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THEORY AND PRACTICE IN NATURE CONSERVATION – WHERE TO SEEK SUSTAINABILITY?

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ABSTRACT: Contemporary nature conservation is the subject of serious disputes, with biocentrists emphasising the superiority of the good of nature, while anthropocentrists believe that conservation space should also take account of the good of humankind. The dispute concerns two very important values perceived differently, and not resolvable within any scientific framework.

The authors postulate a return to the Christian roots of our civilisation. It was God who gave human beings the goods He had created, expecting them to be used in line with His plan. The man who lost God's plan, destroys the life of nature as well as his own. The postulated solution is the proper shaping of conscience, to condition biodiversity conservation in line with the idea of sustainable development.

KEY WORDS: sustainable development, biological conservation, biocentrists, anthropocentrists, theocentric ecoethics.

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INTRODUCTION

The development of our civilisation in recent decades has been the subject of growing criticism (Meadows *et al.* 1973, *Raport...* 1969, UNEP 2016), with one result of that process being the shaping of the sustainable development concept. Implementation of that concept has become a dominant driving force in economically-developed democratic societies, while the very theory of sustainable development has become a pure- and applied-science paradigm in such fields as economics, the social sciences and the environmental sciences. In line with it, economic growth is to be linked with increasing wellbeing in society, intra- and inter-generational justice and an environment in which the existing components (at least) are preserved (Fig. 1).



Figure 1. The three components to sustainable development. Such development may only proceed where there is harmony between these component parts. Nature conservation is one element to the environmental component (authors' own elaboration)

Sustainable development has assumed highest-priority status in Polish legislation. It is mentioned among the principles of Poland's state setup, indeed as a principle of the highest rank (appearing in Art. 5 of the country's Constitution – see the *Konstytucja*... 1997). It also gains definition in Art. 3 of the Environmental Protection Law Act of April 27th 2004 (*Ustawa*... 2004), wherein: "«sustainable development» shall mean such socio-economic development which integrates political, economic and social actions, while preserving the natural equilibrium and the sustainability of basic natural processes, with the aim of guaranteeing the ability of individual communities or citizens, of both the present and future generations, to satisfy their basic needs."

Nature conservation is a key element within the environment-related subject matter of sustainable development. Among the 27 principles set out in the 1992 Rio Earth Summit's "Declaration on Environment and Development", references to the protection of natural resources relate to a sovereign right to use the environment and its resources; retention of an environment in which future generations can also meet their needs; and obligatory cooperation of states in the protection of the Earth's ecosystem. www.czasopisma.pan.pl PAN

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International conferences and Papal Francis Encyclicals and Addresses (Franciszek 2015) relating to the environment sit alongside EU documents and Polish law (the Nature Conservation Act of April 16th 2004, the *Dziennik Ustaw* Official Journal of Laws of 2004, no. 92, item 880 – see *Ustawa*... 2004) in being targeted at practical objectives addressed mainly to humankind and seeking to ensure improved quality of the natural environment. Meanwhile, the deeply-rooted ideological concept of nature conservation (Soulé 1985), and the convictions of most naturalists and NGOs (Witkowska and Witkowski, author archive) incline towards the traditional view that "true" protection or conservation requires the separation of a protected object from human economic activity. Such stances are a source of conflict, given the presence of parties with ideologically distinct positions which cannot come to an understanding regarding the achievement of practical goals. The recent dispute over ways of protecting Poland's Białowieża Forest is just one manifestation of this kind of conflict (Bobiec *et al.* 2016; Weiner 2016).

Our aim here is to present three main and current approaches to the nature-conservation theory, with account taken of the two opposing stances represented by Michael Soulé and Peter Kareiva, as well as a third that in some sense integrates the logic of both (Mirek 1991, 1997, 2000a, 2000b, 2000c, 2001, 2002b). The article is founded upon several different modules:

- In the first module we draw attention to the key criterion of sustainable development that respect for biodiversity should represent (Mirek 2001). The Convention on Biological Diversity, which also invokes sustainable development, not merely puts biodiversity before us as a paradigm of nature conservation, but also (*nolens volens*) makes a measure of that development out of it (Mirek 2001, 2002a, 2000b). That in turn takes in the relationship between the human being and nature, and between human beings via nature, both within and between generations.
- In the context of the criteria invoked above, we consider three different models for the relationship between people and nature open between economic exploitation or utilisation and nature conservation.
- We show how these three models are dependent on perceptions of the human being and nature in the context of the God-humanity-nature relationship. The first two seek to avoid referring the relationship between human beings and nature to the authority of God; while the third – founded on the Christian tradition at the root of Western culture – seeks out all three components of the relationship.

