The Paradise of God: Renewing Religion in an Ecological Age

NORMAN WIRZBA

OXFORD UNIVERSITY PRESS

The Paradise of God

This page intentionally left blank

The Paradise of God

Renewing Religion in an Ecological Age

NORMAN WIRZBA

OXFORD
UNIVERSITY PRESS
2003

OXFORD
UNIVERSITY PRESS

Oxford New York
Auckland Bangkok Buenos Aires Cape Town Chennai
Dar es Salaam Delhi Hong Kong Istanbul Karachi Kolkata
Kuala Lumpur Madrid Melbourne Mexico City Mumbai Nairobi
São Paulo Shanghai Taipei Tokyo Toronto

Published by Oxford University Press, Inc.
198 Madison Avenue, New York, New York 10016

www.oup.com

Oxford is a registered trademark of Oxford University Press

Library of Congress Cataloging-in-Publication Data

Wirzba, Norman.
The paradise of God : renewing religion in an ecological age / Norman
Wirzba.
p. cm.
Includes bibliographical references and index.
ISBN 0-19-515716-8 (cloth : alk. paper)
1. Creation—Biblical teaching. 2. Ecology—Religious
aspects—Christianity. I. Title.
BS680.C69 W57 2003
231.7'65—dc21 2002153316

9 8 7 6 5 4 3 2 1

Printed in the United States of America
on acid-free paper

For my family:
Gretchen, Emily, Anna, Benjamin, and Luke
And in memory of my grandfather:
Wilhelm Roepke

This page intentionally left blank

Preface

The destruction of many of the earth's habitats, whether we think it has reached crisis proportions or not, and the rampant injustice and violence that characterize many of our social relationships, suggest that we have not yet attained peaceful relations with each other and with the earth. Rates of soil erosion, water and air pollution, global warming, garbage production, species extinction, suburban sprawl, ozone depletion, deforestation, desertification, as well as class envy, worker anxiety, stress, depression, and boredom—all indicate a narrowing of our ability to appreciate the broad natural and social contexts that are necessary for a successful and healthy life. If we take seriously our identities as spiritual *and* biological beings, then it becomes apparent that long-term cultural health requires the preservation and promotion of those social and natural conditions that are constitutive of successful living. To despise these conditions is to despise ourselves. In our destructive haste to "get somewhere" and to "make something" of ourselves, we condemn our children and the whole creation to want. Indeed, the profligate character of our lives suggests that we do not believe our children have a future that matters.

In the past we could readily abandon the places we wasted and find new territory to occupy. Creation's fund, we might say, seemed inexhaustible and infinitely forgiving of our careless lives. But no longer. Though creation's gifts are enormous, they are not infinite. And so we are sensing for the first time in history that a revision of our most basic presuppositions—about human identity, vocation, and cultural progress—is in order. If in former times we could as-

sume that natural habitats existed primarily for our own benefit, the ecological insight that human well-being is inextricably intertwined with the well-being of myriads of organisms and the biological processes that sustain them is now forcing us to think and act in a less arrogant manner. Having believed our desire and want to be the measure by which we appropriate the earth, we are now seeing human desire as painfully and tragically out of step with our own health and the health of the habitats that nourish and support us. We act as though the earth is our enemy, the presence that needs to be overcome or at least thoroughly subdued so that human purposes can be achieved. We simply bulldoze, burn, and spray our way through life. Is this not a futile battle in which we all turn out to be the losers?

Hope for ourselves and the earth that supports us depends on an all-encompassing vision of peace rather than war. In a world governed by peace, the fear, ignorance, and arrogance that have heretofore guided many of our settlement techniques are replaced by trust and delight, by the tranquility and enjoyment characteristic of Sabbath life. Rather than fighting a world we do not understand, we instead take the time to figure out our fitting place within it. In this process of authentic homecoming, which we can here define as the art that attunes us to a habitat's possibilities and limits, we find the possibility of a viable, healthy, and joyful existence. But where and how will we attain this vision of peace?

In this book I propose two sources: agrarian/scientific ecology and Jewish/Christian doctrines of creation. Ecology has helped us understand how human life depends upon and is benefited by billions of organisms, their habitats, and the natural processes that sustain them. While this understanding was often an integral part of indigenous cultures, an understanding that no doubt made them much more sustainable than many of our civilizations, it has dropped out of Western culture. Scientific ecology, particularly when it is made concrete in authentic agrarian practices and responsibilities, enables us to reintegrate this ancient and necessary wisdom within our own cultural life. Adopting an ecological view will help us see our interdependence with the earth and perhaps force us to come to terms with the devastating power and control we have over environments.

Doctrines of creation play a vital role because they hold before us a vision of God's original peace. They provide us the ultimate context for implementing the art of homecoming. While ecology can show us the indissoluble ties that unite us with the earth, the teaching of creation fleshes out for us the nature and character of responsible human life within the world. That we have not always appreciated this about creation stems from our penchant to read this doctrine primarily in terms of origins. In this book I develop the *character* of creation, its moral and cultural significance, so as to help us see what our proper place within the created order should be. Rather than thinking about the teaching of creation in terms of how it all began, I treat creation as de-

scribing a moral and spiritual topography, an ethos that situates humans with each other and with the earth before God their creator.

Developing the doctrine of creation this way will require us to question Thomas Berry's assessment that "we do not have a good story" to guide us in the ways of responsible earth-dwelling.[1] While we no doubt have much to learn from the "evolution epic" propounded by Father Berry, Brian Swimme, and others, we should not dismiss too quickly the moral and cultural implications of the teaching of creation that, admittedly, have gone largely untapped. As we will see, scriptural accounts of creation tell a surprisingly honest and current story of the need for character reformation and development, all with an eye to the health and wholeness of creation. The biblical story is not entirely "dysfunctional," as Berry and many others have claimed. No doubt, (mis)readings of scripture have been the source of a great deal of pain and destruction. But the character of creation bears witness to a moral logic that condemns our destruction of it. How can we profess belief in God the creator, surely a bedrock belief to many, and at the same time despise the creation? That we have endured this contradiction for so long is surely a sad reflection of our blindness and our unwillingness to be the creatures we are meant to be.

The desperate, frantic, and anxious character of much of our lives, as well as the languishing of many of the earth's habitats, suggests that we have not yet learned what it is to be creation. We have not yet attuned our lives to the creator's intention and so joined our fate to the fate of creation as a whole. The central argument of this book is that we will not enjoy each other and the earth until we come to a clear understanding of the meaning of creation and our place within it. Destruction and injustice, in other words, are the fruit of a malformed account of creation. It is only as we come to understand ourselves as creatures before God, and then act upon that knowledge, that we will experience the peace of creation.

The road to peace, as theologian Rowan Williams suggests, is by no means easy:

> Peace does not come without *integrity,* wholeness of human desire, which implies the reality of balance and mutuality in the world and so . . . carries with it the demand for compassion and poverty. . . . It involves *contemplation,* which is the way in which the conviction of the non-centrality of my ego finds expression in relation to others, to the material world, and to God. It is, most simply "purity of heart" in the world of relationships, so that "they make a whole."[2]

A properly human life depends upon the acceptance of our own poverty, which Williams describes as the acceptance of our being one part of an interdependent order. As we will see, the doctrine of creation is the ideal place for us to understand and work out our mutual interdependence. But can we abide this humility, or will we continue on the paths of ego-centered affluence? That our

self-chosen paths lead to destruction is amply borne out in the reading of our own histories. Putting us on the right path will require that we return to the teaching of creation, for it is here that we learn our authentic identity and vocation. As we attend to the stories of creation, now read in terms of creation's character rather than origin, we will see that the goal of all history is the universal celebration of joy and peace. In the peace of the whole creation we will find our own peace. In the delight of God we will find our own delight.

It is a pleasure to acknowledge and publicly thank the many people who have contributed to the writing of this book. This project would not have been completed without the generous support of the Louisville Institute/Lilly Endowment which, under the leadership of James Lewis, provided a sabbatical grant that enabled a year's time to focus and write. Cynthia Read at Oxford University Press expressed support and encouragement for the project from the beginning, as did my colleague Homer White, who read the entire manuscript in various draft stages, offering numerous helpful suggestions. Portions of this book have appeared in earlier manifestations in *Christian Reflection*. I would like to thank Robert Kruschwitz, director of Baylor University's Center for Christian Ethics and editor of *Christian Reflection*, for first printing and then permitting me to use that material here. Above all, however, I must thank my wife, Gretchen Ziegenhals, and my children, Emily, Anna, Benjamin, and Luke, who remind me that the goal of creation is its celebration. I dedicate this book to them and to the memory of my grandfather, Wilhelm Roepke, who first modeled for me something of what it means to be a creature in God's great paradise.

Contents

The Paradise of God

This page intentionally left blank

Introduction

You never Enjoy the World aright, till you so lov the Beauty of Enjoying it, that you are Covetous and Earnest to Persuade others to Enjoy it. And so perfectly hate the Abominable Corruption of Men in Despising it, that you had rather suffer the flames of Hell then willingly be guilty of their Error. There is so much Blindness, and Ingratitud, and Damned folly in it. The World is a Mirror of infinit Beauty, yet no Man sees it. It is a Temple of Majesty yet no Man regards it. It is a Region of Light and Peace, did not Men Disquiet it. It is the Paradice of God.

—Thomas Traherne, *Centuries of Meditations* 1.31

We do not detach ourselves from things in order to attach ourselves to God, but rather we become detached *from ourselves* in order to see and use all things in and for God. . . . There is no evil in anything created by God, nor can anything of His become an obstacle to our union with Him. The obstacle is in our "self," that is to say in the tenacious need to maintain our separate, external, egotistic will.

—Thomas Merton, *New Seeds of Contemplation*

As the Creator loves His creation so creation loves the Creator. Creation, of course, was fashioned to be adored, to be showered, to be gifted with the love of the Creator. The entire world has been embraced by this kiss.

—Hildegard of Bingen

Culture and the Cosmos

Our current "environmental crisis" is not simply a crisis within culture, the result of a few misguided and damaging practices. It is, rather, a crisis of culture itself, particularly if we understand a culture in terms of the care and cultivation (from the Latin *cultus*) of the conditions necessary for humans to thrive in their dwelling upon the land and with each other. That we willingly destroy and disregard the natural habitats and social contexts that make our lives possible, and on which we daily depend, indicates a profound confusion over what constitutes a proper human identity and vocation. The effects of our bewilderment, in the forms of systemic ecological destruction and disruption, social fatigue, violence, and anxiety, can hardly be addressed, let alone overcome without a proper appreciation for the broad cultural forms—in education, economics, religion, and art—that have made our confusion inevitable.

We should recall that in its earliest (middle English) usage the term culture referred not to the refinements of civilization but to a cultivated piece of land, a field upon which people worked to secure their livelihood. Over time its meaning shifted to include the work of cultivation itself, the tilling of soil and the husbanding of animals. A second cluster of meanings, dating back to the sixteenth century, was more figurative in meaning since it referred to the refinements of mind and manners that followed from education and training (perhaps referring originally to the training of character that grew alongside the productive work of tilling the soil). This second meaning would come to dominate the former, and in the process signal a divide between civilization and nature, a separation between the work of one's hands and the work of the mind. This subtle terminological shift would be of immense significance since it bore witness to a fundamental transformation in the way people understood themselves, their bodies, and their physical environment.[1]

One way to chart the development of this terminological shift would be to note and reflect upon the effects of decades of urbanization. Without condemning urban life per se, it would be naïve to overlook or ignore the cultural significance of mass migrations of people from the country to the city, for in the extinction of agrarian practices we witness not only the loss of a way of life but the erosion of a cultural sensibility that understood intimately and concretely the human bond with the earth. Clearly, farmers could be guilty of rapacious land-management practices. But what their existence afforded, because it centered practically on the fundamental needs of food, water, and energy, was the crucial insight that we live in and through our dependence on others. The long-term care of ourselves and our communities necessitates that we take care of the natural contexts that sustain and support us. Urban life, however, makes it likely that many citizens will be entirely oblivious about, and thus unsympathetic to, these biological habitats. Our lives increasingly

take part in self-constructed (often grandiose) bubbles that make little direct contact with the wide, life-giving universe around us. This loss of practical contact with the natural world has led to the narrowing of our knowledge and sympathy, and from that narrowing has come carelessness and needless destruction.

The denial of our biological and communal interdependence stands as one of the central animating forces behind modern life. In the drive to become independent, autonomous beings, we have sought as much as possible to be released from the constraints and responsibilities of corporeal life. We have sought, in other words, to engage reality "on our own terms," rather than the terms set by weather, crop cycles, animal husbandry, human physiology, and tradition. As moderns we succeed not by the grace of life and death but by the transactions of our money economy. Urban life, because it fosters the illusion of a postagrarian existence, makes possible as never before the naïve pursuit of our autonomous ambitions, and with that, since we invariably destroy or disparage what we do not understand, the possibility of a freedom condemned to wreckage and want.

And so at the root of our environmental crisis we find the inability or unwillingness to situate human life within a broadly conceived ecological context. Modern life bespeaks the refusal to acknowledge and live out the relational/interdependent character of all human life. Our temptation, whether that be in the name of progress, success, or liberation, has been to sever ourselves as much as possible from the communal conditions that contribute to a complete life. Having denied our necessary dependence on others, human and nonhuman, we now find ourselves adrift and alone, worried about the viability or worth of the lives we have chosen and are continuing to choose for ourselves and for our grandchildren. Many of us have little appreciation for where we came from, what we depend upon, where we are going, or how our personal dramas fit into a larger whole. We are, in short, bereft of a sense of the cosmos, the sense of an ordered whole that envelops and enables life.

Among archaic cultures the crisis of meaning and purpose that we experience today would have been much less likely, if not unimaginable. By "archaic" I do not simply mean primitive or ancient. Rather, I am referring to any culture, usually indigenous and preindustrial, that defines itself in reference to its primordial, often sacred, origin (*arche*), an origin that not only accounted for life's being put into motion, but also gave existence its definition and direction. In these cultures it was customary for the group to identify itself with, and in ritual life to renew itself according to, the archetypal patterns that founded and secured the cosmos as a whole. Cultural life was geared toward directing work, play, and devotion to the sacred center that made existence vital and real. While acknowledging that the road to the sacred center was often a difficult journey and noting that archaic cultures did not perfectly realize in their own histories the inspiration that first guided them, Mircea Eliade de-

scribes the journey itself as "a rite of passage from the profane to the sacred, from the ephemeral and illusory to reality and eternity, from death to life, from man to the divinity. Attaining the center is equivalent to a consecration, an initiation; yesterday's profane and illusory existence gives place to a new [existence], to a life that is real, enduring, and effective."[2]

At issue here is the ability of people to connect with the broader contexts and sources of life and then find in these connections their health and joy. Archaic ritual action instilled in people the profound sense that their lives were placed within and directed by a larger whole. Far from being tangential or ornamental, this ritual action gave to daily life the palpable sense of the continuity and order of life. Human health and happiness, on this view, could not be understood in terms of an individual cut off from its nurturing sources, for the life of the soul reached far beyond the confines of an individual body. This is why Hippocrates, the Greek father of medicine, advised that the health of an individual depended on the character of the environment—the soil, water, air, temperature, food, seasons—in which he or she lived. Personal identity and health, and therefore also the sense of vocation and happiness, depended on the ability to see the intertwining of our lives with the wider cosmos.[3]

This ancient cosmological understanding had the effect of preventing what Wendell Berry, a Kentucky poet and leading agrarian, considers to be two of our culture's most damaging sins: hubris and despair. Directing oneself to and measuring oneself by the larger ecological or cosmological context, as when young men went into the wilderness on rites of passage, yielded a most humane and beneficial result:

> Seeing himself as a tiny member of a world he cannot comprehend or master or in any final way possess, he cannot possibly think of himself as a god. And by the same token, since he shares in, depends upon, and is graced by all of which he is a part, neither can he become a fiend; he cannot descend into the final despair of destructiveness. Returning from the wilderness, he becomes a restorer of order, a preserver. He sees the truth, recognizes his true heir, honors his forebears and his heritage, and gives his blessing to his successors. He embodies the passing of human time, living and dying within the limits of grief and joy.[4]

In our own time, and due primarily to the urbanization and technologization of societies, the cultural frameworks that would foster intimate contact with and understanding of our ecological contexts are largely gone. As children we may still relish in our identification with the wider universe of animals, flowers, water, and dirt. But as we move to adulthood, and in direct opposition to the way of archaic cultures, we wean ourselves away from such identification. We, rather than the cosmos, are the measure of ourselves.

