018. "Religion and Climate Change," *Annual Review of Environment and Resources* 43, 85–108.
- Juergensmeyer, Mark. 2000. *Terror in the Mind of God: The Global Rise of Religious Violence*. Berkeley and Los Angeles: University of California Press.
- Kerr-Wilson, A. 2017. Towards Reconciliation and Climate Justice. <https://cpj.ca/towards-reconciliation-and-climate-justice>
- Kimmerer, Robin Wall. 2013. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Minneapolis, MN: Milkweed Editions.
- Koubi, V., Bernauer, T., Kalbhenn, A., & Spilker, G. 2012. "Climate Variability, Economic Growth, and Conflict," *Journal of Peace Research* 49, 113–27.
- Levy, B. S., Sidel, V. W., & Patz, J. A. 2017. "Climate Change and Collective Violence," *Annual Review of Public Health* 38, 241–257. <https://doi.org/10.1146/annurev-publhealth-031816-044232>
- Lutz, Ellen. 2005. Indigenous Peoples and Water Rights. Retrieved from <https://www.culturalsurvival.org/publications/cultural-survival-quarterly/indigenous-peoples-and-water-rights>
- Manandhar, S., Schmidt-Vogt, D., Pandey, V. P., & Kazama, F. 2013. "Religion, Indigenous Knowledge and Climate Change in a Mountain Region: A Case Study of Thini Village, Mustang, Nepal," In R. G. Veldman, A. Szasz, & R. HaluzalDeLay (Eds.), *How the World's Religions Are Responding to Climate Change: Social Scientific Investigations*. New York: Routledge.
- Mapara, Jacob. 2016. "The Environment as Significant Other: The Green Nature of Shona Indigenous Religion," In F. Fiona Moolla (Eds.), *Natures of Africa: Ecocriticism and Animal Studies in Contemporary Cultural Forms*. Witswatersrand: Wits University Press.
- Mauro, Francesco & Hardison, Preston D.. 2000. "Traditional Knowledge of Indigenous and Local Communities: International Debate and Policy Initiatives," *Ecological Applications* 10(5), 1263–1269.
- Maystadt, Jean-François & Ecker, Olivier. 2014. "Extreme Weather and Civil War: Does Drought Fuel Conflict in Somalia through Livestock Price Shocks?" *American Journal of Agricultural Economics* 96(4), 1157–1182.
- Maystadt, Jean-François, Calderone, Margherita, & You, Liangzhi. 2015. "Local Warming and Violent Conflict in North and South Sudan," *Journal of Economic Geography* 15 (3), 649–71.
- McDonnell, J. 2014. "Challenging the Euro-Western Epistemological Dominance of Development through African Cosmovision," In George J. Sefa Dei and Paul Banahene Adjei (Eds.), *Emerging Perspectives on 'African Development'*. New York: Peter Lang, 98–116.
- Medin, D. L., & Atran, S. 2004. "The Native Mind: Biological Categorization and Reasoning in Development and Across Cultures," *Psychological Review* 111(4), 960–983. <https://doi.org/10.1037/0033-295X.111.4.960>
- Meierding, E. 2013. "Climate Change and Conflict: Avoiding Small Talk about the Weather," *International Studies Review* 15(2), 185–203. Retrieved December 28, 2020, from <http://www.jstor.org/stable/24032947>
- Nelson, R. 2011. "Rethinking Church and State: The Case of Environmental Religion," *Pace Environmental Law Review* 29(1) 121–127.

- Nordqvist, P., & Krampe, F. 2018. "Climate Change and Violent Conflict: Sparse Evidence from South Asia and South East Asia," *SIPRI Insights Peace Secur.*, 4, 1–9.
- O'Brien, K. 2017. "Climate Change Adaptation and Social Transformation," In Douglas Richardson (Ed.), *The International Encyclopedia of Geography*. Chichester/Hoboken: Wiley, 1–8.
- O'Loughlin, John, Witmer, Frank D. W., Linke, Andrew M., Laing, Arlene, Gettelman, Andrew, & Dudhia, Jimmy. 2012. "Climate Variability and Conflict Risk in East Africa, 1990–2009," *Proceedings of the National Academy of Sciences* 109(45), 18344–18349.
- O'Sullivan. 2017. Capturing Climate and Security Risks Through Satellites and Earth Observing Technologies. Retrieved from https://climateandsecurity.files.wordpress.com/2017/06/16_satellite-earth-observing.pdf
- Ostrom, Elinor, 2007. "A Diagnostic Approach for Going beyond Panaceas," *Proceedings of the National Academy of Sciences* 104, 15181–87.
- Pandya, R. E. 2014. "Community-Driven Research in the Anthropocene," In D. Dalbotten, G. Roehrig, & P. Hamilton (Eds.), *Future Earth—Advancing Civic Understanding of the Anthropocene* (pp. 53–66). New York: John Wiley & Sons.
- Pape, R. A. 2005. *Dying to Win: The Strategic Logic of Suicide Terrorism*. New York: Crown Publishing Group/Random House.
- Pierotti, R. & Wildcat, D. 2000. "Traditional Ecological Knowledge: The Third Alternative (Commentary)," *Ecological Applications* 10(5), 1333–1340.
- Raleigh, Clionadh & Kniveton, Dominic. 2012. "Come Rain or Shine: An Analysis of Conflict and Climate Variability in East Africa," *Journal of Peace Research* 49(1), 51–64.