WHY DO WE PROTECT NATURE?

M. SOULÉ'S BIOCENTRIC CONCEPT

The idea of nature conservation and attendant practical action is now over 150 years old. At the same time, the field only emerged relatively recently as a modern scientific discipline. Only with the 1980 appearance of the *World Conservation Strategy*



(from the IUCN, UNEP and the WWF), as well as the (also 1980) publication of a key opinion-forming handbook by Soulé and Wilcox entitled *Conservation biology: An evolutionary-ecological perspective*, was a dramatic development of this scientific discipline brought about, including with its inclusion within the subject matter of population genetics, and consequent emergence of many such high-impact journals as *Biological Conservation* in Europe, and *Conservation Biology* in the USA.

It soon emerged from all of this activity that nature conservation can be understood in many very different ways, to the extent that this is a constant cause of conflict, not least in the current matter of Białowieża Forest, which has already been referred to. In a nutshell, nature conservation brings out two separate concepts, of which the first has its champion in the aforementioned leading American exponent, biologist Michael Soulé. In *BioScience*, he published a famous manifesto entitled *What is conservation biology*? Set out in that article were the functional principles of the said biology, along with its normative (ethical) fundamentals. The newly-emerged "CB" (conservation biology) he referred to as a "crisis discipline", but also as a science seeking to save nature, just as cancer biology seeks to save human lives from that disease. However, unlike the latter and most other branches of biology, this one is a holistic science, whose researchers ought (in the view of the author) to be directed in their work by the functional principles detailed as follows:

• Most species are "producers" of evolutionary processes and phenomena This postulate accepts that stabilised natural systems will behave differently from those that have come under human influence.

A further functional postulate pays attention to the scale of processes:

- In many (perhaps all) ecological processes there are thresholds above or below which sudden chaotic changes may arise, or processes ongoing hitherto cease This happens when a system is either too small or too large, In other words, ecological processes fall within some intermediate scale of processes ongoing in time and space. Phenomena and processes of this kind are not observed in excessively large or small ecological systems. Floods or volcanic eruptions do not fall within the sphere of ecological processes, for example. Likewise, in fragments of an ecosystem that are too small, there may be some curtailment or even cessation of certain phenomena (e.g. that of succession).
- Genetic and demographic processes also have thresholds, and below these certain chance phenomena and processes prevail over those of a deterministic or adaptive nature

What arises out of this functional postulate is that a population's chances of survival or persistence depend on its size.

• Nature Reserves are in a chronic state of imbalance (and hence threat) when it comes to rare species and/or those of large body size

This is particularly true of small islands (of habitat) in which, as practical experience with the management of Nature Reserves makes clear, excessively small populations of many species need to be augmented artificially in the face of threatened extinction (*Conservation biology*... 1980).

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The ideas Soulé offers are expressed very explicitly in his normative postulates. When the author refers to values at all, he bases himself on the deep-ecology (ecosophy) output of A. Naess (2003). Thus, in turn, the following are the 4 ethical postulates propounded by Michael Soulé:

• Diversity of organisms is good (and a good)

On acceptance, this postulate becomes a part of our philosophy, and for example denotes that the extinction of a whole species, or even a population thereof, is something bad. Equally, this postulate would not be taken to concern natural extinctions, given the exceptionally rarity of such events, on the human-lifetime scale at least.

• Ecological complexity is another good

This postulate relates to the complexity of the ecosystem and of ecological processes. The author draws a clear distinction between the complexity of ecological systems created by people (e.g. in cities), and the postulated complexity of natural ecosystems.

• Evolution is a good

If we assume that life itself is a good, then how can we observe a passive neutrality in the face of its evolution? If this postulate holds, then – in the view of the author – support for it must entail retention/preservation of natural evolutionary processes in as many habitats as possible.

