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Chapter 12 Ecological Hope



Michael S. Northcott

Abstract Horkeimer and Adorno, and later Lynn White Jr, blame the anti-animist strain in Western Christianity, its origination of the scientific and industrial revolutions, and the European Enlightenment, as the cultural roots of the ecological crisis. But evidence shows there is no necessary connection between animism and care for other kind. I propose that a more fruitful approach is to reconsider the post-Reformation and scientific eschewal of agency in nonhuman beings and ecosystems such as forests, rivers, and the oceans. Rediscovering the "agency of the others" is also essential as a means to resolve the ecological crisis, since humans alone cannot restore or "save" the Earth from the systemic effects of 200 years of industrial pollution and destruction of resilient biodiverse habitats. Christian eschatological hope has valuable resources for this approach including evidence that in the lives of the saints new friendships were formed between humans and other animals. Analogously, recent developments in ecological restoration and "rewilding" indicate a new peaceable partnership between humans and other kind and, in the light of Christian messianism, and the "theory of hope," may be said to anticipate a wider ecological reconciliation between humans and other kind.

12.1 Introduction

As the ecological crisis grows in both its effects and in public consciousness, there is a growing sense of loss, including grief, at the species that modern industrial extraction and waste processes are driving to extinction. Extinctions are principally caused by hunting and fishing, and habitat modification for agriculture and urban and industrial development. But species are also increasingly at risk of extinction from

M. S. Northcott (🖂)

Indonesian Consortium of Religious Studies, Universitas Gadjah Mada, Yogyakarta, Indonesia

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anthropogenic climate change which is raising temperatures and generating weather extremes in many biomes, including for example coral reefs where sea water temperatures are causing mass die offs of species. At the same time business corporations and government agencies continue to pursue a "business as usual" growth and development strategy reliant on ongoing fossil fuel exploitation and land conversion from forests and savannah to agriculture and other kinds of industrial development.

Many, since Horkeimer and Adorno (2000), and later Lynn White (1967), blame the anti-animist strain of modern civilisation on Western Christianity, and in particular its origination of the scientific and industrial revolutions, and then the European Enlightenment, which it is said are the key cultural developments in which the ecological crisis is rooted. Many also blame John Locke's philosophical and economic prioritization of humanly generated values and purposes over against ancestral, customary, evolved or traditional values and his related theory of private property (for example Charles Taylor (2005)). The Christian idea of hope, some suggest, is also at issue in the ecological crisis, since the idea of progress in human development, and hence economic, material and technological progress, are genealogically linked with the Christian hope of creating the Kingdom of God on earth (Moltmann 1971).

In this chapter I review the evidence for the claim that animism necessarily promotes care for other kind, and find that there is no necessary correlation between animistic belief and respect for species or care for ecosystems. I argue that a more fruitful approach to redressing the ecologically destructive trajectory of industrial civilisations is to reconsider the dominant Western and scientific cultural understanding of being and agency, so that other animals, and ecosystems such as forests, rivers, and even the Earth herself, can be rediscovered as agents alongside humans in the work of halting the processes that are degrading life on earth, and of restoring habitats and communities of species that promote planetary, as well as human, flourishing. And I argue that the Christian eschatological hope as it has unfolded over two millennia has valuable resources for this project, including evidence that in the lives of the saints new friendships were formed, and peace discovered, between humans and other animals. In conclusion I suggest that recent developments in ecological restoration, and in particular "rewilding," herald a new more peaceable relationship between modern humans and other kind. And I suggest that, from the perspective of Christian messianism, and the "theory of hope," ecological restoration may be considered as the realization in the present of reconciliation between human and other kind, and hence as a significant source of ecological hope.

12.2 Animism in Question

In David Attenborough's 2019 documentary series on the state of the planet, *Our Planet*, towards the end of the episode "Coastal Seas," footage from an aerial camera flying towards a group of small steep volcanic jungle-covered islands in a turquoise sea hones in on the white sand beaches and crystal clear waters of the lagoon of

Pulau Misool, off the coast of West Papua, on the far east of the vast Indonesian archipelago. Underwater footage is then cut in to reveal schools of sharks swimming around the lagoon. But for many years, until 2007 when the lagoon was protected, a shark fishing camp operated there and contributed to a massive decline in shark numbers, which have shrunk globally by 90% in the last 50 years.

The principal reason for the worldwide hunting of sharks is the Chinese love of the delicacy Shark-fin soup. Reputedly first served by a Sung Dynasty Emperor, shark-fin soup is one of the four dishes—*bao* (abalone), *shen* (sea cucumber), *yu chi* (shark fin) and *du* (fish maw)—that should be served at important familial ceremonies such as marriage feasts, or to celebrate the launch of a new business project. Serving the inherently expensive dish of shark fin or "fish wing" soup (yu chi) is a key symbolic means by which the host of the dinner shares their good fortune with their dinner guests. Such sharing represents the value of generosity, which is a strong spiritual virtue in Chinese culture, and especially in families, where grandparents and parents should express it to their children who in turn offer filial piety.

The name of shark fin in Chinese—*yu chi*—indicates that the fish soup is high in the "*chi*" or "life force" which, in Daoist tradition, energizes all living things including mammals, birds, fish, plants, and flowing rivers. Chi is said to flow through the human body and to be focused at certain nodal points—or chakras in the body such as the forehead, the throat, and the abdomen. Increasing the "flow" of Chi is seen as therapeutic to humans, and Chinese health practitioners often identify "blocked chi" as a cause of illness that can be unblocked through acupuncture, massage, herbal medicine, heat, and other interventions.

It is not hard to see why the flow of Chi would be thought to be especially enhanced by eating the fin of the shark. The shark is the ocean's fastest creature: sharks are very agile, highly intelligent and powerful hunters. Chinese traditionally believe that eating certain parts from such creatures confers the same qualities on those who consume them. It is a similar spiritual logic which drives the continued hunting of rhinoceros for their horns, and lions and tigers for their bones and meat.

It is not only sharks however that have been depleted by overfishing in the oceans. Worldwide, ocean catches in the last 50 years have been advanced by radar and sonar, and their deployment on huge trawlers, and this has turned the "craff" of fishing into a science in which shoals of fish have nowhere to hide. The guesswork that occasioned the huge catch from the Sea of Galilee that Jesus is said to have enabled for his disciples during a resurrection appearance recorded in John's Gospel, a catch so large as to risk breaking their nets, is completely gone. The result is that in the last hundred years industrial humans have extracted more than 90% by weight of *all* the living creatures that once dwelled in the world's oceans.

