On Dominion and Progress: Sacramental Action in a Secular World

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Humanity and Creation in Christian Theology

For good or ill, it has come to pass. Humanity has multiplied, filled the earth, and gained dominion over it. The earth's ecosystems, biodiversity, geochemical cycles, and climate are all now powerfully affected by human decisions. The influence of humanity is so pervasive that geological societies have been debating whether to formally recognize the start of a new epoch, the Anthropocene. And now we have also begun to fumble with tools that could shape our own evolution. We could debate whether we have come into our dominion by birthright, accident, or treachery. But that would be a distraction, since abdication is not a viable option. The more immediately relevant questions concern what type of rulers we should seek to be and to what end should we exercise our dominion.

Lucas Cranach the Elder. *Paradise*, 1530. Kunsthistorisches Museum, Vienna.

To begin, we must recognize that we share this planet with millions of other species and with generations unborn. Taking our obligations to the rest of the biological world into account, I think it would be best for all concerned if we sought to be godly; we should use as a model what we hope and believe to be God's relation to humanity and creation. What I have in mind is the conception of God that is at the foundation of any thoughtful Christian theology, that of a being immensely concerned with the welfare of humanity and of all creation, so concerned as to allow us the freedom to work out our destiny without coercion or excessive interference.

Of course in Christian theology, God's concern for creation is more than simply benign neglect. Throughout the scriptures, the beauty and bounty of the world is celebrated as evidence of God's care. There is also, in some mysterious way, guidance—and even intervention—on our behalf, that nevertheless leaves human autonomy and responsibility intact. God is understood as seeking to enable our full, perfected expression, which requires that we remain free to do as we wish and that we be responsible for the conse-

quences of our actions. God's concern is manifested fully in the Incarnation, in which God takes flesh so that we and all of creation may be transformed and exalted. According to St. Irenaeus, God "became what we are in order to make us what he is himself."[1]

Whether such a God exists or is merely the God we would like to exist is not an essential consideration for environmental ethics. If the God we hope exists is an omnipotent being who is nevertheless respectful of our autonomy, who has made the world beautiful and bountiful for our enjoyment, and who—in ways that do not restrict our freedom—seeks to enable our perfected expression, then even as part of a secular environmental ethics, that conception of godly concern could serve as a model for our own rule over the earth.

Beyond providing a conception of God worth emulating, Orthodox Christian theology directly links the functioning and fate of nature to humanity's spiritual condition. Humanity is called to serve as mediator and priest, participating with God in sanctifying all of creation. The scriptural underpinnings for this understanding stretch from Genesis through the Epistles.

After the creation of the world, God brings all creatures to Adam to "see what he will name them." In Hebrew and many ancient languages, names have specific meanings that are understood as both reflecting and influencing the essential nature of the person or thing. The naming by Adam should therefore be understood as a creative act that continues throughout history. The cave art in Chauvet, the totems carved by the tribes of the Pacific Northwest, Darwin's *Origin of Species*, and the sequencing of genomes are all examples of an ongoing process of "naming," by which we are seeking to define the essence of other creatures and our relationship to them.

The deep connection between humanity and nature that is implied in Adam's naming of the animals is starkly revealed by the repercussions of Adam's transgression. Not only is humanity expelled from the garden for Adam's transgression, but the transgression causes a profound transformation in the ecology of the world.

Cursed is the ground because of you;
in toil you shall eat of it all the days of your life;
thorns and thistles it shall bring forth to you.[2]

It would be possible to understand the curse as the angry response of a temperamental God, but that would mistake imagery for meaning. As Genesis makes clear, the deep spiritual relationship between humanity and the rest of creation is a fundamental element of God's design, built in from the beginning, and our actions have profound consequences.

Isaiah envisions a time when the disastrous results of Adam's transgression are overcome, humanity returns to God, and a harmonious, fruitful relationship with nature is restored. The language Isaiah uses mirrors that found in Genesis.

Let the wicked forsake his way, and the unrighteous man his thoughts; let him return to the LORD. . . .

For you shall go out in joy, and be led forth in peace; the mountains and the hills before you shall break forth into singing, and all the trees of the field shall clap their hands. Instead of the thorn shall come up the cypress; instead of the brier shall come up the myrtle.[3]

[1] Irenaeus of Lyon, *Against Heresies*, Lib. 5, Preface.

[2] Gen. 3:17–18.

[3] Isa. 55:7–13.

The essential message of the Gospels is that the joyful restoration foretold by Isaiah has begun. The kingdom of heaven is at hand. But the kingdom is not of this world. It operates on completely different principles. Power and might are revealed in humility. The ruler is servant and the meek inherit the earth. God has returned to rule, but not by the coercive means used by earthly rulers. Humanity's freedom, autonomy and responsibility for the earth, embedded from the outset in the fabric of creation, are renewed and given new authority by Christ. "Truly, I say to you, whatever you bind on earth shall be bound in heaven, and whatever you loose on earth shall be loosed in heaven."[4]

The deep spiritual connection linking the fates of humanity and the rest of creation is summed up again by St. Paul in the Epistle to the Romans:

The creation waits with eager longing for the revealing of the sons of God;
For the creation was subjected to futility, not of its own will but by the will of him who subjected it in hope;
Because the creation itself will be set free from its bondage to decay and obtain the glorious liberty of the children of God.[5]

Not only humanity but all of creation will partake in the redemption and transfiguration initiated by the Incarnation and Resurrection of Christ. Through the revealing or emergence of humanity as sons of God, all of creation will realize its full potential. But this process of transfiguration, while made possible by God, requires our active involvement. As the body of Christ, the mystical Church, we are active participants in the salvation of the world. "Where two or three are gathered in my name, there am I in the midst of them."[6]

[4] Matt. 18:18.

