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# **Developments in Religion and Ecology**

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## **Abstract**

Given the still very open context of studies in religion and the environment this chapter focuses on selected novel developments. Religion is understood as offering substantial cultural skills, and besides its meaning making, ritualizing, mapping and tracing, I emphasize the skill of religion to "make-oneself-at-home." Climate change, technology, and space/place represent three specifically challenging discourses to which scholars have creatively contributed. The chapter further discusses the emergence of the so-called environmental humanities and underlines the creativity and diversity of methodological experiments in the study of religion and ecology.

# From nature, life and land to the environment

The research field of "religion and ecology," even termed as "religion and the environment" or "religion, nature and culture," behaves, due to its short but dynamic history, like a child still finding its feet. It can take the hands of its parents, theology and religious studies, and find support among older siblings such as philosophy, history, anthropology, biology and others. Asymmetries, unbalances and tumblings are natural, as are the joys of moving, seeing with different eyes and harvesting first fruits. Nevertheless, spreading one's wings requires balance: between employing established theories and methods and forging new unproven ones in other lands. Given this open and fresh context, this chapter will not map the whole but focus on some selected creative developments in what emerges as a new and flourishing research landscape.

As the notion of "nature" is essential for the self-understanding of the whole Western civilization, also religions have in their long history contributed to the development of the concept of nature. "Nature" in the three Abrahamic religions is interpreted as

"creation" which exists out of its relation to God. "Nature" is less central in African and Asian cultures, where "Life" and "Earth" play more important roles. "Land" is the analogous category in indigenous traditions and other spiritualities that grow out of and within relations to specific bioregional spaces.

Beliefs in Creation, Life and Land are changing as "nature" turns into "the environment"---that is, as nature is affected radically by human social and technical activities. The distribution of Ernst Haeckel's concept of ecology, the emergence of environmental science, and the worldviews and values of environmentalism within social movements catalyze this process even more. Religions have faced and responded in many ways to what we can call the environmental challenge. The emergence and rapid dynamic development of our field mirrors this change in the interconnected concepts of life/nature/land and the Sacred. Therefore one can ask if the change from nature to environment offers such a deep and common challenge to all world inhabitants and believers of all kinds that we at present are moving over a threshold towards a common planetary, global, though still locally differentiated, world religion, where the differences between life, nature and land-based belief systems merge into one common colorful earth religion. In my view it is still too early to formulate such a statement but the idea of a terrapolitan belief system might nevertheless serve as a useful working hypothesis. At the same time religion might be analyzed as a human construct that functions not only constructively but also destructively. This deep ambiguity impacts the more-than-human life worlds in our "Mit-Welt" (co-world). Both sides---the pathology of religion, which attracts many younger scholars today, as well as its liberative force---must be indissolubly connected to each other.

Religions offer substantial cultural skills. Beside the skills of meaning making, ritualizing, mapping and tracing, religion enables the human activity of "making-oneself-at-home" (German: *Beheimatung*). It locates believers in a world and at a place which is inhabited by the Divine (cf. Tuan 2009, 70). Humans do not land on Earth as travelling strangers; our history is fully entangled with the evolution of material, bodily life on Earth. Humans, including believers and scholars, are earthlings. Religious practices therefore certainly "reflect the natural environments and ways of life in which they emerged" (Buttimer 2006, 200). Natural environments embed, carry and nurture human life and thereby also faith. Faith, religion, belief, and spirituality appear in such a view as deeply natural forces. Even "thinking is a process of nature" (Picht 1989, 12). Analyses of religion, therefore, must respect not only the subjective, sociocultural and historical dimensions of religious traditions, but also the ecological functions of faith.

What follows is a preliminary (and admittedly eclectic) discussion of how three phenomena are driving novel developments in the field: climate change, technology, and space/place. All have in common the capacity to crisscross established and formatted academic discourses. Expressions of faith appear in new territories and symbolic systems, and the strong transgressing capacity of religion becomes manifest.