When government agencies set fishing quotas and sustainable catches for industrial trawlers they use data from just the last few decades of ocean surveys and fish catch monitoring. But when historical data from analogue sources, and in particular fishing boat logs and the journals of fishers, are included in the statistics, the decline of stocks of sharks and of coastal and even deep sea fish is above 90% for each species by number (McClenachan et al. 2012). Historic records indicate quantities of creatures in the sea in abundance that have not been seen for decades. It is a similar story for land birds and mammals, and here the documentary record of sharp declines in numbers is greater.¹

While much recent public attention on the state of the oceans has focused on plastic pollution (and plastic pollution is a growing threat to marine life) the greatest threat is from industrial pelagic fishing boats primarily operating in coastal waters where most life is concentrated. These boats are licensed, and often also subsidised, by national governments. But they fish in coastal waters far from their home nations. either by treaty between their own and another government-such as that which Senegal unwisely made with the European Union fleet in the 1990s-or illegally, by night, as many nations lack the capacity to both survey and police their coastal fishing waters. The result is not only a huge depletion of ocean life but the loss of essential protein, and employment opportunities, for small coastal fishers whose boats cannot compete with the technologically sophisticated trawlers of nations such as China, Japan, Russia, and Spain that maintain the largest global fleets. The paradox, as Jean Philippe Platteau argues, is that government subsidies to industrial fishing fleets create very few jobs but the quantity of fish caught significantly undermines the subsistence livelihood of coastal fishers in both the North and the South who make up 97% of those employed in the ocean fishing sector worldwide (see Platteau 1989, and Bavinck 2005).

The solution to unsustainable fishing is to end public subsidies and tax breaks to ocean-going industrial trawlers, and for governments also to regulate the operation of these huge boats. But at the present time there continues to be a race literally to the bottom for fish stocks, in part driven by the growing weight of fish now raised in aquaculture, fed with ground up fish meal from deep ocean fisheries (Pauly et al. 2002). The destruction of coastal marine ecosystems is a major cause of human migration from the developing world. Fishers whose own ecosystems and local economies are destroyed by large foreign trawlers may turn their navigational skills to migration. This is precisely what happened in Senegal: once the Spanish fishing fleet destroyed their fisheries, many young men took to the sea, or migrated overland to Spain, to seek a living in the nation that had wrecked their living at home.

The removal of this quantity of life from the oceans is also changing marine ecosystems. As they are emptied of life, oceans become near deserts, and less capable of sustaining the ancient life-evolving processes of photosynthesis, bio-plasma formation, and calcification through the formation of phytoplankton and shellfish which, at the base of the ocean's chain of life, are a crucial terrestrial sink of greenhouse gas emissions produced by the same industrial civilization which sponsors pelagic fishing boats. A consequent apocalyptic scenario for the oceans, to which the Ellen McArthur Ocean Foundation has given credence, is that without radical action to reduce human extraction and hunting, the oceans will soon have

¹For the UK, significant depletion of wild birds and mammals began in the late middle ages with the passing of a series of "vermin acts" by successive Scots and English monarchs that mandated parish clerks to pay peasants a small sum per carcass of fox, kingfisher, crow, hare and so on handed in: the motive was to prevent other creatures from eating agricultural crops, but many of the creatures hunted to near extinction were not threats to crops (see further Lovegrove 2008).

more weight of plastic than living creatures in them.² At the same time the oceans will diminish significantly in their capacity to absorb a significant proportion of the greenhouse gas emissions that humans emit into the atmosphere.

Indonesia is the world's top region for sharks and it is therefore the prime destination for Chinese shark-fishing fleets. But the consequent depletion of stocks is of concern to the government of Indonesia, in part because tourism is rapidly replacing natural resource extraction as the more valuable industry across the archipelago, and significant numbers of high paying tourists are attracted to dive sites and islands where there is abundant marine life, including sharks. Consequently, in the shark fishing areas a number of sites have been declared Marine Protected Areas by the national government of Indonesia, in tandem with the State Government of West Papua. And one of these sites is at Pulau Misool, where the shark fishing camp was evicted in 2007. Less than a decade later, scientific surveys reveal that life has come back in huge abundance to the lagoon which is now a shark nursery filled with thousands of sharks and smaller fish, and the coral reef also has some prospect of revival although warming sea temperatures are another threat to the coral that protected areas cannot resolve (Jaiteh et al. 2016).

12.3 Ecological Restoration and the 'Sixth Extinction'

The capacity of the Earth, and ecosystems, to revive, and for life to recover when humans reduce their influence but at the same time "guard" the ecosystems that are home to life's greatest fertility, diversity, and abundance-sometimes called "biohotspots"—is a source of ecological hope, even as the broader picture of humanly driven climate destabilization and species extinction presents a much more gloomy prospect. This capacity of ecosystems to "come back" from a seriously industrially polluted state is not confined to the oceans. On a 2000 acre farm in Southern England, just 20 miles south of Gatwick Airport, Sir Charles Burrell decided to abandon industrial farming on his ancestral estate of Knepp in 2002. He removed all the fences over much of the farm, sold his farm machinery, and introduced ancient breeds of animals on the land. They were, in the main, left to their own devices and included Tamworth pigs, European long-horn cattle, and red deer. In the fifteen years that the animals have established themselves on the land, they have returned to living in a relatively "wild" state, adopting patterns of foraging, interaction, and reproduction which have created significant niches for the abundance of species that are now found on the farm. Without industrial tillage the soils have become much richer, and species such as hawthorn and sedge have re-established themselves, in turn providing protected cover for hardwoods such as

²*The New Plastics Economy: Rethinking the Future of Plastics*, Geneva, World Economic Forum and the Ellen McArthur Foundation, January 2016, and at http://www3.weforum.org/docs/ WEF_The_New_Plastics_Economy.pdf.

English oak to re-establish naturally. The result after just 15 years is that many bird and small mammal species are now present on the farm that are rarely found elsewhere on British farmland. They are attracted by an abundance of insects, and a variety of land types including watering holes, as well as thorn bush and shrub, that are usually levelled out and ploughed up on conventional farms.³ The biodiversity that now exists at Knepp exceeds in its different kinds of present and visiting species *any other area* of mainland Britain including "protected" conservation areas. The project at Knepp was partly inspired by a Dutch rewilding project at Oostvaardersplassen to the East of Amsterdam, that was designed by the Dutch ecologist Frans Vera, and has had analogous ecological results (Vera 2005).

What is particularly intriguing about both Pulau Misool and the Knepp Estate is that as humans have withdrawn industrial methods of ecosystem management and resource extraction, while still acting as stewards of the ecosystems to prevent unwanted activities, they have made it possible for *other* large mammals to again become "agents" in the ecosystems: protected from hunting, these animals are enabled, in turn, to help generate cascades of other species, and so facilitate the re-emergence of an ecologically self-sustaining increase in the diversity and abundance of species. They have also created ecologically sustainable opportunities for visitors to interact with nonhuman mammals in rewilded ecosystems that did not before exist and which paradoxically are economically more successful than the previous industrial agricultural landscape.

