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The Relationship between God, Nature and Man – the Development of Modern Catholic Social Theology in the Light of Genesis

Abstract

The way we understand the relationship between God, Nature and Man is meaningful for our ecological behavior and worldview. There are methodological problems regarding the discourse on the environment. We will only make normatively meaningful claims if we describe the exact aspects of nature that are worthy of conservation in theological, ecological, economical, esthetical and cultural terms. In this article we find an analysis of the theological and cultural resources of the Modern Catholic



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Social Theology as a way to an Integration of Ecotheology.

Keywords

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1 Introduction

My article is divided into four parts: 1. (Methodological): Impasses of communication about the environment; 2. (Biblical): The creation mandate; 3. (Catholic): Comprehensive development; 4. (Socio-philosophical): A new understanding of welfare and progress.

1.1 Impasses of communication about the environment

A precondition for this kind of dialogue is, based on my experience, a critical reflection on common problems of communication.

There are three basic methodological problems concerning our discourse on the environment (Brickwedde/Peters 2002), which are to become even more complicated as soon as theologians start to contribute to the debate. It tends to be overly

- moralistic: there is an excess of moral appeals with little actual leverage
- diffuse: an overstretch of the agenda of the discourse that tries to embrace a broad range of topics and therefore fails to make a precise point
- idealistic: calls and suggestions for action that are out of touch with the social and economic forces that shape our everyday individual and social lives.

Theological expertise can only unfold its full potential if the representatives of all religions learn how to avoid those methodological pitfalls. More often, however, they use the environmental crisis that we are facing today as a means to disguise their general lamentation of the decay of moral values or diffuse anxieties about the future in an ostensibly timely fashion, evoking notions of an eco-apocalypse.

But the holy scripture of the Christians is called “Evangelium”, the “good message”. That means our task is to spread hope and not anxiety. We need to find positive approaches to the challenges facing us. As our colleagues from Japan will know very well, it is crucial to not further aggravate paralyzing anxiety when coping with catastrophes like Fukushima.

Many religious representatives frame the ethical consequence of their belief in creation in the imperative: to protect creation. This notion is quite unclear, if it is to imply that we should treat nature as an object of ministrations and conserve it in its given state. The understanding of nature as an object that needs protection was shaped by the early excursions into space which exposed the human race to images of our planet as a small, fragile ball floating in space, evoking the human instinct to care for weak objects. Nevertheless, nature is first and foremost an open evolutionary order that is constantly changing, and not an object of static conservation (Reichholf 2008).

We will only make normatively meaningful claims if we describe the exact aspects of nature that are worthy of conservation in theological, ecological, economical, esthetical and cultural terms. Especially in the religious discourse on the environment there has been a diffuse expansion of appeals for environmental protection at the expense of a precise definition and delineation of what is actually worthy of being conserved.

Successful communication on environmental matters needs an ethical approach that uses positive concepts to spread

motivation instead of instigating fears. It should provide an orientation for individual and social decision-making processes instead of moralising appeals; it demands a precise analysis of causal mechanisms, risks and chances instead of diffuse platitudes; and it requires a realistic assessment of human weaknesses and social constraints instead of unworldly utopias.

1.2 Interreligious dialogue inspired by natural and social sciences

The crucial difference concerning the responsibility for creation of religions is not the difference between the regions but the difference between ambitious claims and reality. In the face of our scientific-technically oriented culture, all world religions are struggling to communicate their ethical ideals. The relationship between God, nature and Man is a particularly complicated issue.

The differences between religions are negligible compared to the fundamental ineffectiveness and incomprehensibility of religious discourses in the modern world. The primordial gap does not separate Asiatic religions like Hinduism and Buddhism or Shintuism and monotheistic religions, i.e. Christianity, Islam and Judaism. Rather, it runs between religious belief and modernity.

We need a new, scientifically acceptable and practically relevant understanding of the theology of creation. Religions need to reinterpret the anthropological, ideological and spiritual content of their respective traditions concerning creation in the context of our scientific-technical civilization. Natural sciences and the theology of creation need to learn from each other (Vogt 2009, 305-372). The religious approach to environmental ethics should be discussed in a methodologically focused and conceptually reflected way.

In the context of ethical behaviour and religious motivation, emotions and spirituality are absolutely crucial. But spirituality does not start where rationality ends. Rather, they should be connected. This balance between faith and rationality is one of the most important aspects of religious communication concerning environmental issues in our time.