The modern abandonment of archaic cultural forms is represented in the profound shift from a cosmological to a historical understanding. By "historical understanding" I mean a sensibility that views life primarily in terms of a human rather than a divine drama. Rather than mimicking or taking our cue from the divine founding of reality, we establish ourselves as the source and goal of action. Human existence, in other words, becomes a profane existence.[5] At various points in time and to varying degrees, Western cultures severed the connection between humanity and the cosmos. Work and devotion took place in a profane world, the world of history, the arena of human thought and invention. Rather than being a look back to the founding order of the universe, cultural life assumed an autonomous nature characterized by the look forward to the new, to the innovative rather than the original. In short, modernity elevated history as the realm of cultural innovation and degraded nature as the static realm of impotent sameness and predictability. By implacable logic, then, nature's primary purpose could be none other than to serve forward-looking human needs and desires.[6]

We can readily see the difference between a cosmological and a historical understanding if we contrast their differing conceptions of space. Upon entering a new territory, Hindu Vedic ritual prescribed that an altar be erected that would consecrate the people and the space to the god. The altar did not merely invoke the presence of the god and thus render the space sacred. The very construction of the altar, in its details and in its procedures, was an act that reproduced the divine creation of a cosmos. Building the altar thus had the effect of turning the territory into a sacred cosmos, an ordered whole that united land, people, and their god.[7] Without this sacred act, the land would be uninhabitable since it would remain in the realm of chaos rather than order.

The modern "settlement" of America proceeded under entirely different assumptions. Upon entering new territory, scarce attention was paid to the integrity of place. Land was simply the foil to work out human ambition. Our use of the land followed no founding cosmogony, reproduced no sacred order. Much to the horror of indigenous cultures, Westerners routinely brought within human control vast landscapes that reflected a purely human intention (consider the topographical alteration dictated by the railroad and strip mining). Land was in no sense the bearer of a sacred order, the promise and source of life, for it had been reduced to a resource, fodder for the realization of human ambition and invention. Land, within this context, can hardly be considered a home, unless we define it as the influential twentieth century architect and planner Le Corbusier did: "a machine to live in." As a machine, it bears no soul or integrity of its own. Its value is exhausted in its utilitarian benefits.

As is well known, this shift from a cosmological to a historical understanding has yielded an ambiguous harvest. On the one hand, it has given birth to the many liberation and "rights-based" movements that have punctuated modern history. On the other hand, however, it has contributed to the unprece-

dented destruction of vast natural habitats and the organisms they support. As we define ourselves in terms set by ourselves, our much-praised autonomy runs the risk of becoming inattentive and irresponsible. Because we are decontextualized and nature is desacralized, our desire and our action are cut loose from the cosmological, ecological, and communal constraints that, in an earlier time, would have proved determinative. Since our gaze and our energy are directed to the fulfillment of self-chosen ends, we no longer take the time or develop the patience to consider what the needs, benefits, and aims of the habitats that support our lives might be. The tragic result is that our desire can come into conflict with the very conditions that make life possible.

The extent of the tragedy became starkly apparent in 1992, when more than 1,700 of the world's leading scientists, 104 Nobel laureates among them, issued an unprecedented warning to the world community. They stated that people and the natural world were on a "collision course" and that current human activity, in the forms of urban sprawl, overconsumption, population growth, deforestation, pollution, and so on, was jeopardizing the future well-being of our children and their posterity: "A great change in our stewardship of the earth and the life on it is required, if vast human misery is to be avoided and our global home on this planet is not to be irretrievably mutilated."[8]

A great number of people consider this warning alarmist. Because the range of our vision and experience are so limited (we don't have many practical or sustained connections with the ecological contexts that sustain us) and because our focus is often on the superficial, it is easy to think that we can do very little that will seriously or irreparably harm the earth. But the appearance, as environmental historians are showing, is deceiving.[9] If we acknowledge that many of us are simply ignorant about how habitats work and how our actions affect them, and then add the fact that changes in the environment occur very gradually, over stretches of time that often hide their effects from even the most attentive observers, then our optimism may show itself to be naïve. Scientists are increasingly aware that, because of the vast complexity of interactions between organisms and their habitats, it is impossible to confidently know or predict the effects of habitat deterioration. Causes, in other words, have more than one effect, and in many cases the effects surprise even the most astute.[10]

The problems many of the world's scientists are pointing to are not new. For centuries we have observed cultures (e.g., the fertile crescent of ancient Mesopotamia and vast stretches of the Mediterranean basin) decimate their own habitats, turning productive agricultural lands or proud forests into desert. The cost then was the demise of a civilization. Today, given the unprecedented global scope of our environmental problems and the added pressures on habitats due to population growth, the cost will be much more extensive and less region and culture specific.[11] Though present ruinous human activity may not bring about the extinction of our species, we do face, and are already witness-

ing, the prospect of vast human misery, which would be the result of food and water shortages or maldistribution, regional warfare over scarce resources, increased health problems related to pollution, and the escalation of tension between developed and underdeveloped countries, the former seeking to protect their "way of life," the latter wanting to improve their often desperate condition.

The roots of our cultural miscarriages, in other words, run deep. It will no longer do to separate environmental concerns from the overall course of cultural development, for our recent history confirms the agrarian insight that our well-being is inextricably tied to the well-being of the natural contexts that support and sustain us. Insofar as cultures have assumed an insular identity that can function apart from or in disregard of these natural contexts, they have invariably come to ruin. We must learn to see that the deterioration of the earth, which consists of the weakening or destruction of the natural conditions that enable habitats and organisms to grow and heal themselves, finds its necessary corollary in social deterioration and injustice. Social justice, we might say, goes hand in with ecological justice, since both depend on the human identification with and sympathy for the communal conditions that make for a complete life. The prospect of justice, however, depends on the articulation and implementation of a uniquely human identity and vocation that in seeking the well-being of others, human and nonhuman, discovers joy and peace.

Community and Soil

Though a simple return to archaic or agrarian life is impossible, it is imperative that we recover, albeit in a new way, a sense for the human identification with the wider universe. We need a more honest estimation of ourselves as embodied and embedded beings. What is necessary is that we learn to reconnect with the ecological and social contexts that sustain us, for it is in this reconnection that the range of our sympathies and care will increase. The principle that will successfully guide our thought and action is the following: seek always to expand the range of affection since the depth and range of our care is a reflection of the depth and range of our affection. Viewed practically, we tend to care *for* what we care *about*. The question of immediate importance is thus: How do we foster the conditions in which the range of our care can be expanded to include the wider world of strangers, other species, and the natural habitats that sustain us all?

An answer to this question begins with the acknowledgement that the range or scope of a person's care is somewhat fluid. It increases or decreases according to stages of development. As children, the scope of our care and concern is rather narrow, given that our primary focus is ourselves. But as we mature, we are encouraged to see that we live in a wider human world that,

while certainly being of benefit to us, expects us to care for it in return. The path to adulthood entails acceptance of communal responsibilities, because as adults we now see that others depend on us, just as we depend on them. Our lives, in other words, are not without needs or consequences. Though the nature of our mutual interdependence may not always be apparent, it is clear to those who are the least bit attentive that the effects of our actions often have unforeseen implications or consequences. We hurt and help others often without knowing or intending it, just as we ourselves are similarly hurt and helped.

Much of the time we take our mutual interdependence for granted. We do notice, however, and reflect upon our intertwined lives on those occasions when we meet someone who denies their interdependence. When we meet an adult who claims that their life has no bearing on the life of another and that they in turn are not the least bit affected by another's life, we think them odd or obtuse, perhaps even ill. In denying their interdependence they have, in effect, placed themselves outside the community and the nurture, joy, and richness it provides. The claim to be sufficient unto ourselves, wholly independent and thus in no need of communal support, would suggest, as Aristotle once remarked in his *Politics* (1253a), that we are no longer dealing with a human being but with a beast or a god. However we understand such individualists, as beasts, gods, or simply confused or belligerent, it is obvious to most that a full and healthy human life depends on the acceptance of those responsibilities that enable and support communal living.

The above account describes briefly what has been known for a long time—humans are social animals. To speak of an individual human life in isolation verges on the incomprehensible because of what it would require us to deny: that we were born of a mother, that we were nurtured in our development, that we speak a language, and that we identify ourselves (and focus a set of values) in terms of a tradition and culture. All the marks that identify a uniquely human life depend on communal contexts that either directly give us life or surround life with meaning and sense. Not to care about or care for these contexts would suggest hubris and supreme ingratitude.

We should now ask: Are we similarly obtuse, arrogant, or ungrateful when we limit our care to the human community and thereby deny our interdependence with the wider nonhuman world? In the minds of a growing number of people the answer is "yes." From an ecologically informed point of view, those who limit their care and concern to the human community are like infantile or belligerent persons who think the center of concern is themselves. It is a fundamental error not to acknowledge that the range of mutual interdependence extends beyond the human species. We are not simply cultural beings inhabiting an intrahuman world. As embodied, we are also biological beings, which means that we are necessarily and concretely tied to and dependent upon biological habitats and the evolutionary processes that sustain

them. The health of ecosystems clearly contributes to our own health, just as our activity has the potential to harm or help ecosystems. The trick is to get people to see our mutual interdependence.

Zoologist Desmond Morris once remarked that humans "suffer from a strange complacency that . . . we are somehow above biological control."[12] This complacency has led some to entertain the fantastic notion that the day is approaching when, like gods, we will no longer suffer disease or death. It has led many more to think that the destruction or deterioration of vast stretches of natural habitat is or will be without human consequence. Whatever its cause, whether it be the religious idea that humans are made in the image of God or the humanist belief in our own omnipotence,[13] the idea that we are invincible is becoming harder and harder to sustain. Our attempts to master and engineer the world into a space completely to our own liking and benefit has yielded habitats that are not only uninhabitable by us but by a whole host of other organisms. Polluted land and water, depleted ozone, antibiotic-resistant pathogens, toxic spills, and superweeds, to name a few of the works of our own hands, are becoming major human health hazards. What is clear to all but the obtuse is that the condition and health of the earth's natural habitats has implications, whether or not completely understood or foreseen, for the health of the human community. The fate of human culture is inextricably intertwined with the fate of the earth. To pit the well-being of humanity against the well-being of the earth is to invite mutual harm.

To better understand the interdependence between humanity and the earth, we should consider ourselves from the perspective of soil. While this perspective, given our largely urban culture, may seem strange, it is essential because it is in terms of the soil and its processes that the favorable conditions for life are possible. Soil is not inert or dead matter. It is rather a complex body containing billions of organisms that daily enable the processes of life and death to continue. Soil is the literal foundation upon which the earth's organisms feed and find their life. For good reason many ancient cultures, agricultural and preagricultural, understood the earth and its soils and waters to be the embodiment of a great spirit or creative power. Soil is the primary site through which the forces of life and death are repeatedly transacted. According to the biblical view, it is the medium through which the divine power of life is effected.

This idea of the centrality of soil is not entirely foreign to Western cultures that speak in their funereal rites of the bond between humanity and earth. Consider the "Commendation" section in the burial rites found in the Anglican *Book of Common Prayer*: "Thou only art immortal, the creator and maker of mankind; and we are mortal, formed of the earth, and unto earth shall we return. For so thou didst ordain when thou createdst me saying, 'Dust thou art, and unto dust shalt thou return.' " Though many individuals find this sort

of talk out of fashion, it nonetheless gives expression to the sense that our lives are inextricably tied to dirt. As recounted in Genesis 2:7, God fashioned the first human being out of the earth and made a living being by breathing the breath of life into earthen nostrils. This biblical account, even when not understood literally, is startling because it exposes the pretentious thought that we can live above or apart from our biological roots. It also causes us to question the assumption that human life can be neatly cut off or separated from the life of nonhuman others, for in this account it is clear that animals and plants are brought to life out of the same ground (cf. 2:9 and 2:19).

The interdependence between humanity and soil does not depend solely on this religious view. The bond is much more practically and immediately evident if we consider that all life depends on the digestion of food, the nutrients of earth, water, and air. Without food we could not live. Without soil we could not grow food. Therefore, without soil, humanity and other organisms will not survive. This short syllogism makes obvious what several civilizations, ours included, have denied or forgotten.

Though we may dream of a life apart from soil, as when we design hydroponic farms or synthetic food factories or when we plan for a mass exodus to space colonies, such dreams are unrealistic. They are flights of fancy because they overlook the shortage of fresh water or they forget that even synthetically produced foods depend on nutrients that eventually find their source in the earth. Furthermore, why would we think we can live a good life in inhospitable space when we cannot do so on a planet uniquely suited for human flourishing? As scientists are now clearly documenting, human existence draws from and depends upon a multitude of nature's services—wetland water filtration and purification, forest oxygen production, soil and water retention through plant cover, water and ice temperature stabilization, for example—that are in turn dependent in some way on the integrity of soil.[14] Our economies, even as they move into the service or information age, rely ultimately on the benefits of natural processes. And so we do not need soil only for the food on our plates. As soil provides for the needs of other organisms, it at the same time provides for the variety of needs that characterize a human life.

Because soil is the vital link in the continuation of life, numerous historians have remarked that the birth of agriculture some ten thousand years ago signaled the most revolutionary development in human history. The plow, which enabled us to manipulate the soil, rather than being simply a tool for humanity's benefit, has also been the cause of massive destruction. Wes Jackson, a leading contemporary agrarian, argues that until we recognize the harmful potential of the plow we will not develop farming and food-production practices that are truly sustainable over the long term. Till agriculture, besides being the boon that made the growth of human populations and cultures possible, is also a "global disease" that threatens, if not properly managed, to precipitate our culture's end.[15] A historical example will make this point clear.

Consider the ancient civilization of Sumer. Through a great deal of ingenuity and hard work, Sumerian farmers transformed the region between the Euphrates and Tigris Rivers into extensive grain and forage fields. Their agricultural success led to the development of a culture of considerable sophistication. This success, however, was relatively short-lived, owing largely to changes in the soil. Deforestation in the northern regions of Mesopotamia contributed to soil erosion and the accumulation of silt in the rivers. As the riverbeds rose due to silt sedimentation, they became more unpredictable and prone to flooding. Silt not only changed the courses of the waterways the farmers depended on for their irrigation projects, it also tended to clog up their irrigation works.

A second corollary problem was the salination of soils that was the result of overirrigation and a rising water table. Without proper drainage, salts that are naturally dissolved in the water accumulate in the soil. If the salt level reaches a high concentration, the soil will be poisoned such that plants can no longer grow. Together, silt and salt led to the degradation of the land. Deterioration of the land, in turn, led to the impoverishment of the agricultural base upon which Sumerian civilization was built. Obviously it would be an overstatement to say that the Sumerian civilization came to its end because of irrigation. But it would be impossible to deny that the land's deterioration did play a major, perhaps even determinative, role in this civilization's transformation.[16]

As we turn to the history of other cultures we find similarly that in many instances pressures or stresses on the soil found their corollary in cultural stresses. Societies that cannot feed themselves cannot be sustained unless they revert to strategies that in some cases are severe: conquest of other lands, importation of food, or relocation. Obviously each of these strategies runs the risk of severely compromising the integrity of a civilization. As we now know, Phoenician, Greek, and Roman civilizations were weakened by their own disregard of the soil. Given the current global scope of the deterioration of land, it should also be obvious that the strategies of conquest, importation, and relocation are less and less viable. There is today little healthy land to exploit, import from, or move to.