In the Abrahamic religious traditions of Judaism, Christianity, and Islam, human beings are said to be kalipha or "guardians" of life on earth, set in place by the divine as "vice-regents" to care for the earth as divinely chosen representatives of Yahweh, God, or Allah. This is indicated first in Genesis 1.28. The theme of guardianship is also to be found in the Qu'ran, and in Rabbinic and Christian commentaries on Genesis in the first centuries of the Common Era. But a potentially competing feature of the Abrahamic traditions with respect to nonhuman life and ecosystems is that they are, as Lynn White Jr. influentially argued, "anti-animist." This is to say that, whereas there are scattered over the forests and coastlands of the earth numerous *local* cosmologies in which indigenous peoples attribute divine or sacred power to all living beings—and especially to places of high life value such as springs, rivers, mountains, forests, coastal reefs and mangrove swamps, and to large mammals such as jaguar, tiger, shark and whale-the Abrahamic traditions tend to have little regard for spirits said to be resident in other life forms, or places such as "sacred" groves, springs, mountains, and so on. Instead the Abrahamic conception of the terrestrial sacred is principally focused on the human soul, which in Greek is anima. This is not to say that Abrahamic traditions do not have sacred places, but the sacred places are principally in the lands of the origin of these religions, and in particular Jerusalem, claimed as a sacred place most of all by Jews, but also by Christians and Muslims. Rome and Constantinople are also seen as sacred cities by many Christians, and

³For a detailed narrative, including some of the unanticipated scientific results of the "wilding" of the Knepp Estate, see further Tree (2018).

particularly those of the "mother churches" of the first Text of the Common Era, namely Catholicism and Orthodoxy. Analogously for Muslims, Mecca and Medina, and the holy land of the Prophet today known as Saudi Arabia, are holy places and places of pilgrimage.

As the Abrahamic traditions have spread globally through trade routes and the science of 'discovery' over the last two millennia they have become "universal" or "global" religions by definition. But, their conceptions of the divine in the main outcompete and displace the "local gods" and "spirits" of "new" lands opened up by explorers, missionaries, and traders. Hence the global spread of all three religions from Europe and the Middle East—and of Christianity and Islam especially—is also associated with what is sometimes called "ecological imperialism," in which habitats and species far from the cultural regions which birthed these traditions are taken over and reduced in the diversity of both human cultures, and ecological and species diversity (see further Crosby 1996, pp. 350–369).

In an end of life overview of the interdisciplinary study of religions and ecology, of which he was a pioneer, anthropologist Roy Rappaport, whose first field work was on the island of Papua New Guinea, argues that indigenous cosmologies of the kind that have enabled indigenous peoples to sustain the fertility and biodiversity of the ecosystems they inhabit typically carry within them a conception of the *logos* or underlying order that sustains life in its diversity and abundance (Rappaport 1999). This conception informs their ritual practices and beliefs such that their harvesting and natural resource extraction is managed with the aid of these rituals and beliefs so that they do not exceed the carrying capacity of the ecosystem. This proposal, first outlined in Rappaport's essay, and subsequent book of the same title, "Pigs for the Ancestors," is an intriguing hybrid of natural and social science, including the scientific study of religion and theology (Rappaport 1984, pp. 224–242).

If Rappaport is right to identify the means by which a conception of underlying order or *logos* informs indigenous cosmologies, it raises the question how the Christian understanding of the incarnation of the logos in the flesh and blood of Jesus of Nazareth might inform a Christian conception of ecological sustainability and restoration in the context of what is now a system-wide emergency of global proportions. The principal drivers of the emergency are over-extraction of natural resources and the dumping of wastes from extraction processes—including most influentially greenhouse gases—back into the Earth system in ways that ecological processes are unable to resolve. This is leading to Earth system-wide destabilization of the climate, and global biodiversity loss on a scale equivalent to those of previous prehistoric extinction waves, and hence increasingly described as the "sixth extinction."⁴ But this raises the theological question of how to think of the cascade of events that are precipitating the sixth extinction, and its implications for the Christian hope of redemption, or the eschaton.

⁴Richard Leakey, the Kenyan primatologist, together with Roger Lewin, was the first to draw an equivalence between the current wave of species extinctions and the previous five waves of Earth system wide species extinctions which are evident in the geological record: see Leakey (1996).

12.4 Finding Hope in Sharing Agency

The narratives of Pulau Misool and the Knepp Estate are hopeful stories because they indicate in guite striking ways that creaturely life comes back in abundance in particular places where humans exercise appropriate guardianship against destructive human practices and allow other creatures to recover *co-agency* with humans in managing and tending ecosystems. But neither story indicates that humans, in enabling this to happen, can, or even ought, to get *completely* out of the way. A classic example of what happens when humans are evicted from ancestral guardianship of place concerns the national parks in the Western United States. As is well known, the Scotsman John Muir, who is honoured as the "founding father" of the United States National Park Service, began his engagement with the American west as a shepherd, and later as a recreational walker and campaigner for the conservation of the mountainous landscapes of the Californian Sierra from industrial developments and in particular hydroelectric dams.⁵ Muir also campaigned for the extension of the park areas, and before he died, much of what he worked for had come to pass. However, in Yosemite, the extension of the national park to include its current large area from high montane to the lower plateau, and rocky valleys through which flows the mighty Yosemite River, led to the eviction of the native Americans whom Muir himself in his diaries had regarded as superfluous to the "wilderness" he so much admired, and even as a kind of pollutant or desecrating presence to the new sacred of "wilderness" (see Spence 1996). However within ten years of the indigenous inhabitants being evicted, it soon became apparent that they had for centuries performed certain essential functions in managing the landscape, such as setting controlled fires, which were also beneficial to other resident species. And without their presence, the balance of species present when the park was set up began to change.

In recent years, the park authorities have determined that one crucial species that the native Americans had "permitted" to live in the land with them was the wolf. And it turns out the wolf provides crucial land management characteristics that keep other grazing and browsing species—especially deer—away from certain areas. Therefore, the presence of wolves enabled a richer flora and fauna to grow than when these grazing species over-dominate. The reintroduction of wolves into the American West was sponsored by the National Park Service, beginning in Yellowstone National Park, and wolves have now spread through the national parks system right down to the southwestern United States. Beneficial ecosystem results are seen in consequence, and have been charted in a number of scientific papers (Ripple and Beschta 2007; Laundré et al. 2001), as well as in other media such as televisual documentaries (for a popular account of 'wolf restored' habitats see Bakerslee 2017).

⁵John Muir recorded his early sojourn in the Californian Sierras in a book that has become a classic of North American nature writing; see Muir (1911).

