

Roots, branches, and seeds

Exploring Western society's exploitative tendencies

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A perusal of the science and technology headlines on the Canadian Broadcasting Corporation's Web site reveals an oil spill, a record year for greenhouse gas emissions (2006), concerns about tuna conservation, and threats to polar bear and bowhead whale populations—just today's examples of how human activities are endangering our planet. Addressing such problems is likely to occupy the attention of earth's societies in coming years, a challenge that theologian Thomas Berry has named the "Great Work" of this period in history.¹

This great work will involve many practical components: scientific research, technological innovation, political instruments, international agreements, and changes in individual

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lifestyles. But none of these practical measures will suffice in the absence of a profound examination and transformation of the values, beliefs, assumptions, and worldviews that condone and encourage behaviour destructive to the earth. We must ask not only how we can live better but also why we live the way we live. Why is our society so destructive of the earth? Why do we feel entitled to use the gifts of the land indiscriminately? Why do we take for granted the life-giving processes of natural ecosystems? Why

do we assume that they will provide these gifts indefinitely in the face of our overuse?

A multitude of factors and ideologies have accumulated and combined over the many centuries through which Western society has developed into its present form. Many of these ideologies have roots in biblical and Christian traditions, in classical Greek and Roman philosophies, and in the worldview that developed

during the Renaissance and Enlightenment periods in Europe. Particularly important are conceptions of the human, convictions about the relationship between humans and the natural world, and beliefs about God. Equally significant are the ways these ideas have branched into societal institutions such as science, technology, and the economy.²

Roots: Conceptions of the human

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Christian scriptures, starting in the first chapter of Genesis. The Judeo-Christian view of the human being is radically elevated in relation to both the divine and the nonhuman, as humankind is created in God's image and given dominion over the rest of creation (Gen. 1:26). In contrast to other ancient religions, in which humans are either indistinguishable from the rest of nature or merely

playthings of the gods, Christian tradition sees humans as creatures of importance and worth. We are called into covenant relationship with God, and for our sake God has taken human form and died.

Another factor in elevating the human species in Western thought is a worldview based on divisions between spirit and matter, mind and body, and nature and culture. Dualism of this kind derives from various traditions in classical Greek philosophy, including Neoplatonism and Gnosticism. These philosophies divide the spiritual world from the material world. The material or physical world is fallen and evil, while the world of spirit is good.

These dualistic philosophies hold that human beings inhabit both realms, having both a physical body and a spirit. This type of dualism is present neither in the Jewish scriptures nor in the earliest expressions of Christianity. But as the Christian faith spread into the Greek world through the early missionaries, Greek ideas merged into Christian theology, and spirit/matter dualism found its way into the Christian faith. Theologians such as Origen (ca. 185–ca. 254 CE) and Thomas Aquinas (ca. 1225–1274 CE)

viewed nature and matter as degraded and low, and life in the material world as a sort of purgatory. For them, salvation is found through release into our original spiritual state.

For many centuries, recognition of the power and sovereignty of God and focus on matters of faith held in check the anthropocentrism of the Jewish scriptures and the dualism of the Greeks and early Christians. But as European societies emerged from the Middle Ages through the Renaissance and the Enlightenment, new philosophies boasted a proud faith in humanity. The supremacy of the divine slowly eroded, and human beings achieved a more godlike status. In consequence, the charge to subdue and have dominion over creation became a call to mastery of nature. The intervening centuries have seen an intensification of our anthropocentric outlook, resulting in a sense of human entitlement to nature's gifts and a selfish disregard for the consequences of our actions for anything but our own species.

The philosophies of the Renaissance and the Enlightenment also reinforced a dualistic worldview. The humanism of this period

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focused on our ability to reason; it celebrated rationality, logic, and objectivity above other ways of knowing and thinking. In this context, the spirit-matter dualism of the Middle Ages shifted to a distinction between the mind, which is associated with logic and rational thinking, and the body, seen as a slave to emotion and material needs. René Descartes (1596–1650) immortalized this view in the simple phrase “I think, therefore I am.” Beings who can engage in thought are separated from and elevated above beings

that are seen as unthinking, and the mind and human culture are seen as superior to the body and nature. Nature is not only inferior to culture, but also, continuing in the Greek tradition, viewed as flawed and fallen.