- Reuveny, Rafael. 2007. "Climate Change-Induced Migration and Violent Conflict," *Political Geography* 26(6), 656–73.
- Rosenau, J. 2015. Evolution, the Environment, and Religion. Retrieved from <http://ncse.com/blog/2015/05/evolution-environment-religion-0016359> (accessed December 2020).
- Sachdeva, S. 2016. "Religious Identity, Beliefs, and Views About Climate Change," *Oxford Research Encyclopedia of Climate Science* (1), <https://doi.org/10.1093/acrefore/9780190228620.013.335>
- Salehyan, I. 2014. "Climate Change and Conflict: Making Sense of Disparate Findings," *Political Geography* 43, 1–5.
- Scheffran, J., Brzoska, M., Kominek, J., Link, P. M., & Schilling, J. 2012. "Climate Change and Violent Conflict," *Science* 336, 869–871.
- Schilling, Janpeter, Akuno, Moses, Scheffran, Jürgen, & Weinzierl, Thomas 2012a. On Raids and Relations: Climate Change, Pastoral Conflict and Adaptation in Northwestern Kenya (under review). *Climate Change and Conflict: Where to for Conflict Sensitive Climate Adaptation in Africa?* S. Bronkhorst and U. Bob. Durban: Human Sciences Research Council.
- Seter, H. 2016. "Connecting Climate Variability and Conflict: Implications for Empirical Testing," *Political Geography* 53, 1–9.
- Shaiko, R. G. 1987. "Religion, Politics, and Environmental Concern: A Powerful Mix of Passions," *Social Science Quarterly* 68(2), 244–262.
- Smith, Linda Tuhiwai. 1999. *Decolonizing Methodologies: Research and Indigenous Peoples*. London. New York: Dunedin.
- Spilka, B., Shaver, P., & Kirkpatrick, L. A. 1985. "A General Attribution Theory for the Psychology of Religion," *Journal for the Scientific Study of Religion* 24(1), 1–20.
- Steinberg, Ted. 2006. *Acts of God: The Unnatural History of Natural Disaster in America*. New York: Oxford University Press.

- Taringa, N. 2006. "How Environmental is African Traditional Religion?" *Exchange* 35(2), 191–214.
- Tarusarira, J. 2017. "African Religion, Climate Change and Knowledge Systems," *The Eamnenical Review* 69(3), 398–410. <https://doi.org/10.1111/erev.12302>
- Taylor, B., Van Wieren, G., & Zaleha, B. 2016. "The greening of religion hypothesis (part two): Assessing the data from Lynn White, Jr, to Pope Francis," *Journal for the Study of Religion, Nature and Culture* 10, 306–78.
- Tress, G. B., Tress, H., Décamps, A., & d' Hauteserre. 2001. "Bridging human and natural sciences in landscape research," *Landscape Urban Plan* 57, 137–141. [https://doi.org/10.1016/S0169-2046\(01\)00199-2](https://doi.org/10.1016/S0169-2046(01)00199-2)
- Ulloa, Astrid. 2011. "The Politics of Autonomy of Indigenous Peoples of the Sierra Nevada de Santa Marta, Colombia: A Process of Relational Indigenous Autonomy," *Latin American and Caribbean Ethnic Studies* 6(1), 79–107.
- van Baalen, S., & Mobjörk, M. A. 2016. *Coming Anarchy? Pathways from Climate Change to Violent Conflict in East Africa*. Stockholm: SIPRI.
- Van Koppen, K. C. S. A. 2000. "Resource, Arcadia, Lifeworld. Nature Concepts in Environmental Sociology," *Ruralis* 40(3), 300–318.
- Wabule, A., & Tarusarira, J. 2019. "When Soldiers' Survival Became Spiritual: Ugandan Soldiers in the Democratic Republic of Congo and South Sudan War," *Journal of War and Cultural Studies* 12(4), 347–362. <https://doi.org/10.1080/17526272.2019.1649904>
- Watson, E. E. and Kochore, H. H. 2012. "Religion and Climate Change in Northern Kenya: New Moral Frameworks for New Environmental Challenges?" *Journal for the Study of Religion, Nature and Culture* 6(3): 319–343.
- Watson, E. 2009. *Living Terraces in Ethiopia: Konso Landscape, Culture and Development*. Oxford: James Currey.
- Watson, E. 2010. "A 'Hardening of Lines': Landscape, Religion and Identity in Northern Kenya," *Journal of East African Studies* 4(2), 201–20.
- Werrell, C. E., & Femia, F. 2017. Climate Change Raises Conflict Concerns. Retrieved from <https://en.unesco.org/courier/2018-2/climate-change-raises-conflict-concerns>
- White, L.T. Jr., 1967. "The Historical Roots of Our Ecologic Crisis," *Science* 155, 1203–1207.
- Whyte, Kyle Powys, Brewer, Joseph P., & Johnson, Jay T. 2015. "Weaving Indigenous Science, Protocols and Sustainability Science," *Sustainability Science*. Online: <http://link.springer.com/article/10.1007/s11625-015-0296-6>.
- Wischnath, Gerdis, & Buhaug, Halvard. 2014. "On Climate Variability and Civil War in Asia," *Climatic Change* 122(4), 709–721.
- Young, Oran R. 2011. "The Future of the Arctic: Cauldron of Conflict or Zone of Peace?" *International Affairs* 87(1), 185–193, <https://doi.org/10.1111/j.1468-2346.2011.00967.x>