## Climate change

Global climate change represents one of the most demanding challenges facing humanity in the twenty-first century and it has provoked different responses. Climatology represents one of the most successful transdisciplinary developments of recent decades. Nevertheless, current discussions about mitigation and adaptation to climate change are dominated by propositions for technological and economic solutions. However ecologically informed, they are largely shaped by the limits of mechanistic and economy-oriented worldviews. Instead, we need a deeper understanding of the cultural dimensions of anthropogenic environmental change (Hulme et al. 2009) – to which the study of religion and ecology makes substantial contributions.

Several Christian theologians have in the last years offered exciting reflections about how climate change affects faith, ethics and the image of God (Northcott 2007, Conradie 2008, McFague 2008, Bloomquist 2009, Primavesi 2009, McFague 2008, Northcott and Scott 2014). In particular, Michael Northcott's plea for a new political theology in this context should be taken seriously (Northcott 2013). Hydroclimatologist Dieter Gerten and I have initiated a process of researching religion *in* climate change (Bergmann and Gerten 2010, Gerten and Bergmann 2011), and recently Robin Globus Veldman et al. have published a collection of interdisciplinary essays on religious responses to climate change (2014). An increasing number of studies in social anthropology also offer needed insights into the human, spiritual and cultural dimensions of anthropogenic climate change (see Crate and Nuttall 2009).

Globus Veldman et al. consider four factors that "help religions in general engage with climate change" (Globus Veldman et al 2014, 309-313). First, religions are exerting an influence on believers' worldviews which can be in harmony and even in conflict with other cultural and political influences. The influence by worldviews remains ambivalent as it either can strongly motivate climate activism or encourage quietism and denial of on-going change. Second, the social scientists emphasize that many people are reached and affected by the *moral authority* wielded by religions. Religious arguments for climate justice are clearly growing and also interfaith collaborations are fertilized by the global change challenge. Arguably, in the North, the strong exchange of religious and secular environmental social movements raises the question to what degree new global ecological morality is emerging within a global citizenship. Third, religions' institutional and economic resources are important. Education, access to transnational networks, leadership and also ownership of land and capital represent important resources that should not be underestimated as roughly 90% of the world population identifies as belonging to religious traditions and as more or less capital and land is owned and administrated by religious institutions. Furthermore, religions provide social connectivity and collective action. Common faith can be an important form of social cohesion, and the overlappings of religious communities and the civil society are many. Religion, for me, works as sociocultural driving force that enhance and deepen communicative and communitarian skills and processes. Sometimes religions can mobilize transformative countervailing power with regard to existing power constellations. While social science and also economy tends to reduce and fragmentize the human and spiritual dimension, the scholar of religion and the environment needs to constantly struggle for to keep the perspective open.

I would highlight four further dimensions, drawing attention not only to how climate change impacts religion, but also to the ways religion can make a difference in the Anthropocene (Bergmann 2009b). For one, religions' responses to the production of suffering and violence offer passiological skills highly relevant in times where anthropogenic impacts on global and local life worlds produce radically new modes of suffering while reinforcing conventional ones. For example, the historical event of God's own crucifixion in Christianity turns now into a metaphor of global and local crucifixion in the Anthropocene. Who are the victims? Who carries the Cross? What in fact is the Cross? And where does the anthropogenic *Via Dolorosa* lead? Religions also provide a diversity of non-verbal cultural skills such as built environments, rituals, topographies, memorials, images, music and drama, as well as gardening, weather belief, arts of cooking and social care. This "aesth/ethical" dimension allows a synergy of empathic forces where our bodily lives are connected to a new constructive imagination of our place and role in the world. Furthermore, the culture of money, as Georg Simmel has called it, represents a crucial force and driver of climatic change. In many ways, the invented abstraction of money underpins the colonization of life worlds in all scales of life in the Anthropocene. Religions have in their long history of human culture continuously developed antidotes to the misuse of money. Finally, a general insight in the context of the Anthropocene is that religions need to accelerate their spatial turn (Bergmann 2007) Not only "our common future" as the Brundtland process has demanded but also "Earth, our common home" has become a central theme for the religious construction of meaning about the world amidst dangerous climatic-and-environmental change. For me, one of the central analytic questions herein is how religions provide support for making oneself at home in such a world (Bergmann 2014).