• **Biological diversity has its inherent value, irrespective of its utilitarian value** This normative postulate needs to be regarded as a fundamental one. In it, the author shows what separates the conceptual and idealistic side of nature conservation from a utilitarian way of looking at the issue. In this way reference is made (in fact unknowingly, just as Naess also made unaware reference) to the way of considering matters espoused some decades earlier by Jan Gwalbert Pawlikowski (1938).

THE ANTHROPOCENTRIC CONCEPT OF P. KAREIVA AND M. MARVIER

Notwithstanding many signs that humanity was going in a different direction, and that the sustainable development concept was being used to impose a certain overriding character of utilitarian over ideological solutions (even in nature conservation itself), it was not until 2012 that – again in *BioScience* – there appeared a polemic vis-à-vis M. Soulé's concepts. The authors here were no-less-outstanding scientists in the shape of P. Kareiva and M. Marvier (2013), whose own manifesto was set out under the title *What is conservation science*?

The authors put it straight: today, it is our species that dominates the environment, and there is no way of separating the good of other species from the good of humankind. Conservation Science (CS) deals, not only with biodiversity and the dynamics of natural systems, but also with social dynamics and mutual relations between the two systems and processes. The science in question remains a crisis discipline (*a la* Soulé), but it is based on better and fuller appraisals of reality, and the accumulation of knowledge that ongoing technological progress has been making possible. Thanks to that knowledge,

planning of protective action is based on choice as regards both goals and action strategies.

In this new view, a fundamental mistake made in Soulé's biocentric conceptualisation relates to the role of people in regard to biodiversity. For him, a marked majority of all human beings pose a threat to nature, while only a tiny minority – mainly comprising "Western" biologists – makes any effort to engage in protection, and to limit or prevent damage. The authors of CS take a much broader view. For a start, they see protection/ conservation as an expression of values that people in general adhere to. This stance and rationale are targeted at a shaping of the world for future generations. From the psychological and ethical viewpoints, the recognition of people's activity and attitudes in regard to nature is of key significance if protection is to be achieved. However, this a dimension extremely neglected in CB through to the present day.

Second, diversity is not the sole aim of protective activity, as it is also associated with human life and upkeep (means of living). The authors point to cases in which protective actions distorted economic conditions and people's wellbeing, with the establishment of protectede areas resulting in a deterioration in social and economic situations. Of course most of the human population does in fact benefit as protected areas are set up, but there are also admittedly those whose loss is plain to see. For this reason, the relationships and linkages between local communities and those managing protected areas requires greater focus on founding and management. The CB idea first and foremost expounding nature conservation measures leads to a wrong diagnosis, and in consequence to inappropriate, conflict-generating solutions. For its part, contemporary CS must draw, not only on the biological sciences, but also on knowledge present in society, business management, anthropology, politics and many other spheres of humanist learning.

Soulé set out 4 main functional postulates for the CB discipline that was taking shape, and these are no less apposite for the fact that protected areas and species are suffering ongoing decline around the world. According to the authors of the new (CS) strategy, the only way to improve this situation is to bring local communities into conservation planning and policymaking, with greater care than hitherto also taken of areas beyond those enjoying official protection. Referring to Soulé's concept, CS authors Kareiva and Marvier (2012) show how the environmental, social and economic context in which nature conservation is currently operating has changed significantly.

In the course of a single generation (since 1985), the human population rose 40%. The greater part of that increase took place in areas of high biodiversity, with this fact alone making it clear how difficult it will be to reconcile population growth with biodiversity conservation. In the 25-year period post-1985, there was also a marked increase in energy consumption, and in concentrations of carbon dioxide in the atmosphere, with this apparently translating into a 0.5°C rise in the planet's mean surface temperature. The period also brought a further increase in the area of the Earth in which ecosystems have been transformed or altered. Currently, more than 40% of all ecosystems are now pastoral in nature, or else used in crop-growing. Either way, this land is associated primarily with human nutrition.