The recovery of the agency of other creatures in the management of ecosystems in what we might call late modernity reflects a realization about the asymmetric relationships that industrial humans—even when science-informed and involving "conservation projects" such as national parks—have typically developed with other creatures and their habitats. I think it is reasonable to say that Jean Calvin anticipated something along these lines when he wrote in *The Institutes* that the problem with the city—which is the most humanly-made landscape of his time—is that it is most representative of the work of humans, and since they are fallen, the glory of God is less manifest in cities than it is in those parts of the world that have been less modified since the origin of creation (for full citations of Calvin, see Northcott 2018). In effect, industrial technologies, developed in and managed by residents of industrial cities, have allowed the humanly dominated urban scape—in which human agency, human acts, and intentions overbalance the agency, acts, and intents of other creatures—to spread from cities across almost the whole surface of the Earth.

Calvin's belief that the excess of human influence in cities reduces their capacity to reflect the divine glory of the creator, as compared to forests and "wild" landscapes, is a theological imaginary of "nature" that, as I have argued elsewhere, is a significant root of the development, first among Protestants in Western Europe and North America, of the modern idea of "wilderness" as a place where human influence is little in evidence, and where humans are over-awed by the magnificence, scale, and "sublime" qualities of the landscape (see Northcott 2018). But there is a paradox in this imaginary which, as it has become increasingly detached from its theological roots, has come to see wilderness as intrinsically nonhuman, and humanity as an alienated, over-powering and ultimately destructive presence in the landscape, and even on Earth. According to this imaginary, at some point in the future, the Earth, or 'gaia', will finally slough off this presence, so allowing life to return to its former path of speciation, making the Earth fertile and benign for all creatures, not just for humans. Weirdly then, as its theological underpinnings fell away, a Protestant theology of fall and redemption has produced a misanthropy, and even a despair, about human influence on the rest of creation that was not part of Calvin's theology, and which is even more alien to the theologies, both Catholic and Orthodox, that preceded the Reformation.

This misanthropy is most evident in various kinds of ecological apocalyptic, or dystopias, such as James Lovelock's famous metaphor of humanity as a virus the planet will eventually slough off, and the essay, and later book, of Alan Weisman entitled *The World Without Us* (Weisman 2008).⁶ These dystopias are marked by an absence of hope. And there are those who suggest that hope is actually the enemy of action to restrain and reverse the current trajectory of human influence and that a seasoned pessimism is a more "useful" attitude than hope.⁷ But the narratives of the

⁶The metaphor of humans as a "virus" was first mobilised by James Lovelock in his *Gaia: A New Look at Life on Earth* (Lovelock 1995).

⁷As Bruno Latour puts it: "we are all climate quietists when we hope, while doing nothing about it, that 'everything will be all right in the end'" (Latour 2018).

ecological restoration of Pulau Misool and the Knepp Estate indicate that what works best is not the total absence of humans, but intentional restraint by humans in the management of ecosystems, and a preparedness to give space to other creatures so they recover a measure of agency and formative influence on habitats and places.

12.5 The Christian Hope and Moral Regard for Other Persons

Hope is a virtue, one of the three "theological virtues" that Saint Paul first identified, and that Thomas Aquinas later named as significant Christian revisions to the earlier Aristotelian virtuous tradition of moral excellences. The classical virtues, which are most in evidence in the two narratives of ecosystem recovery already discussed, are temperance and humility. In both cases humans find ways to temper their prior industrially-enabled asymmetric relations with other creatures. And as the other creatures literally "come back" and recover their agency in creation, an abundance of life, returns which has never been achieved by standard conservation projects that tend to focus on recovery plans for individual endangered or locally extincted species. The realization of the power of the "others" to achieve what scienceinformed humans have not achieved, should also provoke humility. Both narratives also point to the possibility of what some call a "good" "Anthropocene," which does not reside so much in humans taking purposive control of the "levers" of planetary systems—as Paul Crutzen who originated the term Anthropocene proposes—but rather in finding measures in all areas of technological intervention to restrain human influence and rebalance that influence with the agency of the other creatures with whom, from the beginning, Genesis indicates, humans once dwelled peaceably in the primeval forests, such as that of Eden.⁸

Both narratives of ecological restoration also indicate that there is no straightforward return via re-animization to the "cosmic harmonies" of indigenous religions that, in any case, are not as harmonic as all that. While indigenous traditions have patterns of respect and honour towards other animals and birds, which to an extent prevented over-hunting, there is nonetheless good scientific evidence that wherever humans have dwelled they have hunted large mammals and birds to extinction— Moa, Mammoths et al. There is also much evidence of high death rates, by violence, among indigenous hunter gatherers. Various explanations are given by scientists of these death rates but the one that I find most convincing is that the high number of violent deaths, compared to those found among moderns, reflects the relatively small "worlds" in which indigenous people lived, and in which some still do live. In these worlds there are known resident beings and indigenous cosmologies include these beings in what we might call a "sacred canopy" of life that gives all their place. But

⁸For a critical overview of the idea of a good Anthropocene see Hamilton (2016).

humans who do not live in the place occupied by a particular indigenous group may be perceived as not only unknown, and outside of the sacred canopy, but as a threat to the group that, when encountered, is therefore often met with violence.

"In" and "out" groups are a feature of all moral systems until modern efforts to establish "enlightened" or "rational" moral codes in which the category "person" indicates a culture-transcending category deserving of universal moral respect above all other categories. Immanuel Kant significantly argued that cosmopolitan regard for other persons would represent an extension of the moral law, which he believed was innate in every individual person, and that would—when expressed by every person and people group in relation to all other persons and people groups—in effect be a realization of the Christian chiliastic hope for the realization of the kingdom of God on earth.

Against Kant's hopeful cosmopolitanism, a darker political theology, such as that of Carl Schmitt, holds that in and out groups are an inevitable feature of the human condition and that borders, geographical boundaries, even "walls", are an essential feature for functioning governments within particular national terrains. Schmitt goes even further when he suggested that the definition of the political is the ability to distinguish at the border between the insider and the outsider, the friend and the enemy.⁹ At the present time, Schmitt's darker vision, rather than that of Kant, seems to be more in the ascendancy in a number of domains, including parts of both North and South America, and even in Western Europe, as Austria, Britain, Hungary, and Italy have all in recent years elected leaders or held referenda in which an anticosmopolitan attitude is in the ascendancy.

Neither Kant's hopeful chiliastic cosmopolitanism nor Schmitt's darker friendenemy politics, include other creatures within the realm of humanly considerable moral agency, and hence neither is a source of hopeful moral energy for resolving the current asymmetry between industrial humans and the agency of other beings, and the Earth herself. Both instead assume, as Latour has often remarked, that the Earth and life are "stable backgrounds" for the newly delineated rational constitution of Enlightened peoples that conveniently, but negligently, leaves out the Earth and other creatures as co-constituents, co-agents of the terrains in which such constitutions have cultural and political writ. Here I think it is valuable to return to Christian sources and history in order to note two things that neither Kant nor Schmitt seem properly to have understood and that are rarely discussed in attempts to conceptualize what ecological restoration requires in the domain of thought and ethics.