#### **Technofutures**

Although the highly advanced technical skills of human beings impact how we interact with the environment, the field of technology has all too long been left only to engineers and specialists. Fortunately that is changing, and today scholars in many disciplines ask questions about the ethics of technology and its cultural, social, political, economic and also ecological significance. Nevertheless, the entanglement between religion, nature and technology appears still to be a lacuna where we might expect a more intense research activity in the near future.

Certainly theologians have dealt with bioethical issues associated with technology, often dealing with general questions related to health or medicine, or specific biotechnological sciences such as genetics. Some have endorsed rather than criticized modern technology while a majority critically examines the subpolitical sphere of technological development. When the absence of thinking about technology's sociocultural and ecological implications is characteristic for the initial phase of technological development, ethical problems that arise in its application can only be discussed in a very limited way afterwards. Democratic principles of participatory decision-making are regularly set-aside in the sphere of engineering.

An interesting exception is taking place at present in the field of climate change where geoengineering has been forwarded as a central solution. Leading scholars, have already in the initial phase asked critical questions about their own activity and coined the notion of the Anthropocene (Steffen et al. 2007) in order to establish an open public discourse about how humans could and should impact all spheres of the world. Interestingly enough, they also encourage faith communities to be involved as central interlocutors as the challenge of global engineering the climate and more raises unprecedented questions about the scale of humanity's technically aided impact on the planet (Lawrence 2015).

Other scholars have approached the challenge by understanding our late modern state of being as postnatural--that is, a state where prior ancient assumptions about the natural world are no longer secure. At the same time, the postnatural does not negate our dependence on the natural world. Still others have shown how an understanding of the Sacred is always at work implicitly in concepts and practices of technology, and that we might need to talk about "the global Sacred" (Szerszynski 2005, 159ff).

The fourth international conference of the European Forum for the Study of Religion and the Environment addressed the interconnection of religion, nature and technology, and led to a book on *Technofutures* (Deane-Drummond, Bergmann and Szerszynski 2015) that investigates the implicit religious driving forces of technological practices by paying attention to the relationships between religious traditions, the diversity of the natural world and the meanings of technology. Regarded from a religious perspective, technology often includes strong claims about salvation, sometimes even identifying itself as a tool of salvation for humanity. Western cultural history and Augustine's doctrine of original sin stressed the fallen nature of humanity. Human beings were supposed to restore their godlike state of being on Earth by using their creative practical skills. Monasteries in the West became the strongest drivers of early modern technology development. Today, it is hard to agree with such an optimistic view of technology, even if climate engineering sometimes is marketed with salvational enthusiasm.

The false notion that technology is value-neutral is often used to obscure the deeply problematical implications of so-called technical "innovation," and to safely quarter engineers and economic interests within a supposedly subpolitical sphere. Instead, many technical artifacts are a physical outcome of complex social processes involving the production and sharing of power among humans as well as between human and non-human life forms. The invention and production of technical artifacts takes place in the triangle of natural/environmental, sociocultural and human-subjective dimensions, where each impacts the others.

In the religious view, machines and high-tech systems represent animated artifacts for human survival. Dead things are made alive. Machines can impact other life forms. The discourse about animism and neo-animism, where all beings, things and places are regarded as inspirited entities, is therefore significant for the discourse about technology and the environment. Furthermore the notion of fetishization allows a fresh and exciting new understanding of technology. Technical artifacts and also the abstract construction of money value offer examples of how a fetish is, in a deeply spiritual process, loaded with meaning and power to affect other beings. For Karl Marx, fetishism was "the religion of sensuous appetites," (Marx and Engels 1982, 22) and the Marxist analysis of technology as driver of alienation and commodification offers insights not only on the spiritual, social and ecological power executed by the machines but it also explains how religious belief systems are affected and threatened

by the colonization of life worlds through intricate technical systems. Expanding the concept of fetishism, one can identify processes of technocratization in many spheres of social life, where everything is pretended to be doable.