[5] Rom. 8:19–21.

[6] Matt. 18:20.

Our Modern Secular Faith

The dominion verse in the first chapter of Genesis and the Abrahamic faith traditions that recognize the book of Genesis as a scriptural reference are often blamed for sanctioning humanity's rapacious use and abuse of the natural world. The brief sketch I have provided above is intended to show that such a view is quite at odds with Christian theology. Decidedly less clear are the practical implications in a secular, pluralistic society of the Christian understanding of our sacramental relationship to the natural world. There are few questions more urgently in need of our attention.

Political liberalism and the separation of church and state emerged from the Enlightenment. What is less widely acknowledged is that they were brought into the world by Christian culture, accompanied by all of the pains associated with childbirth.[7] The original political idea of the Enlightenment was to create a religiously neutral public sphere where governments, supported by the will of the people, would make decisions to enhance overall welfare. Political and legal safeguards were instituted to ensure that majority rule did not become tyranny and that government did not interfere in the private exercise of religion. The market, even in the view of its most famous patron saint, Adam Smith, was understood to be a useful servant—capable, in the then-narrow realm of commercial transactions, of transmuting self-interest into public benefit, but always under the guidance and management of the state, which alone was entrusted with safeguarding the interests of all.

Over time, as religious and other traditional views of the common good were abandoned or confined to the private sphere, the servant grew strong and in-

dependent and the master grew feeble and confused. Markets have extended their reach into every facet of life and into every corner of the globe. Meanwhile, no political justification can be found for them other than to continue to support an increase in production and consumption, along with the continued development of technology as a guarantor of further progress. Other than for the most egregious abuses involving blatant fraud or immediate damage to persons or property, political leaders have lost all moral authority to constrain exchange between market participants. The result is a rapidly accelerating application of science and technology, guided, or rather propelled, by a collective pursuit of pleasure and comfort, with government acting as supporting player and occasionally as referee, stopping the action momentarily if one of the participants commits an obvious foul.

Do not mistake my meaning. There is no doubt that over the past two hundered years, market economies supported by investment capital have improved living conditions and increased life expectancy in almost every part of the world. In the past twenty-five years, that progress has been quite rapid, with the percentage of the world's population living in extreme poverty dropping from 41 percent in 1990 to less than 12 percent today. With almost a billion people still living in extreme poverty, there is more to be done to spread the benefits of material prosperity. But a decent standard of living, or even a steadily increasing material prosperity for all, should not be the sum total of our aspirations. In higher-income countries, it is not at all clear that further increases in material wealth will lead to increased well-being. Yet we seem to have lost the ability to define any collective purpose beyond that. We have entrusted ourselves to the invisible hand of the market which we vaguely conceive as being wielded for our benefit by the god of progress.

G. K. Chesterton saw this very clearly almost one hundred years ago:

Progress is simply a comparative of which we have not settled the superlative. We meet every ideal of religion, patriotism, beauty, or brute pleasure with the alternative ideal of progress. That is we meet every proposal of getting something we know about with an alternative proposal of getting a great deal more of nobody knows what.[8]

The eschatological nature of our modern faith in progress is on full display in the teachings of a small but highly influential sect of true believers, the transhumanists, who count among their members some of the richest and most influential members of the tech community. The transhumanists expectantly await a time in the not too distant future when exponentially accelerating advances in biotechnology, nanotechnology, and, most important, artificial intelligence will make it possible to upload our consciousness to machine-based intelligence capable of indefinitely perpetuating itself.[9] When that brave new world arrives, we, or at least the select few who are fortunate enough to be able to afford the price of admission, will become immortal.

It is open for debate whether this vision of the future offers us a glimpse of heaven or of hell. Unfortunately, that debate seems to be largely confined to Hollywood films and science fiction novels. Meanwhile, increasingly powerful forms of artificial intelligence continue to be developed, networked, and connected to ever-growing databases. Technologies for enabling direct neural connections between biological brains and computers are moving from

[7] Early proponents of allowing minority religious communities full participation in political life were Christians and based their arguments on Christian principles. See Roger Williams, *The Bloody Tenet of Persecution* (1644); John Milton, *A Treatise of Civil Power in Ecclesiastical Causes* (1659); and John Locke, "A Letter Concerning Toleration" (1689). This tolerationist view had to overcome earlier justifications for religious compulsion such as Augustine's interpretation of "compel them to come in" from the parable of the feast (Luke 14:15–25).

[8] Gilbert Keith Chesterton, *Heretics* (1905; New York: Barnes & Noble, 2007), 26.