It would be a mistake to think that the ancients were not aware of the harmful effects of their land-(mis)management practices. Though they may not have understood the science behind their harmful methods, what was clear to them was that the land could be harmed and that human activity be identified as its source. Homer, referring to the phenomenon of hillside deforestation, wrote in the *Iliad* 16.389–92 that "many a hillside do the torrents furrow deeply, and down to the dark sea they rush headlong from the mountains with a mighty roar, and the tilled fields of men are wasted."[17] Plato in his *Critias* 111 would also note the denuding of soil due to erosion. Much more recently, in 1797 George Washington would complain in his *Letters* of the blindness and

belligerence of farmers who rape the earth: "We ruin the lands that are already cleared and either cut down more wood, if we have it, or emigrate into the western country. . . . A half, a third, or even a fourth of what land we mangle, well wrought and properly dressed, would produce more than the whole under our system of management . . ."[18] These references suggest that our problem has not always been ignorance. It might be better to speak of our continuing degradation of the earth as a willful blindness. Though we may "know" each time we take a bite of food or use lumber to build our homes that our fate is intertwined with the fate of the soil, we still act as though we are invincible and can stand alone or apart from the natural habitats through which we live. We should characterize this refusal to accept responsibility for our interdependence with the wider world as a form of moral and spiritual maldevelopment. It is a cultural failure of the greatest magnitude.

What I have been suggesting is that our dependence on a wider universe, what we today might call our placement within ecological contexts and processes, is concrete, necessary, and beyond dispute. Whereas preindustrial cultures understood this dependence practically and through their ritual activity, the force of our cultural lives has been to dissociate or disconnect humanity from its ecological moorings. This development has led to a false understanding of ourselves, just as it has led to the destruction of the natural sources on which we depend. Hope for a more authentic life, for a life that is properly human, depends on the acknowledgment that our lives are contingent upon the life that soil makes possible. In short, our identity as human beings extends beyond our skin and our soul to include the vast expanse of the creation as a whole. Our vocation as decent, created beings must now be reformulated in light of the expansion of our identity.

The Sense of Creation

Even if an ecological accounting of human life is fundamental to an honest assessment of human identity and vocation, it must be admitted that an ecological understanding, by itself, does not yield a comprehensive vision of life. Ecology can illuminate what is there, inform us about the conditions in terms of which organisms flourish, and alert us to the limits and possibilities of particular habitats. What we need, however, is a more complete view that attends to the origin, purpose, and goal of existence, for it is in terms of these ultimate considerations that the character of existence is given its decisive bearing and sense. In other words, it is not enough to know that our lives depend on other natural organisms and processes. We need to know how to live out our interdependence responsibly and in the context of what all living is finally for.

As we consider questions of life's meaning and purpose, we move beyond a scientific account of life to its spiritual significance. Though science may establish our biological interconnectedness, the question of what we will do with this knowledge is a moral and spiritual matter. We have the capacity, a capacity that defines us as spiritual and biological beings, to choose to act responsibly or irresponsibly in the face of our interdependence with others. We may, for instance, abuse the sources on which we depend, just as we might make their care of foremost importance. Negotiating the alternatives requires the implementation of standards that are finally religious in nature, for it is religion that has traditionally defined questions of ultimate value.

Within Western religious traditions it is the doctrine of creation that plays the primary role in helping us define the origin, purpose, and goal of life. In its teaching we find an account that encompasses the manifold of humanity, earth, and God in a comprehensive vision. It is unfortunate that this doctrine has not been fully appreciated and put to practical use, for more often than not talk of creation is misunderstood to focus primarily on the beginnings of things. While talk about the origination of the universe is itself important, since it carries considerable theological significance, the beginning is really a prelude to the more practically significant task of determining the order of creation as a whole and seeing in that ordering the placement of humans within the creation before God. In other words, the teaching of creation, besides being a teaching of how the world began, is about the characterization of human identity and vocation within the world. In it we see who we are and what we are to become. A developed account of creation will thus invariably alert us to the value and character of what is and, in doing so, inform us about the nature of our interdependence with the creator and the creation and our responsibility for this interdependence.

One way to understand this is to say that the doctrine of creation reveals a divine intention. The universe is not simply a brute mass that has been left to its own devises, but serves a divine aim. And we, said to be created in the divine image, are called upon to bear witness to and emulate the creator's intention. If we understand God's creative act to be the expression of a supreme generosity and availability for another or if we understand God's "being" as always a "being-for-another," then it makes sense to say that our lives become authentic insofar as they imitate such generosity. The divine pattern, in other words, becomes the pattern for our own lives. Because we are spiritual and biological beings, we can, if we choose, bear witness to God's own kenotic work of creation by repeating in our own lives the practices of attention, care, and fidelity.[19]

Creation is not a once-and-for-all completed event. It is open to the creator's continuing involvement, just as it is open to our own influence. We have within our ability the freedom and the power to alter the character and order

of creation. That we do participate in the work of creation is clear, since many scriptural texts speak directly to the roles that humans play in restoring or desecrating the creation. Consider as one instance the famous injunction in Genesis 1:28 that humans fill the earth and subdue it. This command, while it has clearly taken on a life of its own, is part of God's own work of creation and is in fact a continuation of that work. Creation continues in the forms of God's sustaining power and in its movement to a final redemption. In our own work we either contribute to or detract from this divine work.

That our culture is not aiding God's continuing creation is painfully clear. Rather than enabling habitats and organisms to flourish, the effect of our economic "development" has more often than not led to their deterioration, if not outright destruction. How, in the face of God's pronouncement that creation is good, in the face of God's care and delight in the created world, can we as agents of the continuing creation do such harm? There is no simple answer to this question. It may well be that we have forgotten or denied the vocational importance of the doctrine of creation or have simply dismissed the biblical teaching on creation as a quaint relic of our mythological past. It is doubtful, however, that we could have forgotten altogether the idea of creation, since the drive in humans to understand themselves, to figure out their place and destiny in the larger whole, is so very strong. If we have ignored or dismissed the scriptural teachings on creation, we could have done so only by replacing that teaching with some secular variant or alternative.

The significance of the teaching of creation for an articulation of human identity and vocation becomes especially apparent if we return again to archaic cultures, where we discover that, ideally speaking, the ordering of the cosmos acted as the model and basis for the ordering of human cultures. Work and art were to take their inspiration and goal from this originary, founding moment. Eliade put the point forcefully when he said, "*Every construction or fabrication has the cosmogony as paradigmatic model.* The creation of the world becomes the archetype of every creative human gesture, whatever its plane of reference may be."[20] Even if we grant that we no longer share the cosmological orientation of these archaic cultures, we should still ask if our own creative, or in some cases decreative, gestures are not in some measure a reflection of how we understand our place and purpose within the "creation."

The term *creation* needs to be put in quotation marks at this point because it is not at all clear that many people, despite their vague attestation to belief in God or a higher power, understand the universe as God's creation. In fact, much of our contemporary creative work seems to presuppose an absurd or meaningless world, a world in which particular acts matter very little or have no larger significance. Our practices, as when we engineer or modify habitats and organisms or when we produce shoddy or cheap and therefore wasteful products, suggest that we see the universe as ours to do with as we please. The

scriptural view that the whole of creation belongs to God and that our role within the creation is limited, but also ennobled, to that of the steward or servant seems to make little practical difference in the way many people order their lives.

If we understand creation to be about the ordering of the world—an accounting of the character of reality—and not simply its origin, then it becomes clear that the doctrine of creation is of great cultural and practical significance. In our cultural lives we enact what we understand our life and work to be about. We reflect the transforming power of the divine creative intention, or its absence. Through our tasks and our institutions we bear witness to whatever value we find in reality. Since so much of our work reflects a narrow conception of value, as when we think that human desire or need is the origin and goal of value, we should wonder if the doctrine of creation any longer plays a vital cultural role. As Rowan Williams suggests, "Being a creature is in danger of becoming a lost art."[21] But the fact that many people are sensing the spiritual bankruptcy of our culture and its violent presuppositions (we "thrive" at tremendous cost to the earth) suggests that the time may be right to reinvigorate the teaching of creation within our cultural practices. We do not much trust our own creativity and are instead searching for the paradigmatic creative work that will lead our lives and our world to wholeness and peace.

It is the central claim of this book that an appreciation for the doctrine of creation will lead to a meaningful, wholesome reconnection with the wider social, ecological, cosmological, and divine contexts in which we necessarily live. Out of this reconnection the possibility will emerge for a renewal of identity and vocation—an ennobling of work and play—that will expand the scope and range of our affection and care. As will become clear, the fulfillment of this new identity and vocation will demand a transformation of current cultural forms that deny creation. What we need, in other words, is to recover the art of being creatures. By this art I mean (a) an appreciation for how our lives are maintained by grace and (b) the practical skills necessary to act upon that appreciation. Our temptation has been to think of ourselves as self-sustaining beings, completely in control of our own possibility. Given the alienation and destruction that follows from such self-imposed isolation, we now see the need for us to reconnect our individual lives with God's life-giving, creating, redeeming intent. But in order for this to be possible, we must learn to think about the teaching of creation in fundamentally new ways.

For starters we must give up the idea that creation is primarily about how God "causes" a world to be. This notion, which is sustained by a scientific agenda not representative of the scriptural texts, fails to observe that the setting for the articulation of God's creative work was primarily liturgical and religious. Hebrew writers show little concern for the speculative question of how or by what means the universe came into being. The summary of Langdon Gilkey expresses this neatly:

> The Israelites, who expressed this doctrine in Psalms, history, and prophecy, were not prompted by a scientific curiosity about the exact series of events, or the set of relations and circumstances which accompanied the origin of the world. . . . They were overwhelmingly interested in the mystery of the purpose and meaning of their history as a people, and so with the nature of the Ruler of all history. Correspondingly, they sought, in calling God "Creator," to affirm the total sovereignty of the almighty power of the God who had revealed Himself as the author of Israel's destiny and the executor of Israel's fulfillment.[22]

Viewed religiously, the question of origins is important not because it works out the causal mechanism for creation, but because it addresses the question of ultimate meaning and purpose. The teaching of creation alerts us to who we are before God, what the nature of this God is, and what God intends for the creation as a whole.

We understand creation in a proper manner when we see God's creative work as continuous and responsive. Rather than being a deistic, one-time act completed long ago, a view made popular by mechanistic science, the scriptures suggest a God who is interested enough in creation to react to it: "The creating God is not only the acting God, but also the reacting God, the God who responds to what has been created. The Creating God is open to being confronted by the independence, the originality, even the need for improvement of that which has been created."[23] The God of Israel is a covenanting God, a God who enters into relationships, often suffering because of those relationships. God wants to be involved in the life of creation, for it is in terms of that involvement that we see and come to know God's love. Here we should remember John Calvin's bold assertion: "It can be said reverently, provided that it proceeds from a reverent mind, that nature is God."[24] Far from being a pantheistic statement, what Calvin means is that nature, the whole of creation, is the medium through which God's creativity and intention find concrete expression, provided we have the eyes to see.

In the Christian traditions the presence of God in creation is made even more striking in the teaching of the incarnation. God becomes a human being and, in so doing, enters the very materiality that constitutes creation. The home of God, rather than being a heaven far removed from our plight, is here. God sees fit, as John's Apocalypse reminds us, to move the holy city to earth, for "the home of God is among mortals" (Rev. 21:3). Jesus Christ is not merely God's representative. As the one through whom creation is brought about, God's presence and power have been established on the earth in the most intimate way. In the work of the Holy Spirit, that presence abides and continues in the faithful, careful work of the church. We need to think of God's creative work in the arresting manner that Nicholas Lash, in his commentary on the

Apostles' Creed, has suggested: "God's utterance lovingly gives life; gives all life, all unfading freshness; gives only life, and peace, and love, and beauty, harmony and joy. And the life God gives is nothing other, nothing less, than God's own self. Life is God, given."[25] Lash's trinitarian formulation of God's creative work makes it impossible for us to think of creation in the abstract way that we often do. God is nearer to us than we can ever imagine, for God is the power of life at work within us and the whole of creation. God is present within us in the nearness of our own breath. God was never "out there" acting upon the creation in some mechanical manner, for in the act of creating the commitment of God's friendship, God's "being-for-another" was announced.

The presence of God in creation is, therefore, an abiding presence, one that affirms the continuing nature of the divine creative work. The words of the psalmist (104:27–30) speak eloquently to precisely this thought:

> These all look to you
> to give them their food in due season;
> when you give to them, they gather it up;
> when you open your hand, they are filled with good things.
> When you hide your face, they are dismayed;
> when you take away their breath, they die
> and return to their dust.
> When you send forth your spirit [breath], they are created;
> and you renew the face of the ground.

As Irenaeus of Lyons, the first great Christian theologian of creation, put it, God creates by means of his two hands, the Son and the Spirit, which means that God has direct and unmediated contact with creation all the time, and vice versa.[26]

Once we understand the intimacy between the creator and the creation, the power of this doctrine to establish meaningful cultural life should become apparent. Our connection to the earth, rather than being a constraint that unduly limits our freedom, becomes the means through which we relate to the beneficence and power of God. In reconnecting with the creation, we reconnect with the creator, not because the two are identical but because the former is the expression of the latter's goodness. As several of the early church fathers expressed, Augustine foremost among them, working with the natural order, besides strengthening our intelligence and enlarging our skill, affords us the opportunity to commune with the grace of God.[27] Insofar as we tune our lives to the intention of creation, we at the same time infuse our lives and the life of all else with meaning and purpose, since our attunement touches the source and goal of all that is.

Our recovery of the teaching of creation will also require that we take full notice of the connection between God's creative and redemptive work. Creation is not finished. It has not yet achieved its complete perfection. This means that

not only cultures, but also the created order as a whole, can be distorted and disfigured. The prophetic vision expressed by Isaiah (11: 6–9) of the wolf laying down with the lamb and of the child leading the calf and the lion, as well as the early Christian hymn that spoke of all things being created for Christ and of all things being reconciled and brought to peace in Christ (Col. 1:15–20), suggests that God's concern is for the whole of creation and that this concern is profoundly faithful, painfully long-suffering, and moving forth in hope toward its future perfection. When this redemptive view of creation is combined with the agency of Christ in creation (see John 1:1–4 and Col. 1:15–20) and with Paul's declaration in Ephesians 1:4 that Christians have been chosen by Christ "before the foundation of the world" to participate in the work of the life-giving Spirit of God, then it is clear that the teaching of creation, when more adequately understood, goes to the heart of personal identity and vocation. We are, as several theologians on occasion have noted, cocreators with God, not in the sense that we have the power within ourselves to bring about the universe, but because we are God's agents called to participate in the redemption of a suffering creation. And so the doctrine of creation, rather than being of merely antiquarian or scientific significance, goes to the heart of what it means to be a person. It defines what it is for us to be and, by extension, what it means for a culture to consider itself just and at peace.

Soil and Salvation

When we link the work of creation to the work of redemption, we are enabled to see that creation, rather than being a static achievement completed in the past, is the dynamic arena in which God's love and peace are working themselves out. Redemption or salvation is not something that is added to an otherwise fully formed work—it is not an afterthought of God, prompted by the realization that the creation has gone wrong. Instead the act of creating is itself already an indication of what God ordains as a complete life. What creation is to be is already written into the creation itself. When God says, "I am about to do a new thing" (Isa. 43:18ff.), God is referring to an ongoing work that will restore the human community and the wilderness to its original intent, an intention that has been lost or buried in histories of violence and destruction. God is a covenanting God who has invited us and works with us to bring about the perfection of creation.

It is easy to misunderstand what is being suggested here, since the imagery that surrounds much historical and contemporary talk about salvation suggests a removal from rather than the restoration of the created world. To be "saved" often has the sense of being rescued from a dangerous or life-threatening situation, as when a life preserver is thrown to someone so that they can escape threatening water. This view, however, seriously undermines the scriptural

sense that God's redemptive purposes are worked out in the creation rather than apart from it. God saves the people of Israel not by plucking them out of their history but by restoring them within their history, a restoration made possible either by a deliverance from those agents who oppress them or through internal reformation in light of divine justice and mercy. God in Jesus Christ saves people by restoring them to health and well-being where they are, just as the forgiveness of sin makes possible a wholesome and honest life with others before God. The aim of salvation is to create the space in which the joy and peace of God's creation can be experienced and shared. The attainment of salvation demands that those forces which undermine creation—violence, greed, suffering, jealousy, pride—be confronted and overcome.