Faith communities face challenges in such a context because religions perceive and receive life—including human capacities for technology--as a gift. The doability of everything and the "technological imperative" where one has to do whatever one is able to do seems to be radically opposed to the foundational attitude towards life in religion. The commodification of life through fetishized artifacts and money appears contradictory to the belief in life as a gift. There are many religious traditions that allow an alternative understanding of life and also environmental engineering. Christian believers might remind themselves about the life-giving Holy Spirit who penetrates all life forms from within. Indigenous people might regard the land itself as the power of life, from where also the power of artifacts springs so that the human use of artifacts must take place in harmony with, and not against, the spirits of the land. New green spiritualities might depart from a general understanding of all life forms and places as inspirited and instead ask for alternative ecological practices characterized by respect and dignity. Undoubtedly the practices of engineering and the intrinsic power of technical artifacts represent one of the central conditions for modern life and also one of the most central threats to its sustainability. One might wonder if the future will offer a dramatic change of our understanding and practice with regard to technology development and what role religious believers might play in this.

# The spatiality of faith

One of the driving forces behind civilization is, as geographer Edward Soja has shown, the development of city space—as process that began more than 10,000 years ago (Soja 2000, 35). The accelerating process of urbanization is now turning the whole planet into one single "postmetropolis." A majority of the world population now lives in urban areas. This affects the reshaping of landscapes and regions all over and it deeply affects the development of religious processes.

Following philosopher Henri Lefebvre, Soja has made a theoretically useful distinction between three types of space: physical, imagined and lived space (Soja 1996). The concept of "lived religion," as it has been developed for the phenomenological study of religious practices in place and space, cooperates well with this concept and it offers an exciting tool to analyze the spatiality of faith (Bergmann 2008). How is religion at work within built environments, and how are natural and built environments impacting belief systems?

A general insight in the context of the Anthropocene which we have become aware of through the accelerating dynamics of dangerous anthropogenic change of climatic, water and land systems is that faith communities need to accelerate their *spatial turn*. While Christian theologians have reflected on God in the twentieth century mainly in terms of time and history – which is easy to understand in the context of the breakdown of Eurocentrism, Christian universal power and two world wars – the environmental challenge clearly turns our focus to the spatiality of Creation.

The all-embracing space for human life represents for all religions one common gift of life. It reveals its glory in the complexity, diversity and interconnectedness of life systems in one single planetary space for all (Primavesi 2009). "Earth is our home," the Earth Charter succinctly states (Earth Charter Commission 2000). The statement sounds simple but it summarizes a deep wisdom that has been guarded by religions for many ages. "The Earth is the Lord's," it sounds in the Hebrew Bible (Exodus 9:29, Psalm 24:1), and Paul is very clear in his letter to the Romans that the earth and humans as God's icons are interconnected in a communion of suffering and "hope for liberation" (Rom. 8.21).

Scholars of religion and theology have developed multiple approaches to connect the discourse about space and place and the discourse about religion in general and religion and the environment in particular. For Kim Knott, the notion of locality offers an important tool (Knott 2005), while others prefer to begin with the understanding of place (Inge 2003). Some have started to depict "geographies of religion" (Ivakhiv 2006, Kong 2010), while others prefer to talk about "sacred lands" (Park 1994). Furthermore themes of mobility have become interesting, where for example pilgrimage and tourism offers creative spatial expressions of faith (Bergmann and Sager 2008, Stausberg 2011).

In Christian theology a "spatial turn" has been initiated in the last few years, and it will undoubtedly accelerate due to the demanding experiences of change in a common planetary space. The challenge to renew faith traditions hereby is to explore and interpret how the life-giving and all-embracing space of the Creator is a gift to his/her creatures. At the same time, believers inhabit a global space where risks and damages are socioeconomically distributed in a violent and unjust way. Will God's good all-embracing space turn into a catastrophic space where some are victimized for the survival of others? How does God's love to the poor relate to situations where the most vulnerable become the most victimized? What does climate justice imply and how can it turn into a global and local spatial justice?