The period has also seen apparently positive changes. The area enjoying legal protection has increased from 6.5 million km² to in excess of 16 million. The area of marine protected areas has increased in the period from less than a million km² to more than 8.1 million. This is a genuine success, but the growth in areas protected cannot of itself assure any reversal of negative trends regarding biodiversity, given the everincreasing anthropopressure, and all the more so given that societies and politicians alike are in fact turning away from the idea of biodiversity conservation. As Gallup polling reveals, as of 1984, a majority of respondents (61%) chose the environment as a key priority over the economy. However, by 2004, support for the key significance of the economy was far higher, while by 2011 only 26% of those surveyed felt that the environment could be protected even at the expense of the economy.

A further problem concerns changes in behaviour among children and young people, a majority of whom now live in towns and cities. These people have less contact with nature, while a further factor distancing them from nature is the attractiveness of the Internet and the virtual world of computer games. Reduced interest in nature tends to limit the impulse for large numbers of publications dealing with the subject to come out.

In discussing Soule's concept, Kareiva and Marvier come up with their own postulates needing to be treated more as indications for practical action in nature conservation than general guidelines of a normative character:

- Today there are no natural systems. Studies of our planet make it clear that there are no places in which a total lack of evidence of human presence can be documented. This period in the history of the Earth is thus being termed the Anthropocene (Stoner and Melathopoulos 2015), given that human activity in many spheres of the environment exceeds the actions of all other species put together. While people clearly also had a very marked influence on the environment and nature in the past, the present situation sees that influence greater than ever before, with so many consequences that it is simply impossible to pursue nature conservation measures as if nothing was going on.
- Western civilisation came upon the idea of protected areas free of human influence, • from which – as necessary – inhabitants were even expelled, and certainly excluded from decisionmaking processes. These decisions mostly emerged as unjust socially and mistaken from the scientific point of view. While such areas have their role to play, the future of conservation undoubtedly lies in areas that people do also make some use of. And, faced with climate change and invasions of introduced species, even the natural and uninhabited protected areas also require intervention, if the existing system or original goals of protection are to be upheld.
- The fates of humankind and of wild nature are interlinked, and depend on such • common factors as clean air, pure water, resources of food and shelter. Many factors that harm the wellbeing of people also do harm to wild nature.
- The ecosystems upon which our water, food and medicines all depend are also the • ecosystems in which other species live. Nature conservation is, on the one hand, the protection of the inner valuable features of biological systems, but also on the

other the protection of those attributes that maintain our own lives and wellbeing. The human population, like all of nature, finds itself at a much elevated risk level.

- Nature is in fact remarkably resilient. However, this does not mean that an ecosystem will regenerate even if anthropopressure is maintained. Furthermore, it is clear that some ecosystems are more fragile and delicate than others.
- Today, it is no longer possible to continue propagating the slogan "think locally, act globally", because out efforts at the local level where nature conservation is concerned may indeed be rendered inadequate or negated altogether by global trends, above all global warming, but certainly not as the only factor, given also the major effects of pollution, the cutting of forests for cultivation purposes, or international trade and the influence that has on the spread of invasive alien species. Specific factors like hunting in Africa and the demand for rhino horn being generated all the time from China might also be mentioned as examples. For such reasons, conservationists ought to show as much interest in things like new provisions agreed by the World Trade Organisation as they are in establishing further protected areas.

Kareiva and Marvier depart from any formulation of **normative postulates**. Rather, they seek to show those actions that in their opinion will allow success with nature conservation to be achieved:

- Nature conservation measures must be implemented in the landscape modified by human activity. The desire to achieve success in the context of natural ecosystems is becoming more and more unrealistic. Today we are dealing with permanently transformed ecosystems and landscapes (with climate change, alien species, etc.). The conservationist must understand that people form elements of biological systems and can also live in wilderness forests. In such areas, protection should encompass both people and biodiversity. What is more, local communities seek to protect the goods they utilise a plus from the point of view of the CS strategy. Conservation in fact requires complementary strategies that link the protection of ecosystems and species with the safeguarding of the needs of humans who live there too, even as they also collect harvests and engage in hunting.
- Nature conservation will only enjoy long-term success if society swings behind the goals of protection. Experts and practitioners participating actively in nature conservation ought to leave their traditional activity behind, and become interested in economic development, poverty, lack of work and environmental rights.
- Conservationist experts and practitioners alike must enter into cooperation with the large corporations. After all, just a small number of corporations have enormous capabilities to obtain resources, produce food, shape the landscape, etc. Corporations are "key species" in the global ecosystem. The goal of cooperation with the corporations would be to raise the quality of the activity they engage in (as compared with the past), and hopefully to ensure changes in some of their habits.
- Only joint protective and economic activity will permit success to be achieved. The scientific effort that nature conservation denotes should develop this matter, therefore.