According to the eighth century Greek theologian John of Damascus, creation is the act of "making room" in the divine "place" that God is, or as Robert Jenson rephrases it: "For God to create is for him to open a place in his triune life for others than the three whose mutual life he is."[28] The sense of creation as a making room indicates the gratuitous and hospitable character of God's work. In creating the world, God opens a space in which we are invited to participate in the joy of the divine life. As we know, creation as the "space" of God can be mutilated and disfigured. It can be turned into an arena that, rather than turning all life to God as its origin and fulfillment, serves only human interests. The scriptural record shows that when this happens, creation is overcome with evil. The work of redemption, in this case, would refer to the restoration of the space of creation so that all of creation can once again share in the fullness of life that God is. As we are hospitable to others and attend to the needs of creation around us or when our work accomplishes or facilitates the thriving and the delight of others, we participate in God's redemptive work that enables all creation to be itself.

From a biologist's point of view, the imagery of the lion laying down with the lamb seems romantic, if not fanciful. It makes more sense to say that the lion should eat the lamb, since that is the way of nature. Is not the idea of the redemption of nature, therefore, a category mistake? Has nature sinned that it needs redemption? How we answer this question depends on what we mean by redemption. If we understand it as the expiation for guilt, then nature does not need redemption. But if we understand it as the regeneration of life within a context of suffering and death, then the idea begins to make some biological sense.

The natural world is an arena in which struggle is always going on. But this struggle, while it clearly gives in to the collapse of entropy, also gives rise to the richness and variety of life. Indeed, the very destructiveness of nature serves as part of its creativity. Were destructiveness, as when organisms eat other organisms to survive, the very last word, nature would collapse. The fact that it has not suggests that there is a conserving power at work within it. In this conserving power we see a sign of God's redemptive work, for what could

simply die is perpetually being reborn to new life. Obviously, this is not a redemption without pain or suffering. But from the Christian point of view a painless redemption should never be expected. Nature thus has a cruciform character since it reflects the suffering, redeeming character of God's own life. As Holmes Rolston puts it, "The cruciform creation is, in the end, deiform, godly, just because of this element of struggle, not in spite of it. There is a great divine 'yes' hidden behind and within every 'no' of crushing nature. . . . God too suffers, not less than his creatures, in order to gain for his creatures a more abundant life."[29]

Salvation, we might say, is nothing less than our enjoyment of God, the enjoyment of God's life and love as reflected in the grace of creation (and the delight of the Sabbath) that finally overcomes suffering and death. Rather than being reserved exclusively for some future time, it begins now. Few have understood this as well as the seventeenth-century poet Thomas Traherne did:

> Lov is the true Means by which the World is Enjoyed. Our Lov to others, and Others Lov to us. We ought therfore abov all Things to get acquainted with the Nature of Lov—for Lov is the Root and Foundation of Nature: Lov is the Soul of Life, and Crown of Rewards. If we cannot be satisfied in the Nature of Lov we can never be satisfied at all. The very End for which GOD made the World was that He might Manifest His Lov.[30]

To think that we can live a redeemed life in heaven when our existence on earth promotes destruction and ingratitude is surely a deception. Surrounded as we currently are by the beauty and goodness of creation, why would we think that the beauty of heaven would not undergo a similar destruction by us? The scope of redemption, just as it extends to the whole of creation, begins its transformative work within us here and now since the creator's love simply knows no bounds.

If this view of salvation is taken seriously, we must take the steps now that will turn our current culture of death into a culture of life. Economies built on destruction and exhaustion must be replaced with economies that model hospitality and care. We need to see that our economic lives give the most honest portrayal of how we understand salvation. It is no accident that, having privatized the idea of salvation and then postponed its fulfillment to another time and place, professedly religious individuals have no difficulty abusing the earth and other people to achieve their own ends. This life, supposedly, can be sacrificed for another. The falsity of this view rests on the insulation of economic from religious life and the separation between health, wholeness, and holiness—when more properly understood—the health and wholeness of people must be understood in terms of the created context of which they are a part.

In light of these comments on redemption and salvation, it is now possible to give a preliminary formulation of how we should understand our vocation:

the work of humanity consists in the hospitable gesture of welcoming and enabling the whole of creation to share in the peace and joy of the divine life. It is a vocation that demands that we be attentive to those forces that would distort or disfigure life and so doom some elements of creation to a life of loneliness and suffering. If the work of creation is itself the loving gesture that frees creatures to live life fully, then the work of redemption must entail the fostering of those just conditions that make life possible. In other words, the work of justice must move from the ground up to include the whole of creation.

In our treatment of soil the separating, salvation-privatizing attitude is most apparent. If we remember that soil is the matrix of life or, as some cultures preferred, the life-giving placenta that nourishes life, then current abuse of the soil must be understood as a profoundly antireligious gesture. It is estimated that approximately twenty billion tons of topsoil erode each year. In some regions, due to rapacious farming practices, the weight of soil loss surpasses, even doubles, the weight of grain or corn produced. Moreover, soil that is not being eroded is slowly being poisoned to death with the heavy use of fertilizers and pesticides. In destroying the soil we also condemn to death the lives of those microorganisms within the earth and those organisms, human and nonhuman, who live from the soil. If we understand God's creation as "making room" and then also understand that the life that is invited into God's presence comes from and is dependent on the earth, then the destruction of soil is a direct affront to the life and work of God. Restoration of soil, in turn, becomes a primary focus through which we participate in the divine life.

It is hard for us to appreciate much of this since our lives are so cut off from the mystery that soil is. We walk on pavement or concrete and have little to do with the growing of our own food. As a result we are not aware of the profound hospitality demonstrated in the life of soil. Think for a moment about the fact that diseased and dead corpses continually go into the ground, yet return as nutrients for the renewal of life. Soil is not merely dirt. It is the site of the miracle of life, the "place" where God's own life takes on its most intimate and concrete form. William Logan was clearly aware of this when he wrote, "Hospitality is the fundamental virtue of the soil. It makes room. It shares. It neutralizes poisons. And so it heals. This is what the soil teaches: If you want to be remembered, give yourself away."[31]

Farmers who work attentively and patiently with the land are fully aware that in their work they continually encounter the grace of creation. They plant their seed, but then must wait for powers beyond their or anyone's control to bring the seed to life. All they can do is hope that they have been as hospitable to the soil and its needs as the soil is to theirs. The farmer is first and foremost a steward or servant, a dispenser of the mysteries of God. When the experience of grace that farming is disappears, as in contemporary agribusiness that exploits land for maximum profit, then the farmer is out of place, outside the

divine life, for the preoccupation is now to work against grace for oneself rather than to work with grace for creation.

Care of the soil, besides being the quintessential human vocation (Gen. 2: 15), introduces us to the fundamental grace and mystery that sustains our and every being. In our daily responsibility for the health of soil, we bring ourselves into direct contact with the continuing work of God. In this contact we learn of and from God. As Berry has observed:

> The most exemplary nature is that of the topsoil. It is very Christ-like in its passivity and beneficence, and in the penetrating energy that issues out of its peaceableness. It increases by experience, by the passage of seasons over it, growth rising out of it and returning to it, not by ambition or aggressiveness. It is enriched by all things that die and enter into it. It keeps the past, not as history or as memory, but as richness, new possibility. Its fertility is always building up out of death into promise. Death is the bridge or the tunnel by which its past enters its future.[32]

Can we envision a religion and a culture that integrates all the elements of creation into a community of delight before God? Can we learn to see in the care of the earth and the care of each other our most profound religious task? Can we come to understand our salvation as inextricably bound up with the glory of the whole creation now understood as the extension of God's hospitality and delight? The task before us is both mundane and humbling since it recalls us to our creation from the ground. It is also profound and exalted since in the acceptance of the task we commit ourselves to participate in the divine life of making room for creation. In this task, a task initiated by God, we find the hope for a more authentic spirituality. In its ongoing work, we anticipate God's culture of creation.

I

The Character of Creation

Scriptural Profiles

Much of Christian and Western thought has led to the radical alienation of man from nature. Greek idealism, Gnostic dualism, neither wholly conquered in medieval theology, German idealism all have contributed to this alienation. All attempt to rescue man from his oneness with nature, and to exclude nature from the history of salvation. All wish to lift man above the natural creation, extricate him from the drag of matter, free his immortal soul, feed him on the flesh of deity, the bread of immortality, exalt him to oneness with the Absolute Spirit, to absolute freedom. In each of these endeavors, one perceives the repetition of the sin of Eden, the desire to mount to the heaven, to become like a God, to eat of the tree of eternal life.

—Frank Moore Cross, "The Redemption of Nature"

From the word "Go," "creation" has in view the association of heaven and earth as interdependent realms, which are themselves internally differentiated. In this way the realm of heaven is seen not only as the place from which *natural* forces—light, warmth, water, wind, and storm—determine life on this earth. Heaven is also seen as a place from which proceed strong forces that shape and determine *culture*.

—Michael Welker, *Creation and Reality*

In the last several years, especially as environmentalists have laid the blame for ecological destruction at the feet of Jews and Christians, scholars and laypeople alike have turned to scripture for inspiration and guidance in rethinking humanity's relation to nature.

This is a dangerous enterprise, since it runs the risk of forcing a contemporary ecological agenda on texts that did not have this focus as their primary concern. The purpose of scripture, as Holmes Rolston has reminded us, is not to tell us about the scientific principles and mechanisms that explain the functioning of the natural world. Given that the Hebrew language does not even have an equivalent for the modern term *nature*, it would be a mistake to think that the Bible speaks specifically in contemporary ecological terms.[1] What we do find, however, are descriptions of creation that think about ecology and economy in a most inclusive way: a community of earth, animal, humanity, and God. By thinking broadly about the character of creation, what the nature of the community is, we catch a glimpse of how the religious mind understood the human-earth-divine bond. This understanding, I argue, can and should be brought into conversation with ecological concerns, for out of this conversation a reckoning of the justice or injustice of our own economies can occur.

Biblical authors are everywhere concerned with the proper ordering of life toward God. For the most part their focus is on human relations, how they are distorted and can be made right again. But the backdrop for these human dramas is always the larger drama of creation in relation to its creator. At various moments in the scriptural text—not only in Genesis, but in Sabbath legislation, the story of Job, the cosmic work of Christ, and the eschatological hope of the prophets and the Apocalypse—this expansive view of creation becomes especially clear. Here we learn not only of human ecology but the ecology of creation and what the two might have to do with each other. Here we learn about the character of creation and discover its moral and spiritual significance and orientation.

Creation texts, in other words, give us an opportunity to think about ecological matters in an illuminating and somewhat systematic way that is not anachronistic because they speak to the place of creatures within the context of the cosmos and its creator. And so while scripture may not directly address contemporary concerns like species extinction or the deterioration of water and air quality, it does talk in general ways about the placement of these created elements within a larger whole, and it considers what a proper relation might be between creation's various elements. At the most basic level, we learn what God values and thus gain a sense for what we should value too. Scriptural teaching on creation, in short, enables us to understand from a religious point of view the formation, goal, and character of the created world *and* the place and destiny of humanity within that world. The founding, organization, and governance of human cultures should not be severed from the more comprehensive establishment of the creation as a whole.

To suggest this is to say that the scriptural writers, along with other ancient authors, believed that the order operative within the natural world was in some sense related to the moral order that governed human societies. The ancient

mind, if one can speak generally, presupposed that a teaching about creation was at the same time a teaching about culture insofar as the power that brought both into being was one. As the ancients spoke about creation, they did not assume an "objective" or neutral stance toward an amoral or abstract world of things, simply because the idea of detached objectivity would have been a foreign notion. Moreover, scriptural traditions, no less than other ancient texts, represented the points of view, and thus the concerns and worries, of the people transmitting and receiving the accounts. This is why the accounts of creation within scripture differ as much as they do. We should not expect one single understanding or characterization of creation, even if several motifs are shared, because the full meaning of creation takes time to develop as people become more attentive to their experiences and their histories. What was of interest to the Priestly or Yahwist redactor, for example, was not the same for the Apostle Paul, who would reinterpret creation in terms of Jesus Christ.

Creation accounts, in other words, mirror the cultures that produce them as they illuminate the workings of the culture in which they find their home. Whether one sees the order within nature as a reflection or projection of the order of society, as F. M. Cornford once proposed,[2] or sees the order within culture as an extension of natural order, as some recent philosophers of science have argued,[3] the point that needs stressing is that the idea of creation implicates both the natural and the human world in an indissoluble web. In other words, our speaking about creation has ramifications for our understanding of culture and the natural world as united, even if we might at times speak solely about the realms of culture or nature as though they were separate. Scripture testifies to the intertwined fate of humanity and the earth at various points: in Genesis the ground cries out on behalf of the slain Abel; Isaiah proclaims that authentic human peace will find its corollary peace among animals; and the eschatological triumph of Christ gathers up all things in heaven and on earth before him.

When we turn to the Bible and examine its creation accounts, we must not therefore suppose that the significance of the teaching ends with a clarification of the origins of the universe. To do so would be to sever the connection between creation and culture, both dynamic processes making their way to their fulfillment in God. It would also be to disengage the close connection between creation and redemption. We need to see creation accounts as expressing "the most fundamental relationships and values, building blocks in the formation of a community's identity. The way in which creation is configured has as much to do with how the moral community structures itself as with the way the natural world is ordered."[4] Were the creation a static or completed act, it would make little sense for God to be in relation to it as its inspiration, sustenance, and end.

Most readers of scripture have little trouble acknowledging that scripture is concerned with the formation of a religious community's identity. The dif-

ficulty emerges when the attempt is made to tie moral or communal identity to the identity of the natural world. After all, we live in a time when the amoral character of nature is widely affirmed. This is a mistake, particularly if we understand the natural world as not simply natural but as God's creation. If we believe, as scripture suggests we do, that God is continually active in the creativity of the creation, then it becomes more difficult to abandon it to the valueless status suggested by mechanistic philosophy or science. God's concern and delight, as the experience of Job so clearly shows, does not end with persons, but reaches out to include the whole of the divine work.

This insight has been absent from a great deal of not only scientific but also exegetical work. Biblical scholars have only recently begun to question the categories through which scriptural texts are to be understood. Of these categories or frameworks, several of which are alluded to in the epigraph that opens this chapter, one of the most influential was the "salvation-history" approach to interpretation. Briefly stated, this approach maintains that the major emphasis in scripture is on a personal, existential response to the call and judgment of God. The God of Israel, and thus also the God of the early Christians, was a God who worked through the medium of history rather than nature. Influential scholars such as G. Ernest Wright made the distinction between history and nature central because it enabled them to show how the Jewish and Christian God was different from and represented an advance beyond the pagan and mythological gods of the ancient world, who did symbolize or identify divinity with the natural world. Interpretations of the Bible that spoke too much about nature ran the risk of suggesting that perhaps pagan religious ideas were not so bad after all.

Is it appropriate, however, to read scripture with the interpretive history/nature dichotomy?[5] This is a very important question because this dichotomy has important implications for how we understand God, humanity, and the created order as a whole. One can readily see, if one adopted the salvation-history approach, how God would be perceived as one who does not especially care for or sympathize with the processes of nature since God's sphere of activity is then primarily, if not exclusively, history. One can also appreciate why humans would not need to concern themselves too much with the integrity of the created order since that is not where they meet God or work out their salvation.

In his later years Gerhard von Rad, one of the very influential scholars associated with the salvation-history approach, acknowledged that it was anachronistic and inappropriate to read scripture in light of nature/history dualism. It was anachronistic because the dualism had more to do with the influence of nineteenth-century idealist philosophy than with the more integrative understanding of the ancient mind. Von Rad noted that a more careful reading suggests that "the Old Testament draws no such distinction between Nature and history, regarding them as one single area of reality under the control of

God."[6] His advice to contemporary readers was to interpret scripture as much as possible in terms of the worldview of the ancient mind, a task he knew to be difficult if not impossible. If we could remove modern biases against nature we might see that nature, as in the form of theophany, was not only a powerful medium through which God's presence could be made known, but was itself, as the speech from the whirlwind in Job suggests, the object of God's pleasure and delight.

What I have been suggesting is that scripture can be of considerable help to people concerned about ecological issues, not because it will advance our scientific ecological understanding, but because it will address how humans are to act and orient themselves in the context of a creation that is shot through with divine purpose and grace. Once we remove the prejudice of thinking that God is concerned exclusively with the realm of human history and once we acknowledge that God's concern extends to the whole of creation, then we will begin to see why a divinely ordained human vocation will have to take into account our responsibilities before God, each other, and the created order. For an understanding of precisely what those responsibilities are, the teaching of creation, because it is not exclusively concerned with the origins of the universe but has cultural and moral development as its intent, will serve an important function.

