

The way we Christians talk about our responsibility for creation and to our neighbors should not be entirely controlled by the scientific and ideological arguments coming either from the right or from the left. The great biblical narrative of creation, fall, redemption, and final restoration provides the larger story within which we should deliberate. There are also particular texts and themes in the Bible that provide crucial components of a biblically informed humane environmental ethic, such as the way in which Abraham, Isaac, and Jacob were historically famous for digging wells, or the way in which the ancient Israelites talked about developments in agricultural technology. And biblically informed Christians will never want to forget the development mandate given to Adam and Eve or the way in which God has long been active in his world as both Creator and Redeemer.

Johnson and Schirmmacher have teamed up to present essays which attempt to articulate and address selected themes in environmental ethics that unite a proper concern for creation care with loving our neighbors. Read, and then try to think farther along the paths they suggest.



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Th. Schirmmacher / Th. K. Johnson Creation Care and Loving our Neighbors

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**Thomas Schirmmacher,
Thomas K. Johnson**

Creation Care and Loving our Neighbors

Studies in Environmental Ethics



WEA
WORLD EVANGELICAL ALLIANCE



Thomas Schirrmacher
Thomas K. Johnson
Creation Care and
Loving our Neighbors:
Studies in Environmental Ethics



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Foreword

KEN GNANAKAN, PH.D.

Our world is facing increasing threats of environmental disasters. These are both natural and human-caused catastrophes, and the impact on the whole planet and its people is devastating. The frightening proportions to which these calamities have escalated should be cause for concern to one and all, and something needs to be done urgently.

It is one thing to see these facts and figures; they are frightening enough. But it is totally different when people experience such disasters personally. Lives are lost, families are shattered, and the environment is brought to a breaking point. When the stability of a whole community is shattered by an oil spill, a toxic gas leak, or a nuclear meltdown, the nightmare of the experience continues for decades. We may be able to take immediate measures to alleviate these physical conditions, but the ongoing damage done is far greater.

I had the opportunity to go to Bhopal, in North India, some twenty years after one of the world's worst disasters had taken its toll on some half-a-million humans. The tragedy, which happened on December 3, 1984, "when the Union-Carbide pesticide manufacturing plant released extremely volatile methyl isocyanate gas and other toxins into the air"¹, has ongoing effects. And at least one of the journalists who has chronicled such disasters highlighted, perhaps inadvertently, the banal roots of such a monumental event. The tragedy was caused by "lax safety standards and budget cuts."² Dead bodies were sprawled on the streets, and apart from these, many thousands suffered damage to their vital organs, resulting in permanent health problems.

When I was in the city, I was informed that some survivors were already dead; others were alive but were suffering severe aftereffects. Some children had grown up in that ongoing environmental contamination. The factory site was continuing to emit deadly chemicals into the air, soil, and water. Questions about ethics were primary in the conversations I had in Bhopal. Why was this company allowed to come here? How were they able to flout environmental norms? Was it because of money? The discerning younger generation was full of such probing questions.

¹ <http://ecosalon.com/7-biggest-environmental-disasters-where-are-they-now/>

² *Ibd.*

I am glad that this book by Schirrmacher and Johnson addresses some of these basic ethical issues. But too often people still talk only of what happens to humans, embodying the anthropocentric perspective we Christians are criticized for having. I am glad this book writes about human beings as well as about the environment and how Christian ethics can play a central role. The authors believe that environmental ethics concern not only humans in society but also “other living creatures, which includes plants and animals.” Therefore, when we address environmental issues, it is not enough only to see how we humans benefit from whatever measures are adopted. We must respect and honor the wider environmental framework and develop an ethical culture that takes everything into account. Loving our neighbors and creation care can and must be joined together.

The authors state their intention clearly: “We have articulated themes which Christians can use to act responsively and creatively in regard to creation care which should also equip Christians to enter into a significant critical dialogue with the religious (and non-religious) convictions of other people that are shaping their approaches to environmental care. We have to understand humanity and nature before God, or else we will distort our understanding of humanity or nature.” Environmental issues must be addressed by the whole global community.

I am particularly pleased that Schirrmacher and Johnson start with the UN declaration on drinking water and sanitation as human rights. The water crisis is escalating. The rich have adequate access to water resources, but the poor are struggling. There is large-scale wastage in some areas, whereas there is acute shortage in others. The UN is concerned for human life as a whole, but there are critics who, as we read in the book, are asking whether the UN “is creating previously unheard of rights out of thin air?” Or, as Johnson and Schirrmacher ask rhetorically, “can it be that this ‘new’ right, which has only been formally and publicly acknowledged on a global level since 2010, is, in fact, a civic and moral obligation, now clarified in the terminology of human rights, which is truly as old as humanity?”

There is urgency for Christians, particularly Evangelicals, to act immediately. But on the whole, for us Christians there is a certain “skepticism about environmentalism,” as the writers rightly underline. First and foremost, Christians have shirked their responsibility toward the environment, thinking this is not part of the gospel mandate. But more than that, there has been disdain for controversial movements that has caused us to rightly avoid them. There is also the confusion from the New Age Movement. Despite all this, there is a positive approach that must be taken, and as the writers put it, “Christians should consider the theological and philosophical

foundations of creation care so that we are equipped for responsible action as well as moral dialogue with our neighbors in a manner that presents a holistic Christian worldview.”

But what is this holistic Christian worldview? This gets to the heart of the matter, enabling us to correct our limited viewpoints that have hindered us from breaking out of our human-centered perspectives. The problem started with the dualism that came strongly with the so-called “Enlightenment,” although dating back even to Platonic philosophies. And since the start of the scientific revolution, with the stress on the type of rationalism introduced by Descartes, dualism has been rampant. But this has changed with more integrated holistic positions now accepted even in the Evangelical community. Holism (from Greek *holos*, meaning the whole or entire) posits that all systems should be viewed as wholes, within which the constituent parts belong. The concept of synergy that is popular today, based on this principle, teaches that the whole is greater than the sum of its parts.

If it is the whole Bible that we read, then we must begin our discussions with reference to our Creator God, who is also our Redeemer God. And the two combine to make the powerful Creator-Redeemer, who is not Lord of just one part of our lives or even of a particular section of the world. As God, he is Lord of all – all humanity and the whole of creation. This is the God we worship, and this is the God who calls us to act on his behalf in the whole world.

If we are concerned for the whole, then creation offers us an appropriate starting point for the foundation for God’s total dealings. There is an intricate interconnectedness in all that God has created, and this network of the energy and resources in God’s creation builds into a splendid synergy or holism to undergird our mission. When we are committed to the Creator God, our mission must span the whole scope of God’s concerns.

We should remind ourselves that the Hebrew worldview considered life in its entirety; the word *shalom* appropriately captures this whole. Shalom in the Old Testament is not just peace but an overarching term that refers to well-being in the whole of life when God is at the center of things. This well-being is used in the widest sense of the word – prosperity, bodily health; good relations between people and between nations; salvation for all of God’s creation. So the health of the environment is also included.

Our negative attitude toward creation and the created world has hindered us from fully appreciating God as Lord of all. Hence, we remind ourselves that the first thing to do is to recover a positive attitude toward creation, and, in doing so, we will need to widen the horizons we have set for the gospel and for mission. If God is Creator, there should be an ongo-

ing relationship between God and his redeemed people from whom mission flows.

In conclusion, I wholeheartedly commend this book and pray that it will make an impact on the Evangelical community worldwide. It can widen our understanding of the gospel, our attitude toward mission, and, most importantly, encourage us to live as whole Christians in the whole world. As the writers state, “There is an ultimate unity between God’s continuing care for his creation and his mandate that humans become fruitful and work in his world . . . The same God who created us with a mandate to work in his world has also commissioned us to care for his world.” What a wonderful world . . .

Ken Gnanakan, spring 2016

Ken Gnanakan, Ph.D., from India, is a widely recognized educator and environmentalist engaged in varied projects for socio-economic and environmental development in India and through a global network of experts. He is the chancellor and founder of the ACTS group of institutions in Bangalore which integrate theology, practical skills, and environmental thinking in education from primary school to university level. Over the last three decades, ACTS has grown significantly – schools, colleges, a university, environmental programs – all the while retaining its commitment to serve the poor. Today, ACTS has projects on a number of different campuses in and around Bangalore, as well as in Hyderabad, Delhi, Allahabad, Kacchawa (UP), Calcutta and Shillong (Meghalaya, North East India).

Dr. Gnanakan articulated his educational philosophy in *Integrated Learning* (Oxford University Press, 2011) and his environmental ethic in *Responsible Stewardship of God’s Creation* (Bonn: VKW, 2014), which is volume 11 in this Global Issues Series published on behalf of the World Evangelical Alliance. He also serves the WEA as Senior Advisor to the Theological Commission. He is married, with two children and six grandchildren, all living in Bangalore.

The Human Right to Drinking Water: A Newly Invented Right or an Ancient Obligation?³

A new human right?

On July 28, 2010, under the leadership of Secretary General Ban Ki-moon, the General Assembly of the United Nations declared that clean drinking water and sanitation are human rights.⁴ This has prompted a moral/political debate. Is this a new human right which the UN has invented in the twenty-first century? Are those critics right who think the UN is creating previously unheard of rights out of thin air? Or, one might ask, can it be that this “new” right, which has only been formally and publicly acknowledged on a global level since 2010, is, in fact, a civic and moral obligation, now clarified in the terminology of human rights, which is truly as old as humanity?

This second way of viewing the question is, we believe, very clearly the better way to describe the history and purpose of describing water as a human right. The terminology of “human rights” is the predominant global moral and political language used to describe our mutual duties and obligations in our era; this terminology was not often used before modern times. But we believe that clean water is an area of ethical obligation which is rooted in the dawn of humanity. We have real moral duties to our neighbors in the area of clean drinking water, even if the precise relation between moral duties and legal duties is still being clarified.

The right to food has long been a foundational human right acknowledged by the UN (further described below), and drinking water, in an important sense, is the first and most fundamental component of nourishment. It has been picked out, more precisely, emphasized, as a distinct human right because it is essential for survival and because global advocacy for drinking water distinguishes itself from advocacy for food because different problems have to be addressed and because different processes and technologies are needed.

³ Parts of this essay were originally presented as a lecture by Thomas Schirrmacher at Brest State University, Brest, Belarus, in May 2014.

⁴ <http://www.un.org/es/comun/docs/?symbol=A/RES/64/292&lang=E>. Confirmed 10 June, 2015.

Stated succinctly: no human can live without clean drinking water. A lack of drinking water leads directly to death in a short time, a very serious infringement upon human dignity (and life!) if anyone is in a position to prevent it. Depending upon the level of contamination, contaminated drinking water leads to several million deaths each year, as well as to serious diseases for millions more. This is simultaneously a symptom of environmental pollution, which should be a major theme in environmental ethics, as well as a symptom of a lack of well-distributed economic development.

Our position:

Safe drinking water is an individual human right which correlates precisely with a public duty of civic authorities to provide clean drinking water. In order to fulfill that right, an individual can very rarely do anything on his own; safe water must be provided by public authorities, regardless of whether those authorities are called a clan, tribe, or government. It is a justice duty of public authorities to assure that their people have access to clean water to drink. Providing drinking water is a joint duty, a duty at the local government level, as well as regionally and nationally. And since lakes, rivers, rain, and groundwater do not hold to national borders, it is an interstate and international duty. Because those in responsible positions in government are not always able to fulfill their water duties, international charities have a crucial role to play in developing and providing the needed technologies and know-how. If public officials are unable to assure that their people have sufficient clean water, they have a moral duty to request assistance from international sources. Such international assistance is in the realm of mercy. Ethical obligations in relation to water have been considered by morally sensitive people since antiquity, often as an organic part of religious discussion. We will reference this ancient religious discussion to provide perspective to the current need for ethical responsibility in relation to water.

An Ancient Obligation!⁵

Already in the ancient world there were serious religious and ethical considerations associated with water. Some in antiquity, perhaps many, regarded the person who provided drinkable water as morally heroic, as being historically great. Regardless of other enigmatic themes in the dis-

⁵ Even if the reader might not yet share the Christian beliefs of the authors, we hope that all might accept the Bible as a significant record of moral discussion.

cussion, the woman who talked with Jesus by a well in first-century Samaria asked, "Are you greater than our father Jacob, who gave us the well?" (John 4:12). Jacob was a moral hero for well-giving, even from a distance of perhaps eighteen or twenty centuries. Whether or not the woman at the well was aware of regional history, in earlier millennia, at the time of Abraham, stealing a well (and therefore drinking water) had been regarded as tantamount to a declaration of war, leading either to combat for survival or a peace treaty. Without water, an entire community would perish. (See the interaction between Abraham and Abimelech recorded in Genesis 21:22-34 which probably occurred some 4,000 years ago.) Isaac, the son of Abraham and the father of Jacob, was, in his own time, more famous than his father or his son for well digging, though clearly all the biblical patriarchs saw the provision of water as a duty of the head of a clan. And it was seen as a distinct gift of God when neighboring groups of people did not dispute the ownership of water from the wells. (See Genesis 26:15-22.) The tragic story of Abraham's guilt for banishing Hagar and her son Ishmael from his clan hinged upon Abraham's justified fear that they might die of thirst in the wilderness without the water resources of his clan. It was an "angel of God" who came to Hagar and showed her a well, allowing Hagar and Ishmael to live. (See Genesis 21.) Thousands of years ago, clean drinking water was already seen as a question of life and death, and for that reason it was an issue of war and peace, of basic injustice (if the head of a clan did not provide water) and mercy (when an angel of God opened Hagar's eyes to find water).