1.3 Spirituality and ethics in the face of rationalism

The distinct quality of Christian ethics in a pluralistic society is not primarily derived from an additional contribution of arguments but rather lies in the incorporation of a spiritual dimension, inspiring considerable potential for motivation for ethical behaviour. Christian ethics can draw on a very rich tradition that aims to translate ethics into an ethos, by equally addressing hearts and minds, deep-seated hopes and daily life. Leonardo Boff criticises the anthropological and ethical traditions of modernity for not moving beyond rationality: “Without mysticism and its institutionalization in the different religions, ethics would degenerate to a cold catalogue of regulations and the codes of ethics would become processes of social control and cultural paternalism.” (Boff 2000, 11)

Ethical analyses of the spiritual type of knowledge

Spirituality is a type of knowledge that draws attention to the connection between ideas and emotions. It enables us to understand the manifold qualities of nature beyond their physical, quantifiable features. There are elementary approaches to knowledge based on everyday experiences, which are in some aspects more creative and richer than knowledge based on scientific experiments that is in line with the modern ideal of objectivity (Hofmeister 2000, 77). Sensual experiences constitute understanding on a different level than quantifiable measurements. Bearers of this kind of multi-

perspective knowledge can be predominantly found in the disciplines of theology and arts.

The reflection on the manifold kinds of perception, knowledge and understanding, including the emotional aspects of our relationship to nature, leads to deeper spheres of the human self-perception and thus sets free new energies of ethical and religious thinking and acting.

Many environmentalists insist on an intrinsic value of nature. This requires a perspective that does not only endorse the factual and scientifically quantifiable, but also the beauty of nature, its sense and symbolism. It requires an aesthetical and spiritual sensibility that does not look at things in isolation, but in their entirety and unity. This is how ecological and religious perceptions can enhance and complement each other.

The gap between knowledge and belief

Responsibility for nature in times of climate change, the increasing number of human beings on earth and scarcity of resources is – in the first place – not a problem of knowledge, but a problem of conviction and belief: we do not believe what we know about climate change and environmental problems, because we cannot sufficiently imagine what it means for us and for the fate of people all over the world and for life on earth in general. We are not able to react adequately, because we have never experienced such a deep, complex change of living conditions. The consequences are – for most decision makers – too far away.

The climate conference in Copenhagen (December 2009) showed that we are “atheists of the future” (Sloterdijk 2009). In order to enable us to realize what climate change means and to react adequately, it is necessary to translate our scientific data into descriptions of what they mean for society in terms of sufferings, values and lifestyles. Thus, the cultural sciences

(including theology) would be of crucial help to overcome that deep gap between knowledge and belief in this very specific context.

I advocate for an establishment of a working group for culture and religions in the International Panel on Climate Change (IPCC), because we need a better understanding of spiritual and cultural knowledge in order to motivate people in different cultural contexts for the protection of our climate and for an adaptation to environmental change.

2 The biblical creation mandate

2.1 The belief in creation as crisis management

The biblical faith in creation developed in a time of political and social crisis: the time of exodus and the Babylonian exile (approximately in the 6th century before Christ). The act of creation as the beginning of all things inspires a hope for the care of God and the survival of his creatures that has the power to transcend all phenomena of crisis (Ganoczy 1982, 11). This beginning holds its primary place in the hope for salvation.

Unity of the mission to dominate and the mission to guard nature
The so-called dominion mandate – Genesis 1,28: “fill the earth and subdue it” has frequently been interpreted as the cultural-historical program for environmental destruction (Amery 1972; a critical answer: Rappel 1996). In fact, the Hebrew verbs *rdh/kbs* can be interpreted as to trample, to stomp, to subdue, or even to rape. In Genesis 1,28 however, they have to be interpreted in the context of royal terminology. Consequently, rather than despotic domination, the term should be interpreted as royal rule in the sense of responsible care – just as a king would care for his subjects (Löning/Zenger 1997).

This interpretation is backed by the biblical composition of the first and the second creation account. “God put them into the Garden of Eden to tend and to watch over it (Gen 2,15). The “domination mandate” has to be seen in the light of the “gardener mandate”. Men are authorized to rule over nature by responsibly cultivating, conserving, shaping and protecting god’s creation.

Godlikeness and earthly nature of Man

The mandate to dominate (Genesis 1, 28) is theologically based in the notion of Man as “God’s image”, which entails both freedom and responsibility. Humans are not directly or primarily ascribed a sacred designation, but a social one which includes a sacred dimension: They shall serve each other, which is the best way to serve God. They are to develop their skills and talents freely and on their own responsibility as a way to honour God.

Consequently, the verb *rdh* has to be interpreted as “to dominate” according to the ideal of God: to guide and to tame. The mandate to dominate implies a hierarchical partnership between men and animals according to the notion of domination by providence (Welker 1995, 101-106).