[9] See Ray Kurzweil, *The Singularity Is Near: When Humans Transcend Biology* (London: Penguin Books, 2006); Nicholas Bostrum, *Superintelligence: Paths, Dangers, Strategies* (Oxford: Oxford University Press, 2014); http://whatistranshumanism.org/; and http://humanityplus.org/.

science fiction into practice. Numerous firms and a network of military-funded research labs are making rapid progress in developing robots capable of autonomous learning and autonomous movement in complex, newly encountered environments.

Whether artificial intelligence could ever become human-like and whether it is wise to pursue such a goal are important questions with significant philosophical and even existential implications. Philosophers continue to debate whether human beings do or do not have free will. While this is not the place to rehearse the arguments in that debate, it is worth noting that humans are sufficiently unpredictable to have enabled the debate to continue for millennia. This suggests that a human-like artificial intelligence would have to pass something more comprehensive than the celebrated Turing test, in which a human interlocutor attempts to determine whether he or she is conversing with a human or a computer. A more complete test of whether an entity possesses general, human-like intelligence is whether it is capable of independently developing new skills and capabilities, can interact with us as a human would, and appears to be motivated by a purposeful but not fully predictable will of its own.

The thought of creating a self-improving intelligence with what appears to be free will should give us pause. But in the world of artificial intelligence, pause is not on the agenda. The component elements needed to achieve general, human-like intelligence are being feverishly pursued, not as a result of collective agreement after a thoughtful debate in democratic forums, but rather from the uncoordinated actions of profit-seeking firms combined with the accelerant of military competition between nation-states.

I do not mean to single out the field of artificial intelligence for special treatment. The same driving forces and reasons for concern apply to other applications of our rapidly advancing technological capabilities. As a result of very recent advances in biotechnology, almost anyone with a graduate degree in biology and a modest amount of money to spare can now quite precisely edit the genome of almost any organism—including humans—and, if desired, ensure those changes are inherited.[10] This technology is rapidly being incorporated in applied research programs in academia and industry, and there is little doubt it will eventually be widely deployed in a new wave of genetically modified organisms and designer babies, most likely before we are fully capable of assessing the social or ecological implications.

A Choice to Make

It is often argued that, as new challenges arise, humans muddle through, learning and innovating as we go, always finding our way to a better place. This may be true with respect to localized or narrowly defined problems. But when the problem is global, when the response requires either pervasive action or restraint, and when the benefits or costs are not immediate or easily captured in market transactions, we have not shown ourselves capable of responding quickly enough to avoid serious harm. This is illustrated quite clearly by the inability of the global community, after more than three decades of effort, to fashion an effective response to anthropogenic climate change. Preventing the release of dangerous forms of artificial intelligence and controlling the harmful effects of an onslaught of genetically modified organisms will be at least as challenging in a market-driven, militarized world.

[10] For an accessible introduction to these technologies and some of the ethical challenges they are likely to create, see Jennifer Kahn, "The Crispr Quandary," *The New York Times Magazine*, November 9, 2015.

Just as we have extended our dominion over all the earth and are learning to wield tools capable of affecting the course of evolution, it seems we no longer possess, or at least agree on, a worldview or ethical system to guide our actions. From a purely secular perspective, questions regarding humanity's purpose are unintelligible or at best self-referential, based entirely on our own desires and preferences. Yet for all our modern, secular trappings, we still hold an essentially religious faith in progress. Climate change, the steady erosion of biodiversity, and the near elimination of a private realm not subject to commercial manipulation show that we are ready to sacrifice many things that we hold dear in the expectation of attaining some future state of bliss. The more extreme versions of our secular faith appear as dark parodies of Christianity, complete with the need to die to our old selves in order to be reborn into an eternal, digitized existence. Whether it is a parody of Christian faith, the real thing, or some other vision of humanity's purpose that should guide the exercise of our dominion is a question we must answer. If we simply continue to satisfy whatever whim or fancy takes hold of us, then by the time we finally come to our senses, if we do, we may find we have done irreparable harm to ourselves and the world.

A genuine understanding of humanity's role as servant ruler, responsible for tending all of creation and revealing its beauty and majesty, is more urgently needed than ever. However, if this calling is to be widely embraced, Christians must provide a visible witness of its practical application. This will require wading deeply into the complex ills and opportunities of the modern world to fashion an intelligent, Christian response to issues ranging from climate change and biodiversity conservation to bioethics and income inequality. In communicating what we have found, we cannot take faith in God or an acceptance of scripture as a given, or we will only be talking to ourselves.

If we are to act as leaven in a pluralist society, we will need to find ways to speak persuasively to those who are not Christian or are Christian only by historical affiliation. As a starting point for that dialogue, I suggest we seek to measure the exercise of our dominion in terms of three virtues: love of beauty, humility, and compassion for others, human and non-human. This world with its creatures is a work of art, billions of years in the making. Even after all our advances in science and technology, there is still so much we do not understand or cannot effectively control. Before we take actions to modify the world, as inevitably we must, we should first ask if we are quite confident that our actions will enhance its beauty and benefit those most in need. ✻

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