There was in ancient Israel a clear distinction between the ethical treatment of animals and the ethical treatment of people. Though they said, "The righteous care for the needs of their animals" (Proverbs 12:10), certain animals were allowed to be used both for food and for religious rituals. But the ethical treatment of people was the underlying purpose for many of their civil laws and moral principles, such as providing adequate drinking water. And the foundation for the distinction between the ethical treatment of animals and the ethical treatment of humans was found in the suggestive statement, "God created mankind in his own image, in the image of God he created them; male and female he created them" (Genesis 1:27). Even if we cannot fathom what it meant to the ancient Hebrews that humans were in the image of God, this description gives moral weight to our intuition that how we treat people is of the highest moral importance. In Christian speculation one hears that the "image of God" means that people have a capacity or even a longing for dialogue with God. Some, under the influence of Saint Augustine, have thought that God enlightens every human mind with

the awareness of the dignity of others and of the difference between right and wrong, even though some resist this awareness.

Since the middle of the twentieth century, “human rights” has been the dominant global language used to discuss public ethics. To prevent the language of human rights from becoming reductionistic, we can supplement the moral languages we use to discuss the ethics of water by mentioning a duty to help one’s neighbor. And the language of a right to water should be enhanced by also talking about mercy toward people in need. But talking about a right to water is, we believe, very important because it puts moral responsibility at the fore in a twofold manner: public officials have a justice duty to provide water for their citizens, while everyone has a love of neighbor duty to ask if others have sufficient safe water and what can be done to help. To emphasize the obvious: being human without safe water is simply not possible; moral responsibility requires that we consider the ethics of water.

Water at the United Nations

The right to drinking water has grown out of the right to food, which was established in the foundation of the UN itself. The right to food is mentioned in the Universal Declaration of Human Rights (1948), article 25: “Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.” Surprising to some, mention of a right to food has a very long history. As early as the English *Magna Carta* (1215) we read, “no one shall be ‘amerced’ (fined) to the extent that they are deprived of their means of living,” and that in a society in which starvation was a real threat to many.

The International Covenant on Economic, Social and Cultural Rights of the UN (1966/1976), signed by 160 states, states in article 11: “1. The States Parties to the present Covenant recognize the right of everyone to an adequate standard of living for himself and his family, including adequate food, clothing and housing, and to the continuous improvement of living conditions. The States Parties will take appropriate steps to ensure the realization of this right, recognizing to this effect the essential importance of international co-operation based on free consent. 2. The States Parties to the present Covenant, recognizing the fundamental right of everyone to be free from hunger, shall take, individually and through international co-operation, the measures, including specific programs, which are needed:

- (a) To improve methods of production, conservation and distribution of food by making full use of technical and scientific knowledge, by disseminating knowledge of the principles of nutrition and by developing or reforming agrarian systems in such a way as to achieve the most efficient development and utilization of natural resources;
- (b) Taking into account the problems of both food-importing and food-exporting countries, to ensure an equitable distribution of world food supplies in relation to need.”

At least since the 1970s, water has been a significant theme in United Nations discussion and action. The exact moral terminology of “human rights” may not have been used at first, but at least since the 1977 Mar del Plata action plan, responding to the human need for clean water was seen as an intrinsic part of respecting human dignity.⁶ This led the UN to declare 1981-1990 as the “International Drinking Water Supply and Sanitation Decade.”⁷ Reporting on both water and sanitation needs has grown rapidly since 1990, so that both clean water and sanitation had important places in the Millennium Development Goals, where they were included with other environmental goals. Soon some commentators regarded water and sanitation needs as some of the least expensive of the Millennium Goals which would also bring tremendous human benefit. A 2002 report for the World Bank reported estimates of costs between \$0 and \$9 billion, \$0 because some experts thought it was possible to reach the goals by better investing and distributing already existing funds.⁸

However, more funds were invested. “The world community recognized the need to devote more resources to providing clean water when it recognized access to safe drinking water as one of the Millennium Development Goals. Adopted by the United Nations General Assembly in 2000,

⁶ See the “Report of the United Nations Water Conference, Mar del Plata [Argentina], 14 – 25 March, 1977.” http://www.internationalwaterlaw.org/bibliography/UN/Mar_del_Plata_Report.pdf. Confirmed 3 June, 2015.

⁷ <http://www.un.org/documents/ga/res/35/a35r18e.pdf>. Confirmed 3 June 2015.

⁸ Shantayanan Devarajan, Margaret J. Miller, and Eric V. Swanson, “Goals for Development: History, Prospects, and Costs,” World Bank Policy Research Working Paper 2819, (New York: The World Bank, April 2002): http://www.wds.worldbank.org/external/default/WDSContentServer/IW3P/IB/2002/04/26/000094946_02041804272578/Rendered/PDF/multi0page.pdf. Concerning financing drinking water for all see also GLAAS report 2012: “Global analysis and assessment of sanitation and drinking-water (GLAAS): The challenge of extending and sustaining services,” (Geneva: WHO, 2013): http://apps.who.int/iris/bitstream/10665/44849/1/9789241503365_eng.pdf. Confirmed 30 April 2014.

one of the goals was to ‘[h]alve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.’⁹ The goal prompted numerous agencies to increase funding and coordinate their efforts to provide clean drinking water throughout the world.”¹⁰ Indeed, the Millennium Goal with regard to drinking water was met five years ahead of schedule, though the goal regarding sanitation was not met on schedule.¹¹

Simultaneously with the development and implementation of goals with regard to water and sanitation, there has been significant development of the moral and political language used to describe the situation and our obligations. As one might hope, the reasoning used at the UN is partly dependent on the reasoning used by multiple governments. For example, the human right to clean water was articulated already in the 1996 Constitution of the Republic of South Africa, Articles 27:1 and 27:2,¹² and in the constitution of the US State of Pennsylvania (Art. I, §27).¹³ The Supreme Court of India stated several times that the right to clean drinking water is implied in the Indian constitution.¹⁴

In 2002 the Committee on Economic, Social and Cultural Rights of the UN Economic and Social Council drafted the broadest defense of an implied right to water to that time.¹⁵ They based this implied human right on the right to life, the right for an adequate standard of living, the right to adequate healthcare, and for adequate housing and food. They described

⁹ United Nations, “The Millennium Development Goals Report 2009,” 45.

¹⁰ John Copeland Nagle, “The right to clean water,” in John Witte and Frank S. Alexander, *Christianity and Human Rights* (Cambridge: Cambridge University Press, 2010), 343.

¹¹ <http://www.un.org/millenniumgoals/environ.shtml>. Confirmed 3 June 2015.

¹² <http://ourwatercommons.org/water-solutions/case-3-constitutional-right-water-south-africa>. Cf. <http://www2.ohchr.org/english/issues/water/lexpert/docs/StateActors/SouthAfrica.pdf>. Confirmed 24 June 2015.

¹³ http://blogs.law.widener.edu/envirolawcenter/files/2010/03/PA_Citizens_Guide_to_Art_I_Sect_27.pdf. Cf. http://www.pennlive.com/midstate/index.ssf/2014/04/environmental_rights_5_shockin.html. Confirmed 24 June, 2015.

¹⁴ http://www.ielrc.org/activities/workshop_0612/content/d0607.pdf. Confirmed 24 June, 2015.

¹⁵ United Nations Economic and Social Council, Committee on Economic, Social and Cultural Rights, Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Rights: The Right to Water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights), General Comment No. 15 (2002). Confirmed 30 April 2014.

the right to water as including: 1) a sufficient quantity of water; 2) safe water quality; 3) freedom from arbitrary disconnections; 4) physical and economic accessibility; 5) information regarding water issues; and 6) non-discrimination in water services.¹⁶ In 2003 the World Health Organization (WHO) issued a report on “The Right to Water.”¹⁷ In 2005 the human rights subcommission of the UN Economic and Social Council stated, “the right to drinking water and sanitation is unquestionably a human right,” and called upon the States to “establish a regulatory system” of drinking water and “establish water-quality standards on the basis of the World Health Organization guidelines.”¹⁸

In 2008 the United Nations Human Rights Council mandated Ms. Catarina de Albuquerque as an independent expert and rapporteur on the human rights obligations related to access to safe drinking water and sanitation. From her reports, the road leads directly to 28 July 2010, when the General Assembly of the UN and 122 member countries formally accepted the human right called “a right to water.”¹⁹ Some weeks later the UN Human Rights Council adopted a similar resolution stating the human right to water and sanitation is an integral part of the right to an adequate standard of living. Moral common sense, recognized since antiquity, has been fully endorsed at the highest international levels as part of the obligation of a responsible government to its residents.

An Overview of the Current Situation

When we read the professional reports (some excerpts of which appear in the appendices) about people who lack clean drinking water, we believe at least seven important trends can be observed: 1) there are still hundreds of millions of people who cannot easily get a glass of clean water to drink; 2) the lack of clean water to drink is usually a symptom of extreme poverty or the result of a disaster or war; 3) in many situations the lack of drinking water is associated with a lack of sanitation and hygiene or other sources of

¹⁶ Ibid., 4-6.

¹⁷ World Health Organization. The Right to Water 6 (2003), http://www.who.int/water_sanitation_health/humanrights/en/index2.html. Confirmed 30 April 2014.

¹⁸ United Nations Economic and Social Council, Commission on Human Rights, Sub-Commission on the Promotion and Protection of Human Rights, Economic, Social and Cultural Rights: Realization of the Right to Drinking Water and Sanitation 5, 6, 8 (July, 2005). Confirmed 30 April, 2014.

¹⁹ Resolution A/64/292, 28. July, 2010. <http://www.un.org/en/ga/64/resolutions.shtml> (scroll down). Confirmed 30 April, 2014.

water pollution; 4) the lack of clean drinking water and sanitation still causes the deaths of several million ordinary people each year. Huge numbers of children die from diarrhea because of drinking unsafe water. If these deaths were not scattered in so many remote areas of the globe, the situation might be compared with the Holocaust or another genocide! This situation merits repeated mention; 5) water ethics and practice form an important part of our total environmental ethic. We cannot separate a human right to water from water pollution and therefore our universal human duty to protect the environment on which we all depend; 6) rapid improvements in recent decades show that it is possible to substantially reduce the number of people who lack water. When governments, scientists, philanthropists, and humanitarian aid workers collaborate with local leaders to apply the best technology to the situation, massive improvements are possible. This is illustrated by the fact that the UN Millennium Goal regarding water was achieved; 7) as in all situations where external assistance is applied to a local problem, usually coming from international sources, attention must be given to avoid excessive long-term dependence which will interfere with local ownership and leadership. Long term, local and regional leaders must provide good water for their own people, even if the technology and infrastructure may have been a gift from abroad.

Clearly, addressing the problem of water is a civic duty for local, regional, and international leaders. Those with defined religious beliefs should also ask themselves and their religious communities if responding to the needs of their neighbors for water is also a divine calling which can place them in the role of the angel who cared for Hagar and Ishmael.

Water and economics

Water is a common good which should not be regarded as purely private property. When the companies providing water are owned by the state, there must be safeguards to assure that the distribution is just and especially under good governance, since, in case of limited resources, corruption can easily lead to a situation in which water is mainly provided for the rich, for industry, or for limited sectors of society. When private companies play a large role in water distribution, the state has to assure that distribution does not only follow the will of the owners and their commercial interest, but that water is made available to everyone, especially the poor, and that they can afford it. A total privatization of drinking water, without significant accountability to the public, seems to be ethically inappropriate if having drinking water is a human right and clean water is a common good.

The biggest threat to drinking water and to investments to improve drinking water distribution and basic sanitation is corruption. Transparency International writes: “Corruption in the water sector is widespread. It damages drinking supplies, sanitation, agriculture, energy and the environment . . . Corruption wastes billions of dollars in these efforts. It makes water undrinkable, inaccessible and unaffordable. And since dirty water can be deadly, cleaning up the water sector is literally a matter of life and death for millions of people. Water management, irrigation and dam projects are large, expensive and complex. This makes corruption in procurement and contracts both easy and profitable. Funds for managing water resources can line the pockets of corrupt officials. Big agricultural businesses can pay bribes for access to irrigation systems and groundwater supplies. This deprives smallholders of their livelihoods. Bribery also means that water pollution often goes unpunished. Corruption keeps people thirsty and ill. It distorts policies and budgets for drinking water and sanitation, making it easy for waterborne diseases to spread. Corruption also affects service delivery and billing. Informal providers – often the only source of water delivery to the poor – can use extortion and bribery. In some developing countries, corruption can add 30-45 per cent to the price of connection to a water network. In such situations, families face a struggle to survive and escape poverty.”²⁰

The enforcement of normal laws against bribery would save the lives of many who die from drinking polluted water.