My own work has employed the notion of "Raum" (space/place) (Bergmann 2014). Here religion is understood as a skill of *Beheimatung* (making-oneself-at-home). Beliefs help people to root and inhabit as well as to move, transform and creatively adapt to a world "in turmoil," to use Rilke's striking expression. Religion not only interacts with spatial processes but serves as *Raum* itself.

It should be self-evident that a spatial and platial understanding of religion is significant for the study of religion and the environment. Terms such as nature, ecology and the environment offer spatial root metaphors for interpreting human life, and one can only wonder why we have so often marginalized the spatiality of our existence in favor of our temporality.

Heimat (home) offers another central metaphor for this spatial turn (cf. Scott and Rodwell 2015). While the skill of inhabitation, to make-oneself-at-home, is common for all organisms that have to interact with their specific surroundings in order to survive, it also serves as a metaphor to describe the Sacred within the world. In Christianity, God's acting in and for the world is depicted as the Holy Spirit's indwelling, and animism works with a view of life where all beings carry the spiritual source of their existence both within and around themselves. Furthermore,

contemporary human migrations and other forms of uprootedness driven by the technology and economics of globalization seem to catalyze an increasing sense of homelessness which challenges religious modes of making-oneself-at-home. This geopolitical situation produces an increasing existential homelessness among the rich and a violent dislocation among the poor with a growing number of people and peoples who cannot stay in their traditional environments due to dramatic environmental change. Migration flows are connected to regional patterns of global warming, and increasing global economic injustice draws new maps of so called developed and developing countries, where the latter could often be described as dedeveloping. Will we ever come home? How is religious faith affected by this changing world religion map? And what change might religion itself bring for a new "topophilia" (Tuan 1990)? Can it foster love toward the earth?

To Live and believe in the times of the Anthropocene is to be continuously aware of being a receiving as well as an acting part of nature, or what Alexander von Humboldt had entitled as *Naturgemälde* (the painting of the world) (Humboldt 1845). Human beings are both painted by the world and painters of the world. Rituals and prayers, artworks and technologies, doctrines and values as well as cosmologies and images of faith and earth are simply human brushstrokes in an ever-evolving process of iconography (cf Bergmann 2009a). The role of religions remains crucial in the Anthropocene, everywhere on Earth, our common home, and in our common future.

#### **Environmental humanities**

While the field of religion and ecology has gradually developed since the 1970s, other disciplines in different faculties have responded to the environmental challenge and reoriented their activities. One of the most significant developments has been the emergence of what is called *environmental science*, which was catalyzed by several different developments such as the "discovery" of the significance of human impacts on nature, the investigation of soil in agriculture, the 1969 Santa Barbara oil spill, and much more. Compared to natural science, environmental science embraces a radically different normative understanding of its own identity. Whereas natural science was born in the medieval context of scholastic theology as an applied investigation of God within nature and its eternal laws, environmental science emerged as an exploration of the man-made impacts on nature. Scientist Rachel Carson's famous scenario of a "Silent Spring" (1962) without birds singing was built on the discovery of dangerous chemicals poisoning nature. While natural science investigates nature for the sake of man and his reign over nature, environmental science operates with a normative understanding where life and nature have an intrinsic value that must be included in society's usage of nature.

Ernst Haeckel's invention of the term *ecology*--that is, the interaction of organisms and their surroundings--did not mean much to his contemporaries, but eventually led not only to new disciplines in biology but also affected other disciplines, such as ecophilosophy, eco-theology and eco-architecture. Although the term *human ecology* especially in Germany and Scandinavia, catalyzed developments toward new interand transdisciplinary fields of study, only small investments were made within the humanities.

More recently, however, diverse scholars in the humanities have become increasingly active. <sup>5</sup> In particular, the fields of environmental history, environmental ethics, ecocriticism in literature studies, environmental anthropology, ecotheology and the study of religion and ecology have produced vibrant and significant contributions to the environmental agenda. The sociology of environmentalism, ecological economics and industrial ecology should also be mentioned in this regard.