Man is conceptualized as “Erdling” (Adam), as an earthly creature, which amounts to an essentially ecological designation. According to the biblical view he is “dust”, a creature that belongs to the earth. This applies for all human beings and implies that Man is embedded in nature – there is no privileged position for him. Only the reference to God, the capacity to experience God as a gift, distinguishes him from nature. This capacity to experience God enables Man to love without reserves and to assume responsibility for others – hence, it distinguishes Man from nature and at the same time connects him deeper with it.

Nature as the contractual partner of God

After the expulsion from paradise we no longer live in a perfect world, but in a world often shaped by conflicts and suffering. Nevertheless, the world is still under the protection of God, which is symbolized by the rainbow. In the narrative of Noah not only Man but also nature are named as the contractual partners of God: “I have set my rainbow in the clouds, and it will be the sign of the covenant between me and the earth.” (Gen 9,13) All aspects of the composition of the story are based on the understanding of the intrinsic value of nature. Nature is seen as a subject.

This reading is not compatible with European law, which is mainly based on ancient Roman legal traditions that clearly separated between Man and nature. In the world of modern (juridical and scientific) thinking, animals and plants are just objects; in the world of the poetic language of the bible they are considered as subjects.

2.2 Consequences for an ecological doctrine of creation

God and the world: a difference that inspires creativity

The Christian view is not that of a divinisation of nature. It is not pantheistic. God and nature are distinct. The difference between creator and creation alleviates human beings of the burden of a supposed divineness (DBK 1998, No. 78f). We are not God. We do not need to be perfect. Our way of life is a continuous search with a lot of loop ways. It is this distinction that makes a free relationship between the creator and his creatures possible. We have to be critical if a man claims to be perfect, if a king claims to be like God, if a society or a specific community is claimed to be “heaven on earth”. This critical distance allows for and inspires creativity.

This difference between creator and creation is absolutely crucial in the ecological context: it is a very common perception – especially in the global movement of “deep ecology” which started in the 1960ies in Norway – that nature in itself has divine and holy characteristics. The consequence of this divinisation of nature is that we are not allowed to modify it; technical intervention, such as in agriculture, genetic engineering or scientific experiments with plants and animals, would be absolutely tabu. Nature would be seen as a perfect order without conflict, a perfect balance.

Christian ethics on the other hand, considers both the marvellous and the imperfect sides of nature. Nature is an order with positive and negative sides, with life and death, harmony and conflict, happiness and grief. Our mission is to identify the good aspects of the nature in us and the nature around us, to cultivate them and to accept with humility and in solidarity even those aspects of life that seem to contradict our wishes.

This understanding of nature, which includes harmony as well as disharmony, is compatible with modern evolutionary approaches, which understand nature as an order with astonishing adaptation-capabilities as well as an order of never-ending conflict (struggle of life). In the long run, evolution is the sequence of unbalanced systems and it is exactly these situations of imbalance that incite progress (Reichholf 2008).

If nature were a perfect order, the emergence of human civilisation would have to be considered a disturbing element. The tremendous dynamics of modern society disturb the order of nature on the planet earth. We would have to consider ourselves as the “biggest catastrophe of nature”, and the environment would benefit by an extinction of the human race. This would be the ultimate consequence of any biocentric or ecocentric view.

The Christian world outlook fundamentally differs from these perceptions. From a Christian point of view, values are not predetermined by nature, but rather a product of communication, culture and life. Values are not naturally given, but created by the human discourse and by our relation with each other, with nature and with God.

The belief in creation and perception of time

The biblical understanding of the world is not cyclical; it cannot be confined to the circular flows of nature and is not limited to the interminable repetition of the same structures. Rather, it endorses a perspective that looks into the future as something truly new, often surprising and unforeseeable, while at the same time taking history as something from which we can learn and which we do not necessarily have to repeat into account. This is the basic precondition for the Jewish-Christian hope to find salvation: not by being redeemed from material life, body and natural constraints, but to find salvation in the redemption and transformation of reality (Ganoczy 1982, 53).

Many might think that this would distinguish Christian and Buddhist approaches to the relationship between God, Man, and creation. Buddhist thinking is focused on overcoming fleshliness and materialism, and pictures the Nirvana as the empiric world of creation. But at a closer look, the differences become much less categorical: Christians also distance themselves from materialistic approaches and Buddhists do not con-ceptualize the empirical reality of creation as purely negative.

But nevertheless the conceptualisation of time is crucial for the understanding of theology of creation and the relationship between God, nature and Man: If the world is an infinite cycle of repetition, salvation as the encounter between God and Man has to be thought of as something taking place outside of nature

and outside of human life in space and time. In contrast, Christians think of time as a history, eternity as the source and unity of time (not just as the negation of time) and the kingdom of God not as a second world behind our world but as the hidden and mysterious presence of God in the midst of creation and human existence.