Religion, water, and technology

As repeatedly mentioned, for much of the world’s population, ethical obligations and humanitarian impulses (including those related to food, water, and the environment) are organically connected with religion, but we observe a widespread tendency for many people to separate their thinking about technology from religion. And this disconnect of religion from how we view technology may weaken the resolve of some to apply new and better technology to the water needs of our global neighbors. A good way to see the proper connection between religion and water technology is to notice anew the connection that the ancient Hebrews perceived between God and food technology, especially since almost everyone today sees the way in which food and water are inseparable human needs. For this con-

²⁰ <http://www.transparency.org/topic/detail/water>. See also David Schirmacher and Thomas Schirmacher, *Korruption* (Holzgerlingen: SCM Hänssler, 2014).

nection between God and improving food technology in antiquity we turn to the prophet Isaiah.

“When a farmer plows for planting, does he plow continually? Does he keep on breaking up and harrowing the soil? When he has leveled the surface, does he not sow caraway and scatter cummin? Does he not plant wheat in its place, barley in its plot, and spelt in its field? His God instructs him and teaches him the right way. Caraway is not threshed with a sledge, nor is a cartwheel rolled over cummin; caraway is beaten out with a rod, and cummin with a stick. Grain must be ground to make bread; so one does not go on threshing it forever. Though he drives the wheels of his threshing cart over it, his horses do not grind it. All this also comes from the Lord Almighty, wonderful in counsel and magnificent in wisdom” (Isaiah 28:24–29).

Isaiah was describing the development of farming techniques used in Israel around 700 B.C. It was the kind of practical wisdom developed by trial and error and passed from one generation to the next in the family and community. To provide improving levels of food for one’s community, one had to learn diligently from one’s father, uncles, and neighbors. And Isaiah added a surprising comment about such a wise and successful farmer: “His God instructs him and teaches him the right way.” Isaiah, representing ancient Hebrew believers, saw the increase in such practical wisdom as coming from God, even though it was learned in ways that did not seem very religious. This growing knowledge was communicated within the community from generation to generation. Improving food technology was seen as a gift of God.

We believe that what was said about food technology in ancient Israel can be said about water technology in the twenty-first century. There are valuable new technologies being developed that can provide clean water to millions who need it simply to live in health. The people developing and applying such technologies are doing God’s work and are learning from God through scientific methods, even if some scientists and philanthropists might be unsure of their own religious beliefs. And if God might be the ultimate source of such new technologies, those people working to develop and apply new water technologies should approach their work with ever new commitment and creativity. Just as the developing food technologies in ancient Israel were seen as gifts of God in the eyes of a prophet, so too should the good efforts today which are developing and applying water solutions be seen as divine gifts. A humane response to the human right to water may not only be a human matter; it can be seen as part of the divine-human dialogue.

Appendices I. – IV.

I. UN-Water reports

In recent decades there has been a rapidly increasing quality and level of reporting on the need for clean water and sanitation. It would be difficult to imagine that public officials, philanthropists, and scientists would be so diligent in responding to the need for water, but for the level of reporting that is now available. We can only illustrate a brief sample of this reporting.

From the reports one can see that the combination of scientific/technological knowledge with moral/political will is leading to real and measurable improvements that save the lives of many and improve the health of many more. This should encourage renewed practical efforts which should be supported by renewed moral reflection. To repeat: recent history shows beyond doubt that significant improvements in access to clean water and sanitation are possible; this progress can continue if backed by constantly improving technology and growing levels of moral responsibility and political will. However, such improvements will not be easy, and these improvements are certainly not an automatic process that will continue without constant initiative by scientists, philanthropists, and policy makers. Population growth is continuing, and much of that growth is in the parts of the world which still lack adequate clean water and sanitation. Improved access to clean water usually occurs simultaneously with increased industrialization and urbanization which together increase total per capita water use, increasing the challenge. The initiative to improve clean water supplies must continue to exceed the pace at which human water use is rising.

There are three main types of regularly updated world reports by “UN Water:”

The World Water Development Report (WWDR)²¹ is coordinated by the World Water Assessment Programme (WWAP) on behalf of UN-Water and was published every three years, 2008, 2011, and 2014. Beginning in 2015 it should be published annually.²²

²¹ <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/wdr4-2012/>, 3 volumes, datas esp. in volume 2: Knowledge Base;“ cf. http://en.wikipedia.org/wiki/UN_World_Water_Development_Report. Confirmed 30 April 2014.

²² <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/wwdr/2015-water-for-a-sustainable-world/>. Confirmed 10 June 2015.

The progress report of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (JMP) has been produced every two years in multiple languages. The JMP is affiliated with UN-Water and presents the results of the global monitoring of progress towards the millennium goals until 2015.²³

The Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS) is produced every two years by the World Health Organization (WHO) on behalf of UN-Water, so far 2008, 2010, 2012, and 2014.²⁴

According to a 2013 report, 780 million people worldwide lacked access to safe drinking water, and 2.5 billion people lack basic sanitation at the end of 2011.²⁵ This was a significant improvement from numbers a few years earlier. The number of people lacking access to safe drinking water is decreasing. In 2004, still 1 billion lacked access to safe drinking water. This decrease in absolute numbers took place in spite of a growing world population. Yet 6 – 8 million people die annually because of a lack of water or from water-related diseases.²⁶

According to the UN, 85% of the world's population lives in the driest part of the planet. 70% of global freshwater withdrawals are used for agriculture.²⁷ 66% of Africa is arid or semi-arid and 300 million of 800 million people in sub-Saharan Africa live in a water-scarce environment; that is, they have less than 1,000 m³ per capita.

The 2014 report of the World Health Organization and UNICEF 'Progress on Sanitation and Drinking-Water' states, that since 1990 almost 2 billion people have gained access to an improved water facility.²⁸ 626 million of these live in Eastern Asia, where sanitation coverage grew from 27% in 1990 to 67% in 2011.²⁹

Worldwide, 2.5 billion lacked basic sanitation at the end of 2011. 761 million of those use public or shared sanitation facilities, 693 million use facilities that do not meet minimum standards of hygiene (according to

²³ <http://www.wssinfo.org/>. Confirmed 10 June 2015.

²⁴ http://www.who.int/water_sanitation_health/glaas/en/. Confirmed 10 June 2015.

²⁵ "United Nations International Year of Water Cooperation," "Facts and Figures," <http://www.unwater.org/water-cooperation-2013/water-cooperation/facts-and-figures/en/>. Confirmed 12 July 2015.

²⁶ Ibid.

²⁷ Ibid.

²⁸ http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/jmp.2014_eng.pdf, p. 6.

²⁹ Ibid.

WHO standards = “unimproved sanitation facilities”). The rest, 1 billion, still practice open defecation. 71% of those live in rural areas. 90% of all acts of open defecation take place in rural areas.³⁰

Open defecation declined from 24% of the world’s population in 1990 to 15% in 2011; that is, from 1.28 to 1.04 billion people.³¹

768 million people do not use an improved source for drinking-water (according to WHO standards). This includes 185 million people drinking surface water.³² This is roughly half of those in 1990, truly a striking improvement.

In nearly two-thirds of households, it is women who collect water. In the 12 percent of households where children collect water for the family, girls are twice as likely as boys to be the ones doing the work (2010).³³ 443 million school days per year are lost to water-related illness (2010).³⁴

II. World Vision-Reporting

World Vision is a respected Christian charity in the Evangelical tradition which has been investing heavily in water resources for several decades, having started their efforts of mercy many years before water was regarded as a human right in the realm of justice. In their reports they commonly join water, sanitation, and hygiene into the acronym “WASH.” World Vision reports,

“Water is the basis of all life. But for millions of children, the water they drink can also be a source of persistent illness, leading to an early grave. A child dies of diarrheal disease every 30 seconds – and for every child who dies of diarrheal disease, three more children die of other diseases passed along by unwashed hands, or made more deadly by chronic malnutrition resulting from constant bouts of diarrheal disease and intestinal parasites. Thus, every 7 seconds, a child in the developing world dies of WASH-related disease or WASH-related malnutrition.”³⁵

³⁰ Ibid., p. 5.

³¹ Ibid., p. 6.

³² Ibid., p. 8.

³³ http://www.unicef.org/esaro/7310_Gender_and_WASH.html. Confirmed 30 April 2014.

³⁴ <http://water.org/water-crisis/water-facts/children/>. Confirmed 30 April 2014

³⁵ [http://www.worldvision.org/resources.nsf/main/press-statements/\\$file/wash.pdf](http://www.worldvision.org/resources.nsf/main/press-statements/$file/wash.pdf), p. 2. Confirmed 5 June, 2015. This report is dated October, 2011. Such reports from World Vision are largely dependent on scientific reports issued by UNICEF, the WHO, UN water programs, and the US CDC.

“It is hard to think of a more potent reason to redouble our efforts than the harsh reality that nearly 8 million children this year will not live to see their fifth birthday. While the number of annual child deaths has dropped by half over the past 30 years due to efforts by governments and aid agencies, far more remains to be done, especially in the WASH sector.”³⁶

“‘Safe’ water must address water quality to prevent water-related diseases and also be close enough to the user’s domicile to encourage use of the water source. Sanitation involves both physical infrastructure, such as latrines, and also the use and maintenance of the sanitation facilities. Good hygiene is the practice of cleanliness, such as handwashing, to prevent diseases.”³⁷

“Every day, nearly 1,600 children die from diarrhea caused by contaminated water, poor sanitation, and unsafe hygiene practices – more than from AIDS and malaria combined. Worldwide, about one in nine people get water from contaminated sources, and more than one in three lack access to basic sanitation. Each year, the lives of up to two million children could be saved through safe water, sanitation, and hygiene programs . . . For women and girls – many of whom spend several hours each day walking to get water – education and economic opportunities are a distant second to survival. That makes it nearly impossible for them to break the cycle of poverty.”³⁸

“. . . just not having enough water is a growing problem. The demand for water across the globe is steadily increasing at a rate of 100 percent every 20 years as industrialization, agricultural use, urbanization, and a rising standard of living for the world’s growing population drive consumption higher. This puts entire communities at risk in regard to health, food production, economic opportunities, development, and the lives of their most vulnerable members – children.”³⁹

III. Environmental Ethics within the Christian tradition

We are aware that though Evangelical Christians have often been leaders in addressing the need for water (think of World Vision) there has, at times, been a deficit in writing about environmental ethics, including water

³⁶ Ibid., p. 3.

³⁷ World Vision, Water and Sanitation, <http://www.worldvision.org/content.nsf/learn/ways-we-help-wsh>

³⁸ <http://wvcampaign.org/water-sanitation-and-hygiene>. Confirmed 5 June 2015.

³⁹ World Vision, Water and Sanitation, <http://www.worldvision.org/content.nsf/learn/ways-we-help-wsh>

ethics, within the Evangelical movement of which we are members. We have both sought to address this deficit by means of lectures, editing, and writing. However, we are not unique in this effort; therefore, we wish to quote a similar effort. On behalf of Christians at large, John Copeland Nagle summarized the Biblical teaching concerning creation care as part of the context for considering water ethics:

Biblical basis for creation care

“God created the world.”

“God pronounced the creation to be good.”

“God is the owner of all creation.”

“God gave humanity dominion over creation.”

“God charged men and women with the responsibility of caring for creation.”

“God alone is worthy of worship.”

“Creation has suffered the effects of the entry of sin into the world. The fall of humanity that occurred when Adam and Eve sinned affected the rest of creation, too.”

“God will redeem His creation. The entire creation is included in many of the covenants that God announces throughout the Bible.”⁴⁰

This does not deny that the Bible also prophecies that this earth will be destroyed on the Day of Judgment and be replaced by a new earth (2 Pet. 3:7, 10; Rev. 21:1). Leaving open whether this a totally new earth, or the old, but totally renewed earth, Nagle adds:

“The creation waits in eager expectation for the sons of God to be revealed. For the creation was subjected to frustration, not by its own choice, but by the will of the one who subjected it, in hope that the creation itself will be liberated from its bondage to decay and brought into the glorious freedom of the children of God. We know that the whole creation has been groaning as in the pains of childbirth right up to the present time” (Rom. 8:19-22).