The first point is that Christianity is the first religio-cultural tradition in history to propose in its founding texts and "laws" that *all* other persons are, and *ought* to be, subjects deserving of moral regard by humans regardless of their religious affiliation, or cultural, or gender orientation. The second point is that in the course of Christian history this conception of "other regard" that principally takes the form of "love of neighbor" begins to extend over the centuries towards other creatures.

⁹For extensive discussions of Kant and Schmitt on modern cosmopolitanism and the friend enemy distinction, see Northcott (2013).

The first point is critical and should be uncontroversial. But many scholars do not see Christian ethical regard for strangers—and even enemies—as a root of modern cosmopolitan regard, arguing instead that classical Greek moral philosophy, and its rebirth at the Renaissance and in the Enlightenment, is the key root. Luke Bretherton makes a strong case that Christian cosmopolitanism is in significant respects the origin of the modern ideal of moral regard for strangers—in particular for strangers from other lands who are considered "refugees" in the modern sense of persons seeking to enter another terrain to obtain settlement rights and, ultimately, livelihood there.

Bretherton (2006) traces a genealogy for stranger regard in Western theology from the gospels through Augustine to Dante Alighieri and in the modern era, Wolfhart Pannenberg. Both Dante and Pannenberg situate cosmopolitan regard for those from distant lands not, *pace* Kant, in a universal regard for those having the status "person," but in the eschatological telos of all persons, as revealed in the Christian story of redemption and transformation, towards ultimate union with God that Dante, like Aquinas, describes as the beatific vision.

A good case can also be made for tracing back the distinctive Christian regard for strangers to the gospel parable of the Good Samaritan, in which a Samaritan is said to have encountered a Jewish victim of robbery on the road from Jerusalem to Jericho and rescues the man and arranges for his care in a roadside guesthouse. Christ narrates the story in response to the question from Jewish teachers "who is my neighbor." By having a Samaritan make *himself* neighbor to a Jew whom he meets on the road, Christ overturns the conventional boundaries and cultural distinctions between Jews and Gentiles—for Samaritans were not considered Jewish in Second Temple Jerusalem but as a breakaway sect dwelling in a separate territory from Judea, namely that of Samaria whose capital was Jericho. But the parable also overturns the conventional boundary between a citizen and a refugee since in the parable it is a traveller—a non-citizen—in Judea who expresses the agency of a good citizen, and a good Jew, by being a neighbor, a carer, to the Jewish victim of robbery but who is neglected by those of his own religion and country in the early stages in the story.

The Samaritan story also has another import for modern cosmopolitanism and political theology because it suggests that locality, nearness, place are critical moral categories in the Christian ethic of neighbor love.¹⁰ This is in contrast to Enlightenment cosmopolitanism which in both deontological and utilitarian guise tends to situate the duty of other regard beyond borders—and toward refugees—in a universal conception of what is owed to all persons by their constitution as individuals, rather than differentiating between persons who are near to other persons and persons who are far away. A Good Samaritan-influenced cosmopolitanism therefore includes within it the importance of habitat, locale, place, terrain (or *terroir*) and in this sense is a more creation-situated, and Earth-oriented, ethic of other regard than

¹⁰On the erasure and re-appearance of 'place' in Western thought and theology see further Inge (2003), and Northcott (2015).

that found in modern cosmopolitanism. Hence, in a crucial sense the idea of neighbor love in the Christian tradition elides the conventional modern dualism between nature and culture by situating duties to persons in relation to their locus in the community of other persons, and other beings, in which they are encountered. This allows that duties to those who may not have rights in one's geographical political community—as fellow citizens—nonetheless find a place in a Christian political ethics when terrestrially they are linked by proximity, or by environmental damage or trading links, with a particular territory—for example by presenting themselves as refugees at the border—but not in such a way as to corrode the proper conception of politics as justice between those who dwell in, and have found customary ways to dwell justly in, political territories.¹¹ Again it needs to be emphasised that this conception of the status of the other is not based upon a liberal theory of duties that are owed to persons by virtue of their being individual persons in whatever domain they may find themselves in, but is rather eschatologically oriented to the status of all persons in the Christian drama of salvation that flows from the present towards final redemption, and is encapsulated in the beatific vision.

12.6 The Christian Hope and Moral Regard for Other Beings

The Christian hope stands in significant contrast to modern cosmopolitanism because it situates other persons both in creation and redemption: hence the Christian hope generates other regard that, in principle at least, does not participate in the modern dualism of nature and culture. But what about other beings, beings who are not persons? Are there grounds for including other creatures, and even the Earth herself, in this Christian sphere of moral regard for neighbors? Is the Christian hope, in other words, eschatologically oriented towards a conception of a redemptive and transforming union of *all* beings and not only persons?

The best historical ground for this claim is the documented narratives, first of Jesus Christ, and then of Christian religious, in developing relationships of other regard, and peaceableness, with other animals. Here, the animals lose their post-Fall alienation from humans in the relationships they are said to have had with Christ and the saints. There is a highly suggestive note in the Gospel of Mark that in the time between Christ's baptism and his commencement of ministry he went into the wilderness where he was not only tempted by Satan, but "was with the wild animals."¹² This very brief reference to the possibility that in the Messianic era

¹¹For the argument I am countering here—that the Samaritan parable elides proper and politically necessary conceptions of justice and citizenship—see Dobson (2005).

¹²"And immediately the Spirit drove him into the wilderness. And he was there in the wilderness forty days, tempted of Satan; and was with the wild beasts; and the angels ministered to him" (Mk 1:13); see the commentary on this by Bauckham (1998).

that Christ inaugurated, the promised restoration of relations of peace between humanity and other animals had already begun, and this is the import given to this brief passage in a more extended discussion of Christ's relations with other animals in the second century text of Pseudo-Matthew, according to which lions and panthers are said to have accompanied the Holy Family in their flight into Egypt "showing them the way, bowing their heads; and showing submission by wagging their tails" because "they adored Him (Christ) with great reverence."¹³ The early theologians interpreted this and other texts as indicating that in Christ the original peace and harmony that there was in Eden between humans and other kind would be progressively restored after Christ who had set the Earth on a path towards eschatological peace and fulfilment. Among the most extensive discussions of this claim in the first Christian millennium is in the writings of Isaac of Nineveh, also known as Isaac the Syrian.¹⁴

As Ryan McLaughlin notes, there are numerous accounts of saints developing such relationships but the two best known stories are those of Saint Jerome removing a thorn from a lion's paw, and of Saint Francis befriending a wolf (McLaughlin 2014, p. 71). In both cases animals conventionally associated with predation lose their predatory characteristics, while also losing their fear of humans. Instead they become naively familiar with humans, just as the animals who are described as coming before Adam to be named by him in the first creation story in Genesis. Both stories are also suggestive that there is an eschatological telos in Judaism and Christianity, as Walter Brueggemann argues, towards a progressive extension of the "circle of neighborliness" to a growing range of "others" who, in the course of Christian history, come to include other kind (Brueggemann 2002, p. 143; see also Miller 2013). In similar vein, that most eschatological of modern Protestant theologians, Karl Barth, argues that the progressive realization of Christian redemption as a distinctive form of human ethical life would tend towards vegetarianism over time since the original pre-fallen creaturely ethic of Adam and Eve in Paradise is said to have been vegetarian and hence one in which there was no killing (Barth 1989; see also Hauerwas and Berkman 1993, and Clough 2019).