Creatio continua: creation as a process

Despite the clear demarcation between the creator and the creature, eternity is a hidden aspect in time, which is understood as “*creatio continua*” in theology. In opposition to the common reading, the narrative of Genesis (Gen 1-11) is not just a speculation about the very beginning of the world in terms of a “*creatio prima*”, but rather a narrative description of the general features of the process of creation as a “*creatio continua*”. Creation is a perpetual creative process, a constant evolution. God is present in the process of creativity and in the emergence of new life.

The tension between the redeemed and the unsaved world

The Christian understanding of creation is shaped by the tension between the unsaved world and the anticipation of a reconciled reality. The same tension characterises the notion of nature: harmony and conflict, order and chaos, life and death, becoming and decay. Given this inherent tension, ethics cannot be derived directly from nature, but needs to draw on historic, cultural, and religious categories. The Christian understanding of creation does not preclude naturalistic ethics of nature. At the same time, the notion of creation needs to be based on a reflection of nature as an open, process-oriented and ethically ambivalent order to not remain an abstract concept.

In the tension between the redeemed and the unsaved world, Christian ethics of nature has a complex character: values are

not perfectly given in the order of nature, but we have to search for them in the process of cultural interpretation and formation of nature. The “grammar of nature” is relevant for ethics; it defines limits, conditions and duties of ethics. But natural law and ethics are not the same. Ethics is related to freedom, and so to the decisions of a subject and not just to the necessity of natural law. Christian ethics is not a naturalistic or cosmological concept. Nevertheless it has to learn to be more conscious of and responsible for nature.

Core ideas of Christian ethics of creation

Against this background, the ethical and practical relevance of the belief in creation can be summarized in three core terms (cf. DBK 1998, No. 56-84):

- *Man as image of God*: In the Christian tradition, human beings as free and responsible subjects are the temple of God. Man can conform with the value system of God if he acts freely, independently and dutifully. This is the basis for the unique dignity of Man and his responsibility for all living creatures. The emphasis on the inviolable dignity of Man in God’s own likeness does not preclude a recognition of the intrinsic value of nature, but is its logical precondition. This is the real epistemological meaning of “anthropocentrism” - it does not imply that only human beings matter. It is not more and not less than an epistemological precondition of knowledge and ethical evaluation. Christians need to learn this as well. In this respect I consider your critical questions as legitimate and helpful.
- *Community of God’s creations (Mitgeschöpflichkeit)*: Man and all living creatures are united as creations of God. This prohibits us to consider our common creatures as mere means to an end. The respect for all other

creatures is the consequence of God's love. Man shares a common destiny with all other living creatures, each of which holds its own place in the big house of God's creation (Löning/Zenger 1997, 142-146). The term "Mitgeschöpfe" (creatures like us) was included in the German law for animal protection during the last modification in 1990. But we are far from respecting and implementing it in reality, e.g. in practices of modern farming.

- *Reverence*: The Christian belief in creation emphasises an attitude of reverence, which is able to constantly rediscover and protect the beauty of creation in the face of sorrow and conflict. Reverence for creation implies reverence for the creator as well as respect for the given limits, measures and dimensions of creation. Albert Schweitzer (1875-1965), the protestant theologian, jungle-doctor, musician and scientist, appreciates the attitude of reverence as the fundament of a new, nature-based ethics.

If we are to reconceptualize environmental ethics, we have to recognise the unity of these three aspects instead of playing them off against each other.

3 Catholic Social teaching on the way to an Integration of Ecology

3.1 Catholic magisterium: Comprehensive development

From a historic perspective, the contribution of the catholic magisterium concerning the discourse on ecology will not be found in specifically ecological aspects, but rather in an enhanced understanding of the term "development" and its integration in social, cultural, and economic questions, which

has shaped our understanding of development (cf. to the following Vogt 2009, 180-214; Philipp 2009). Paul VI, in 1967 in the encyclica *Populorum progressio*, emphasises that development should not be limited to economic growth, but should be seen as holistic, comprehensive process. The encyclical insistently criticises the western way of life which is based on consumption. Delegates of the Vatican to the first UN conference on the environment in 1970 in Stockholm put forward the same arguments. The encyclical *Populorum progressio* thus sets up the main tenets of the Rome's social doctrine on environmental protection.