“Christian teaching has a lot to say about water in particular. Water plays a central role in the Bible. The Old Testament Prophets promise water as a blessing for people and other creatures in the desert (Isa. 35:6; 43:19-20; 44:3-4). Jesus promised a reward to those who provide a cup of

⁴⁰ Headings of paragraphs in John Copeland Nagle, “The right to clean water,” 335-350 in: John Witte and Frank S. Alexander, *Christianity and Human Rights* (Cambridge: Cambridge University Press, 2010).

water to those who are thirsty (Matt. 10:42). The cleansing power of water is evident throughout the Scriptures, both in the physical sense (Mark 7:3; John 9:7; 13:5) and in the spiritual sense of baptism. The Bible also emphasizes the importance of pure water. Numerous passages describe the consequences of polluted water (Ex. 15:23; 2 Kings 2:19-22; Jer. 8:14; Ezek. 32:2, 13). Throughout the Bible, water sustains human health, enables plants to grow, and serves ceremonial purposes. Yet the Israel of biblical times often suffered from a lack of water, so the people relied upon wells, cisterns, and channels to collect and keep necessary water supplies.⁴¹

“[B]iblical teaching has begun to inspire Christian writings about the importance of water and the need to protect it. Christian ethicist John Hart observes that ‘[water] is intended by the Creator to be a sign and mediation of the Spirit’s immanence and solicitous care for the living.’⁴² Hart adds, ‘When water is pure, its life-giving role can be fulfilled. When water is polluted, it endangers health and life not only for humankind, but for all the biotic community.’⁴³ . . . There are also Christian writers who would place greater emphasis upon global clean water than on the problems of climate change. Calvin Beisner, for example, argues that ‘[a] billion dollars invested in waste water treatment plants and municipal water systems would improve the health and life expectancy of many times more people than an equal amount invested in the most acclaimed problems of climate change, species extinction, and deforestation.’^{44,45}

“Several Christian organizations have joined the campaign for a right to clean water.”⁴⁶

“Many international non-governmental organizations (NGOs) target the need to provide clean water to those who do not enjoy it throughout the world. . . . At a recent congressional hearing, Representative Smith praised the work of Living Waters International, ‘a Christian ministry that implements water development through training, equipping and consulting.’ Living Waters prioritizes the use of appropriate technologies, which is

⁴¹ John Copeland Nagle, “The right to clean water,” 338.

⁴² John Hart, *Sacramental Commons: Christian Ecological Ethics* (Langham MD: Rowman & Littlefield, 2006), 80.

⁴³ *Ibid.*, 79.

⁴⁴ E. Calvin Beisner, *Where Garden Meets Wilderness: Evangelical Entry into the Environmental-Debate* (Grand Rapids: Acton Institute, 1997), 74-5.

⁴⁵ Nagle, “The right to clean water,” 339.

⁴⁶ *Ibid.*, 341.

necessary because ‘drilled wells with hand pumps are the best solution for rural communities’ because such pumps ‘are simple to repair, and replacement parts can easily be found.’ Living Waters also emphasizes community involvement and ‘seeing people manage their own water solutions to the greatest extent possible.’”⁴⁷

IV. The Vatican’s statement, “Water, An Essential Element for Life.”

Introduction to the document

To demonstrate the high level of similarity between Evangelicals and Roman Catholics about water, human rights, and environmental ethics, we include extensive quotations from an important Vatican statement about water rights. As J. C. Nagle noted, “The Pontifical Council for Justice and Peace provided the most extensive Christian defense of a right to clean water in 2003. The Council’s note ‘Water, An Essential Element for Life,’ advances three arguments for a right to water. First, the note observes that ‘water is a precondition for the realization of other human rights.’⁴⁸ Second, the note offers the familiar argument regarding the importance of water: ‘Water is an essential commodity for life. Without water life is threatened, with the result being death. The right to water is thus an inalienable right.’ The note’s third argument asserts that ‘[t]he dignity of the human person mandates’ the acknowledgment of a right to water. Each of these three arguments draws support from numerous governmental and secular organizations as a justification for a right to clean water, as well as from Christian teaching.”⁴⁹

The following paragraphs are quotations from the Vatican Statement of 2003. The entire text is found on the Vatican website:

Selections from the document “Note: Water an Essential Element for Life”

Water is an essential element for life. Many people must confront daily the situation of an inadequate supply of safe water and the very serious resulting consequences. The intention of this paper is to present some of

⁴⁷ Ibid., 344.

⁴⁸ Pontifical Council for Justice and Peace. Note: Water, An Essential Element For Life. www.vatican.va/roman_curia/pontifical_councils/justpeace/documents/rc_pc_justpeace_doc_20030322_kyoto-water_en.html (March 2003).

⁴⁹ John Copeland Nagle. “The right to clean water”. p. 341.

the human, social, economic, ethical and religious factors surrounding the issue of water.

The Holy See offers these reflections on some of the key issues in the agenda of the 3rd World Water Forum (Kyoto, 16th-23rd March 2003), in order to contribute its voice to the call for action to correct the dramatic situation concerning water. The *human being* is the centre of the concern expressed in this paper and the focus of its considerations.

The management of water and sanitation must address the needs of all, and particularly of persons living in poverty. Inadequate access to safe drinking water affects the well being of over one billion persons and more than twice that number have no adequate sanitation. This all too often is the cause of disease, unnecessary suffering, conflicts, poverty and even death. This situation is characterized by countless unacceptable injustices.

Water plays a central and critical role in all aspects of life – in the national environment, in our economies, in food security, in production, in politics. Water has indeed a special significance for the great religions.

The inadequacy in the supply and access to water has only recently taken centre stage in global reflection as a serious and threatening phenomenon. Communities and individuals can exist even for substantial periods without many essential goods. The human being, however, can survive only a few days without clean, safe drinking water.

Many people living in poverty, particularly in the developing countries, daily face enormous hardship because water supplies are neither sufficient nor safe. Women bear a disproportionate hardship. For water users living in poverty this is rapidly becoming an issue crucial for life and, in the broad sense of the concept, *a right to life issue*.

Water is a major factor in each of the three pillars of sustainable development – economic, social and environmental. In this framework, it is understood that water must meet the needs of the present population and those of future generations of all societies. This is not solely in the economic realm but in the sphere of integral human development. Water policy, to be sustainable, must promote the good of every person and of the whole person.

Water has a central place in the practices and beliefs of many religions of the world. This significance manifests itself differently in various religions and beliefs. Yet two particular qualities of water underlie its central place in religions: water is a primary building block of life, a creative force; water cleanses by washing away impurities, purifying objects for ritual use as well as making a person clean, externally and spiritually, ready to come into the presence of the focus of worship.

The principle water difficulty today is not one of absolute scarcity, but rather of distribution and resources. Access and deprivation underlie most water decisions. Hence linkages between water policy and ethics increasingly emerge throughout the world.

Respect for life and the dignity of the human person must be the ultimate guiding norm for all development policy, including environmental policy. While never overlooking the need to protect our eco-systems, it is the critical or basic needs of humanity that must be operative in an appropriate prioritization of water access. Powerful international interests, public and private, must adapt their agendas to serve human needs rather than dominate them.

The human person must be the central point of convergence of all issues pertaining to development, the environment and water. The *centrality of the human person* must thus be foremost in any consideration of the issues of water. The first priority of every country and the international community for sustainable water policy should be to provide access to safe water to those who are deprived of such access at present.

The earth and all that it contains are for the use of every human being and all peoples. This principle of the *universal destination of the goods of creation* confirms that people and countries, including future generations, have the right to fundamental access to those goods which are necessary for their development. Water is such a common good of humankind. This is the basis for cooperation toward a water policy that gives priority to persons living in poverty and those living in areas endowed with fewer resources. The few, with the means to control, cannot destroy or exhaust this resource, which is destined for the use of all.

People must become the "active subjects" of safe water policies. It is their creativity and capacity for innovation that makes people the driving force toward finding new solutions. It is the human being who has the ability to perceive the needs of others and satisfy them. Water management should be based on a participatory approach, involving users, planners and policy makers at all levels. Both men and women should be involved and have equal voice in managing water resources and sharing of the benefits that come from sustainable water use.

In a globalized world the water concerns of the poor become the concerns of all in a prospective of *solidarity*. This solidarity is a firm and persevering determination to commit oneself to the common good, to the good of all and of each individual. It presupposes the effort for a more just social order and requires a preferential attention to the situation of the poor. The same duty of solidarity that rests on individuals exists also for nations: advanced nations have a very heavy obligation to help the developing people.

The principle of *subsidiarity* acknowledges that decisions and management responsibilities pertaining to water should take place at the lowest appropriate level. While the water issue is global in scope, it is at the local level where decisive action can best be taken. The engagement of communities at the grassroots level is key to the success of water programs.

Conclusion

Water is an essential element for life. Right throughout human history water has been looked on as something intertwined with humankind. Human beings live alongside water and are nourished by water. It is a source of beauty, wonder and relaxation and refreshment. Our very contact with nature has a deep restorative power. It is no accident that people chose places associated with water for the holidays, in order to renew and regenerate themselves. Water has an aesthetic value.

In the Judeo-Christian Holy Book, God is presented as the source of living water beside which the just man can find life. Because the Bible was written in a part of the world where water is scarce, it is not surprising that water features significantly in the lives of the people. Due to the scarceness of water in the lands of the Scripture, rainfall and an abundance of water was seen as a sign of God's favor and goodness.

Water is a primary building block of life. Without water there is no life, yet water, despite its creative role, can destroy. The Bible opens precisely with the image of the divine spirit hovering over the water at the creation of the universe. In the accounts of creation contained in the first two chapters of the Bible, it is from the midst of the waters that dry land is made to appear, while living reptiles and rich life forms are made to swarm the waters. It is also water that moistens the earth for other forms of life to appear.

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Christian charities emphasizing clean water

- Compassion, Water Facts, www.compassion.com/child-advocacy/find-your-voice/quick-facts/water-quick-facts.htm
- Living Waters, What Would It Take? How Much Money Would Solve the World's Water Crisis, www.water.cc/water-crisis/related-news/
- Living Waters, Our Approach, www.water.cc/about-lwi/our-approach/
- Samaritan's Purse. A Thirsty World Needs Clean Water. http://www.samaritanspurse.org/index.php/articles/water_facts/
- World Vision, Water and Sanitation, <http://www.worldvision.org/content.nsf/learn/ways-we-help-wsh>.

Dualisms, Dualities, and Creation Care⁵⁰

Already in 1970, when modern discussions of environmental ethics were still new, Francis Schaeffer warned that dualism within the Christian community and tradition was one of the main reasons why Christians sometimes have difficulty articulating and practicing proper environmental ethics. Schaeffer often used the term “Platonic” to describe this dualism. In his groundbreaking book *Pollution and the Death of Man* (1970), after explaining how neither pantheism nor humanism has an answer for the question of how to understand nature and the human-to-nature relationship, he wrote,

It is well to stress, then, that Christianity does not automatically have an answer; it has to be the right kind of Christianity. Any Christianity that rests upon a dichotomy – some sort of Platonic concept – does not have an answer to nature; and we must say that much orthodoxy, much evangelical Christianity, is rooted in a Platonic concept. In this kind of Christianity there is only interest in the “upper story,” in the heavenly things – only in “saving the soul” and getting it to Heaven. In this Platonic concept, even though orthodox and evangelical terminology is used, there is little or no interest in the proper pleasure of the body or the proper uses of the intellect. In such a Christianity, there is a strong tendency to see nothing in nature beyond its use as one of the classic proofs of God’s existence. ‘Look at nature,’ we are told; ‘look at the Alps. God must have made them.’ And that is the end. Nature has become merely an academic proof of the existence of the Creator, with little value in itself. Christians of this outlook do not show an interest in nature *itself*. They use it simply as an apologetic weapon, rather than thinking or talking about the real value of nature.⁵¹

It is our observation that the problem of dualism has not disappeared in the years since Schaeffer’s time. As Christians we have a lot to say about the value of nature in itself and about the human-to-nature-relationship, though we have not always made our claims clear. If we articulate our claims about nature more clearly, this will assist our thinking about the whole range of questions in social ethics and also show the distinctiveness of the Christian view in contrast with many other religions and worldviews. Sometimes the problem of dualism is only vaguely men-

⁵⁰ An earlier version of this essay was published by Thomas K. Johnson and Thomas Schirrmacher on behalf of the World Reformed Fellowship, www.WRFnet.org.

⁵¹ *The Complete Works of Francis A. Schaeffer*, vol. 5, *A Christian View of the West* (Crossway, 1982), p. 23.

tioned, without a detailed explanation; at worst the term has been used to accuse other Christians of paradigm problems on matters of faith and creation. As part of renewing environmental ethics and our overall Christian public ethics, we think it is worthwhile to clarify and criticize multiple types of dualisms and to offer an outline of selected appropriate dualities which should overcome these various dualisms. Sometimes the articulation of dualities has been misunderstood to be teaching some type of dualism, but we think a proper understanding of dualities within the Christian worldview is a crucial step toward overcoming inappropriate dualisms. Proper biblically informed dualities can replace several types of dualism that originate in worldviews opposed to the biblical worldview. These dualities will also further clarify not only the differences between Christianity and both humanism/secularism and pantheism (whether from the east or from the west) which Schaeffer articulated; these dualities will also clarify differences between Christianity and most varieties of Islam, which is important for all of public ethics in the twenty-first century, since a high percentage of our neighbors in global society follow some type of humanism/secularism, some type of pantheism, or some type of Islam.