Strong international structures were built and have led to several international societies and networks as well as to new research institutions. While scientists have impacted national governments and business corporations where ministries of the environment and agencies for natural protection were set up and where green values became a market-changing necessity for the production and commercializing of industrial products, the humanities affected mostly through the public discourse in the media and the social movements, where in the context of this book especially the greening of the traditional faith communities and the emergence of what is called ecospiritually in different spheres is obvious. Environmental science and environmentalist social movements could in this way build a strong power constellation driven by a criticism of modernization and an alternative vision of humanity's place on Earth.

The environmental humanities allow reflections about human beings to contribute to a more satisfying integral theory about the environment. Although the theoretical and methodological limitedness in (environmental) science still hinders more integrated cooperation, one can almost intuit the beginning of a new alternative mode of scholarly exploration of the world. Climatologists, for example, have had to confront the limits of their own empirical and computer based simulations as they discover that human beings and groups are not as easy to predict and include in simulations as they had thought. Asking how much suffering a human can take and how he or she might respond leads climatologists directly to the environmental humanities and also to the study of religion, as faith communities specialize in dealing with suffering and uncertainty. Green architecture represents among others an exciting experiment, where insights from urban studies, ecology, ethics and aesthetics are entangled.

Here I can only express my hope that the term "environmental humanities" might help to move committed scholars closer to each other and to nurture the flourishing of really transdisciplinary projects. One should of course not keep secret that the term also has awakened sometimes highly controversial debates about its content where new territories for power execution are negotiated in a somehow not just peaceful way. Nevertheless and increasing number of universities and countries have quickly been able to perceive and support the potentials of a well-organized field of environmental humanities and one can only hope that we are moving closer to a symmetry of all faculties and that environmental science finally can become a sphere for all scholars who decide to put the common good of life in the forefront.

# The diversity of methods

The theme of nature allows a broad range of approaches for scholars of religion and theologians, making it necessary to decide about one's preferences. In general one can begin with a hypothesis that images of nature and images of God/the spirits/the

Sacred are deeply interconnected, so that any change to one has an impact on the other. Images and practices are also entangled, so that the scholar can approach these interconnections by analyzing practices as well as ideas. Also, third-space-studies of religion and the environment are possible as we saw and can add original insights.

While scholars in ecotheology have cultivated the field with methods from historic-systematic (contextual) theology, biblical studies, ethics and practical theology, perspectives from church history are unfortunately still lacking (although the field of environmental history would offer excellent potential for cooperation). Scholars in religious studies often apply methods from cultural studies and cooperate closely with environmental anthropologists who usually operate with more or less diffuse concepts of religion. In particular, Roy R. Rappaport's influential work has inspired many scholars both in human ecology and religious studies.

Ethical perspectives can of course be made relevant in many thematic fields, such as climate justice, landscape preservation, species extinction and much more. Here mostly theologians and philosophers have been at the forefront while many younger scholars in religious studies prefer to explore the pathology of religion rather than its emancipatory power. Phenomena such as environmentalism and ecospirituality at work in other spheres than explicit religion have although been investigated intensely among scholars in religious studies while theologians have focused on the ideational dimension of the environmental discourse.

Many creative new interdisciplinary adventures have taken place in the fields of climate science, where a diversity of possible approaches have been offered, although we have not yet seen a comparative world wide research agenda on religion in climatic change where all religious traditions and faith communities are compared in a balanced way. Nevertheless the conditions for such a project are growing all the time. Other promising transdisciplinary projects have mined deeper into the aesthetic dimension, where, for example, environmental arts, the values and visions of architecture, and the art history of climate have been explored together with scholars in our field. Ritual studies offer furthermore a unique toolbox of methods that have been of creative significance for scholars who seek to combine the practical and ideational analysis of religion.