Ultimately, action in the name of nature conservation should not abuse trust, especially in regard to local communities. Faced with strict prohibitions and a lack of economic means, the latter will become helpless in the face of decisions taken. In any case, people have the right to decide their fate, just as they should be able to decide about the land and water they depend on. This is not only just from the moral point of view, but it also brings more of the desired conservation effect than top-down decisions taking no account of local inhabitants.

Nature conservation is reactive and defensive, and has as its tasks the curbing of biodiversity loss and the maintaining of some nature in the form it was once in. Conservation brings with it a great project of recreation, with the ambition (of Kareiva and Marvier) being for as many protected areas as possible to be established. Their vision of conservation achieves balance between human development and the protection of biodiversity.

Today, we must thus link together – within nature conservation – the postulates of the biocentric concept, within which the aim of activity is to retain conditions in which values within species and ecosystems can be realised, and the anthropocentric standpoint, where meeting of the internal needs of ecosystems and species takes place somehow "by the way" as the needs of our human population are met. The biosphere is one, and the needs coincide to a considerable degree. In practice, however, the needs of our population are met at the expense of those of other species. Notwithstanding the rapid growth in the overall coverage of protected areas on Earth, a process of accelerated extinctions of species and degradation of the biological structure of living systems is ongoing anyway. While it is true that we are now seeing symptoms of a slowdown in this process, we remain far from any recognition that animate nature is now in some kind of dynamic equilibrium.

THE THEOCENTRIC CONCEPTUALISATION

A third concept allowing for the building of a conciliation platform between the two aforementioned approaches of an extreme nature is founded upon the objective truth present in two books, i.e. the Book of Nature and the Scriptures. This is a truth presenting the realism of the relationship holding sway in the God-humanity-nature triangle. What matters is that these are reciprocal relationships not conflicting with one another internally. The value central to the said relationships is life as conceived broadly (of both the human being and nature), as well as its objective good (or wellbeing).

Unlike the two previous concepts of an extreme nature (of which one is anthropocentric and the other biocentric), this one is in some sense anthropocentric and biocentric at one and the same time. However, being theocentric by its very nature, it shows clearly that the said theocentrism takes account of the interests of humankind as best understood, making this concept anthropocentric sui generis. Analogously, it also takes account of the authentic good of other forms of life, which therefore makes it biocentric in its own way. For it can be suggested that God in his creative idea was taking account "from the



outset" (*Genesis* 1; J 1) of the true good of all creation, of all forms of life that He had brought into existence, and hence also the good of humankind and the good of nature. In calling upon human beings to rule over the rest of creation (*Genesis* 1), God did not understand the nature of that rule in the way that certain scientistic exegetes (like White 1967) have interpreted it, but rather viewed it as a service ("to have dominion over the creatures you have made, and rule the world in holiness and righteousness", as the *Book of Wisdom* 9: 1–5, has it). First and foremost, then, this is ongoing care for the work of creation conferred from that time on upon humankind, with the role being to ensure the continuation of God's creative act, rather to engage in the merciless exploitation of the Earth and its resources. The positive-side nature of humanity's dominion over nature is thus love, as further manifested in authentic care for the objective good of each living thing.

In parallel, the relationship involving human love for the rest of creation is a *sine qua non* condition and in some way identical with a person's concern for the inner state of the human heart, as well as for the external manifestations thereof expressed in terms of deeds. On account of the existing ties between people and the natural environment, a relationship understood in this way that constitutes an objective good in one sense is also from another point of view a good of humanity, both directly (protecting the state of his heart as an internal environment) and indirectly (protecting the natural environment in which people live and of which they constitute a part). A relationship between the human being and creation conceptualised in this way also – indirectly – builds the shape of the relationship between person and person (via the environment), as well as between humanity and God (again via the environment).