Inappropriate Dualisms

Though our list is not exhaustive, we Christians have encountered four or five distinct varieties of dualisms which we can describe. Some of these theological/ethical problems have come back repeatedly in the first 20 centuries of our Christian history.

1. Zoroastrian dualism of the ancient world thought there were two powers of almost equal power, one good and one evil. The world was seen as a conflict between these two powers, and evil actions by people might not be entirely their personal responsibility, because such actions may be under the power of the evil deity. There were echoes of this type of dualism in the beliefs found among the followers of Marcion, from the second century, to which the church responded in the Apostles' Creed and the Nicene Creed. This was one of the worldview problems addressed when the Nicene Creed emphasized that God the Father is the Creator of all things visible and invisible. Though Christians believe in a devil or Satan, he is never described as even remotely comparable in power to God, since God is the Creator of all, including Satan. Christians traditionally describe Satan as a chief angel who fell into pride, which shows that Satan is incomparably less than God in every respect. A Zoroastrian type of dualism should be totally rejected by Christians.

2. Hellenistic dualism, which Schaeffer often called the Platonic concept, was also common in the ancient world and taught that only invisible spiritual entities are real and good, while the material, physical realm is either not fully real or not fully good.⁵² There were strong influences of Hellenistic dualism in Gnosticism, and this idea has tended to come back repeatedly throughout history, both in Christian circles and also in the many varieties of New Age and the religions coming from India. Because of the influence of Hellenistic dualism, many Christians from the early centuries of the church, unfortunately, were docetic in their understanding of Jesus Christ, thinking it was impossible for the eternal Son of God to truly become human.⁵³ It is completely the opposite of the biblical teaching about the goodness and reality of creation as seen in the first chapters of Genesis and the historic Christian creeds.
3. Medieval nature/grace dualism is somewhat like Hellenistic dualism, but it is partly adapted to central Christian beliefs. The physical realm of “nature” is seen as real, but it may not be very important to God and it may not be very good. According to this way of thinking, God is primarily interested in the unseen realm of grace, which is detached from the everyday world of nature, and the serious Christian life does not have much to do with everyday life. Believers may be urged to ascend or escape from the world of nature to a higher and more spiritual realm of grace. This type of dualism also recurs in Christian circles throughout history. It is overcome once we see that God is very interested in his good creation, that God is very active in his good creation (by means of general revelation and providence), that Jesus became a real man with a real soul and body, and that salvation means the restoration of all of God’s creation.
4. The modern and postmodern public/private dualism says that faith or religion is a private and personal matter that has little or nothing to do with important public matters such as education, law, government, medicine,

⁵² The words *Hellenism* and *Hellenistic* are sometimes vague, but we are using the terms in the way often used by historians of philosophy and religion to refer generally to the ideas found in many Greek writers starting as early as the sixth century B.C. (Pythagoras) and continuing in writers as late as the third century A.D. (Plotinus). There were many different philosophies within a broad worldview that largely held the mentioned common assumptions.

⁵³ The term *Docetism* comes from the ancient Greek word *dokeo*, which means to “appear.” It is used to describe the view that the eternal Son of God only appeared to be human and did not truly become human, since anything eternal and divine could not become matter and flesh. The apostle John contradicted this view when he boldly proclaimed, “The Word became flesh and made his dwelling among us.” (John 1:14)

business, or the environment. This way of thinking suggests that faith may be privately interesting, but it is publicly irrelevant, since faith is viewed as irrational and public life must be strictly rational. This way of thinking is fundamentally an attack on core Christian beliefs which has prompted numerous Christian thinkers to write about both the rational coherence of the Christian faith and the significance of the biblical message for all areas of public life. A proper understanding of the proper dualities of the Christian faith helps us see that God is continuously involved in all dimensions of his creation, including public life, even if some people refuse to recognize God's role in such things as practical wisdom, civic duty, or environmental care. Wise political and environmental rationality, truly proper moral rationality, should be seen as a gift of God's common grace for the proper ordering of life together, to promote a proper care for people and God's world.

5. There is also a type of dualism which is really a special postmodern variety of the public/private dualism. This type of dualism thinks that natural science tells us the full truth about the physical world while faith addresses our subjective world of feelings, hopes, values, and meaning by means of a leap from rationality into a realm of irrationality. Faith and religion are removed from the realm of truth, while the physical world is seen as a vast evolving machine without any concern for our hopes, fears, and joys. Atheism is assumed in the realm of rationality, but "simple" believers may remain in their stupidity if it makes them happy. After all, many religions are less harmful than drugs if that is what it takes to help people find irrational meaning and hope. As soon as we see that God is the Creator and Ground of all being and all truth, we will react in horror to this type of dualism, but this problem recurs among Christians whenever the gospel is reduced to being perceived as a feeling or experience without clear truth claims.

Many Christians will find portions of one or more of these types of dualism in their hearts and minds since these dualisms are common in many cultures. One of the steps toward overcoming the various dualisms is to learn to fully understand and appreciate the proper dualities of the Christian faith, some of which we will explain below. We can describe these dualities as arising from the difference between the work of the Father and that of the Son, as long as we do not think there is any conflict between the work of the Father and the work of God the Son. The connections between both parts of the proper dualities become clear when we see that Jesus, the Christ, came to restore the creation of his Father and ours. The proper dualities of the Christian faith are the opposite of the various dualisms which are contrary to the biblical message.

Proper Dualities of Christian Public Ethics

Our terminology of “dualities” arises from the Protestant Reformation; both Martin Luther and John Calvin talked about God’s two kingdoms in their writings on ethics, which we have modified to describe and consider the twofold work of God in the world. Though there is complete unity of purpose among the Persons of the Trinity, we think we can make a distinction among the primary functions of each Person of the Trinity. In each of these six areas, we distinguish a twofold work of God in the world, the first of which is primarily the work of God the Father, the second of which is primarily the work of God the Son, both of which are made effective in human experience by God the Holy Spirit.⁵⁴

1. There are two types of revelation. The first is God’s general revelation in creation, whereby God gives all people some awareness of himself and his power. Even though some people may reject and claim not to know God and reject his general revelation, God’s self-revelation through creation continues to provide the transcendental condition of human experience for all. There is also God’s special revelation in Christ and Holy Scripture, which should lead to salvation and an accepted knowledge of God and which has its center in the gospel of Christ. General revelation is primarily the work of God the Father through creation, whereas special revelation is primarily the work of Christ the Son and is very closely tied to redemption. Both types of revelation only reach their intended goals through the work of the Holy Spirit.
2. There are two ways in which God gives knowledge of his moral law. The first is a general knowledge of God’s law which is the gift of God to all mankind (via general revelation), even to those who reject this knowledge; there is also a much clearer and deeper knowledge of God’s law which comes in Moses, the Ten Commandments, the prophets, and the remainder of the Bible, and which is always connected with God’s covenant of grace and redemption in Christ. Our knowledge of God’s moral will, both as revealed through creation and through Scripture, is always dependent on the Holy Spirit.
3. There are two types of grace from God. He gives his common grace to all his creatures to make life possible, including human culture and knowledge, and to call humankind to repentance; the second type of grace is his special grace, that of salvation by faith in Christ. The Holy Spirit is

⁵⁴ We are assuming here the claim of the later, western version of the Nicene Creed that the Holy Spirit proceeds from both the Father and the Son (*filioque* in Latin), so that there is a distinction, but without a sharp separation, of the Holy Spirit’s work mediating the work of creation and redemption to human consciousness.

the Person who must take the external gift of both types of grace and make them internally effective in the inner life of people and nations.

4. There are at least two types of righteousness. Active civil righteousness is a response to the external demand to practice civic responsibility in our various roles and situations; this righteousness is demanded of all people by God the Father by means of his creation. Passive, spiritual righteousness is a response to the free gift of special grace, forgiveness, and salvation in Christ. Both types of righteousness are dependent on the work of the Holy Spirit. Civic environmental responsibility is in the realm of civil righteousness, but it should be reinforced within the Christian community by a strong desire to care for God's creation in open gratitude for the gifts of creation and redemption.
5. There are two types of wisdom. Practical wisdom is about how to live effectively in the world which God the Father has created; spiritual wisdom consists in a deep knowledge and grasp of the salvation and grace we are given in Christ. Both types of wisdom are dependent on the Holy Spirit, who gives all the true wisdom possessed by all people.
6. There are two kingdoms, meaning two ways in which God rules over our lives. The first is the kingdom of God, in which God sometimes remains anonymous, whereby he providentially rules over the affairs of men and nations, using the mandates and structures of his world, to shape our lives, to restrain sin, and to fulfill his purposes. The second is the redeeming reign of Christ over our lives, in which we consciously submit to his Word and seek to respond in faith and obedience to Christ as our Lord. Both ways in which God reigns are implemented in human decisions by means of the internal work of the Holy Spirit.

In Romans 13:1 Paul wrote, "Everyone must submit himself to the governing authorities, for there is no authority except that which God has established." It is noteworthy that many of the authorities which Paul encountered, especially the Roman authorities, were not in any way Christian authorities. The Roman Empire and Emperor did not recognize the God of the Bible, and most local Roman governors and local rulers were not personally Christians. Nevertheless, Paul says they were established by God. This important biblical claim alternately assumes or implies the dualities mentioned here. As Christians we have an explanation for the legitimacy of public authorities who do not yet believe in Jesus in the first part of the twofold work of God in the world.

In all of these dualities just described, the first element is primarily the work of God the Father, while the second element is primarily the work of Christ, the Son. We must never forget that the Son was sent into the world by the Father to restore, save, and recreate the creation and the creatures,

which were distorted, damaged, and misdirected by sin. This means that in each of these “twos” or dualities, the second element restores, completes, and renews the first. In older Christian language, “Grace restores nature.” This requires some explanation.

We can only properly understand and appreciate the Father’s general revelation through creation when we also accept special revelation in Christ and Scripture; nevertheless, that general revelation has an essential role in the lives of all people as the condition that makes human life possible. While the general revelation of God’s law, God’s natural moral law, allows most people to have some true knowledge of right and wrong and to have some idea of moral responsibility, we can only fully grasp God’s moral law as it comes to us in Scripture. Nevertheless, the believer’s relationship to the unbelieving world may be distorted if we forget or minimize the natural moral law and think that all that people know about right and wrong comes only from the Bible. Common grace allows many people to live somewhat orderly, honorable, and peaceful lives, but without special grace in Christ, those orderly and honorable lives are empty, hopeless, and terribly misdirected, leading to a horrible end. Civil righteousness is a real possibility for many people, especially if they receive good moral formation from their parents and teachers, so that they can become good neighbors and good citizens. But that civil righteousness is without direction and deep content until it is renewed when the righteousness of faith leads people to want to glorify God in all of life; then civil righteousness is empowered and directed by spiritual righteousness.

Dualities, Religions, and Public Ethics

In all of the six ways previously mentioned, God the Father creates and Christ the Son redeems. The Son restores the work of the Father, and both actions are made effective in human experience by the Holy Spirit. This Trinitarian understanding of the world clarifies both the coherence of the Christian worldview and shows how it is different from the other worldviews that influence the thought of many about matters of public and environmental ethics. Secularism will generally say that nature simply is and that there is nothing behind or beyond nature which gives significance and meaning to nature. Pantheism will have difficulty maintaining a distinction between humans and nature while also giving clear reasons why people should do the good and avoid evil. And it is important to note that one of the differences between Christianity and most varieties of Islam is that Islam does not normally recognize these six dualities. The differences

between Christianity and Islam are not only on the level of claiming to have different special revelations, different paths to salvation, differences on the possibility of certainty of salvation, and differences on many particular ethical questions. It is very difficult for many varieties of Islam to recognize such things as general revelation, common grace, God-given civil righteousness, a God-given natural moral law, or God-given practical wisdom among unbelievers. For this reason Muslims often want to derive their thinking and action for all of life, culture, and government directly from their religious law, the Sharia. In contrast to secularism, pantheism, and Islam, Christians should recognize the ways in which God is directly working in his Creation, even if God sometimes remains partly anonymous or hidden because people suppress their awareness of God, and even if there is little or no direct influence of the Bible on some particular group of people.

Christians have not always been as clear as we should have been in our teaching about the twofold work of God in the world. Sometimes Christians have denied these dualities in a confused desire to be faithful to Christ alone, minimizing the first part of the dualities. At other times, other Christians have talked as if special revelation, saving grace, and spiritual righteousness are unimportant, neglecting the second part of the dualities. But in spite of these mistakes, the distinction between the common and special works of God, which recognizes the specificity but unity of the work of the three Persons of the Trinity, has been a very important factor in the shape of life and culture in the western world. Teaching about this distinction can make similar contributions in other cultures. This idea is behind such important cultural/legal practices as the freedom of religion and the separation (without hostility) between church and state. This duality means that Christians have felt free to accept cultural gifts (such as education, government, technology, medicine, and law) from our culture, criticize our culture, and contribute to our culture, without demanding that our biblical faith be imposed on the culture as a condition of our culture's legitimacy. This is very different from the moral/cultural perspectives arising from secularism, pantheism, or Islam.