Biology has so far mainly transferred its insights about threatened species and ecosystems into politics for preservation. The transfer from science to politics, however, has not satisfyingly included local cultures and inhabitants. Yet environmentally committed biologists have also established cooperations with scholars in the environmental humanities in order to find new forms of environmental care for landscapes. In this context scholars established in 2011 in Zürich the Sacred Natural Site network, where a manifold of different habitats that are administered by religious communities as sacred sites or landscapes are monitored in a highly ambitious way. Might knowledge about how religion is at work with regard to a habitat help us to construct new modes of social support and new modes of care for specific environments?

This incomplete methodological survey intends only to underline the exciting creativity and diversity of methodological experiments in the field. Can we regard this

in itself as an expression of evolutionary power, not only in nature but also in academic culture?

## References

Bergmann S. (2007) "Theology in its spatial turn: Space, place and built environments challenging and changing the images of God *Religion Compass* 1:3, 353–379.

Bergmann S. (2008) "Lived religion in lived space" in Streib H. Dinter A. and Söderblom K. eds., *Lived religion: Conceptual, empirical and theological approaches; Essays in honor of Hans-Günter Heimbrock* Brill, Leiden and Boston 197-209.

Bergmann S. (2009a) In the beginning is the icon: A liberative theology of images, visual arts, and culture Equinox/Routledge, London.

Bergmann S. (2009b) Climate change changes religion: Space, spirit, ritual, technology – through a theological lens *Studia Theologica - Nordic Journal of Theology* 63:2, 98-118.

Bergmann S. (2014) Religion, space and the environment Transaction Publishers, New Brunswick and London.

Bergmann S. and Gerten D. eds. (2010) Religion and dangerous environmental change LIT, Berlin

Bergmann S. and Sager T. eds. (2008) *The ethics of mobilities: Rethinking place, exclusion, freedom and environment* Ashgate, Farnham.

Bloomquist K. ed. (2009) *God, creation and climate change* Lutheran World Federation, Geneva.

Brunn S. D. ed. (2014) *The changing world religion map: Sacred places, identities, practices and politics* Springer, New York.

Buttimer A. (2006) "Afterword: Reflections on geography, religion, and belief systems" *Annals of the Association of American Geographers* 96:1, 197-202.

Conradie E. (2008) The church and climate change Cluster Publications, Pietermaritzburg.

Crate S. A. and Nuttall M. eds. (2009) *Anthropology & climate change: From encounters to actions* Left Coast Press, Walnut Creek.

Deane-Drummond C., Bergmann S. and Szerszynski B. eds. (2015) *Technofutures, nature and the sacred: Transdisciplinary perspectives* Ashgate, Farnham.

Earth Charter Commission 2000 The Earth Charter (http://www.earthcharterinaction.org) Accessed 25 May 2015.

Geertz C. (1973) "Religion as a cultural system" in *The Interpretation of Cultures* Basic Books, New York 87-125.

Gerten D. and Bergmann S. eds. (2011) *Religion in global environmental and climate change: Suffering, values, lifestyles* Continuum, London and New York.

Globus Veldman R., Szasz A. and Haluza-DeLay R. eds. (2014) *How the world's religions are responding to climate change* Routledge, London and New York.

Hulme M. et al. (2009) Conference covered climate from all angles Science 324, 881-882.

Humboldt A. von (1845) Kosmos: Entwurf einer physischen Weltbeschreibung vol. 1,Cotta, Stuttgart and Tübingen.

Inge J. (2003) A Christian theology of place Aldershot, Ashgate.

Ingold T. (2000) *The perception of the environment: Essays on livelihood, dwelling and skill* Routledge, London.

Ivakhiv A. (2006) "Toward a Geography of 'Religion': Mapping the Distribution of an unstable signifier *Annals of the Association of American Geographers* 96:1, 169–175.

Knott K. (2005) The location of religion: A spatial analysis Equinox, London and Oakville.

Kong L. (2010) "Global shifts, theoretical shifts: Changing geographies of religion *Progress in Human Geography* 34:6, 755-776.