These dualistic ideas have found expression in many aspects of Western culture. For example, ecofeminist analysis shows how dualistic divisions between men and women and between culture and nature are connected, and how these divisions have condoned and encouraged both the subjugation of women and the

exploitation of nature. Widespread and ancient traditions associate women with the body and nature, and men with the mind and culture. Accordingly, men—with their physical power and supposed superior rationality—are the builders of culture and are destined to dominate both women and the natural world.

Spirit-matter dualism has also continued to influence the Christian understanding of salvation. While biblical perspectives encompass both physical and spiritual renewal and blessing, the idea of salvation as the removal of believers from the earth has captured the imagination of many Christians. It is assumed that Jesus' second coming will culminate in a complete destruction of the fallen material world, after which the spirits of the faithful will dwell with God in heaven. Those who wait for this spiritual salvation often deem irrelevant any concern for the welfare of the created material world. Some Christians even argue that the

faithful need not work for environmental stewardship and sustainability, because environmental degradation is a clear sign that the end is at hand.

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Roots: Conception of the divine

Another important root of Western society's exploitation of the earth is our conception of the divine. Many cultures believe that divine spirits inhabit everything (rocks, trees, waters, and animals), and that people must placate these spirits before we can use their habitats.

Thus the resident spirits function as a protection against overuse. The monotheistic faith of Abraham, Isaac, and Jacob removed the gods from nature, which effectively eliminated a significant restraint in the relationship between humans and their surroundings. Devoid of its resident spirits, nature could more easily be objectified and viewed instrumentally as a means to human ends.

The monotheism of Jewish faith contributed to another radical shift in our conception of the divine and of reality. In removing God from nature, this faith placed God within history, walking with God's people through the generations. Societies that worship nature gods tend to have a cyclical worldview attuned to the movement of the seasons. In contrast, the reality of the Judeo-

Christian God of history is linear. In this view, history has a beginning and an end. In between these events lie possibilities for change, development, and progress.

A historical orientation with a commitment to progress has both shaped and driven Western society, and the pursuit of progress, one might argue, has yielded our society's best and its worst. Progress has been at the root of many artistic endeavours, advancements in medicine and improved health, the search for greater knowledge, and striving for justice and equality among people. At the same time, it has fuelled the West's quest for economic and political dominance of the globe. It has driven the violent colonization of foreign countries through the subjugation of both their peoples and their lands. Most important, progress has propelled Western science, technology, and economic pursuits; these secular institutions have provided the tools, resources, and impetus for the use of the natural world and for its destruction.

Branches: Science and technology

Without the knowledge and tools provided by science and technology, human impact on our planet would be very different. For example, advancements in medicine have decreased mortality rates among human populations, allowing our species to multiply at a rate that is beginning to put enormous pressure on the resources of the planet. At the same time, discovery of ways to unleash the energy stored in fossil fuels has increased the power and scope of our resource extraction, transportation, manufacturing, and construction systems.

Science is a type of knowledge based on the systematic collection of information through observation, producing a body of verifiable theories or models. It seeks to be predictive by explaining causal relationships, and it favours data that can be measured numerically. The scientific process requires rigorous testing, which confirms the reliability of the information it produces. Other sources of knowledge—including tradition, intuition, personal experience, and religious faith—are more subjective and less amenable to measurement and proof. As the scientific process has developed, the pursuit of knowledge has narrowed, other sources of knowledge have increasingly been dismissed as inferior or irrelevant, and science has become the favoured form of knowl-

edge in our society. Together science and technology—which is essentially the practical application of scientific knowledge—have become a belief system or faith in their own right. The primary goal of this belief system is to unlock the secrets of the universe for the purpose of human gain.

Science and technology have both fed and been driven by an instrumental view of nature, which sees the natural world as a means to human ends. The systematic investigation of nature that began during the Renaissance was made possible in part by the desacralization of nature brought about by Hebrew monotheism and by the degrading of nature through spirit-matter dualism. The project of scientific investigation itself, however, further stripped nature of any remaining spirit or soul. A hallmark of scientific study is objectivity, an element of the process that contributes to its reliability, but objectivity also disengages observers from what they are observing. People in the West increasingly view nature as

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a blind and mechanical object that deserves no respect in its own right and has worth only in its usefulness to human designs.

Another consequence of the narrowing focus on science and technology has been a disregard for ethics and values. Ethics is a branch of philosophy dealing with values, which are beliefs about what is desirable. As such, these knowledge processes play a key role in decision making. Because ethical dialogue cannot be tested or measured objectively (though it can be rational and

systematic), it is often dismissed in decision-making processes, in favour of scientific knowledge.