A deep appreciation and understanding of the ongoing work of God in and through his creation should provide true depth of meaning for Christian environmental ethics. Our concern for the environment should not merely be an external need to obey the law or a vague concern for long-term human well-being. We should not only be thinking about consequences for our neighbors or our grandchildren if we do not care for the environment, though that is an important part of true love. We must never

forget that this is our Father's world, and how we treat his world illustrates what we think about our Father, regardless of any other results or consequences. Of course, God commissioned humanity to be active in his world, "to work it and take care of it" (Genesis 2:15), even if the source of this demand remains unrecognized by many. Nature belongs to God, and he is active in his creation in multiple ways (several of which were described above), prior to his work of redemption in Christ, caring for his own creation, so that our care for creation should be an image or imitation of his care for creation. This is the solution to the dualism or "Platonic concept" described by Schaeffer which stands in the way of a proper environmental ethic among Christians. We should learn to sing, "This is my Father's world."

Faith and Reason active in Love: The Ethics of Creation Care⁵⁵

Summary: In our era marked by ongoing environmental disasters killing millions, by skepticism about environmentalism, and by wide-ranging reassessments of the basis for environmental ethics, Christians should consider the theological and philosophical foundations of creation care so that we are equipped for responsible action as well as moral dialogue with our neighbors in a manner that presents a holistic Christian worldview. This includes themes which are questions of faith, such as a deep understanding of the unity of God's moral and physical laws with his providence, but also themes where there is a greater unity of faith and reason, such as understanding our humanness. By being consciously God-centered, we can avoid the opposite extremes of being either human-centered or nature-centered, both seen in secular thought where God is ignored, and truly love both nature and our neighbors. We will address these themes by means of considering our situation; considering the unity of divine and human creation care; and by means of a dialogue with secular environmental ethics including the relation between faith and reason in understanding humanness.

Our situation

On the one hand:

“A 2012 World Health Organization (WHO) study found that 3.5 million people die early annually from indoor air pollution and 3.3 million from outdoor air pollution.”⁵⁶ Many of these deaths occur in China and India.

“Unsafe water causes 4 billion cases of diarrhoea each year, and results in 2.2 million deaths, mostly of children under five.”⁵⁷

⁵⁵ Parts of this essay were first published in Thomas Schirrmacher, *Ethik* (Hamburg & Nürnberg, 2002), vol. 5, 251-290. These parts were translated by Dr. Richard McClary and included into this new text by Thomas K. Johnson.

⁵⁶ http://www.huffingtonpost.com/2013/04/09/air-pollution-deaths-green-energy_n_3045828.html. Accessed May 27, 2013.

⁵⁷ http://www.unwater.org/wwd10/downloads/WWD2010_Facts_web.pdf. Viewed December 2, 2013.

LatinaLista – “*Earth Day 2013* should have been more than just a “celebration” of the planet or even a further raising of awareness of the consequences of climate change. Earth Day 2013 should have served as the beginning of a panic attack among global communities that the future of the planet is not just extremely fragile but imminently life-altering for all inhabitants.”⁵⁸

On the other hand:

In 1968 Stanford professor Paul Ehrlich predicted, “The battle to feed all of humanity is over. In the 1970s the world will undergo famines--hundreds of millions of people are going to starve to death in spite of any crash programs embarked upon now. At this late date nothing can prevent a substantial increase in the world death rate.”⁵⁹

“The ban on DDT,” says Robert Gwadz of the National Institutes of Health, “may have killed 20 million children.”⁶⁰

And yet:

1. This is my Father’s world, and to my listening ears
all nature sings, and round me rings the music of the spheres.
This is my Father’s world: I rest me in the thought
of rocks and trees, of skies and seas; his hand the wonders wrought.
2. This is my Father’s world. O let me ne’er forget
that though the wrong seems oft so strong, God is the ruler yet.
This is my Father’s world: why should my heart be sad?
The Lord is King; let the heavens ring! God reigns; let the earth be
glad!⁶¹

A serious discussion of environmental ethics has to face massive contradictions. Many millions, usually the poor, are dying annually as a result of air, water, and indoor pollution; the consequences invite comparisons with the Holocaust. On the other hand, the terrible predictions of 45 years ago, represented by Paul Ehrlich, were clearly false; there are not hundreds

⁵⁸ <http://latinalista.com/2013/04/earth-day-2013-should-serve-as-the-beginning-of-an-environmental-panic-attack>. *LatinaLista* of April 22, 2013. Accessed May 27, 2013.

⁵⁹ Paul R. Ehrlich, *The Population Bomb*, (Ballantine Books, 1968), prologue, no page number.

⁶⁰ Michael Finkel, “Malaria,” *National Geographic* (July 2007) <http://ngm.nationalgeographic.com/2007/07/malaria/finkel-text>. Accessed May 27, 2013.

⁶¹ This famous hymn was written by Pastor Malbie D. Babcock in 1901.

of millions starving to death each year. At the same time, some have gone beyond Angst into a self-confessed state of panic about the environment, often citing global warming; other thoughtful people are divided, some seeing past efforts to protect the environment as quite effective, while others see much environmentalism as foolish naiveté, represented by the self-destructive ban on DDT. Some want new environmental ethics to protect humanity, while others say humanity is the problem and want to replace human-centered “speciesism” with a “Land Ethic” or an “Eco-centric Ethic,” claiming previous Christian and philosophical ethics wreaked havoc because they were *too* interested in human well-being.

We must, however, be careful about what types of answers we expect to find in the Bible. The Bible does not address every hot topic. The Bible does not tell us what portion of climate change is caused by humans and what has other causes. The Bible does not tell us if the greater risk to human well-being is global warming or the onset of another ice age, which some predict. The Bible does not tell us how to reduce air pollution in the metropolises of the developing world, the cause of massive suffering. Nor does the Bible tell us the exact relation between local health risks and global environmental problems. But the Bible does give us an overall perspective on God, humanity, and the world, freeing us from religious distortions, some of which make environmentalism into a religion-substitute against a history of anti-environmental philosophy. And attention to nuances in the Bible will help us develop a balanced, responsible environmentalism that can be applied, that contributes to moral discussion in a religiously mixed world, and that supports our presentation of the gospel in the global environmental discussion. Both for the sake of contributing to moral discussion in the public square and of supporting the global presentation of the Christian faith, we should emphasize the relation between faith and reason, both of which must be motivated by care for people and nature, which are both God’s creation.

I. Faith and the unity of divine and human creation care

God’s Word articulates a creational unity of God’s natural physical laws, God’s moral law, and God’s continuing care for his creation, which provides the basis for human creation care, including loving our neighbors environmentally. In secular cultures people commonly embrace dualisms which separate natural science from ethics and the ethical treatment of people from care for nature. A crucial step toward overcoming such dualisms, reconciling environmental science and ethics, is to recognize the

unity and goodness of God's work in creation and providence. The "natural law" is the complex unity of God's moral law given to all mankind with God's scientific law, by which he governs all of non-human nature, grounded in his creation and continuing care for his world (common grace and providence). This unity, taught in the Bible, unifies our environmental ethics.

God's law-giving activity in creation and his sustaining care fit together. God is both Creator and Sustainer of the world in its entirety, human and non-human (Ps. 104; Heb. 1:3; Col. 1:17; Neh. 9:6). The Old Testament describes natural physical laws and God's moral laws for humanity in parallel; the two words used for "decree" or "ordinance" (Hebrew: *choq* and *cherah*) refer to both moral principles (Deut. 4: 1-45; 5:1-31; 6:1,20; 8:11; 10:13; 11:1; 28:15,45; 30:16; 2 Sam. 22:23; Ps. 18:23) and ordinances governing the non-human creation (Jer. 5:24; 31: 35,36; 33:25; Job 28:26; 38:33).⁶² God's sustaining care forms the background for human moral responsibility (Ps. 89:9-15). Helmut Egelkraut describes this unity of scientific laws, moral commandments, and God's care for creation: "This world, as a creation of God, has been given certain decrees which ensure its continuation."⁶³ Natural laws are God's laws for nature. Nature does not give the laws of nature to itself; its laws are not self-existing. Laws of *creation* or *creation* ordinances are the description of God's laws governing nature and humans.⁶⁴ God's first group of commands to humanity, including care of creation (Gen. 1:26-28; 2:15), are an organic part of God's natural law.

In Psalm 148:6 we read about the heavens: "He set them in place forever and ever; he gave a decree that will never pass away." In Jeremiah 31:35-37 the creation ordinances are described as unchangeable decrees coming from God. According to Jeremiah 33:20-26, God has made a "covenant with the day and with the night." Thus the "fixed laws of heaven and earth" have been "established" and are as certain as God's covenant with David.

⁶² Both terms are used parallel for the moral law in Deuteronomy 6:1, 2; in Jeremiah 31:35, 36 they are used for God's rule over nature.

⁶³ Helmut Egelkraut, "Gott, der Schöpfer und Erhalter und sein Gebot," 40 Jahre Evang. Missionsschule in Unterweissach: Freundesbrief Nr. 116 (Oct., 1988) 26-30, here 29.

⁶⁴ This unity of the natural law governing humans and nature was a standard theme in Christianity in most of our history.

Parallelism describing God's decrees in creation and his ordinances for humanity abound in the Psalms and the Prophets: "He sends his word and melts them; he stirs up his breezes, and the waters flow. He has revealed his word to Jacob, his laws and decrees to Israel" (Ps. 147:18-19). "Even the stork in the sky knows her appointed seasons, and the dove, the swift and the thrush observe the time of their migration. But my people do not know the requirements of the Lord" (Jer. 8:7). Other biblical terms describe the unity of God's relation to humankind and nature, which we mistakenly separate. Jesus "rebuked" (Greek: *epitimao*) the elements (Mk. 4:39; Lk. 8:24), as well as the demons (Mt. 17:18; Mk. 1:25; 9:25; Lk. 4:35; 9:42). In the Old Testament God "rebuked" (Hebrew: *ga'ar*; 28 times) his enemies (Is. 17:13), as well as the sea (Is. 50:2; Nah. 1:4; 2 Sam. 22:16; Ps. 18:16; 104:6-7; 106:9) and the "pillars of the heavens" (Job 26:11).

We should understand this unity of God's law governing nature, God's moral law for humans, and God's care for creation in association with several additional theological principles. Some will be briefly summarized; others will be explained:

A. The unity of work ethics and environmentalism

There is an ultimate unity between God's continuing care for his creation and his mandate that humans become fruitful and work in his world. There is not a conflict between Christian work ethics (leading to community and economic development) and Christian environmental ethics (leading to a cleaner and healthier world). The same God who created us with a mandate to work in his world has also commissioned us to care for his world. And as God cares for his creation by means of his decrees, we trust that he will sustain his world while we imitate him in his world.

Humankind was created for purposes pleasing to God. God made humankind in his image to be the ruler of the earth and gave him the responsibility of preserving and developing creation. This creation mandate is not added on to human nature as a task which is alien to what we are naturally or which people can avoid; it is an organic part of how God has made us. (This means that God's creation mandate forms the hidden theological assumption for creation care even when God is ignored.) The Bible starts in the Garden and ends in the Eternal City, because the development of civilization is not only a human necessity related to human well-being; it is also God's plan for the ages. From our human perspective, civilization and the development of our environment comprise a sub-creation, applying

God-given human creativity to God's original creation; from God's perspective, according to the Bible, civilization is an implementation of God's plan.

For this reason, we believe that technophobia, the fear of significant technological growth, cannot save our environment. Only if we apply the cumulative intelligence and research inquisitiveness expressed in technology resulting from a strong work ethic can we be environmentally responsible. Christian ethics seems designed for this combination of environmental care and technological development. Günther Rohrmoser summarized these two sides which must be emphasized simultaneously. Humanity needs a worldview that places the human race into a moral position of responsible superiority over nature. "Humankind is not only to come to know that he is lord and possessor of nature, but also to know that he is not merely a part of nature. Rather, he is to experience that nature has been entrusted to him." This is a role which "corresponds to the statements made within Christianity's account of creation, which brings with it the theological potency to develop this position in order to solve the basic problems of our society. The creation mandate does not mean to dominate nature. Rather, it means to conduct culture-shaping activity and to develop and unleash the hidden possibilities."⁶⁵

The lordship humanity has over the earth must serve both humankind and the rest of creation, bringing creation to its intended goal; complementary biblical principles must be held together. In Genesis 2:15 humanity receives the dual mandate to "work" the world and "to take care of it," always in light of both God's purposes and human needs. Some have falsely separated using the creation from caring for the creation, but biblically they belong together: "A righteous man cares for the needs of his animal, but the kindest acts of the wicked are cruel" (Prov. 12:10). Sabbath rest applies to livestock for their needs (Ex. 20:10; Deut. 5:14). The land receives a Sabbath rest to serve wild animals by producing food for them (Lev. 25:7; Ex. 23:10-11). Rules protected animals as well as human beings: "Do not muzzle an ox while it is treading out the grain" (Deut. 25:4). The angel's first criticism of Balaam was that he beat his donkey (Num. 22:32).