Figure 2. The human-natural environment relationship as referred to the Christian concept of God the Creator

On account of the vertical nature of the relationships being referred to (Fig. 2) – i.e. their reference to God; they are non-steerable from the outside by way of formal and legal orders or bans, or economic mechanisms or organisational structure. It is true



that the latter are very important, but always just an assistance in the establishment of these types of relationship. For essentially these relations require the internalisation – even at the level of the heart or conscience – of a system of harmonising values within the framework of a common good, i.e. the good of all three "participants" in the aforementioned relationship (God, the human being and nature).

The importance of this internalisation of values (in the process by which the conscience takes shape) was drawn attention to in the mid-1970s by the Montrealbased GAMMA group (Zieliński 2008), as it developed its zero-growth concept as a forerunner or predecessor of the sustainable development concept. In fact, it had also been noted several decades earlier by Jan Gwalbert Pawlikowski, who wrote: "(...) the idea of nature conservation shows a great many similarities with ethics (...). It is not a branch of knowledge or a profession, but rather a norm showing how to proceed that should be general in nature (...)" and as such: "added to every dish (i.e. to every human activity"; "(...) it extends the concepts of duty and responsibility, likewise the feelings of solidarity and love, also beyond the sphere of relationships with people into the whole of what Adam Mickiewicz dubbed the «mute kingdom»" (Pawlikowski 1938).

In a comment on today's hope for nature to be saved by way of technical measures or legal regulations, French ecologist and ornithologist Jean Dorst (1924-2001) also emphasised the importance of the aforesaid internalisation: "Let nobody think that the preservation of humankind will be assured if we merely combat pollution, manage the Earth's resources better and curb any further multiplication of the harmful areas of human activity! When a patient has a diseased heart, the doctor does not prescribe treatment involving ointment for the hands, which would merely serve a placebo function at that moment". He added: "The causes of our predicament lie in our souls. And it is there that reasons for hope that we can finally become real people can be thought to lie". In this, perhaps not especially precise, way, Dorst is saying that the source of the environmental crisis lies in the ethical crisis, the problem being an inherent one at the level of the human conscience (here described in general terms using the word "soul"). "The humanisation process may only go further if we experience full solidarity with the living world, and with this Earth" (Dorst 1979). A similar view of the current environmental crisis came from Th. S. Derr (1974) who opined to the effect that science and technology would not be able to meet the challenge represented by the present environmental crisis, with solutions instead needing to be sought in the moral and theological spheres.

In the late 1940s, Aldo Leopold also brought the essence of the threat down to the level of the human conscience, which he not unreasonably christened the "environmental conscience" (Aleksandrowicz 1979). In turn, the ethical dimension to problems associated with the environmental threat was encapsulated very concisely by Pope John Paul II when he said: "the ecological crisis is above all a moral issue" (Jan Paweł II, 1989). In so doing, he indicated the primary causes and source of the crisis. From the 1970s onwards, the Catholic Church many times gave voice to concerns relating to the environmental crisis, as Pope Francis recalled in points 4–6 of his most recent

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Laudato Si' Encyclical. In that last document, His Holiness followed his predecessors in emphasising strongly that the degradation of the natural environment had its ultimate cause in humanity's ethical and cultural degradation.

Overall, the theocentric concept under discussion (as built upon tenets of Christian thinking) represents – if not in practice, then certainly in its conceptual layer – a core value of Western civilisation. It refers to the virtue of moderation, in essence built on a proper understanding of the love characterising the will of God. A model for humankind as relationships with the world are pursued is provided by God's interactions with people, as well as His interactions with the rest of creation. Let us then extract the main outlines of the relationship:

- Nature is a creation, in the hands of God the Creator, and the subject of his love within the wider sense of creation; at the same time it is an element of redemption written into the creative idea;
- Human beings were given mastery over nature by God himself, in order that the whole of creation might be ruled over in His name, with a part thus played in the creative impulse of the Creator. The characteristics of this rule are known, with humankind expected to exercise it in line with the original concept, and hence the Will of God;
- The measure of this relationship between humankind and creation is thus love of God and respect for his intentions. If so, then the good of humankind is registered in a dual (direct and indirect) sense in the authentic good of creation. This means that the kind of human rule that violates this good is both a direct and indirect slight upon the true Lord. In turn, balance in the human-nature and exploitation-protection relationship is described as a relationship founded upon love, and is thus the authentic good of each party (God, the human being and nature). This is also an individual good linked harmoniously with the category of the common good.