It would be a mistake to think that scripture speaks in one voice about the character of creation. Not only is creation spoken of from various points of view, but the teaching itself can be broken down into varying emphases, some stressing God's providence, others stressing God's redemptive intent. In this chapter we will therefore limit ourselves to texts that speak directly to the significance for human vocation that follows from the differing portrayals of the character of creation. Perhaps surprisingly, we will not begin with the Priestly account in Genesis 1, which enjoins humans to subdue and dominate the earth (a discussion of this narrative will be reserved for chapter 4). This text has been commented on at great length in other places. My aim, rather, is to show how less well-known passages are of tremendous significance for an understanding of creation and, consequently, for an understanding of human identity and vocation. My treatment will not be exhaustive, since the creation accounts are fairly complex and have been much discussed by others. What will emerge, however, are characterizations of creation rich in their potential to speak to ecological and cultural concerns.

Creation as the Drama of Soil

> Generations have trod, have trod, have trod;
> And all is seared with trade; bleared, smeared with toil;
> And wears man's smudge and shares man's smell: the soil
> Is bare now, nor can foot feel, being shod.

> And for all this, nature is never spent;
> There lives the dearest freshness deep down things;
> And though the last lights off the black West went
> Oh, morning, at the brown brink eastward, springs—
> Because the Holy Ghost over the bent
> World broods with warm breast and with ah! bright wings.
> —Gerard Manley Hopkins, "God's Grandeur"

The placement of the Yahwist creation account after the Priestly account (Gen. 1:1–2:3) has clearly been to the Yahwist's disadvantage. Being less stately and grandiose in its rhetorical form, one can readily see why its message has been muted or simply confused with a Priestly account that is cosmic in scope and neatly ordered in its progression. The Yahwist's perspective is not that of the whole universe, but rather a garden and, even more specifically, the soil or dirt on which all life depends. Instead of proclaiming a beginning brought about by fiat of the divine word, a beginning that is determinative for all realms of being, the Yahwist moves quickly, almost in passing, from the making of heaven and earth to the formation of a human being out of the earth. God plants a garden, puts the human being in it, and then forms plants and animals from the same earth. Because humans and animals share the same essential nature as "animate beings,"[7] what finally makes humans significant in this story is their vocation: they are assigned the task of taking care of the ground, of tilling and keeping the garden. So much for the creation. The story then considers life within the garden, demonstrating that things can go terribly wrong, but also indicating that our relationships can be made right.

If one approaches this text looking for an account of the origins of the world, assuming that origins are central to a teaching on creation, then one will be disappointed. But if one understands creation as a teaching that addresses the moral placement of human creatures within a coherent creation and then goes on to consider the nature or character of that placement, then the Yahwist account assumes profound significance. While the Priestly account is clearly interested in talking about the ordering of the creation, it is the Yahwist who gives a much more nuanced and sustained treatment of the moral relationships that permeate creation's order. It does so by inviting us to consider the stories of several generations of humanity, beginning with Adam but extending to Noah, so we can see concretely the difficulty of living up to the divinely mandated vocation of caring for creation. In some respects, it would make sense to read the Yahwist narrative backward from Noah to Adam, since Noah more properly exemplifies the divine intention for humans within the creation.

While the Priestly account builds up to the creation of humankind on the sixth day, the Yahwist account, though certainly focused on the human realm, also keeps its focus on the fate of the ground, seeing the destinies of humanity

and soil as inextricably intertwined. The site of the drama is a garden in which God is the original gardener. The bond between humanity and earth appears on several levels. First, the context that calls for the creation of humans is land that has no one to cultivate it: "And there was no one to till the ground" (2:5b). The identity and vocation of humans is tied to a need manifest in the life of land. Second, there is a close etymological pairing between the first human (*adam*) and the arable land or soil (*adamah*) from which this earthling is created. This pairing, which is also reflected in English in the connection between *human* and *humus*, the rich, organic, life-giving layer of soils, is not merely etymological since the image of God is one of the potter who takes earth and molds it much like a potter fashions clay and of the farmer who, at crucial moments, revives a struggling newborn creature by blowing into its nostrils. It is from the earth that we come and it is to the earth that we return upon death (3:19). Our biological life, especially at the level of metabolism, everywhere bears traces of our attachment to dirt. Third, the divine curse on humanity is borne not only by humans but also by the ground itself: "Cursed is the ground because of you" (3:17). The wrongdoing of humans, whom we might also term "groundlings," has effects for the character of the soil itself since it will now be susceptible to thistles and thorns. The ground is not amoral and lifeless, but is instead a site in terms of which moral judgment can be executed, as when the ground is the medium through which the blood of Abel cries out (4:10). And, fourth, the hope of humanity that the divine curse be lifted rests on Noah, whose name means the one who will bring "relief . . . from the toil of our hands" (5:29). When Noah emerges from the ark, God promises to never again curse the ground, promising instead to establish the regular seasons that will make farming possible. Noah, having received the blessing and the covenant on behalf of his family and the rest of creation, is pronounced "a man of the soil (*adamah*)" (9:20). Throughout the Yahwist account, the basic presupposition is this: human identity cannot be adequately understood apart from its relation to soil.

The emphasis on soil in this narrative should not be surprising once we recognize its agricultural context.[8] The view here is not that of the priestly class, with its close connection to royalty and the elite classes of society, but rather that of farmers who work the land for their own sustenance. The difference between an agrarian and a priestly ethos is crucial in our attempt to understand the meaning of creation. Though both accounts are anthropocentric, it is the agrarian view that stresses human kinship with rather than separation from the rest of creation, human dependence rather than human dominion. As much as humans may want to claim that they are special, the Yahwist account, reflecting the practical wisdom of subsistence farmers, continually reminds us that we are bonded to the earth, that we carry in our being and in our vocation the marks of the soil.

The nature of the bond can, of course, be understood in a purely symbolic

or figurative sense. On this view the point of the connection would be to stress that humans should not presume to exceed their creaturely status. As Ronald Simkins puts it: "The significance of the correlation between the human creature and the earth is metaphorical and not biological. By connecting humans to the earth the Yahwist counters all attempts by humans to transcend their creaturely status. Humans are of earth, not of heaven, and so their fate is bound to the earth."[9] This interpretation, however, does not adequately take into account the agrarian ethos that informs the Yahwist perspective.

Farmers much more than urbanites (those who no longer feel the connection to soil due to shodden feet) are aware of the fact that they live "from the ground." They know concretely, "in their bones" we might say, that were it not for the life of the soil they would die. Food and water are the simple necessities of life. These do not come from our own hands but are instead the gifts of the earth. The bond between farmer and earth is thus not merely figurative or metaphorical. It is rather literal and concrete, experienced each time we take a bite or have a drink. As every good farmer knows, to put ourselves in the service of husbandry is to learn of our vulnerability before forces we cannot control or master. The implications for human identity that follow from this agrarian view are very important: "Humans are regarded as subservient to the soil upon which their survival depends. The human being is viewed more as an ordinary member of the community of life than as a privileged being set apart from it."[10] An agrarian ethos, in other words, runs directly counter to the prevailing notions of progress that are premised on the manipulation and control of environments, the searing, blearing, and smearing of toil and trade, as Hopkins refers to it. Agrarianism teaches that what we would control—ultimately the forces of life and death—is beyond reach. Failure to heed this insight, as when humans try to rise above their earthbound status, leads to the destruction of what we wish to control.

If we turn to recent scientific ecological thought, the bond is shown to be systemic and inescapable. On a strictly material level the Yahwist narrative is quite correct in showing a common origin of life in the soil. By *origin* I do not have in mind so much the first beginnings of things as their origination, as the basis from which life proceeds. Our bodies feed on the soil and the myriad of organisms it contains and supports, just as we in turn feed it with our waste and, finally, with our bodies. As we ingest these elements, they become part of us. The soil has never been foreign to or outside of us, for, in order to live at all, the elements that make up the soil must also become the elements that constitute our own being. Were it not for soil, the material elements of the earth could not combine so as to promote organic life. Rather than being inert, dead stuff, soil is the matrix through which life and death continually move into each other. It is the massive recycling, purifying organism that transforms disease and death into health and new life.[11] Our life, biologically understood, does depend directly on the soil, for on the level of basic metabolism our life

and our identity are inseparable, some might even say at times indistinguishable, from the life and identity of the soil. In a most practical and logical way, we can therefore confirm the Yahwist view that sees curse and blessing as never merely affecting humans or soil. Because of the intimate biological connection between bodies and the soil, the well-being of the one will necessarily be reflected in the other. Our fate, quite literally, is tied to the fate of the soil.

Besides offering a profound account of human identity, the Yahwist account also addresses human vocation in a distinct manner. Given that our identity is tied to the earth, we should not be surprised to find that care of the earth, rather than simply being an incidental feature of human life, defines the human vocation: "The LORD God took the man and put him in the garden of Eden to till it and keep it" (2:15). Lest we think this passage says little more than the injunction to take care of our own needs, we need to understand that the Hebrew term to *till* the ground could also be translated as to "serve" it. The term *service* must here be understood in its agrarian, rather than some abstract political, context. Within this context service does not connote oppression or humiliation, but rather the necessary and ennobling work that promotes growth and health. To serve is to be attentive to and to work with the natural orders that ensure survival and well-being. Caretaking of the garden thus amounts to a participation in and a continuation of God's own life-giving creativity. And so gardening simply cannot be reduced to self-care. We also work to enhance the garden, for, as every good gardener will understand, our needs do not exceed the needs of the much larger natural context that sustains and nourishes us: "As the *ādām* is a product of the *ădāmâ,* the fertility of the *ădāmâ,* is a product of the *ādām*'s work. By tilling the soil, the man sustains himself and the soil reaches its productive potential. Far from one-sided, the relationship between the soil and the first human is naturally mutual, indeed symbiotic."[12] In promoting the life of the soil, we secure our own well-being and the continuity of the creative work begun by God.[13]

The agrarian ethos of the Yahwist also suggests that caretaking of the earth, besides being a matter of survival, leads directly to the formation of moral and religious virtues that are proper for human development. Foremost among these would be a cultivated sense of humility and gratitude. These two virtues often run the risk of becoming abstract and vague, pious ornaments to an otherwise arrogant or rapacious life, because they do not grow out of our lived experience. There is an important difference between a virtue that one claims for oneself through speech and a virtue that grows spontaneously with practical experience. Those who work closely with the earth know practically (not just theoretically) in clear and unmistakable terms that their lives are maintained by a beneficence and grace that they neither understand nor control (while we can aid the conditions for growth by our own work, we cannot be the agents of growth itself). They know they are vulnerable and live by God's good gifts. And so presumption or ingratitude comes to represent a violation of our own

being, not simply an oversight. To be ungrateful or proud is to forget who we are. Caring for the earth, even in the simple urban task of maintaining a small garden, makes it much more difficult for us to forget our status as groundlings. Attunement to the drama of soil, in other words, leads to the cultivation of properly human virtues that are honest and authentic.

The Yahwist narrative shows how easy it is for humans to forfeit their vocation and forget their identity. All too quickly, human presumption turns us away from the soil to ourselves, with the result that mutual well-being is turned into a destructive rapaciousness that seeks self-benefit at the expense or disregard of others. There are, of course, a number of ways to interpret Adam and Eve's expulsion from the garden. What is important for us to understand here is that the expulsion is dependent on Adam and Eve's having exceeded the proper role given to them by God. They were not content to remain within their soil-based identity and vocation established by God. The murder of Abel, which is perhaps more adequately understood in terms of sibling rivalry than a dispute between shepherds and grain producers, represents jealous Cain's inability to live within the limits and constraints that are a natural part of created life. (Notice here how the curse of Cain goes hand in hand with a cursing of the ground, such that it will be impotent despite his efforts.) Cain could not accept his place within the created order, and so the forfeiture of his own place led to the distortion of other places as well. The descendents of Adam would further represent the decline of human culture as a refusal to live within divinely appointed limits. The Nephilim, who were considered "warriors of renown," tried to exceed their creaturely status altogether by blurring the creator/creation distinction (6:1–4).

There has been some speculation on the nature of the evil practiced by Adam's descendents that would have caused God to be sorry for creating humanity. The rabbis suggested licentiousness, whoredom, sexual perversion with beasts, and incest. Even the earth itself became lewd, for when wheat was sown it produced pseudowheat.[14] The central problem was that the order of creation, an order that depended on humans for the maintenance of God's creative work, was coming apart as humans, who now wanted to be mighty and godlike, forsook their identity and task and instead tried to be something they were not. The result was the suffering of humanity and the suffering of the earth together.

The connection between the suffering of humanity and of the earth can be variously understood. On the one hand, one might argue that human evil is punished by God in the form of a sterile or impotent earth. The connection between the fate of the earth and the fate of humanity is thus mediated by God. On the other hand, one could also understand the connection more directly. Human impropriety, particularly if one appreciates the biological affinity of humans and soil, leads directly to the deterioration of the earth, and vice versa, because our lives and our actions cannot be neatly separated from the

earth. From an agrarian point of view, the failure to care for the soil, as well as outright acts of destruction to it, will rebound to humanity in the form of mutual suffering—the soil, through improper care, will fail to provide the food that we and other organisms need to live. We do not simply depend on the soil, but the soil, in varying places and to varying degrees, also depends on us. A proper working out of the human vocation will keep this interplay in healthy balance. Disregard of our vocation can lead to the immorality and impotence that occasioned God's judgment and the flood. We should also recognize, however, that from a strictly ecological point of view, ruinous human practices amount to our bringing judgment and suffering upon ourselves in the forms of degraded or exhausted habitats.

"Noah is the new Adam who will usher in a new age of existence."[15] What this means is that Noah represents a second attempt to understand and live faithfully according to the divinely ordained identity and vocation. Whereas Adam's descendents were unjust, Noah is righteous. In him we will see what it means to be faithful to God by taking up our proper place in the drama of the soil. To appreciate this fully we need to reconsider the flood story not as an escape story in which a remnant of creation is preserved as "seed stock" for another beginning, but as itself the occasion in which Noah will learn and demonstrate his fidelity to the creation and the creator. Noah, in other words, represents the hope that will restore and heal the connection between *adam* and *adamah*.

In our reading of the flood story, we do not often linger over the twelve months that Noah spent in the ark taking care of the animals, even though this period, according to some rabbis, may represent the story's primary significance. It is hard to imagine the preparation and labor, let alone the attentive and patient knowledge, required of Noah to adequately feed and nurture mute animals. It is equally hard to fathom, especially if one considers the rapacious mind-set of his contemporaries, Noah's ability to humble himself to the demands and needs of the animals.[16] Yet these characteristics are precisely what led to Noah's being proclaimed righteous. Noah is righteous because like God the creator he took upon himself the maintenance of all creation.[17]

The ark experience was really a training ground, a laboratory of sorts, in which righteousness could be learned and displayed. Noah emerged from the ark as a "sustainer of life," as one who now knows what it means to take care of God's creation. He showed his care by making himself the servant of creation, by submitting his desires to the well-being of others placed in his charge. Having seen the faithfulness of Noah, his willingness to be an earthbound creature rather than a minigod, God establishes a new covenant with him and with all creation, a covenant that will insure the continued order of creation—the continuing viability of agronomic processes—despite the human propensity toward evil: "I will never again curse the ground because of humankind, for the inclination of the human heart is evil from youth; nor will I ever again

destroy every living creature as I have done. As long as the earth endures, seedtime and harvest, cold and heat, summer and winter, day and night, shall not cease" (8:21–22). The agrarian bases of life now assured, we must choose between the creation-denying ways of Adam's descendents and the creation-serving ways of Noah.

The drama of soil that the Yahwist has provided shows that the teaching of creation serves the purpose of promoting what William Brown has called a moral ontology. The focus is on providing us a picture of what a proper or moral life looks like, and how that moral vision growing out of the order of creation is contextualized by the more expansive drama of soil. There is an integrity to creation that depends on humans seeing themselves as properly placed within a network of creation and God. The drama shows us that neither God nor the creation itself can tolerate violence, manipulation, or shame. Instead of the hubris that characterized Adam and his descendents, Noah stands out as a beacon of the humbled *adam* who is faithful to the needs of *adamah*: "Integrity flourishes whenever one welcomes the other, not out of conquest or deception but out of mutual need, respect, and love."[18] Lest we think this integrity or propriety is easy, Noah also stands out as a testament to the difficulty of such welcome.