In many of the narratives of the saints rediscovering peace with other animals it is not however so much human as animal agency which is the key: animals are drawn to the saints because in their humility and poverty they radiate compassion towards all creation, and creatures respond in kind by losing the fear of *Homo sapiens* said to have begun with the fall of Adam and Eve. The restoration of peace is reciprocal, and involves mutual compassionate recognition. This progressive unfolding, from the life of Christ through the lives of the Saints, of an extension of the circle of neighborliness to include other animals, also admits of the agency of other creatures in completing the eschatological extension of the circle of compassion exemplified in Christ's story of the Samaritan to include all creatures. I think it is also not

¹³Pseudo-Matthew 18, quoted in McLaughlin (2014, p. 72).

¹⁴For a fuller discussion of Isaac of Nineveh's eschatological theology of peace between humans and other animals see McLaughlin (2014, pp. 72–73).

unreasonable to make a connection between this extension of the circle of Christian compassion to include other animals and the great leap forward in primatology in which chimpanzees, gorillas and other apes are increasingly recognised by scientists as being much closer to humans in a remarkable range of cognitive, communicative, and empathic behaviors. The first contemporary scientist to go into the field and begin making observations of primates based upon a lack of fear, and an expectation of empathy, is Jane Goodall, who is a lifelong Christian (Goodall 1999, 2009). In the title as well as the narrative of her autobiography, Goodall shows how her belief in the Christian hope is a mainstay of her compassionate regard for primates and other creatures, and her charismatic and extensive campaigning efforts—in the movements she has founded—to spread compassion and care for primates, and other kind, around the Earth.

The evidence many scholars have assembled in recent years of distinctive Christian attitudes to other kind does not gainsay however another strain—and it is fair to say, the majority view—in the Christian tradition and Christian history according to which animals, and creation as a whole, are created by God instrumentally to serve humanity rather than as deserving of independent moral regard as beings who are also caught up in the story of salvation.

It is reasonable to suggest that the root of this belief is to be found in an apostolic argument in the New Testament between the apostles Peter and Paul. Peter intended that Gentile Christians should adopt Jewish ritual laws: this would have included the circumcision of Christian males before baptism, and their adoption of Jewish dietary practices as prescribed in Leviticus including proscription of eating of certain creatures—particularly pig and reptiles—and the requirement that all animals and birds that are to be eaten should be slaughtered in such a way that the blood is ritually drained and returned to the earth "which is the Lord's" (Psalm 24. 1). Paul resisted the idea that Gentile Christians need adopt Jewish dietary and ritual laws and this became a major contest in the churches Paul founded, including those at Corinth, Galatia, and Ephesus. The conflict came to a head in Jerusalem at what was in effect the first Apostolic Council where Peter softened his stance and agreed an "ecumenical accord" which indicated that Gentile Christians would be purified "by faith" and therefore had no need of circumcision.

As for dietary laws, the judgment, which was written down in a letter that Judas and Silas were to take in person from Jerusalem to the Gentile churches, was to the effect that Gentile Christians should not be bound by ritual and dietary laws that some from Jerusalem had attempted to impose upon them but, being faithful to the name of the Lord Jesus Christ they need only "abstain from meats offered to idols, and from blood, and from things strangled, and from fornication: from which if you keep yourselves, you shall do well." (Acts 15. 29). Paul suggests to the Christians at Corinth that such dietary liberty may even be extended to meat offered to idols provided that it is not consumed in the meetings of the Christians for worship, and provided that their Christian neighbors are not offended by this liberty: but if this liberty does give offence, Paul suggests it is better to abstain from eating meat (1 Cor. 7-8).¹⁵

Jewish dietary law rests upon what many modern liberal exegetes see as a "primitive," quasi-magical, belief in the sacredness of the life blood of animals. In the Torah, the message is clear that in Paradise there was no killing; that violence, including meat-eating, had caused the primeval Flood; and that after the flood meat eating is permitted by an apparently reluctant Creator in a new covenant with Noah, because of the weakness of men and women. But this permission is only given with a number of strict regulations and prohibitions. The most important of these is that the life blood—which is described in Torah as "inspired" by the breath of the Spirit since the same Hebrew word *nephesh* is used of blood and spirit—is returned to the earth "which is the Lord's." Returning the blood to the ground, and sacrificing a portion of every animal and bird eaten-first at the Ark of the Covenant and later in Solomon's Temple-were therefore requirements to give respect to the creator spirit who breathes through all being. And when the Israelites settled in cities in the Land, butchering itself-because of the moral and polluting dangers of the act of killingis to be conducted by only one group or tribe-the Levites-who were to live separately from the other tribes so as not to infect them with the potential evils of killing and slaughter. The Jewish apostles, it is reasonable to argue, maintained much of this ritual understanding of the significance of blood and of the theological and ethical rationale for the Jewish proscription on eating blood. And therefore it was the sole dietary requirement they imposed upon the Gentiles. But while a minority of Gentile Christians from the first century abstained from meat eating altogether because of its potentially profane associations, vegetarianism was more often associated with Gnosticism than with orthodox Christianity, and most Christians also did not follow the dietary rule of Acts 15.

In my view, the New Testament proscription on eating blood is a critical link with the sacred view of life that was sustained—however complexly—in the dietary rules of the Israelites, and subsequently in Jewish culture. The loss of this complex of rules means that Christians—uniquely among those of the Abrahamic faith—do not have any formal ritual dietary laws. It is even possible, though the evidence chain is too long and multifarious for definitive proof, that this helps to explain the distinctively instrumental relations with other animals which developed in Christianity, and ultimately into the secularized forms and practices of modern industrial capitalism (see further Northcott 2008).