But despite its commitment to objectivity, the scientific enterprise is as value laden as any other human endeavour. Inherent in our all actions and technologies are values, and though we may not recognize them, they still guide our activities, possibly in directions that are not in our best interest or in the interests of our planet. Science can only tell us what is and what might be, which are important subjects for discussion, but it cannot tell us what ought to be, and that is the most important question in decision making.

A world guided by science and technology, in which ethics has a diminished voice, is characterized by several things. People are increasingly segregated from the natural world and therefore blind to consequences of their activities. This separation reinforces an instrumental view of nature by isolating people from the personal interactions with the natural world that are essential to breaking down this view. At the same time, information and knowledge are produced and broadcast at an ever faster pace, which means that society has a decreased ability to evaluate the information or to consider the consequences of its application. The ever-increasing production of knowledge is a hallmark of progress, but those generating this knowledge and information are under no obligation to ensure that it is used responsibly. People assume that any mistakes can be rectified with further advances in knowledge. And so the treadmill continues, producing increasing volumes of information and knowledge, but little wisdom.³

Branches: The economy

The economy and our slavish concern for its well-being and constant growth are arguably the most significant factors in producing our extractive and consumptive society. The economy works in tandem with science and technology by providing the monetary resources necessary to further acquisition of knowledge and its application, which in turn fuel further growth in the economy. And all this activity uses natural resources, carves up the wilderness, and produces waste and pollution. Etymologically, the word *economy* refers to the management of the household. As a society, however, we are concerning ourselves with managing only a tiny part of our household. Our economic focus could be compared to that of a family concerned only with the size of their bank account and the scope of their monetary transactions, while their yard slowly fills with garbage and their house crumbles.

The discipline of economics, as we know it, was invented by Adam Smith (1723–1790). He suggested that because of certain universal laws (the “invisible hand”), when all human beings act according to their own selfish interests in economic activity, an efficient and equitable flow of goods and services will result. The competition between selfish actors is key in this equation, which is the basis for the free market economy that now dominates the

world. Many good things can be said for the market system of economics that grew from Smith's work, but it has some deep flaws that are rarely considered.

One basic flaw in economic theory is a fundamental disconnect between that theory and the natural sciences. In the eighteenth century, when Smith was developing his theories, the impact of a human population of today's size could not have been imagined. Nor did Smith have the benefit of the knowledge and understanding of the natural world that we have acquired today. It is therefore no surprise that he did not take into account a number of physical realities, the consequences of which are becoming increasingly clear.

Economic activity ultimately relies on the natural environment for raw materials and for the assimilation of wastes that are produced. For this reason, basic physical laws describing the nature of energy and matter are essential to the economy. First, neither

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energy nor matter can be created or destroyed; energy flows, and matter cycles, from one form to another. Furthermore, as energy flows, it changes into forms that are less useful. In other words, there is a tendency for disorder to increase. This means that the energy and matter available for use have limits, and that all the materials and energy that pass through the human economic system exit the system in a degraded form.

While nature's mechanisms can process waste and regenerate materials, these mechanisms can be overwhelmed by the pace and scale of human enterprise. Furthermore, because of this tendency toward disorder, any complex and dynamic system that is developing and growing requires constant inputs of energy and matter to maintain or increase itself. In the case of the human economy, this energy is taken from the natural world, thus decreasing nature's internal order and development. The result is expanding human activities that are capable of disrupting the fundamental natural processes that support all life on our planet.⁴

While it is hardly surprising that Smith's original economic theory did not account for these physical realities, it is surprising

that economic theory has not changed and adapted as scholarship in other disciplines has advanced. Instead, many economists continue to dismiss those who suggest that economic activities threaten to overreach the earth's capacity. They insist that economic processes and technology will ensure that new resources and techniques can always be found to replace what is depleted.

At the same time, economic theory has not remained entirely static. Over the centuries, it has become increasingly focussed on mathematical modelling, efficiency, and most important, economic growth. Adam Smith first introduced the idea that societies should pursue economic growth for their betterment, as a way to improve the material well-being of individuals and society. A larger economy would provide more goods and services to more people, without requiring any redistribution of wealth. Smith and other early economists assumed that at some point the economy would reach a sufficient size, rendering further growth unnecessary. Over time, this assumption has been lost, and growth in and of itself has become the single most important economic goal.⁵ Growth has been touted as the panacea for all manner of ills, including underdevelopment in the Global South, winning the Cold War, achieving full employment, battling inflation, and protecting the environment.