That humanity is to preserve the creation does not place human beings on the same level as the creation; it distinguishes humanity from the rest of creation. While the creation is to be preserved, the creation also serves

⁶⁵ Günther Rohrmoser, *Landwirtschaft in der Ökologie und Kulturkrise* (Bietigheim, 1996), 130-131.

humanity. In war, for instance, the trees providing food which belonged to the enemy were not to be cut down (Deut. 20:19-20), for they expressly served to nourish people. A similar stipulation protected birds in Deuteronomy 22:6-7. That the earth, especially farmland, was to lie fallow every seventh year (Ex. 23:10-11; Lev. 25:1-7) was a conspicuous rejection of exploiting the soil. Humanity, acting as steward, has received the earth on loan from God and is responsible for its preservation. This is our Creator's work ethic for humanity, created in his image. Our care for and development of creation must reflect and image God's care for and development of his creation.

B. The unity of love of neighbor and environmental ethics

There is an ultimate unity between loving our neighbors and the biblical work/environmental ethic. As early as Leviticus 19:18, God instructed his people to "love your neighbor as yourself" as a summary of the moral law. It should be noted that the command to love people came after God's creation ordinances, thereby showing that the love command assumes God's creation ordinances to develop a civilization and care for creation. This addresses foundational questions in environmental ethics: Are economic development, love of neighbors, and care for creation compatible with each other? In more detail: should we sacrifice economic and technical development to protect the environment? Should we prefer that a billion remain in primitive conditions so they do not cause pollution? Do the interests of the millions dying from pollution stand in conflict with the interests of the entire human race in reducing pollution? Will helping individuals suffering from the results of pollution help or hurt humanity and the ecosystem?

Answers to such philosophical questions are brought to the study of the environment, not learned from the study of the environment. Our answers to these questions are derived from the Bible. We believe there is compatibility among our God-given moral responsibilities to love our neighbors, to care for creation, and to develop civilization. Phrased differently, we believe that there is unity among an energetic Christian work ethic, creation care, and love of neighbors in need. That complex compatibility requires implementing all the creativity God has given us. It means we expect that loving the poor, whose poverty is linked with horrible pollution, can lead to a type of economic development that is both better for such people and better for creation.

C. Creation care in all the mandates

As described in the Bible, human life was given structures designed by God, each with distinct purposes and responsibilities, the “mandates.” Dietrich Bonhoeffer says, “The Bible knows of four such mandates: work, marriage, the state, the church.”⁶⁶ God’s purpose that we care for the creation was built into humanity in a manner that precedes the distinction into the separates mandates. This means that creation care must be implemented in appropriate ways in all the mandates. Caring for creation is not so much a responsibility for a particular mandate as it is a responsibility that has to be carried out in a distinct manner in each mandate. This means that a business (resulting from the work mandate) has a different type of environmental responsibility than does a family (resulting from the marriage mandate). The state has a type of duty in relation to the environment (writing and enforcing reasonable laws) which is different from that of the church (articulating an ethics of creation care).

D. The unity of human and divine creation care

Human care for creation both already is and must become an image of God’s care for his creation. It is a mistake to either think that God’s care for his world makes our care unnecessary or that we can protect creation without God’s direct involvement. Bonhoeffer drew attention to the difference between the creation of humankind and the creation of the rest of the universe. He interpreted Genesis 2:7 (“... the Lord God formed the man from the dust of the ground and breathed into his nostrils the breath of life, and the man became a living being”): “Body and life are completely intertwined at this point. God breathes his spirit into the human body. And this spirit is life, making the human being alive. God creates other life through his word. He gives humanity something of his life, something of his own spirit. Human beings as such simply do not live without the spirit of God.”⁶⁷ Gustav Friedrich Oehler points out an additional aspect of the image of God: “The form of humankind was to be so created that when God revealed himself, it could serve as a presentation of himself.”⁶⁸ Rather than

⁶⁶ Dietrich Bonhoeffer, *Ethik*. (München, 1949), 70.

⁶⁷ Otto Dudzus (ed.), *Bonhoeffer Brevier* (München, 1963), 81-82, quoted in Dietrich Bonhoeffer, *Schöpfung und Fall: Eine theologische Auslegung von Gen 1-3* (München, 1958⁴).

⁶⁸ Gustav Friedrich Oehler. *Theologie des Alten Testaments*. (Stuttgart, 1891³), 227-228.

replacing or competing with God's creation care, it is the breath and Spirit of God within us that makes human creation care possible so that our care for creation assumes the direct activity of God caring for his world.

E. God's natural law for the nations

God's law was given both to promote well-being among the people of God and to be contributed from the people of God to the surrounding nations. In Deuteronomy 4:40 we read, "Keep his decrees and commands, which I am giving you today, so that it may go well with you and your children after you." Knowledge of God's moral/scientific law is clearly intended for human well-being, but this is not narrowly related to the people of God. The Old Testament gives hints that God's natural law communicated through his people could contribute to the lives of their neighbors. In Deuteronomy 4:6 the people were told, "Observe them carefully, for this will show your wisdom and understanding to the nations." These hints form the background for Jesus' teaching his disciples, "You are the light of the world" (Matthew 5:14). Not only is the gospel to be communicated from believers to the rest of the human race; there is also moral/scientific wisdom that can and should be communicated from the people of God to the wider world, which should contribute to the well-being of wider communities.⁶⁹ If the exiles in Babylon were to "seek the peace and prosperity of the city to which I have carried you into exile" (Jer. 29:7), we should not do less.

F. Knowledge of God's law and modern science.

This biblical viewpoint, that both the natural moral/scientific law and God's written law arise from the same creation-sustaining work of God, has contributed significantly to the development of modern science, especially in the very formative early modern era. This has been a crucial way in which Christianity has contributed to the well-being of many people.⁷⁰ If

⁶⁹ We are thinking here of what the Reformation called the civil or political use of God's law, which, like all the proper uses of God's law, is always distinct from the gospel while having a relation to the gospel.

⁷⁰ On the Middle Ages see Karl Knauß, "Gott, Naturgesetz und Zahl: Schöpfungstheologische Wurzeln der abendländischen Naturwissenschaft in der Naturphilosophie Robert Grossetestes," *Glauben und Denken: Jahrbuch der Karl-Heim-Gesellschaft* 6 (1993), 156-186. See also Nancy Pearcey and Charles Thaxton, *The Soul of Science: Christian Faith and Natural Philosophy* (Crossway, 1994). Pearcey and Thaxton were influenced by Francis Schaeffer, who argued that the

the cultures shaped by the Bible had not believed in God's creation ordinances, scientists would never have searched in such an intensive manner for natural laws! Though telling the story at length is beyond our purposes, we rejoice that God contributed key ideas that led to the benefits of science partly through the central beliefs of Christians. The biblical view of the creation order has had huge and constructive consequences which must be developed for creation care.

This set of theological truths is foundational for our view of science and environmental ethics. There is an ultimate unity in God's care for creation between valid moral principles and the laws discovered by science; as prescribed in the Bible and seen in history, God has brought great benefits to the entire human race through principles, ideas, and values articulated among the people of God.

We see an ultimate unity among God's creation decrees for his world, his moral laws governing human behavior, and the well-being of our neighbors. We expect to find unity among loving our neighbors, treating God's world properly, a vigorous work ethic, and honest science.

II. Christian ethics in dialogue with environmentalism

Though modern environmentalism demonstrates the conflict with God that characterizes fallen humanity, the recognition of creation care as a moral duty by people of many faiths or no faith is based on God's unrecognized demand. Because God is continually communicating his moral demands (general revelation), even if God is denied, people commonly recognize moral responsibility.

The many intellectual attacks on the Christian faith in the realm of environmental ethics, coming from writers accusing Christianity of contributing to environmental problems, must be seen within the context that people are in conflict with God while God continues to provide those people with everything that makes human life possible. God even provides some knowledge of right and wrong to those who deny him!⁷¹ This conflict-filled

Scientific Revolution of the sixteenth and seventeenth centuries "rested upon what the Bible teaches." *The Complete Works of Francis Schaeffer*, Vol. 5, p. 157. Schaeffer's interpretation of this history followed Alfred North Whitehead, *Science and the Modern World*, 1925.

⁷¹ A few examples of this attack on Christianity: Eugen Drewermann, *Der tödliche Fortschritt: Von der Zerstörung der Erde und des Menschen im Erbe des Christentums* (Freiburg, 1991⁶); Lynn White, "The Historical Roots of Our Ecologic

relation is described throughout the Bible. For example, in Romans 1, echoing Genesis 2, where humans were to name (from a position of responsibility over nature) and be accountable for the rest of creation, we see a reversed relation between humans and nature resulting from sin. This means that people create substitute gods to try to replace the Creator, but by this process they also reverse their own relation to the rest of creation, imaging something in creation to be an authority. This continues a related Old Testament theme, the prophets' battle against the nature gods Baal and Asherim, which was simultaneously a battle against the idolization and glorification of nature.⁷²

Humanity loves the thought that we are not responsible for the environment but rather that the environment is responsible for us. Just as Adam pushed the guilt for the fall onto Eve and Eve pushed the guilt onto the snake (Gen. 3:12-14), humanity, with ever new religious tricks, tries to avoid responsibility for the environment and for our neighbors.

A. Environmentalism as substitute religion

The modern environmental movement sometimes pursues nature idolatry to the point of abrogating the difference between humans and the rest of earthly creation. For example, the preamble of the "Earth Charter," issued by non-governmental organizations after the international conference on the environment in Rio de Janeiro in 1992, claims: "We are the earth, the people, plants, and animals, rains and oceans, breath of the forest and flow of the sea. We honour Earth as the home of all living things."⁷³ The creation is put in the place of the Creator, the earth and rain are personified and placed on an equal footing with human beings, and the earth is worshipped. It is no wonder that the environmental movement is criticized as a substitute religion with its own ethic and eschatology, melding the esoteric with valid environmental concerns.⁷⁴ Without trust in God's sustaining grace, it is not surprising that unduly pessimistic scenarios are maintained while real improvements in the environmental situation go unmentioned.

Crisis," *Science* 155 (1967); and Carl Amery, *Das Ende der Vorsehung: Die gnadenlosen Folgen des Christentums*. (Reinbek, 1980; reprint of 1974).

⁷² See Georg Hunteemann. *Vom Überlebenskampf des Christentums in Deutschland* (Herford, 1990).

⁷³ *Nach dem Erdgipfel: Global verantwortliches Handeln für das 21. Jahrhundert: Kommentare und Dokumente*. (Bonn, 1992), 253. This is an early version of the "Earth Charter." Later versions reduced the level of religious rhetoric.

⁷⁴ See as an example Alfred Konstanti. *Göttliche Umwelt* (München, 1992²).

Given the way in which, on an ultimate level, venerating earth involves reversals and denials of known moral/spiritual truth, it is not surprising that former environmental activists have criticized environmental organizations for justifying their existence by twisting facts. Religiously driven reversals of the human-to-nature relationship lead to deadly consequences which are often related to denying knowable truths. The problems in environmentalist organizations are not merely how particular environmental issues are described and addressed. The problems include the religious worldview/philosophy of life from which environmental problems are perceived and described.

In contrast with such idolatry-driven environmental ideology, healthy political policy growth and the growing sense of responsibility related to the environment, with their growing successes,⁷⁵ are morally responsible reactions to well-identified problems. This is the proper use of God-given moral and practical reason, which quietly assumes a relation between humans and the earth closer to biblical teaching than to the teaching found in idolatrous environmental philosophy.

B. The environmental critique of western moral philosophy

In recent centuries western ethical theory has been anthropocentric, whether this has been expressed in terms of *human* duty, consequences of our actions on other *humans*, the *human* social contract, or the development of moral virtue among *humans*. This common criticism coming from environmentalists is correct. Western ethical theory is also weak because it neglects sin as a theme, a related part of anthropocentrism. However, offering a “land ethic” or an “eco-centric” ethic in place of supposed “speciesism” contributes to neglecting the millions of people dying from pollution. Moral values simply cannot come from impersonal nature or ecosystems; they can only come from the Creator of humanity and of nature, who has spoken in both creation and in redemption! For that reason

⁷⁵ See also the critical investigation of the environmental movement by two of its leading German representatives: Dirk Maxeiner, Michael Miersch. *Öko-Optimismus* (Düsseldorf, 1996³); Dirk Maxeiner, Michael Miersch. *Lexikon der Öko-Irrtümer* (Frankfurt, 1998³); as well as ““An der Nase herumgeführt”: Der kanadische Greenpeace-Mitbegründer Patrick Moore wirft den Umweltaktivisten vor, die Öffentlichkeit zu belügen.“ *Focus* 18/1998: 65 and Burkhard Müller-Ullrich. *Medienmärchen: Gesinnungstäter im Journalismus* (Karl Blessing Verlag: 1996), 24-34 (on dying forest syndrome), 35-49 (on Chernobyl), 107-115 (on Brent Spar, 1995), 116-124 (on animal protection).

one should not say: “Leave the ways of humankind and follow the ways of nature.” Rather, the way to go is “Leave the ways of humankind and follow the ways of the Creator.” Our Creator is the one who sustains nature and has entrusted care for creation to us. We must understand humanity and nature before God or we will distort the human to nature relationship.