Lawrence M. (2015) Geoengineering: Hope or hubris?, Keynote at the fifth conference of the European Forum for the Study of Religion and the Environment on "Religion in the Anthropocene: Challenges, idolatries, transformations," Munich, 14-17 May 2015, Munich.

Marx K. and Engels F. (1982) On religion Scholars Press, Atlanta.

Mauelshagen F. (2015) The Anthropozoic era: history of an idea, Keynote at the fifth conference of the European Forum for the Study of Religion and the Environment on "Religion in the Anthropocene: Challenges, Idolatries, Transformations," Munich 14-17 May 2015.

McFague S. (2008) A new climate for theology: God, the world, and global warming Fortress, Minneapolis.

Northcott M. S. (2007) *A moral climate: The ethics of global warming* Darton, Longman & Todd, London.

Northcott M. S. (2013) A political theology of climate change Eerdmans, Grand Rapids.

Northcott M. S. and Scott P. eds. (2014) *Systematic theology and climate change: Ecumenical perspectives* Routledge, Abingdon and New York.

Park C. C. (1994) Sacred sorlds: Introduction to geography and religion Routledge, London.

Picht G. (1989) Der Begriff der Natur und seine Geschichte Klett Cotta, Stuttgart.

Primavesi A. (2009) Gaia and climate change Routledge, London.

Rose, D. B. and Robin L. (2004) "The ecological humanities in action" *Australian Humanities Review* 31-32 (http://www.australianhumanitiesreview.org/archive/Issue-April-2004/rose.html) Accessed 22 May 2015.

Sacred Natural Sites 2011 (http://sacrednaturalsites.org) Accessed 25 May 2015.

Scott P. M. and Rodwell J. eds. (2015) At home in the future: Place & belonging in a changing Europe LIT, Berlin.

Soja E. W. (1996) *Thirdspace: Journeys to Los Angeles and other real-and-imagined places* Blackwell, Malden and Oxford.

Soja E. W. (2000) Postmetropolis: Critical studies of cities and regions Blackwell, Oxford.

Stausberg M. (2011) Religion and tourism: Crossroads, destinations and encounters Routledge, London and New York.

Steffen W., Crutzen P. J. and McNeill J. R. (2007) "The Anthropocene: Are humans now overwhelming the great forces of nature?" *Ambio* 36:8 614-21.

Szerszynski B. (2005) Nature, technology and the sacred Blackwell, Oxford.

Tuan Y-F. (1990) *Topophilia: A study of environmental perception, attitudes, and values* Columbia University Press, New York.

Tuan Y-F. and Strawn M. A. (2009) *Religion: From place to placelessness* The Center for American Places at Columbia College Chicago, Chicago.

<sup>1</sup> For Tim Ingold skills are "not ... techniques of the body, but the capabilities of action and perception of the whole organic being (indissolubly mind and body) situated in a richly structured environment." (Ingold 2010, 5).

Deborah Bird Rose and Libby Robin published in 2004 their article "The Ecological Humanities in Humanities Action: An Invitation" the Australian in <a href="http://www.australianhumanitiesreview.org/archive/Issue-April-2004/rose.html">http://www.australianhumanitiesreview.org/archive/Issue-April-2004/rose.html</a> Accessed 22 May 2015. The journal Environmental Humanities published its first volume in 2012, and the journal Resilience: A Journal of the Environmental Humanities published its first volume in 2014. In the Nordic countries the Nordic Network for Interdisciplinary Environmental Studies (NIES) was founded 2007 cooperation of scholars in different disciplines, <a href="http://www.brill.com/products/series/studies-environmental-humanities">http://www.brill.com/products/series/studies-environmental-humanities</a> Accessed 22 May 2015. The Swedish government has recently in 2015 established a long term national center for the environmental humanities, and the Rachel Carson Center for Environment and Society in Munich (founded in 2009) offers one of the strongest milieus for research in the environmental humanities today <a href="http://www.carsoncenter.uni-muenchen.de">http://www.carsoncenter.uni-muenchen.de</a> Accessed 25 May 2015.