The latter argument assumes that more prosperous countries can better afford to adopt cleaner technologies and clean up any pollution that still occurs. We can find evidence for this trend in industrialized nations with some types of pollutants, but not for carbon dioxide, which continues to increase with economic growth. This argument does not address the issue of resource depletion. Nor does it account for the fact that many wealthy countries have exported their dirtiest industries to poorer countries. In other areas, economic growth has only addressed in mediocre fashion (at best) the wide range of problems to which it has been applied. And yet we continue to cling to economic growth as a solution, despite the fact that it also produces a whole range of problems, including the depletion of natural resources, pollution, and many social ills.

Why does our faith in economic growth endure? The omission of physical laws from economic theory, as described above, is a primary reason. Our national accounting systems, such as calcula-

tions of Gross Domestic Product (GDP), also contribute by making no distinction between beneficial and harmful monetary transactions within the economy. In fact, many social and environmental costs of economic growth, such as pollution remediation, health-care expenditures, and crime prevention, are counted as positive contributions.⁶ Finally, economic growth is simply the easiest solution to many of our problems. Without growth, governments would need to make difficult choices about allocation of resources, while continued growth promises plenty for all without asking sacrifices of any.

Seeds of hope

A discussion such as this one cannot hope to cover all the issues that are worthy of note. Some significant omissions include attitudes toward wilderness, the role of private property laws, the links between poverty and environmental degradation, the growing power of corporations in the economy, advertising and its effect on consumption, and short-term political agendas.

But while the forces working to maintain our consumptive status quo are many, they do not go unchallenged. Many of the ideas, beliefs, and movements discussed above are still alive and

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well in Western society, but seeds of change are germinating and growing, seeds that may eventually flower into a sustainable society. Through a growing understanding of ecology, natural resource managers are developing management techniques that adapt to natural processes rather than trying to control them. Dialogue between economists and ecologists is producing radical changes in economic theory. Environmental ethicists are working to dismantle the anthropocentric biases of our ethical systems, and they are striving to bring animals, plants, and the land itself into our

realm of moral consideration. Postmodern and feminist thinkers are introducing a more holistic worldview that embraces rationality, emotion, intuition, and other subjective perspectives.

And the leaders of many religions and Christian denominations are declaring their commitment to caring for the earth, and are

reexamining their scriptures and traditions for ecologically conscious imperatives. Through the growth of these seeds, we can channel our quest for progress into building our Great Work, “a period when humans would be present to the planet in a mutually beneficial manner.”⁷

Notes

¹Thomas Berry, *The Great Work: Our Way into the Future* (New York: Bell Tower, 1999).

²The next two sections are based primarily on the following sources: John B. Cobb, Jr., *Sustaining the Common Good: A Christian Perspective on the Global Economy* (Cleveland, OH: The Pilgrim Press, 1994); David Kinsley, *Ecology and Religion: Ecological Spirituality in Cross-Cultural Perspective* (Upper Saddle River, NJ: Prentice Hall, 1995); Lynn White, Jr., “The Historical Roots of our Ecological Crisis,” in *Earth Ethics: Introductory Readings on Animal Rights and Environmental Ethics*, ed. James P. Sterba (Upper Saddle River, NJ: Prentice Hall, 2000), 19–26.

³David W. Orr, “Slow Knowledge,” in *Outlooks: Readings for Environmental Literacy*, ed. Michael L. McKinney and Parri Shariff (Sudbury, MA: Jones and Bartlett Publishers, 1995), 9–13.

⁴William E. Rees, “Achieving Sustainability: Reform or Transformation,” *Journal of Planning Literature* 9, no. 4 (May 1995): 343–61.

⁵See Cobb, *Sustaining the Common Good*.

⁶Herman E. Daly, *Steady-State Economics* (Washington, DC: Island Press, 1991); Robert U. Ayres, “Limits to the Growth Paradigm” *Ecological Economics* 19, no. 2 (November 1996): 117–34.

⁷Berry, *The Great Work*, 3.

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Joanne Moyer recently completed a master’s degree in environmental studies at Dalhousie University. She also holds bachelors’ degrees in environmental studies and theology. Currently working as a research associate and contract university instructor in Winnipeg, Joanne is preparing to pursue doctoral studies exploring connections between faith and environmental work.