Three fundamental ideas are at the core of the contribution of the Catholic magisterium to the discourse on ecology:

- 1) The concept of comprehensive development, which has shaped, in cooperation with the Club of Rome, the notion of sustainable development as employed by the United Nations;
- 2) A critique of consumerism and the linkage of ecological considerations with the issue of unsustainable lifestyles, which is the most explicit statement of the Catholic discourse on the environment;
- 3) The concept of property based on Thomas Aquinas, which does not fall back on arguments of natural law, but rather bases its reflection on property on pragmatic arguments and sees the goods derived from creation as public goods to the benefit of all.

John Paul II has repeatedly contributed to the discourse on ecology since the very beginning of his papacy. His main concept is that of "human ecology", which focuses on the dignity of the individual while reflecting on the "respect for life", work as a "cooperation with God", and "respect for life".

John Paul's remarks on ecology in his message for the celebrations of the World Day of Peace in 1990 were highly

appreciated. The title is “Peace with God the creator – peace with all of creation”. It states that a lack of due respect for nature and the resulting plundering of natural resources represent a threat to world peace (John Paul II 1989, No 1). Benedict XVI further develops these claims in his peace message 2010 with the title “If you want to cultivate peace, protect creation”. Given the fact that about a third of today’s conflicts are linked to conflicts over resources, and the tensions caused by environmental migration in many areas of the world, this approach to environmental issues – drawing on theology and peace studies – constitutes a crucial Catholic contribution to the debate.

Ecological debates in the encyclical Caritas in veritate

Currently, the statements of the Catholic magisterium in the social encyclical *Caritas in veritate* constitute the most relevant contribution to the discussion on environmental protection. The encyclical devotes five paragraphs (Benedict XVI 2009, No 48-52) to powerful appeals and analyses regarding the responsibility for creation. It starts from fundamental reflections on the “grammar of creation” (the ethically meaningful structures of nature) as an expression of a plan of love and truth and ends with postulating the necessity of a new alliance between humans and nature to protect humankind from its own self-destruction. Concise postulates for a better handling of energy production and consumption, based on the development of more efficient technologies and an increased use of renewable energy sources, and improved access to energy for poor countries represent direct links to current environmental politics.

In certain aspects however, the encyclical features important gaps: climate change is not mentioned in a single line, neither is the concept of sustainability, even though it is apparent that

climate change will dramatically aggravate existing environmental problems.

3.2 “Upgrading” the debate: The principle of sustainability

Up to this day, sustainability has not become a systematic part of the Catholic social doctrine on a global level. On a national level, however, there is a process of change in the Catholic social doctrine. Against this background I postulate an extension of social principles: along with personality, solidarity and subsidiarity, *sustainability* should be recognized as a fourth social principle. This is the core argument of my book “The principle of sustainability” (Vogt 2009, 456-481) in terms of the systematic aspects of Catholic social ethics.

Sustainability is the missing link between the belief in creation and the environmental discourses in modern society. Just as the Christian idea of charity was for many centuries understood merely as a personal virtue, and only became politically effective and relevant in connection with the solidarity principle, the belief in creation needs a translation into categories on the level of social order, so that it can become politically viable and justifiable, and clarify concrete consequences of organisational structures and economic decisions in modern society. Belief in creation without sustainability is, in terms of structural and political ethics, a form of blindness. Sustainability without the belief in creation (whether Christian or not) runs the risk of losing out on ethical depth.

Sustainability shows up justice loopholes. It is the issue at the interface of all the main questions about the future, often displaying surprising parallels and structural similarities to different dilemmas in different contexts. Sustainability opens the way for new analyses and solutions for the complex interplay between local and global phenomena. Such a central

function can only be realized by the sustainability discourse if it adopts an attitude of permanent scrutiny concerning its limits. This is where theology can be a useful tool in initiating and guiding sustainability's search for hope and meaning, which stretches beyond what is achievable by human, societal or technical efforts. Facing climate change means facing contingency, which requires not only a political but also a cultural answer.

The religious and spiritual understanding of sustainability allows for a critical view on the risk of the sustainability discourse closing itself off and mistaking its integral nature for comprehensive and omnipotent leverage. Sustainability needs an accompanying critical ideology, to be provided by philosophy, theology, sociology and cultural and historical studies.

3.3 Egological World-Ethos: Which competency do the religions have?

The Worldwatch-Institutes study on religion and sustainability

There is a growing conviction that the religions will play a key role in establishing a broad-based consensus and a deeper understanding of the ethical basic principles of a sustainable society: The religions are challenged to engage with the socio-political dialogue by contributing ideas on the basic option for a comprehensive responsibility for creation, a reconsidering of the relation between Man and nature, the power of faith for personal change, a return to the essentials of life beyond consumerism and egoistic mentality (Gardner 2003).