Sabbath Creation

To sit and look at light-filled leaves
May let us see, or seem to see,
Far backward as through clearer eyes
To what unsighted hope believes:
The blessed conviviality
That sang Creation's seventh sunrise,

Time when the Maker's radiant sight
Made radiant every thing He saw,
And every thing He saw was filled
With perfect joy and life and light.
His perfect pleasure was sole law:
No pleasure had become self-willed.

For all His creatures were His pleasures
And their whole pleasure was to be
What He made them; they sought no gain
Or growth beyond their proper measures,
Nor longed for change or novelty.
The only new thing could be pain.

—Wendell Berry, "To Sit and Look at Light-Filled Leaves"

According to the biblical witness there is a correlation between the destruction of creation and the neglect of Sabbath observance. As we fail to appreciate and observe the Sabbath, we are prone to spoil the work of God's hands and exploit the work of each other. We cannot account for this correlation simply in terms of divine retribution, as when God is said to punish those who do not heed divine commands. Clearly, the observance of the Sabbath is a vital part of Jewish law, being the most elaborated of the Ten Commandments. But the suffering of creation that follows from Sabbath neglect is not the direct result of divine displeasure. Instead, the pain of creation is the result of a creation gone awry, a creation that has not and is not living out its inner truth and meaning. The key to the truth of creation is to be found in the Sabbath, for in the Sabbath creation finds its fulfillment, goal, and purpose.

This view of the Sabbath will sound strange only if we think that the teaching of creation is primarily about origins. But as I have been arguing, we need to think more of creation in terms of its character. When considered from this angle, it will become apparent why Sabbath plays such an important role in scripture's understanding of the created work. The Sabbath defines or specifies the character of creation, just as it defines, or has the potential to define, the culture of God's people. The world becomes "creation" on the seventh day. In like manner, the nation of Israel testifies to its religious identity and consecration to God as it keeps holy the day of rest, the "feast of creation." Humanity and earth become most fully what they are to be in the celebration of the Sabbath.

The Sabbath, though not mentioned by name, finds its bearing in the first creation narrative in scripture, the Priestly account. After having created the heavens and the earth in six days, and all the life upon and within them, God finishes the divine work and rests on the seventh. Our text, however, raises an interesting question: "Thus the heavens and the earth were finished, and all their multitude. And on the seventh day God finished the work that he had done, and he rested on the seventh day from all the work that he had done" (Gen. 2:1–2). If the heavens and the earth were finished on the sixth day, why should it be necessary for God to finish the divine work again on the seventh? The reason, according to rabbinic literature, is that creation itself was not entirely finished on the sixth day. Though the heavens and the earth had been created, what remained uncreated was *menuha*, the "rest" or *shabat* of God. The creation of rest, far from being an interlude in the unfolding of creation, is the climax of God's creative life. As Abraham Heschel puts it, "The world would not be complete if the six days did not culminate in the Sabbath."[19]

If we understand the climax of creation to be not the creation of humanity but the creation of *menuha*, then it becomes possible to rethink the character of creation and its subsequent destruction in a more profound manner. How does our treatment of creation and each other reflect the *menuha* of God? Clearly, the frantic and destructive pace of much of our lives suggests that,

while we may secretly or inwardly yearn for rest or peace, rest is the enemy, the temptation of bad business. Rest here takes on the connotation of sloth or laziness. This view of rest as mere cessation from work, or even the avoidance of work, does not get to the heart of God's own rest, which is finally the divine enjoyment and delight in creation (remembering that the garden of Eden literally means a "garden of delight"). The testimony of our own histories suggests that we have made our primary goal the satisfaction of our own desires rather than the peace of creation.

Heschel suggests that a more appropriate translation of *menuha* would be something like tranquility, serenity, peace, and repose. To enter into the divine rest, as Sabbath observance calls us to do, is to enter into the happiness, delight, and stillness of God. Sabbath is not an armistice, but a conscious harmony with and sympathy for all things. It is "a participation in the spirit that unites what is below and what is above."[20] In ceasing from the worry and toil of the workaday week, the nation of Israel participated in the joy that characterized God's own life at the end of the divine work. Though Sabbath observance sometimes takes on somber tones, as when it is perceived as depriving us of some good, the intent of our rest is to show us the goodness of creation itself and to give us the time to appreciate, as Wendell Berry suggests, the pain of our own arrogant striving. The purpose of the Sabbath is to create the space and time in which the eternal joy of creation can become temporally concrete, a joy founded upon the creation's own pleasure at being what God intended for it to be. It is, we might say, a taste or glimpse of heaven, the occasion at which the gifts of God can be intentionally celebrated and shared.[21]

To suggest that *shabat* is the climax of creation means that the created order finds its fulfillment, reaches its goal, in the rest of God. As Jürgen Moltmann describes it, "The whole work of creation was performed *for the sake of the sabbath.*"[22] If this is indeed the case, then serious reconsideration of the idea that the creation exists primarily for human enjoyment is in order. We should note, however, that there is scriptural precedent for thinking that creation serves mainly human interests. In Psalm 8, for instance, the psalmist declares that people, though mortal, are created a little lower than God and are crowned with glory and honor: "You have given them dominion over the works of your hands; / you have put all things under their feet . . ." (8:6). The more immediate and more famous precedent, however, comes from the Priestly narrative itself, where God says, "Be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth" (Gen. 1:28). Here it is clear that the creation is given to us.

But does the gift of creation to humanity entail our unrestricted use of it, and does our being given the creation mean we can do with it whatever we want? Clearly not, for the practical effect of Sabbath observance is to remind us that the creation is never ours but is forever God's. What this means is that

our enjoyment stems not from our possession or mastery over the creation but from its integrity before God. Failure to understand God's ownership and control of the creation leads to human destruction of creation and to a distortion of who we are as created beings. Sabbath observance, in other words, teaches us that we are not God, that we are not finally in control, and that the goal of creation is not to be found within us. To forget this is to make ourselves and our own interests the end of creation. This point becomes clear if we consider the historical and liturgical background of the creation narrative and Sabbath law.

Numerous scholars have noted that the Priestly account of creation is connected with the Israelite experience of oppression. Whether it be at the hands of the Egyptians or Babylonians, oppression forced the question: "Is anyone finally in control over our fate?" The Israelite response was that God is not only in control over the political histories they found themselves in, but God is in control over cosmic history as a whole. Upon crossing the Red Sea, Moses and Miriam sing a song of victory that describes how God rescued them from the Egyptians. To bring about this victory God took control of the waters of the sea and "piled them up" so that the Israelites could pass through safely. The imagery of God containing the waters is strongly reminiscent of how God in the Priestly creation narrative similarly separated the chaotic waters for life to emerge. The point of the exodus, and the point of creation, is that God is in control, that God has the forces of nature and the forces of history in hand. God directs the course of the world, whether that be seen in the plagues visited upon the Egyptians or in the creation of the heavens and the earth by divine fiat, according to the divine will.

The temptation of humans, however, is to think that they are in control of their own lives. Wandering in the desert for forty years would be the training ground that would disabuse the Israelites of this notion. For food they would need to depend on God and so learn in the most practical way that God is in control. Manna, the bread from heaven, would be sent daily by God for six days. Anyone who tried to horde more than a day's share would awaken the next morning to discover that the bread had spoiled. On the sixth day, however, the Israelites could gather a double portion. This portion would not spoil because the seventh day is "a day of solemn rest, a holy sabbath to the LORD" (Exod. 16:23). Not needing to labor in the gathering of food, the Israelites could gather to worship and direct their praise toward God, who is sovereign over all. In this time they could also learn to appreciate, given the context of God's providence and care, the arrogance of their own ambition and worry. Coming from the experience of slavery where Pharaoh prohibited worship, the experience of rest was not only a welcome relief, but a reminder that God's power and will was behind human events and the forces of nature.[23]

Viewing the creation story in terms of the liberation of Israel helps us see why the Sabbath is so important. The goal of creation is not the unending

striving that characterizes so much of cultural life, a striving that seeks to fulfill our own desires and wants. The inescapable corollary and outcome of that vision is not the peace and stillness of God, but rather the oppression and bondage that characterized Israel's life in Egypt. We must not forget that the glory of Egypt's cultural life, as well as the proud cultural achievements of many subsequent civilizations, depended on the violence and oppression of slavery. The prophetic writers suggest that the Israelites often ignored this lesson. Rather than seeking the *menuha* of God, they sought their own glory. As Amos noted, people cannot wait for the Sabbath to be over so that they can return to their usurious business practices (8:5). Neglecting the Sabbath, however, leads not to our own happiness, but to the continued bondage and oppression of cultures and creation. For this reason, many of the prophets, Jeremiah foremost among them, made observance of the Sabbath a prerequisite for the restoration of the land and Israel as a people of God.

This view of the Sabbath indicates that creation truly becomes itself when it ceases the improper desire of self-gain or self-glorification. To be sure, and as the Priestly narrative clearly suggests, human life will be characterized by our use of creation. But our use must not turn into abuse. It must be directed to the pleasure and *menuha* of God, which signifies the noncontentious serenity of creatures being who they are meant to be. Our use, in other words, must not interfere with or militate against the sole law of God's perfect delight—creation's blessed conviviality.

To characterize Sabbath life in terms of noncontentious serenity sounds naïvely romantic, for have we not learned that nature is bloody red owing to the struggle of tooth and claw? Clearly, biological processes presuppose death and struggle, but this is not the whole story of biology, which also includes nurture and symbiosis. The question for us is not whether biological processes must all come to an end—they possess their own integrity—but whether we in our activity will exacerbate or mitigate unnecessary and unfruitful pain. Given the ancient view that human life is a microcosm of creaturely life, the task before those who take Sabbath teaching seriously is to model for the whole creation a life that brings glory to God. Recognizing that what we do has effects for the creation around us, our task is to order our economies so that peace rather than war, delight rather than misery, is our lasting imprint.

Sabbath teaching served to properly orient human desire. It did so in the most practical and concrete ways: "But the seventh day is a sabbath to the LORD your God; you shall not do any work—you, your son or your daughter, your male or female slave, your livestock, or the alien resident in your towns" (Exod. 20:10). The cessation from work, even during the crucial periods of seedtime and harvest (34:21), had the effect of putting our work in proper perspective. Like the Israelites who greedily and faithlessly hoarded manna, our work can become obsessive and futile, a reflection of what Berry terms our "hopeless fret and fuss."[24] Work that is done well is work that honors the creation and

the creator. It does not depend on or foster the violence and injustice that props up many of our accomplishments. Instead it seeks the liberation of creation to be fully itself in the presence of God.

The scope of the Sabbath's peace and tranquility extended beyond humans to include the whole of creation. We have already seen how animals are to be exempted from work on the seventh day. They too need the opportunity to rest. The full radicality of the Israelite view of the Sabbath, however, comes into view when we consider the scriptural teaching on the Sabbatical Year and the Jubilee: "For six years you shall sow your land and gather in its yield; but the seventh year you shall let it rest and lie fallow, so that the poor of your people may eat; and what they leave the wild animals may eat" (Exod. 23:10–11). In Leviticus the command is repeated. On the seventh year "you shall not reap the aftergrowth of your harvest or gather the grapes of your unpruned vine: it shall be a year of complete rest for the land" (Lev. 25:5). Scholars have long debated whether and for what periods the command was kept. Historical evidence suggests that it was kept at various times, for both Alexander the Great and Julius Caesar made provision in their tax codes for an Israelite exemption on Sabbatical years. Since the Israelites did not sow their fields, they could not be expected to pay a tax. At other times, particularly when the Israelites were under siege, there is evidence to suggest that the rabbis softened the command.

Every fiftieth year was to be hallowed as the year of Jubilee, the Sabbath of Sabbaths. This was the year in which liberty would be proclaimed throughout the land. Those who sold their land (often out of economic desperation) were to regain possession of their property. Possession was never absolute, however: "The land shall not be sold in perpetuity, for the land is mine; with me you are but aliens or tenants. Throughout the land that you hold, you shall provide for the redemption of the land" (Lev. 25:23–24). The effect of many of the Jubilee's stipulations was to promote a just economic order that enabled the liberty and redemption of peoples and creation. It promoted the conditions in which all of creation could legitimately claim the right to flourish and be freed from those unjust cultural conditions that would oppress or maim.[25] There is little historical evidence to suggest that the Sabbath Jubilee was ever fully realized. But it stands as a powerful, if unsettling, reminder of the character of God's creation and our place within it. The goal of our life is to so take care of ourselves that the care of creation is maintained at the same time. Given the human propensity to selfishly overextend our desire, the Sabbath, in the form of weekly and yearly observance, serves as a concrete and practical limit to our restless striving.

So far our discussion of the Sabbath has been confined to its Jewish context. Do Christians have anything to add to or learn from this teaching? In the views of some the answer is no, because in the Gospels we see that Jesus frequently violated Sabbath law. Jesus defends his disciples when they pluck grain to eat on the Sabbath (Matt. 12:1–8; cf Mark 2:23–26). He heals a man

with a withered hand (Matt. 12:9–14; cf. Mark 3:1–6) and a crippled woman on the Sabbath (Luke 13:10–17). Jesus' own pronouncement that the Son of Man is lord of the Sabbath, that the Sabbath was made for humankind and not the reverse (Mark 2:27), seems to be the definitive statement of how the Sabbath, in a Christian context, is now left behind or supplanted.

There are several reasons to suggest that this view is misguided. I have been arguing that the Sabbath is fundamentally about the liberation of creation, about its coming into the peaceful rest of God. In Sabbath observance we more fully see and realize the true bearing of creation in terms of its relation to God. The context for the development of the Priestly account of creation and the Sabbath was to give expression to God's power and goodness in fending off the cosmic and historical forces of chaos and oppression. Sabbath observance is thus the occasion wherein humanity acknowledges and joins in the divine beneficence: "As creation is a continuing cipher for divine philanthropy, so is the Sabbath a regular and unending implementation of the philanthropic attitude within the domain of ordinary human affairs."[26] When understood in this light, we can see how the significance of the Sabbath extends beyond present practice into the future when God's *menuha*, now temporarily frustrated, will be fully realized. The Sabbath, in other words, is the all-embracing context that gives shape and purpose to life in all its manifestations and at all times. We do not enjoy God's peace and rest, nor do we properly understand the meaning of creation, because we have not yet learned to properly celebrate the Sabbath. If we could truly observe the Sabbath, we would enjoy "the taste of eternity" (Heschel). As the rabbis put it: "If Israel keeps one Sabbath as it should be kept, the Messiah will come."[27]

Viewing the Sabbath as the anticipation of creation's redemption, the time when all is well with the creation, enables us to understand the work of Christ as the continuation and completion of the Sabbath. The early Christians proclaimed Jesus as Messiah. They understood his preaching of the kingdom of God and his ministry to be the incarnation of God's delight and peace in a world of pain and violence. As lord of the Sabbath, Jesus takes within himself the aspirations of Sabbath life and gives them concrete expression in the ministries of feeding, healing, exorcism, companionship, and service. As Moltmann summarizes it, "Jesus' proclamation of the imminent kingdom makes the whole of life a sabbath feast."[28] If we want to see what a creation liberated into the rest of God looks like and what our role in that liberation can be, we should consider the life of Jesus. Jesus heals the sick, feeds the hungry, cleanses lepers, restores sight to the blind, exorcises demons, and raises from the dead—all so that creation can be made whole, all so that we might be saved and made healthy in the company of others. Jesus represents life in its fullness. The continuing work of the church, in turn, is to be the abiding witness and agent of this healing, liberating, cleansing, celebratory work. As it does this, it

shows itself to be a Sabbath people, a community that understands itself in terms of the creator's intention.