Some older Christian writers already far surpassed anthropocentric ethics without becoming eco-centric. A nineteenth-century example is the theologically conservative Danish pietist Hans Lassen Martensen, who decried abuse of the environment.⁷⁶ He not only viewed an understanding of sin as crucial to serious ethics. A lengthy quotation demonstrates his attempt to find a balanced understanding of nature.

The Christian view of nature and regard for nature offers a sharp contrast to an ascetic and pessimistic failure to consider nature which also degrades nature, whereby everything physical is seen as evil and in every natural beauty a demonic temptation is perceived. However, the Christian view is also opposed to the optimistic pagan view which does not want to see the undeniable disturbances of nature, which assumes the “vanity” (impermanence) to which nature is subjected, which incessantly destroys nature’s own structure and purpose (e.g., when a worm in nature secretly eats a blossom and when the worm of illness and of death chews at the roots of human life, just when both should be unfolding in their respective beauty), and which calls us to admire as perfection in nature the terrifying war of all against all the animal world presents before our eyes, that “fight for survival” in which the stronger creature torments and eradicates the weaker ones or where organic beings such as those swarms of insects spreading disaster, just like all the bugs which belong to the perfection in nature.⁷⁷

C. The environmental critique of Christian beliefs

The already mentioned attack on Christian beliefs coming in many forms from environmentalists is mistaken. Though Christians must be called to new efforts to care for God’s world, this requires a new appreciation of core Christian beliefs, not a rejection of Christian beliefs in order to promote environmental responsibility. In this regard we note the comprehensive historical investigations of Udo Krolzik, *Umweltkrise: Folge des Christentums?* (English translation of the title: *The Environmental Crisis: A Consequence of Christianity?*). His summary merits quotation.

⁷⁶ Hans Lassen Martensen, *Die individuelle Ethik. Die Christliche Ethik: Specieller Theil: Erste Abtheilung* (Gotha, 1878), 331-338, “Die Liebe zu der unpersönlichen Creatur.” Published in Danish in 1854.

⁷⁷ Martensen, *Ethik*, 332.

In answering the question of whether the environmental crisis is a consequence of Christianity, we can start with the following insights: It can be shown that the development of technology in the 12th and 13th centuries was indeed motivated and legitimated by Christianity, but it was in no way characterized by an exploitative relationship to nature. It was not until the Renaissance dismantled the God-ward references for both humanity and nature that an understanding of humanity and nature emerged which gave nature its own value and denigrated it to pure means. This understanding, however, was limited up to the end of the 18th century by the Western conception coming from the monks that humankind, as God's worker, was to successfully bring expression to nature through cultivation. The representatives of this understanding rejected the view of the world as a machine. It was not until bourgeois commercialism that the idea of the world as a machine began to become a reality and to exploit nature. Since the environmental crisis has developed after the Industrial Revolution, it can be said that it is not actually a consequence of Christianity but that rather the consequence of secularization and of the self-referential focus of humanity associated with it.⁷⁸

We need a renewal of care for God's world that arises out of central Christian beliefs, not a rejection of Christian belief in order to protect creation.

D. Technology

In 1960, when Europe was less post-Christian, Gunther Backhaus could still entitle a book . . . and subdue it: *The Influence of the Christian Faith on the Development of Technology* (original German title: . . . und macht sie euch untertan: *Der Einfluß des christlichen Glaubens auf die Entstehung der Technik*). The book views the statement to "fill the earth and subdue it" as responsible for the emergence of technology in the Christian West and as having done so in a positive manner. His summary: "The Bible is the precursor of technology."⁷⁹

However, if technology is not subject to God's commands and becomes subject to either human-centered or humanity-denying ethical concepts – as does everything detached from God – technology becomes a threat to both humanity and creation. Some do not dare mention this. Instead of returning to the creation ordinances, they let themselves be talked into believing that the call to "fill the earth and subdue it" is responsible for our present mis-

⁷⁸ Udo Krolzik, *Umweltkrise: Folge des Christentums?* (Stuttgart, 1979), 84.

⁷⁹ Gunther Backhaus . . . und machet sie euch untertan: *Der Einfluß des christlichen Glaubens auf die Entstehung der Technik*. Theologische Existenz heute NF 84 (München, 1960), 3.

ery. When people protect the environment, whether or not this is clearly articulated, it is done in response to God's commands built into creation,⁸⁰ not because nature has any claim in itself. It is a basic problem of the environmental movement that polluters are pronounced guilty from enormously high moral ground. However, without God such critics can neither dispense the moral force to truly change anything in a world ruled by mammon nor live themselves by the standards which they apply to others.

The Christian West brought about modern technology but attributed to it a subordinated significance. The authority humanity has over the earth (Gen. 1:26-30), the mandate to subdue the earth, as emphasized, includes *building up* and *preserving*: "The Lord God took the man and put him in the Garden of Eden to work it and take care of it" (Gen. 2:15). "Building up" means to progressively and continuously alter something. It thus means, among other things, to develop by means of technology, preserving with conservational safeguards what is at hand. Both facets belong together.

It is delightful that within the framework of environmentalism Christian expressions and ideas have celebrated a revival in the mouth of opponents of Christianity. Suddenly such frowned-upon expressions as responsibility, guilt, and even "preservation of creation" (biblical ideas!) are on everyone's lips. One knows too well that humanity – particularly in the Christian West but also elsewhere – is best motivated ethically when the element of responsibility is to a higher authority. We perceive in this feature of the environmental movement an internal and hidden theological conflict that should be made explicit. Many environmentalists sense their need for a higher source of moral authority, outside of secular anthropocentric ethical theories, quietly making reference to the general revelation of God's moral law and the Christian tradition of morality, while they remain in conflict with Christian beliefs.

E. Reason and the human to creation relationship

Because some theological claims (e.g., justification by faith alone) are purely a matter of faith, they rarely become culture-shaping. In contrast, our teaching about human nature and the role of humans in the universe is a matter of both faith and reason, making it a truth that is more easily contributed to our surrounding cultures. We can articulate our understanding

⁸⁰ See the excellent article by Peter J. Leithart. "Biblical Perspectives on the Environment," *Contra Mundum: A Reformed Cultural Review* Nr. 2 (Winter 1992), 28-33.

of human nature in terms that are both faithful to the Bible and also partly accessible to reason in order to contribute to environmental ethics in our multiple cultures. Many people who do not yet believe in Jesus can benefit from our view of the human-nature relation which supports environmental responsibility. This step also replies to the hunger of our time for a definition of humanness.

In environmental ethics one sees many misconceptions of the human-to-nature relationship. Some deny human dignity and, by implication, also deny human responsibility. Others move toward worship of nature, as if nature is our creator. Some view the world as a vast machine of which we are merely pieces, while others view the earth as a spirit of which we are parts. We are made in the image of God: what separates humans from animals is what humans receive directly from God's Spirit. People have a distinct role and dignity always in relation to the rest of creation. We should notice characteristics which are viewed in the Bible as being typically human with which, we think, social-scientific reason should agree:

1. Thinking: humans think as does God.
2. Conscience: humans can assess and decide, as does God.
3. Speaking: humans speak, and so does God.
4. Writing: humans can write, and so does God⁸¹.
5. History: humans can retain their own knowledge, planning, and action and pass them on. Individuals can build upon the experience of prior generations. God is a God who makes history.
6. Creativity: humans are able to create beauty as can God.
7. Community: humans communicate and love of their own accord, as does God.

Because the environment is discussed within secular and multi-religious societies and because the meaning of humanness is always a theme, we should emphasize that Christian claims about human nature are partly faith but also partly reason. Our teaching on the image of God is a matter of faith, learned from the Bible, but many of our particular claims about what it means to be human are also confirmed by the sciences, even if science alone provides no ultimate interpretation. Such penultimate reasonable truths about human nature learned by science and observation should be brought into the global multi-religious discussions of human nature related to the environment. One illustration must suffice.

Ethnologist Hermann Trimborn, in his study *That which is human is found at the very basis of all cultures*⁸², found commonalities among cul-

⁸¹ od wrote the first version of the Ten Commandments (Exodus 31:18).

tures. Though some claims would be more carefully expressed today, the significant commonalities noted by Trimborn merit attention. After demonstrating the enormous differences among cultures, he names two groups of commonalities. He first mentions human predispositions, the most important of which are the following:⁸³

- the enormous capacity for adaptation to changing environmental conditions
- the acceptance of the culture into which an individual is born, including perseverance
- the creative capacity for inventiveness and change.

He also describes many activities and features common to all cultures:⁸⁴ language, thought, commerce, division of labor, property, clothing, dwellings, society and blood relationships, raising children, public organizations, law, the uniformity of logical consciousness, the aesthetic sense, the need for a causal explanation of the world, and the capacity for religious experience.

It is striking how this catalogue agrees with the biblical assessment, and this is particularly clear when what is addressed here is not *how* the respective points (e.g., the family or law) are constructed in different cultures, but the fact *that* these activities appear in all cultures. (Primarily at the *how* level, cultures differ from each other and deviate most from biblical norms.) At the same time, it is these common cultural features which distinguish human beings from animals, either gradually or fundamentally.⁸⁵

A striking similarity of Trimborn's ethnology with biblical teaching about human nature is the central role of language. Language had to be primary in his list of cultural features because it is assumed in every other feature. In the Bible we see God creating by speaking, while people shape and direct their sub-creation by means of words. Obviously, environmental ethics are words that shape our future.

⁸² Hermann Trimborn. *Das Menschliche ist gleich im Urgrund aller Kulturen. Beiträge zum Geschichtsunterricht* 9. (Braunschweig, no date).

⁸³ Trimborn, *Menschliche*, 18.

⁸⁴ Trimborn, *Menschliche*, 19-35 (most expressions have been carried over literally).

⁸⁵ The question remains whether Trimborn's results purely arise from research or whether the Christian view of humanity influenced him. Science is always influenced by worldviews and cultures. A Hindu researcher might not accept all of Trimborn's results, though a Hindu may be convinced of some of these claims on the basis of evidence.

The gradual disappearance of the Christian understanding of humanness – especially because of evolutionary theory – has had devastating results in the West. Our legislation sometimes protects animals better than children in their mothers' wombs. Under the previous influence of a biblical understanding of humanness, it was clear that the protection of human life had priority over the protection of animals. People no longer understand themselves or their relation to creation.

We are not strange to see the influence of Kant, Darwin, Marx, and Freud in this loss of understanding of our humanness.⁸⁶ Sigmund Freud described two great wounds to the “self-love of humanity:” the Copernican Revolution removed the earth from the center of the universe; and “biological research destroyed the alleged creation privilege of humanity.”⁸⁷ Darwin and Marx were part of a process in which people in western civilization lost sight of their humanness. To renew environmental ethics we must speak confidently about human distinctiveness and mention that what we say is only partly by faith; much of what we believe is also accessible to reason. And what we say answers some of the deepest existential questions which always surface in discussions of the environment. We are not cosmic accidents; God has commissioned us as his representatives to care for his earth and for our neighbors. And our neighbors have a place in God's earth which he has destined to develop from the Garden to the Heavenly City and which is also an object of God's redemption.

Conclusions

The global response to environmental problems will always be influenced by religious, philosophical, and ideological components. Basic worldviews shape how people perceive the world, and those worldview-influenced perceptions will shape the actions of individuals, organizations, and nations. We have articulated themes which Christians can use to act responsively and creatively in regard to creation care which should also equip Christians to enter into a significant critical dialogue with the religious (and non-religious) convictions of other people that are shaping their approaches to environmental care. We have to understand humanity and nature before God, or else we will distort our understanding of humanity or

⁸⁶ See Richard Tarnas, *The Passion of the Western Mind: Understanding the Ideas That Have Shaped Our World View* (New York, 1991), 326-354.

⁸⁷ Sigmund Freud, *Allgemeine Neurosenlehre. Teil III*. Studienausgabe (Frankfurt, 1989), 283-284 (from “Vorlesungen zur Einführung in die Psychoanalyse,” 1916/17).

nature. Our goals must be multifaceted: to equip people for responsible and compassionate action, while also demonstrating the compelling power of the Christian faith, and doing it in such a manner that both convinces people regarding Christian truth claims and influences the global public discussion. Caring for creation is among the first commands of God recorded in the Bible. And we have to genuinely love the millions of our neighbors who are sick or dying because we have not cared for God's creation deeply enough.

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