Of course there are also significant non-biblical sources for this instrumental view of creatures, of which Thomas Aquinas is the most influential in the Western tradition. His instrumental view of other creatures is illustrated in his argument in the *Summa Theologiae* that the reason that cruelty towards other animals is morally problematic is because of the effects it has on humans and not on the creatures

¹⁵For much fuller and referenced discussions of this apostolic argument and its import see further Northcott (2008, 2009).

themselves.¹⁶ But there is now a significant and growing effort to revise this tradition, among a growing number of Protestant theologians, some of whom are already referenced in this article, and now in Roman Catholicism. In his encyclical Laudato Si', the Argentinian Pope Francis challenges the mainstream Roman Catholic tradition for having a degree of instrumentalism towards other creatures. After his namesake, Saint Francis of Assisi, Francis indicates that this tradition ought now to be transcended and set aside. In so doing, Francis has arguably begun to embrace what McLaughlin and others have called the minority tradition of compassion to other animals, apart from their service of and uses to humans. In line with this minority tradition, Pope Francis effectively channels Saint Francis in his "naïve" relations with other animals when he indicates in Laudato Si' that all creatures, and not only persons, have "intrinsic value," and that all creatures are redirected by the Christ events toward the "end of time" when "the Son will deliver all things to the Father," and thus "the risen one is mysteriously holding them to himself and directing them towards fullness as their end."¹⁷ In this way Francis indicates that creatures, and not only persons, are part of the eschatological transformation of all things towards their future consummation: and that this salvific status of creatures is the theological ground for Catholics to honor the divinely given worth of animals, and also by extension of plants, rivers, forests, oceans, and the atmosphere.

In his 2013 Gifford Lectures, subsequently published as *Facing Gaia*, Bruno Latour argues that the critical missing element in contemporary human ethics and politics is recognition of the *agency* of other creatures, and of Gaia, in generating and sustaining the conditions of life on the Earth that make it uniquely habitable for humans and other mammals. He also argues that recognition of their co-agency with humans requires their "re-animation," against the tendencies of Christianity and modernity to de-animate non-human life of all kinds (Latour 2017). But, as suggested earlier, it is clear that in cultures where animals are still given this animated power, it can give rise to highly ecologically damaging practices, such as the destructive shark fishing associated with the Chinese veneration of the shark, and shark fin soup.

In this paper I am arguing that the historical evidence for a "minority report" on Christian eschatological hope for the recovery of peace between humans and other kind, and hence for ecological as well as spiritual transformation in the Kingdom of God on earth, indicates that recognition of the agency of the others also has a distinctive ethical quality. This is because it is most closely associated with the moral and spiritual qualities of humility and holiness shown by the saints rather than the "re-animation" of animals, trees, and so on. The first instance in Christian, and Jewish, texts of the connection between human hope for redemption and hope for creation, comes in the famous account in Isaiah 65 of human development and peace

¹⁶Thomas Aquinas, Summa Theologia Vol 41, II.II, Question 159, 1, 2 online edition at http:// www.newadvent.org/summa/3159.htm accessed November 20, 2019.

¹⁷Pope Francis, Laudato Si': On Care for Our Common Home, Rome, Vatican Press, 2015, 100, 140.

in the messianic age. Then, not only will humans live long and dignified lives in their own homes, in which they also own the means of production, but other animals will live at peace with humans and predation itself will cease. And this "creation-wide" messianism recurs in the Christian revival of messianism in the New Testament, in the writings of the first theologians, and most strikingly in stories, already discussed, of animal communion in the lives of the saints.

The "sacred" status that other kind acquire in their communion with the saints arises not from a general or special ontic category of animus or being animated, but from their being enfolded in the extension of the circle of compassion sustained by the purified intentions, thoughts and actions of the saints, and above all, as Isaac of Nineveh argues (1923), in their humility and self-restraint. In this perspective, the key moral virtue for living hopefully in a geological epoch or era in which humans exercise a newly asymmetric influence over the direction of the evolution of life on earth is humility, and a willingness, as I have argued more fully elsewhere, to see the Anthropocene not as an opportunity for intentional and managed dominion by the humans of the earth, but for an increased willingness to restrain human power over other kind and over habitats in such a way as to allow the other creatures to restore the habitats of which humans, and industrial humans in particular, have shown themselves to be poor stewards (see Northcott 2017). As the story of shark fin soup indicates, animation on its own does not necessarily predict moral regard or care and may even indicate their opposite, since those creatures with the most animating "energy" become all the more objects of human predation and consumption. Restoring agency means both restraint of human powers-of the kind shown by the setting up of the Marine Protected Area in the seas off West Papua-and preparedness to trust the other animals as they recover their agency in co-managing habitats capable of generating and sustaining greater biodiversity, and of repairing human climatological and other damages, such as is evident on the Knepp Estate.

12.7 The Christian Hope and the Restoration of Human-Earth Relations

Much attention in theological circles has been directed to the roots—biblical, ethical, theological—or *genealogy* of Christian attitudes to and behavior towards other kind and the Earth herself. Some argue that genealogy, and the related turn to ecological metaphysics, for example by process theologians such as John B. Cobb, is unhelpful. Willis Jenkins suggests it is both more empowering for those struggling to find ecological hope in their lives and minds, and more realistic in terms of what can be achieved by Christians working in partnership with conservationists and environmentalists, to think in terms of a bottom-up strategy where narratives and instances

of hopeful ecological practices are identified and shared (Jenkins 2010).¹⁸ Dalton and Simmons (2010) also suggest that the ecological crisis is more to do with practices than beliefs and, with Charles Taylor, they argue that practices more often shape and transform beliefs and values than the other way around. This suggests a more pragmatic approach to responding to the ecological crisis, and that ecological hope is engendered by engaging in *practices* that enact the core ecological belief—as enunciated in environmental classics such as Carson's *Silent Spring* and Commoner's *The Closing Circle* and more recently in Pope Francis' *Laudato Si'*—that all living beings are connected. As Dalton and Simmons put it, "(1)ived practices of hope influence the way human societies function in relation to the rest of the natural world" (Dalton and Simmons 2010, p. 126). Since what Taylor calls "social imaginaries" are co-constructed around and through practices, living new ecological "social imaginary" of peace and harmony between humans and earth.

The cases of Pulau Misool and the Knepp Estate above are, examples of ecological habitat restoration and enrichment in partnership between humans and other beings. They are hopeful practices that point the way beyond the present continued industrialization of agriculture, aquaculture, and urban life-towards an alternative future. And there is a huge range of such practices at community and grass-roots level such as creating "edible landscapes" in urban areas, and greening roofs; substituting fossil fuelled cars for bicycles, e-bikes and e-scooters in personal transportation strategies; restraining the entry of cars into city cores and residential areas; reconnecting the food economies of cities with their direct rural hinterlands through community farms, greenhouses, and allotments; building communityowned and run renewable electricity and internet grids; new housing models, such as co-housing, in which there is a mix of private and co-ownership, private and shared interior and exterior space; reframing fossil fuel dependency as a threat to the financial system and hence promoting divestment in carbon-dependent stocks and shares; "transition towns" in which post-oil futures are already imagined and responded to through a range of bottom-up, community-based energy, food and production projects. And, last but not least, churches, mosques, and temples that choose to "green" their buildings, their preaching, their rituals, and the way of life they encourage among their members-including their members' carbon and ecological footprints—through substantial networks of ecological change such as the North American Interfaith Power and Light network, the Illinois-originated and growing network Faith in Place, the Christian network of national faith-based conservation charities and NGOs known as 'A Rocha', and Eco-congregations and Eco-churches in the UK and Europe.