What I have been suggesting is that the Sabbath, far from being an incidental feature of the seven-day creation, and thus of interest only to the liturgically minded, goes to the heart of the meaning of creation. Without the Sabbath the world would exist only as a world. It would be something like the "nature" of modern science since its holy character would go unnoticed. It would be a world without rest, without delight. It would be a world left exclusively in the hands of human whim and fancy and thus without its proper orientation toward God. The Sabbath lets us know that the world is not simply created by God, but that it exists before, with, and for God: "In the resting, and hence direct, unmediated presence of God, all created beings find their dwelling. In the resting presence of God all creatures find their sustaining foundation."[29]

Sublime Creation—The Experience of Job

> It could be that our faithlessness is a cowering cowardice born of our very smallness, a massive failure of imagination. Certainly nature seems to exult in abounding radicality, extremism, anarchy. If we were to judge nature by its common sense or likelihood, we wouldn't believe the world existed. In nature, improbabilities are the one stock in trade. The whole creation is one lunatic fringe. If creation had been left up to me, I'm sure I wouldn't have had the imagination or courage to do more than shape a single, reasonably sized atom, smooth as a snowball, and let it go at that. No claims of any and all revelations could be so far-fetched as a single giraffe.
>
> —Annie Dillard, *Pilgrim at Tinker Creek*

It is only on rare occasions that the utter strangeness of the world, and our place within it, makes itself felt to us. For the most part, we occupy ourselves with routine or diversion, trusting that our lives will yield the requisite amount of pleasure and good fortune that comes with being human. Good fortune, after all, is what we deserve, since it is what we work for, what we organize our schedules for. And, furthermore, does not the teaching of a good creation by God justify us in assuming that life will be to our advantage and benefit? But there are enough events and signs in our histories to suggest that good fortune, at least the good fortune we expect or plan for, may not be within our reach. Personal tragedy, as well as the witnessing of the painful and the bizarre in nature, prompt us to wonder or complain about the wisdom and order of life. It is not only our pain and death that concern us, but the pain and death

that are constitutive of life at all. As Annie Dillard puts it, "Evolution loves death more than it loves you or me."[30]

The story of Job can and has been read in a variety of ways. Among its many lessons, however, is the discovery that our perceptions of the creation and the creator are flawed. We do not think properly about the creation, and as a result we make improper assumptions about the character of our own lives and the character of the God who makes us. When we assume, as Job and many of us do, that we are the center of creation, that the goods of creation are made to suit our utilitarian calculus, we run the risk of adding severe mental anguish to the physical suffering that invariably comes our way. A lesson of Job is that the creation does not exist for us. To think otherwise is to be guilty of spiritual hubris.

Our introduction to Job suggests that he is the quintessential person. He is blessed with family, wealth, and the respect of his peers. He is also morally virtuous and spiritually pious. In short, his life corresponds neatly with the expectation that if we do rightly we will be properly rewarded. He is, as Stephen Mitchell suggests, "a perfect moral businessman: wealth, he knows, comes as a reward for playing by the rules, and goodness is like money in the bank."[31] There is justice built into the order of creation that, in addition to being conducive to human well-being, corresponds to our own calculations about how life should be. Creation is simply the backdrop that will facilitate our calculated outcomes, and God is the protector and guarantor of our interests (cf. 1:10 and 3:23).

As the drama unfolds, the expectations of Job, as well as those of his friends, will be put to the test. God permits Satan to inflict suffering upon Job and his household to see if Job will remain good and faithful. After his possessions and family are taken away and killed, Job refuses to curse God: "The LORD gave, and the LORD has taken away; blessed be the name of the LORD" (1:21). So Satan tries again, this time afflicting Job with miserable sores that cover him from head to foot. Again Job refuses to curse God. His wife, however, thinks him a fool, convinced as she is that God has dealt unjustly with her husband. Job's friends, hearing of his plight, come to visit him and offer him consolation and guidance.

After seven days and seven nights of unbearable suffering, Job curses the day of his birth as a day of utter darkness and gloom. Longing for death, he wishes he had never been born. Job's friends, noticeably disturbed, suggest that Job is rash in his speech, for God is on the side of justice. If Job has acted justly he will be dealt justice. Job's response is, "I am blameless; I do not know myself; / I loathe my life. / It is all one; therefore I say, / he destroys both the blameless and the wicked" (9:21–22), or as Mitchell translates the text, "I am guiltless, but his mouth condemns me; / blameless, but his words convict me. / He does not care; so I say / he murders both the pure and the wicked."[32] As chapter 10 makes clear, the issue here is not only Job's personal suffering.

What is at stake is the integrity of the creation as a whole and the trustworthiness of the creator: "Your hands fashioned and made me; / and now you turn and destroy me. / Remember that you fashioned me like clay; / and will you turn me to dust again?" (10:8–9).

In his plaintive cry Job is alluding to a covenantal conception of creation. This conception extends back to the creation covenants established between God and Adam and between God and Noah. In creating the heavens and the earth, God pledges to maintain and preserve creation. As God tells Noah, the rainbow will be the sign of this commitment (Gen. 9:1–17). Given that God created Job, clothed him with skin and flesh, is God not obligated to continually care for him? "Personal creation entails a binding obligation of sustained moral leading on the part of the sovereign creator."[33] Since Job believes himself innocent of wrongdoing, the fact of his suffering must indicate a capricious and cruel creator and, by implication, a creation bereft of sense and meaning.

Given the extent of Job's pain and suffering, and given his assumptions about the moral and justice-oriented character of the creation and the creator, we can readily see why he wants to take his case directly to God. It is not so much that he wants to defend himself before God. Rather, God must be the one to defend God in the face of senseless suffering.

Though we may not share the same pain that was Job's or accept the view that creation is morally driven to a just goal, we too may wonder about the suitability of our place on earth, particularly when we consider nature's utter disregard for our particular lives. Evolution does not mourn the death of those individuals upon whom it nourishes itself. In our darker moments we affirm, "The universe that suckled us is a monster that does not care if we live or die—does not care if it itself grinds to a halt. It is fixed and blind, a robot programmed to kill."[34] For all our talk about the amorality of nature, we have great difficulty reconciling or integrating our moral, feeling lives with a cold, blind universe. Like Job, we too may ask why there is so much suffering and death. Does the creation, and thus also our personal lives, make sense and therefore legitimize Job's and our moral indignation?

Job's friends turn against Job for turning on God. In their view, the justice of God is unassailable. It is Job who is at fault. The moral character of creation cannot be challenged. But Job will have none of this. His view of himself and the universe is in shreds. Even if he did meet God, what could he possibly say since the certainties that have guided his life are now gone? He feels abandoned by God and mercilessly hounded by his peers. Job now finds himself at the margins of society, since he no longer holds to their certainties. In his suffering he knows himself to be completely vulnerable, for all conventional responses to the problem of suffering and senselessness will not do. What he desires is an honest accounting: "Let me be weighed in a just balance" (31:6). With this request Job announces himself open to a transformation of his perception. He is ready to be instructed about the character of himself, the creation, and God.

The only one who can properly instruct Job about these matters is God, for whatever counsel Job's friends or peers might provide would simply be a reflection and legitimization of their own limited perspective. In chapter 38 God does approach Job, but the approach is indirect, coming as it does out of a whirlwind. So as to further disorient Job, God assaults Job with a list of questions: "Who is this that darkens counsel by words without knowledge?" (v. 2). "Where were you when I laid the foundation of the earth?" (v. 4). "Have you commanded the morning since your days began?" (v. 12). "Have you comprehended the expanse of the earth?" (v. 18). Rather than being questions that seek to excuse God of responsibility, they are rhetorical questions designed "to challenge Job in his creaturely status and finite experience as well as broaden the horizons of his moral worldview."[35] In this encounter with God, Job will learn about the inadequacy of the self-serving, anthropocentric views he and his supposedly wise peers held. In the speeches of God it will be revealed to Job that "in the world of divine making, humans are not at the center of the universe and retributive justice is a false teaching."[36]

Whereas Job was inclined to view the creation through the prism of his own success (the world is a just place) or his own misery (the world is an unjust place), God forces Job to take a wider and thus more honest and just view of the universe. Comparing the creation to the building of a temple, God says that upon the laying of the cornerstone "the morning stars sang together / and all the heavenly beings shouted for joy" (38:7). There is a beauty and a sublimity to the created order that far exceeds what Job, because of his arrogance, is prepared to accept. God goes into considerable detail describing the attentive care required to fashion and maintain the natural processes that sustain life. Moreover, all this meticulous work is not for Job's benefit, since God causes rain to fall on the desert, which is devoid of human life and interest (38:26). Creation is far more than Job can comprehend, imagine, or control.

The view of creation that emerges in God's questioning of Job is a world much more dynamic and complex than anywhere else described in scripture. It is not the orderly world of the Priestly account given to us in Genesis 1, a world in which humanity sits proudly above the rest of creation. God's creation, as revealed in the Joban text, is a world in which the forces of chaos are not entirely subdued but are instead given a limited freedom to exercise their power. God sets bounds to the chaotic waves without obliterating them altogether (38:8–11). This is a wild God who delights in wildness. Moreover, God's precise attention to and delight in the uniqueness and wildness of the animal world—"Can you hunt the prey for the lion, / or satisfy the appetite of the young lions, / when they crouch in their dens, / or lie in wait in their covert? / Who provides for the raven its prey, / when its young ones cry to God, / and wander about for lack of food?" (38:39–41)—suggest a creation and a God whose scope exceed the vision and interest of humans. What Job needs to learn is that the value and significance of creation does not end with his own being.

As Brown puts it, the world of creation as God reveals it is "a nominal world without dominance and subservience, filled with unique identities and intrinsic worth. Each species is an indispensable thread woven into the colorful fabric of life. And Yahweh proudly points to each of them in order to recontextualize the provincial world of Job and his friends."[37] Whereas Job sees in wildness the marks of fragility and impoverishment, perhaps even cruelty and capriciousness, God sees dignity and strength.

The force of God's questioning is thus to reorient Job's understanding of himself and creation. The view of Job, as well as the view of the received wisdom of the day, was that creation and the creator, while perhaps not existing for the exclusive benefit of human interests, were in clean and stable alignment with the aims of human flourishing. To be sure, Job's peers insisted that such flourishing depended on Job's acting justly. What they failed to perceive, however, was that their conception of justice was too anthropocentric. They failed to consider whether their perceptive and evaluative faculties were naïve or self-serving.

Among the lessons Job learns, one of the most important will be that creation needs to be perceived theocentrically. All of creation, even those elements that are of no interest or notice or benefit to us, is of value to God as its creator. God takes notice of every creature's move and takes considerable satisfaction in their activities, even when those activities verge on the chaotic (38:8–9). In the speeches from the whirlwind God utters a view of creation that has an integrity all its own. The parts and processes of creation form a dynamic whole in which chaos and order, work and play, life and death altogether contribute to the glory of God. Moreover, this is a creation that is not ruled with an iron fist. God's watching over creation, not unlike a parent's watching over a sometimes obedient, sometimes rebellious child, entails the extension of a fair measure of freedom to it: "Yahweh governs with an open hand, sustaining creation in all of its variegated forms, leaving both good and bad characters to weave their existence into the complex network of life."[38] There is, in other words, an openness and an unpredictability about creation that follows from its freedom and its divinely bestowed integrity. Creation does not exist solely to suit or benefit us. It has a sublime character that has the potential to stun and amaze us, if we care to look. It also has the potential to cause us pain.

The view of creation that emerges in the Joban text bears a striking affinity with our contemporary ecological understanding. Once we recognize that humans are not the center around which the rest of creation moves, we are opened to nature's own integrity and freedom. Ecosystems display a bewildering array of organisms and processes that have little to do with us directly. Yet their functioning is necessary for the health and stability of the whole, of which we are a part. Moreover, the processes of nature are dynamic, open to whatever possibility presents itself. Rather than being a fixed creation in which the spe-

cies of life are forever and firmly determined, God has built into creation itself the evolutionary, adaptive freedom to become itself.

In God's speech to Job little is said of the human place within the created world. There is a brief comparison of Job and Behemoth, perhaps suggesting humanity's solidarity with the created world or, more likely, God's equal concern for the creation of all creatures. At the end of God's first speech, Job has only this humiliated response: "See, I am of small account; what shall I answer you? / I lay my hand on my mouth" (40:4). Following God's second speech Job acknowledges that he spoke what he did not understand. The creation is simply too wonderful for him to comprehend. The wisdom by which he and his friends had sought to make sense of the world is simply inadequate and false. The dramatic portion of the text ends with the enigmatic words: "Therefore I despise myself, / and repent in dust and ashes" (42:6).

This verse is notoriously difficult to translate. It could also be rendered "I retract [my case or complaint against you] / and give up my dust and ashes," or as Mitchell suggests, "Therefore I will be quiet, / comforted that I am dust."[39] Mitchell's translation may well be the most appropriate since it makes the best sense of Job's experience. Job does not despise himself, for what he has learned is that God created him with the same care as the rest of creation. To despise himself would be to insult God directly. Nor should Job consider himself a complete fool because, unlike his friends, he was prepared to see that human justice may be naïve and short-sighted. He spoke more truthfully of God than his friends (42:7). What Job does learn, however, is that his complaint was misplaced and misinformed.

Unlike interpretations that yield a Job thoroughly submissive to the inscrutable will of God, the view that emerges here is of a man now illuminated by the greater light of creation. No longer lord and master, or sole beneficiary, of the creation, Job survives his plight as one prepared to surrender his life to the wisdom of God and the larger drama of creation. Having seen God now and no longer relying on what he has merely heard about God (42:5), Job has been introduced to a much larger world than he previously inhabited. His perception has been altered to sense in all things the majesty of God, a majesty that encompasses suffering and joy, benefit and loss. He undergoes the shift from an anthropocentric to a theocentric understanding of the cosmos: "It is as if the world we perceive through our senses, that whole gorgeous and terrible pageant, were the breath-thin surface of a bubble, and everything else, inside and outside, is pure radiance. Both suffering and joy come then like a brief reflection, and death like a pin."[40] He is but dust and ashes, and for him that is enough. His own mortality, rather than being a curse, is no less a part of God's plan than the calving of the deer and the hunger of young lions.

Job's transformation leads to a new engagement with the world that is guided by a new vision of justice based in the sublimity of creation. In the

epilogue to the story, God restores to Job, even doubles, his fortunes. He is given comfort and new sons and daughters. But in his handling of these blessings we see that Job no longer deals with the world in the way that he previously did. It is significant that we are given the names of Job's three daughters and that they are described as beautiful (a statement of Job's pride in the goodness of blessing). More importantly, however, the daughters are given a share in the inheritance along with the sons. This gesture would have been unheard of in ancient Israel, given its patriarchal assumptions and institutions. Job is now ready to welcome the world of the other on its own terms rather than in terms of the conventional understanding that would have relegated daughters to a subordinate role. It is a welcome that has been prepared in him by a newly found compassion and delight in creation, "a *gratuitous* compassion that could only be found in the discovery of the God who takes gratuitous delight in all of creation."[41] Job emerges from his long plight ready to embrace the creation with the selfless care and joy that marks God's own involvement in the world. Creation will henceforth be judged and engaged in terms of God's glorious generosity rather than the self-serving, utilitarian calculus that would have guided Job before his trial.

As Job returns from the margins of society and convention he must take up the risk of mirroring in his own life the creation of God newly revealed to him. To do this he must live the difficult life of a world without fixed hierarchies, a dynamic world that is not geared to suit exclusively human ends. Faithfulness to the vision of God will require of Job that he continually learn to limit and align his desire to the integrity and the blessing of creation, to what we today might call the sustainability of ecosystem processes. He must reshape his identity and vocation so that they reflect and promote the well-being of the whole creation, rather than simply his own interests and concerns. He must expand his world and his accounting systems so as to reflect as much as possible the diversity and sublimity of creation. His task was difficult then. It is perhaps even more difficult today, since the assumptions of our culture are more ego driven than ever before.[42] Can we reform our most basic cultural assumptions so that they are geared to the promotion of God's glory as revealed in all aspects of creation?