FINAL REMARKS AND CONCLUSIONS

- 1. The sustainable development concept holds that nature conservation is a component element of environmental protection. In relation to the biosphere, the concept propounds an anthropocentric standpoint, i.e. that the protection of life on Earth serves to maintain or improve the wellbeing of the human population. While enunciated very clearly, the protection of other forms of life is taken account of first and foremost from the point of view of the wellbeing of the environment as a whole (including the good of humankind), and not as a value in and of itself. Such an approach may therefore be treated as "moderate anthropocentrism".
- 2. Contemporary nature conservation continues to contest the anthropocentric concept loudly, as the expressed views of leading naturalists make clear. The founder of the biocentric concept, Michael Soulé holds that biological diversity has its inherent value, irrespective of the utilitarian value. With that awareness in mind, endangered

species and ecosystems should be protected without us even looking at the needs of humankind, up to and including in situations where people are expelled from areas as they are brought under protection. However, these important ways of considering the situation as regards values make no reference to any obvious philosophical, ethical or religious systems.

- 3. An opposing concept capable of being termed anthropocentric is the one presented by P. Kareiva and M. Marvier. This holds that effective nature conservation should entail protection of goods and services offered to human beings as such, by species and ecosystems within the biosphere. And, as we safeguard our own needs, we will also meet the needs of other species. Hence, nature conservation may not ignore human needs, and even less may its resettle local inhabitants away from protected areas. Furthermore, the authors of this concept advocate naturalists' working together with large corporations, instead of seeking to battle against them. Interestingly, this concept also lacks any real basis in any stable and cohesive system of values.
- 4. If the third concept invoking the cultural foundations of Western civilisation is to be treated seriously, as account is also taken of the reflections of objective expert reports (from the GAMMA team), then it needs to be considered that the version of sustainable development set out in the Polish Constitution – and indeed required thereby – is a postulate not attainable in practice. For any approach to the common good inherent in such a version of sustainable development, designated by love, is not something that human beings (Homo sapiens) as biological creations engaging in behaviour conditioned biologically are capable of. Since it arises out of the human conscience, that is a challenge worthy only of Imago Dei. In any case, this model (Fig. 2) is at present being erased steadily, both through legislation and education and spiritual training from public life in Europe (most especially in the West). The Scriptures leave us in no illusion as to how possible is a modern-world return to authentic zero growth based on love and intra- and inter-generational justice (as in fact a *sine qua non* condition for sustainable development). Speaking most eloquently for the real possibilities of creating this model are world civilisational trends noted since that time (i.e. the 1970s). Politicians also speak of nothing else on a daily basis than improving indices of economic growth (in the place of zero growth) as one of the most important things under the sun. Imago Dei is not needed to achieve that priority - in fact quite the opposite. It would be best served by the launched and behaviourally depicted Homo sapiens clothed as the consuming idiot. It is also enough to ask what, since the time of the work of the GAMMA team (1976) and the Brundtland Report, as well as the (1992) signing of the CBD, has happened in public space with the key measures of sustainable development that biodiversity and conscience represent. It answers itself, since we know the rate at which the extinction of species is still occurring, as well as how far-relativised is the space for fundamental values building the common good in the wider version of public space.

5. The global dispute surrounding the principal ideas of nature conservation has been making its return in Poland on various occasions for a long time now. However, recently it erupted again with renewed strength against the background of the discussion (often more political than substantive) surrounding the scope of the nature conservation pursued in the managed part of Białowieża Forest. These matters gain consideration in a separate text (Mirek and Witkowski 2017), with this referring to the approaches to nature conservation analysed above, as well as to the concept of the Biosphere Reserve as a model solution in areal protection specifically devised within the wider sustainable development framework.

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