The renowned Worldwatch-Institute assumes that the "change of course", i.e. a change of policy of the global community towards sustainable development, can only succeed if religions consider and live up to their role and responsibility in this

endeavor. Gardner (the author of the main report) names five outstanding assets which the religious institutions and leaders can contribute to build a sustainable world: the capacity to shape cosmologies (worldviews), moral authority, a large base of adherents, significant material resources, and community-building capability.

I would like to amend the list of assets for sustainability drafted by Gardner based on my Catholic and socialetic point of view:

- All religions identify themselves through a long-term thinking. On this basis they have a very fundamental approach to the thinking of sustainability.
- The Christian Church is the oldest global player on earth and the Catholic Church administrates an influential global institution and network; therefore it has a specific duty and possibility to fight for a globalization of solidarity.
- The Christian anthropology does not measure the value of a human being based on the goods consumed or produced. Consequently, it can empower people to a modest, just and responsible handling of these goods. In Asian religious traditions, asceticism is even stronger than in Christian tradition.
- The belief in creation does not only aim to issue moral appeals, but also to enable a communication that strives to create and communicate values and that understands ecological responsibility as an integral part of the self-respect of Man. What we need are not just moral appeals but a new cosmology – or the remembrance of old religious cosmological traditions.
- The distinct quality of the Christian point of view regarding environmental matters is its root in cultural and social contexts. Environmental protection and human protection form a unit in Christian ethics.

Until now, these religious potentials have only been restrictedly and occasionally activated for the responsibility of creation and for sustainable development. This new encounter between religions and the environmental movement is not only a matter of the external function of religious faith. It also touches the very center of the relation between God and Man itself: in the light of the existential experience of the ecological crisis, the question of God imposes itself in a new way. The ecological crisis is a revelation of God in our time. The crucified Christus can be expericend on a cosmological level in the “crucified creation” in our time (Raimundo Pannicar). The challenge to return to a stable and sustainable relationship with creation touches upon the roots of our relation to God, of our culture and our self-conception. There is no relation to God beyond our relation to creation.

Seminal Figures in Christian spirituality of creation

Christian ethics can draw on a very rich tradition of spirituality which is essentially a spirituality of creation. Franciscus (1181-1226) is probably the most well-known representative, who exemplified an unprecedented expansion of Christian care and love for all non-human creatures by his brother-sister-relationship with the sun, the moon, water, fire, bees, lambs, bugs, flowers, birds and fish. Franciscus’ “defiant sympathy for creation and its creatures” (Ganoczy 1982, 89-94; Werner 1986, 13-37), which is also aware of misery and death as part of life constitutes a radical contrast to the naïve projection of the human longing for an ideal world on the concept of nature.

Another paradigm of Christian devoutness to the cosmos is the rather intellectual-contemplative side, represented by Thomas Aquinas (1225-1274), who, based on his reflection of the theology of creation, illustrated the divinely ordained independence of the empirical reality and this way succeeds in

integrating Aristotle's philosophy into Christian faith. For Thomas, the order of creation and the order of salvation are complementary processes of God's affirmation of the world. This is why the affirmation and appreciation of the reality of creation in all its aspects is the basic moral attitude for him (Mertens 2006). The tradition of natural law, as coined by Thomas, is the main starting point for Christian environmental ethics. The main intention of its curious and thorough attention to the empirical reality has strongly influenced modernity.

Christian spirituality does not only play out in the retreat into one's self and the striving for self-perfection, but also in the capability to curiosity, sympathy, responsibility, and love.

4 A new understanding of welfare and progress

4.2 Ethics after Fukushima

The most important event of environmental history of the year 2011 was – up to now – the nuclear catastrophe of Fukushima (a highly informative overview to the facts and different arguments is to find in: Schneider/Froggatt/Thomas 2011). It is a globally discussed admonition for new ways of risk management and – in the last consequence – for a rethinking of the relation between Man, nature and technology. The German Government drew the consequence to phase-out nuclear power plants starting from now until the year 2022. This was a very difficult decision both for the population as well as for the economy. The German government declared it explicitly as an ethical decision (the commission that had to advise the government was called "ethics commission"). The churches were involved intensively. The German bishops conference published a book about the substantial meaning of a turn in energy supply and its crucial impact for society and for the

realisation of sustainability and responsibility for creation at the beginning of the 21st century.