¹⁸For an influential pragmatist and anti-foundationalist account of social hope see Richard Rorty (1999).

12.8 Conclusion

Richard Rorty argues that Christianity, in its belief in the possibility of the realization of the Kingdom of God in human history, played a major role in the *construction* of the progressive mentality of modernity, and of modern social hope (Rorty 1999, p. 37). And central to the social imaginary of modernity is that "nature" provides a stable background for the production of human cultures, values, and ways of life, and that nature is therefore not a partner in cultural production but rather a source of resources which are extracted and transformed so as to become useful to humans. In the light of this defining role of Christianity in shaping a "denatured" social imaginary, many argue that Christianity is, and remains, anti-ecological and needs replacing with a new form of eco-religious consciousness of the sacred connections between humans and all life (see for example Taylor 2003). Others argue that Christianity is no longer a powerful cultural force in secular modern societies. It is increasingly confined, or confines itself, to the personal sphere, as is evident in the fraught battles over human sexuality in contemporary Christianity, as also in Judaism and Islam, and is therefore an unlikely source of challenge and transformation in the social imaginary of modernity.

But there are counter-evidences to both claims. Among the strongest evidence is the pioneering role of Christian romantic poets and philosophers in the origination of the conservation movement in the eighteenth and nineteenth centuries (see Northcott 2018). And in the late twentieth century there is strong evidence of the role of Christian religious leaders and Christian scholars in fostering both an ecological turn in religious practice, and in growing the increasingly substantial and global interdisciplinary field of religion and ecology. Such leadership began in the 1960s by leaders and scholars who include France Schaeffer, John B. Cobb, Thomas Berry and Jurgen Moltmann, at a time when it was rare among other religious traditions, with the notable exception of the Iranian philosopher Syed Hossein Nasr.

There has emerged in subsequent decades a remarkable range of environmental activism in Protestant and Catholic Churches, and some Pentecostal churches and religious communities. Among the earliest pioneers of faith-based ecological activism were Roman Catholic women religious communities in the Americas. These were a crucial precursor to the greening of the Catholic magisterium under Pope Francis (see further Taylor 2007). Another crucial pioneering religious locus was the World Council of Churches, whose General Assemblies from the 1960s onwards began to address the big earth-threatening questions of nuclear weapons, global warming, biodiversity loss, and the environmental exclusion of indigenous peoples. Perhaps the most influential feature of the WCC's engagement with ecological concerns is its role in originating the idea of sustainable development through its program Justice Peace and the Integrity of Creation. JPIC was launched after the WCC General Assembly in Nairobi at which the Australian scientist Charles Birch first coined the phrase "sustainable society" (Halman 2005, p. 7).

As I argue elsewhere (Northcott 2013), living "as if" the new ecological future of peace between humans and other kind is already here, and seeing the modest

influence of new practices in transformation, is a crucial source of hope that change is coming, that it already works, and that it will come more broadly. In a more theological key, this is the essence of Christian messianism. Given that a small band of followers of a humble inspired leader could change the direction of human history, and that hope for the Kingdom of God on earth was and remains a crucial source for belief in progress in human development—as I think it unarguably does then it is reasonable to believe that hope for restored relations of harmony and peace between humans and other kind has equivalent potential to play a critical cultural and pragmatic role in fostering broader cultural adoption of ecologically benign practices. Hope will also have a role to play in co-generating a changed ecological imaginary, in an era when traditional development goals are largely achieved in developed countries, and are being achieved for growing numbers of people in developing countries.

The Axial-age Hebrew Prophet Isaiah was the first theologian to attribute the idea of election or calling, of "being a people," not only to his own ethnic or cultural group—Israelites—but to all people. He was the first to envisage what a postimperial, post-slavery, post-exilic, way of living would potentially be like. And he was the first to envisage a new order of peace between humans and other kind, and the end of predation between species. Those who already train dogs to eat vegetables, or even big cats in captivity to do the same, are perhaps anticipating this. But I think a more convincing example is the "Penan Peace Park" established by Penan indigenous peoples in Sarawak on the island of Borneo (see Northcott 2019). Far from being "landowners," like the ancestral owner of the Knepp Estate, and in the teeth of opposition from government agencies in Sarawak, and even government conservation agencies, the Penan mobilised logging track blockades and a range of other nonviolent actions to protect a large area of upland rainforest from encroachment by State-sponsored logging and oil palm companies in a struggle that lasted over twenty years. And in 2016, the Penan Peace Park was adopted by the government of Sarawak as an officially recognized protected area within the larger proposed Ulu Baram National Park (Sarawak 2016). In such stories, and their growing replication in many places on Earth, we may find hope that the ecological transformation of modernity that the Earth, her species, and many of her peoples, urgently seek, is already coming.

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Michael Northcott (Ph.D.) is Professor Emeritus of Ethics at New College in the University of Edinburgh. On 2019 he was appointed Professor Visiting at the Indonesian Consortium of Religious Studies, Universitas Gadjah Mada in Yogyakarta, Indonesia, and in 2020 he was appointed Guest Professor at the Evangelische Theologische Faculteit, Leuven, Belgium. He was Guest Professor in Systematic and Practical Theology in the University of Heidelberg (2018). He has also held guest positions at Dartmouth College (2017, 2011), Duke University (2005) and Claremont School of Theology (2002). Professor Northcott has held a number of research grants at the interface of religion and ecology including a large British government grant in which he led a team of researchers investigating Scottish 'ecocongregations' and community-based ecological activism. He has also taught and conducted research, at universities and research institutes in Southeast Asia having begun his teaching career in Seminari Theologi Malaysia, Kuala Lumpur, in 1984. He has supervised over 30 doctoral students from eighteen countries, and published numerous books and papers at the interface of ecology, religion, ethics and political economy including The Environment and Christian Ethics (Cambridge UP, 1996), An Angel Directs the Storm: Apocalyptic Religion and American Empire (SCM Press, 2005), A Moral Climate: The Ethics of Global Warming (Orbis Books 2008), A Political Theology of Climate Change (Eerdmans 2013) and Place, Ecology and the *Sacred* (Bloomsbury 2015) and, with Peter Scott, edited *Systematic Theology and Climate Change* (Routledge 2016). He is currently working on a research monograph at the intersection of Earth System theory and religious ontology entitled God and Gaia.

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