After the Church had engaged in long, controversial discussions, struggling to come to terms with the dilemma between the risks of nuclear energy and the increasing demand for energy, the Bishops' Conference agreed on a clear stand during its general meeting in Freising, Bavaria, in March 2011: "The catastrophe in the Japanese nuclear power plant Fukushima has again illustrated the limits of the power of humans. The residual risk of nuclear power is unforeseeable, the question of permanent storage has yet to be answered and cannot be imposed on future generations. The Bavarian Bishops do not consider nuclear power as a sustainable means of energy production. The phase-out of this technology is to be implemented as soon as possible, the period of the utilization of nuclear technology as a bridge technology is to remain as short and limited as possible."

A few days ago I received the translation of a letter of the late Japanese engineer Norio Hirai, who used to work in a leading position in the Japanese atomic industry. I would like to share a few quotes from this letter: "The problem is not the professionals involved in the planning process, but the unskilled workers who simply don't understand how grave the potential consequences of the smallest error might be. [...] There has been a row of surprising accidents: there was an accident in Mihamahara in February 1991, several incidents in Monju (a fast breeder with a sodium-based cooling system that experienced problems with poorly fitting pipes. 1.4 tons of plutonium are stored in the plant – this amounts to the 175-fold of nuclear material of the atomic bomb that has destroyed Nagasaki)."

The discussion about nuclear energy is very complex. It's legitimate that there are different positions. Our societies need

energy, and this dependency will grow in the future. On the other hand, because of climate change, fossil energies do not prove less problematic in an ethical evaluation.

Nevertheless: Who speaks about responsibility for creation has to speak about nuclear energy as well. If the religious discourse concerning the responsibility for creation has the ambition of being concrete, it needs to relate to the actual decisions of society. Otherwise it remains an empty concept and without any consequence for the reality of everyday life. So I dare to suggest an ethical judgement – knowing that the necessary competence for that is not only deriving from theology but also needs an intensive interdisciplinary dialogue. There are three strong arguments that make a quick phase-out of nuclear energy seem morally imperative:

1. The problem of final storage is not solved; we cannot guarantee a society which will remain stable over several thousands of years. This would be a basic precondition for intergenerational justice given the long-term effects of nuclear power.
2. We learned from Fukushima that even societies with a high level of technical knowledge are not able to guarantee a perfect or even sufficient risk management of nuclear power plants;
3. In the long run, nuclear energy will hit a dead-end: nuclear energy is not renewable; the stock of Uranium is limited, and nuclear energy is very expensive if all the costs accrued during the production process are taken into account. Hence, the earlier we initiate the phase-out and the turn towards renewables, the better.

I am convinced that we are on the threshold to a post-nuclear and post-fossil era. The technical possibilities for a shift are given. What is missing is a shift in values and in our perception of welfare, which is a precondition for the necessary big transformation in energy supply.

4.2. The conflict between climate protection and Social Justice

Justice and peace cannot be realized in the 21st century without climate protection. But there is a profound conflict between climate protection and the fight against poverty, as the well-known and financially viable methods of economic development are to a large extent dependent on access to fossil fuels. However, there is no additional capacity in the atmosphere for the CO₂ that would be emitted by developing countries if they were to develop along the same lines as the industrialized nations.

The technical possibilities for fighting poverty and protecting the climate, and for the integration of these two aims, are in theory relatively good. Realizing these aims is primarily a question of overcoming political and institutional obstacles, as the necessary investments can only be made under conditions which facilitate a fair, cooperative and long-term sharing of the burden. Currently, from the point of view of the developing countries, there are hardly any consensual and attractive suggestions on the table for a fair “burden sharing” in terms of climate protection.

The particular nature of ethical problems that arise as a result of climate change lies in the long distance between initiators and victims. This distance can be defined in three ways: Climate change is having a profound and negative impact on (1) future generations, (2) the poorer countries in the southern hemisphere and (3) the habitats of fauna and flora and thereby also on the relationship between humans and nature. It can be regarded as a threefold externalization of the costs of our way of life: it falls and will fall to the future, to the poor and to the environment. The German Conference of Catholic Bishops has referred to climate change as the “crossroads of global,

intergenerational and ecological justice” on the basis of this analysis. (DBK 2007)

Climate protection needs a code of ethics which sheds light on potential causes for injustice, analyses dilemmas and provides firm criteria on which to base political decisions. We have to speak about philosophy of nature, about anthropology and the complexity of human wishes, hopes and conflicts and about the cultural reasons and obstacles of changing our behaviour (Vogt 2010). Without an understanding of that cultural and religious dimension of responsibility in climate change, the political negotiations will not stand the slightest a chance to change society.

Climate protection is a question of solidarity on a long-term and global level. It is a crucial test, especially for the religions regarding their readiness to assume responsibility for creation. Climate protection is the “moral stress test” for contemporary society.

4.3 Newtons concept of nature and the understanding of progress

Our current model of progress is based on the nature philosophy of Newton's mechanics, which sees time and space as empty vessels, as something lacking both direction and structure, both a beginning and an end. Time and space are merely obstacles to be overcome. Our accelerated society, which is managing to use up myriad resources at a breakneck speed and defines the pace of our lives by the maxim “everything, now, at any time”, is a consequence of our interpretation of nature (Vogt 2009, 305-346). Christian belief in creation leads us to search for alternatives to this view of nature, and can base its nature philosophy on process theology. Sustainability needs new concepts of time and space and thus a cosmology which draws on the knowledge derived from Albert

Einstein's theory and from new theories of the development of complex adaptive systems.

The environmental crisis is not just a challenge for political negotiations and technical innovation, but it is also a question of changing society's values. "Faster, higher, further" has proved to be an inadequate ideal of progress. The current situation demands individual and collective answers to genuinely ethical questions about the goals, limits and conditions of our lifestyle. How much is enough? What are the priorities in striving for progress? How can we ensure fair chances for people all over the globe? How can we ensure that long-term interests are properly represented in the democratic system?

In the search for answers to these questions, which are profoundly significant for the threefold goals of fighting poverty, saving energy and protecting the climate, religions can make a substantial contribution. Their competence is especially based on the fact that they embed moral claims into a cosmology, a deep anthropological understanding of human behaviour and into a symbolic and ritual communication that has more chances to change the behaviour of people. The contemporary paradigm of progress as unlimited growth needs to be replaced by a concept of development governed by the cycles of resources and the rhythm of nature. Long-term economic success needs to be measured by how well it is integrated into the whole, i.e. the economy of creation.

4.4 The hope in God and the belief in political utopia

The modern model of progress has come to its end. This fact has yet to sink into the consciousness of many. Some interpretations of sustainability do not bring clear awareness of that situation, but rather help to artificially keep up our self-delusion. Sustainability with its far-reaching promise of a global, eco-social and economic approach has become one of

the central 21st century utopias. In the 20th century we had to experience the negative side of the deep ambivalence of the blind belief in utopias. Seen from a theological perspective, sustainability demands a rejection of the utopia that politics, science and economic progress will solve all problems.

Even the agreements reached at the UN-conference in Rio (1992) do not clearly address the limits of growth and paper over the cracks of these existential boundaries. We are promised a utopian, global management of ecological and social problems, while behind the scenes, the same old models and power networks are pursued (Reis 2003).

Sustainability has degenerated to a disguise of the traditional prosperity model, which, according to the trickle-down principle, makes the supply and accommodation of the poorest in society dependent on growth and surplus for the rich part of society. The experience of the last two decades shows clearly that this is a misleading promise. “Green-washing” is not enough. We need a deep shift in values and models of economy. The utopian excess of the “green-washing” model of sustainability, as it is currently communicated – and often willingly believed, is open to questions. We have to realize, that the CO₂ emissions are still increasing – especially in China and India, and the chances to reach the 2-degree Celsius target in climate politics are declining. The methane emissions from the melting permafrost have exceeded various worst-case-scenarios and we are well on the way to accelerating this process even further.

Churches and religious communities have to tell the truth - even if nobody likes to hear it. Postmodern society is bound to the promise of everlasting growth and progress without believing it. Christian faith, on the other hand, has nothing in common with a belief in progress. It is a hope, which is quite different from the expectations of prosperity that we became

used to in the western society and which seem to spread now very quickly also in Asiatic societies. It is a way of managing *contingency* in the face of the ambivalence of progress and setbacks, security and risk, joy and suffering, life and death. We have to accept that our life is finite, that it seems quite opaque and not understandable at times. Religions accept the limits of human ability and of our life without downsizing the mind and the hope to a small-scale world.

If we assume, in line with leading sociologists of our time (Lübbe 1998, 35-47; Luhmann 2000) that managing contingency in the meaning described above is a primary function of religion, then it is also here that we find the specific competence of theological ethics in the discourse on sustainability; managing contingency is vital to respond to the postmodern breakdown of the belief in progress which is the starting point of debates on climate change and sustainability, without resorting to ecological apocalyptic scenarios or to a new version of the utopia of permanent growth. The religious dimension of hope liberates from a blind belief in the political promise of a complete managing of all problems of ecology and social life.

5 Conclusion

You asked me to speak about a very broad topic: The relation between God, nature and Man in Catholic theology. My scrabble for an answer was quite long, quite complex and nevertheless very fragmentary and full of unanswered questions. At the end I will try to give a very short answer: The place of God is not outside of nature. He is the mystery of nature. And it is the destination of Man to seek him and to give him room in nature, in society and in our minds.

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