New Creation in Christ

> In Christ we are offered the possibility of partaking in the reality of God and in the reality of the world, but not in the one without the other. The reality of God discloses itself only by setting me entirely in the reality of the world, and when I encounter the reality of the world it is always already sustained, accepted and reconciled in the reality of

> God. This is the inner meaning of the revelation of God in the man Jesus Christ.
>
> —Dietrich Bonhoeffer, *Ethics*

When the early Christians proclaimed Jesus Christ as Lord, it was clear that his lordship extended over the whole of creation. The appearance of this man, though limited to a specific time and place, redefined the meaning of all time and all places. In tones strongly reminiscent of the Genesis creation account, the Prologue to John's Gospel states that Christ was in the beginning with God and that all things "came into being through him, and without him not one thing came into being" (John 1:3). The character of creation, its meaning and its hope, was thus redefined in terms of the activity of God in Jesus Christ. God's intention in creation, we might say, now finds its definitive focus in the work of this man. If we want to know as completely as possible what it is for creation to be creation, we must look at the life of Jesus Christ.

Unlike the gnostics, who acknowledged Jesus as a teacher who promised to lift the select few out of the crass materiality of this life, and unlike some recent Christians who restrict the scope of Christ's concern to personal salvation from sin, the earliest followers of Jesus understood that God's commitment to humanity, to history, to the whole sweep of creation, claimed and involved them in the work of cosmic redemption. In one of the church's earliest hymns, the cosmic scope of Christ's work finds clear expression:

> He is the image of the invisible God, the firstborn of all creation; for in him all things in heaven and on earth were created, things visible and invisible, whether thrones or dominions or rulers or powers—all things have been created through him and for him. He himself is before all things, and in him all things hold together. He is the head of the body, the church; he is the beginning, the firstborn from the dead, so that he might come to have first place in everything. For in him all the fullness of God was pleased to dwell, and through him God was pleased to reconcile to himself all things, whether on earth or in heaven, by making peace through the blood of his cross. (Col. 1:15–20)

Though the life of Christ was stamped with the particularity of first-century Palestinian Judaism, the scope of his significance knew no bounds. The peace evident in the first creation finds its mirror expression in the peace made possible by the cruciform and resurrection life of Christ. The way to God's original peace will be the way of Christ's ministerial and servant life.

The clear implication of Christ's cosmic lordship was that the church, the continuing representative of Christ on earth, was to serve as the medium and manifestation of Christ's creative and reconciling work to the whole creation. As the Letter to the Ephesians says, God chose before the foundation of the

world followers in Christ who would make known the creative wisdom of God, a wisdom that gathers all the things of heaven and earth in Christ (1:3–14). This is a gospel that is directed to the redemption of all reality. To be sure, we do not have the power and wisdom to effect this reconciliation by our own right. But as called to be members of Christ's body and thus custodians and agents of the grace of God, we are implicated in and responsible for (in limited ways) the restoration of creation. Christ has set in motion events of cosmic scope. Those who read the New Testament as concerned primarily with the salvation of souls—and then understand souls in a disembodied, Socratic fashion—falsify the creation of God, the ministry of Christ, and the mission of the church.

If we limit our focus primarily to Pauline or Pauline-inspired texts, the significance of Christ for an understanding of creation is readily apparent. Though Paul does not speak in much detail about the person of Jesus, it is clear that his death and resurrection were events of cosmic importance, events that signaled the end of the old age and the beginning of the new. In Paul's view, Christian existence has an apocalyptic and an eschatological dimension. It is apocalyptic because in the incarnation of God in Jesus Christ, particularly in his resurrection from the dead, cosmic history took a new turn, a turn that called into question and delegitimized previous orders of reality. It is eschatological because even though a new reality has been set in motion by Christ, it is a reality that is not yet fully realized. The most compact expression for this alteration between the ages is to be found in 2 Corinthians 5:17: "So if anyone is in Christ, there is a new creation: everything old has passed away; see, everything has become new!" Though this verse is sometimes translated to suggest that the new creation refers only to the individual Christian, the grammar and the context make clear that Christ's dominion reaches beyond personal salvation. Richard Hays describes it this way: "For Paul, *ktisis* ('creation') refers to the whole created order (cf. Rom. 8:18–25). He is proclaiming the apocalyptic message that through the cross God has nullified the *kosmos* of sin and death and brought a new *kosmos* into being."[43]

In the life of the Christian, the event that most clearly expressed entry into the new order made possible by Christ was baptism. Here the believer publicly demonstrated that she would no longer live according to the old ways of ordering reality, ways that were tied to an unjust human point of view. Within the old order, hierarchies of domination and exclusion are the norm, since the driving force behind this existence is the satisfaction of the ego. The new order made possible by Christ, however, will be an order in which these hierarchies are broken down so that peace and reconciliation might reign. In this new order there is neither Jew nor Greek, slave nor free, male nor female, not because these distinct realities cease to exist, but because the differences that divide them cease to matter. As Paul says, we are all "one in Christ Jesus" (Gal. 3:28).

In speaking of a new creation, Paul is clearly drawing our attention to the creation of the cosmos by God. Whereas Adam led creation into sin—a disordering of the creation—Christ is the New Adam who reverses the consequences of sin, a reordering of creation in terms of the ministry of reconciliation (cf. Rom. 5). As a result of sin the whole creation, not simply humanity, has fallen into disarray: "The creation waits with eager longing for the revealing of the children of God; for the creation was subjected to futility, not of its own will but by the will of the one who subjected it, in hope that the creation itself will be set free from its bondage to decay and will obtain the freedom of the glory of the children of God" (8:19–21). This is a creation that groans with labor pains (v. 22), a creation that feels itself to be under the suffering weight of an alien or foreign power. Creation, just as we ourselves, is not what it ought or was intended to be. And so it awaits liberation from the forces of destruction and injustice.

There is some room for speculation about the nature of these alien forces that impede creation. On the one hand, there is within Jewish thought the idea that the original creation did not completely eliminate the forces of chaos, and that chaos, from time to time, will still exert its destructive influence.[44] And as we have already seen, Job suggests that God, because willing to give freedom to creation, even took some pleasure in its wild and unpredictable behavior. Ephesians gives us another angle on this view when it speaks of the Christian struggle against rulers and authorities and also "against the cosmic powers of this present darkness, against the spiritual forces of evil in the heavenly places" (6:12).

It is also clear, however, that the suffering of creation and humanity are frequently the direct result of sinful human action. In our practices we often contribute to creation's unnecessary death and destruction. In the prophetic literature the wide scope of human destructiveness is especially apparent:

> Hear the word of the LORD, O people of Israel;
> for the LORD has an indictment against the inhabitants of the land.
> There is no faithfulness or loyalty,
> and no knowledge of God in the land.
> Swearing, lying, and murder,
> and stealing and adultery break out;
> bloodshed follows bloodshed.
> Therefore the land mourns,
> and all who live in it languish;
> together with the wild animals
> and the birds of the air,
> even the fish of the sea are perishing. (Hos. 4:1–3)

What Hosea makes clear is that we cannot and must not assume that our acts are without effect for the larger world around us. Human sin seeps beyond

the human world to adversely affect the cosmos, of which we are a part. As we have already seen in Romans, Paul bears witness to a creation beset by suffering and sin. On account of human injustice and greed, the earth languishes and moans under the judgment of God. The whole creation, and not simply we ourselves, therefore cry out for redemption that will free us from futility into the fullness of life. With the arrival of Christ, says Paul, this all-embracing redemption has begun. The ministry of Christ inaugurates freedom from bondage and liberation to become members of God's family, participants in God's glory and peace.

In apocalyptic literature the passing from the old to the new age is often accompanied by cataclysmic destruction. The violence of the passage is often taken to mean that the created order itself, its materiality, must be obliterated so that an entirely new creation might take its place. There is good reason to think that Paul was not thinking this way. To be sure, the transition is by no means an easy or painless affair, since the passage to new creation is through the suffering of the crucifixion. But to think that new creation requires the obliteration of the old would require the eternal condemnation of what God has already proclaimed good, of what God has sworn covenant allegiance to. It would be better to describe creation's redemption as a restoration, as the setting right of creation so that it can be what it was first intended to be. Here Paul's frequent talk of the freedom of the Christian life is important. Redeemed creation is liberated creation, a creation that is good and exists before God without pain and suffering. It is a creation that flourishes, one in which "the wilderness becomes a fruitful field" (Isa. 32:15). Brown is correct to say, "New creation is creation regained."[45] What is regained is the freedom of each creature to be what God intended it to be.

In Paul's view it is the church, the body of those people who have pledged their allegiance to Christ and are thus "in" him, that is to prefigure what the new age looks like: "Where the church embodies in its life together the world-reconciling love of Jesus Christ, the new creation is manifest. The church incarnates the righteousness of God."[46] It does this by following in his way, by being imitators of him. Those who become followers of Christ in baptism no longer live according to their own, often utilitarian, accounting of how the world is to be. They have, as Paul says, "put on the mind of Christ." They live no longer according to the flesh and its ways, but according to the spirit. As Christians are called to share in the ministry of Christ, they will work out in their material lives acts of healing, feeding, and companionship that marked Christ's life on earth.

The dichotomy between flesh and spirit is not at all like the Socratic duality of body and soul. Whereas the Socratic view creates a divide between the material and the spiritual so that the latter can escape the former, Paul's view speaks of how the whole person—body, soul, and spirit—can come under two different governing powers or spheres of influence. Life according to the spirit

is life that affirms and continues the healing, reconciling ministry of Christ. It is life that seeks the lordship and peace of Christ. Life according to the flesh, however, is life that, because it is directed to the satisfaction of our own wants and lust for power, brings about the suffering or destruction of others. It is life that secures its own benefit at the expense of another's unnecessary suffering. The spirit is the realm of life because it seeks the goodness and integrity of everyone, whereas the flesh is the realm of death because it seeks individuation and separation from the nurture and grace of God and from each other.

We need to distinguish here between differing conceptions of death since, according to the biblical view, not all death is bad or evil. On the one hand, there is biological death that follows from the orderliness of creation itself: all creatures will die at their appointed time because that is the way God ordained it. But there is another death, death that is of a more spiritual sort (though it too will be reflected in the distortion or destruction of bodily lives) that testifies to our being separated from or being at enmity with God and with each other. To deny the grace of God or to deny the support of those who daily sustain us is not only to be guilty of hubris and sin. It is to prepare oneself for a life in which others cease to be of concern. The moment we forget to care for others, to care about them and make their needs, joys, and sorrows our own, we proclaim our utter separation from the sources of life and health. We become spiritually dead. Though our bodily metabolism may continue, we have in effect denied the life-giving, life-sustaining power of the spirit and have instead become self-centered and isolated according to the ways of flesh.

Paul was under no illusions about the difficulty of transitioning to a life of the spirit. Our temptation, especially as we live in a "fallen" world, is to want to live in terms of self-promotion and self-satisfaction. For this reason Paul insisted that Christian conversion amounted to a "putting to death" of our old selves, a "crucifixion with Christ" (Gal. 2:19). What is being put to death here is the destructive instinct within us that would impair or ignore the well-being of others, an instinct that denies service to others so that we can maximally serve ourselves. Entry into the new, Christ-defined age means a turning away from this instinctual and conventional way and a reordering of our practical economies so that the well-being of others and ourselves can be achieved together. If one lives according to the spirit of Christ, one's life will be governed by a set of dispositions, attitudes, and practices that have the effect of liberating another to "be" fully and completely. As we serve the community of creation they and we ourselves will be strengthened so that together we can be healthy and whole, fully alert and equipped to continue the reconciling work of Christ. This is why for Paul the edification of others is often the most important concern in dealing out pastoral advice.

At various points we are given a list of the traits that naturally flow from life in the spirit. In Galatians 5:19–23 the list includes love, joy, peace, patience, kindness, goodness, faithfulness, gentleness, and self-control. What lists like

this reveal is that the fundamental aim of Christ's redemptive life is to build up others. Indeed, the dispositions of love, joy, peace, and so on come to fruition precisely as we train our desires on the needs and the integrity of others. In short, followers of Christ have given up their own ambition so that they can welcome and serve others. Like God, who in creating the world demonstrated the divine nature as "being-for-another," as "making room for another," so Christ shows in concrete form what being-for-another looks like. It means feeding those who are hungry, clothing those who are naked, healing those who are sick, restoring to wholeness relationships that are broken, suffering with those who suffer, and rejoicing with those who rejoice. In short, it means putting an end to the life-defeating violence and death that otherwise dominate our lives so that the full life of peace before the creator can begin. A life of peace is not only what we most deeply need. It is what the creation itself eagerly awaits.

The way to peace is through the suffering of the cross. Because the work of new creation amounts to the subverting of the conventional orders of injustice, it should come as no surprise that those who benefit from injustice—the powerful, the rich, the selfish—will resist, even to the point of death, the incursion of a new order. Christ, as the hymn in Philippians described him, took the path of servitude and humility (2:5–11), for this is the path that leads to communal life together. Injustice depends on a strong sense of personal space and right, a sense that what matters to individuals matters most of all. The invariable result of this disposition is to separate people from each other and then to view another as a threat or challenge to personal well-being. Justice, however, is inherently communal since it is premised on the ability to stand before another without fear or shame. Justice is born as we have full regard and consideration for the needs of others. Insofar as we do not respond to the needs of others, we are guilty of evading life-promoting responsibilities, guilty of having thought ourselves better than others, guilty of thinking we can flourish without others and God. In following the path of Christ, believers are called to see that they are not better, but that others are of higher rank and thus deserving of respect and service. As we commit ourselves to the well-being of others, a life of peaceful community becomes possible, a life in which the glory of God as first revealed in the creation of the world becomes possible.

New creation, the world in which justice and peace are the rule, is not simply or exclusively reserved for a future life beyond the time of this world. Nor does it come at the expense of this world and this life. As Dietrich Bonhoeffer once said, "Only wanderers who love both earth and God at the same time can believe in the Kingdom of God."[47] The incarnation of God in Jesus Christ, though having occurred centuries ago, represents God's affirmation of every here and now. In this incarnation we see the concrete expression of God's intention for creation. As baptized into the body of Christ, Christians, in turn, are to bear witness to the new age, the new dominion of God, by modeling in

their life together God's original, life-giving intention. The church as the continuation and representative of new creation lives a tenuous existence since it is caught between the time of Christ's initiation and Christ's fulfillment. Even though its existence is tenuous, its mission, however, is clear: in Christ the reconciliation and the healing of the creation.

The New Heaven and New Earth

> To respond to the song of the Creator is to hear the Word which promises a world to come, a second creation or recreation of justice and peace, a world which the divine *posse* [possibility] is always ready to offer but which can come about only when humanity says yes by joining the dance, entering the play of ongoing genesis, transfiguring the earth. God cannot become fully God, nor the Word fully flesh, until creation becomes a "new heaven and a new earth."
>
> —Richard Kearney, *The God Who May Be*

Would it go too far to suggest that eschatology repeats, though in a new key, cosmogony and cosmology? If not, then we can turn to John's Apocalypse, the Book of Revelation that closes the Christian canon, and find therein a powerful restatement of the creator's intention for creation. In this book we see the character of creation in its all-encompassing form, a form that takes fully into account the trajectories of history and God and shows their intersection in Jesus Christ. Here we catch a glimpse of God's ultimate purpose for history and creation as a whole. One could say, especially given John's emphasis on God as the beginning and end, the first and the last, that Revelation reenvisions the goal and purpose of the first creation in light of the long history of God with God's people (the patriarchs, the nations of Judah and Israel, and most recently the church as the bride of Jesus Christ).

As is well known, the Revelation to John has been subjected to considerable misuse and abuse. The highly symbolic (and esoteric) character of many of its references and images has resulted in false predictions and misplaced hopes. Indeed, our difficulty with this text stems, in part, from a misunderstanding of the nature of eschatological hope. As Paul Fiddes has argued, we must see in hope more than simply the actualization of past or present potential. When we configure hope on a continuum with a sordid and destructive past and thus base hope on potential as we currently see it, we actually undermine it. Hope is steeped in the possibility of God to make something new: "The possibilities for new creation in God challenge the actual tendencies of the present, or its potentials; they break in from the future. . . . We look forward not to what is merely 'not yet' actual, but to what God makes possible."[48] And so rather than reading Revelation as a book of doom, a book in which we see

the actualization and full realization of a destructive past, we should instead interpret it as a statement of what God still has in store for creation, a statement of what God has done and will yet do to make creation the holy dwelling place of God. The New Jerusalem, rather than simply being an enclave for a select few, shocks our expectations by being the definitive expression of God's kingdom and intention, a city in which there are no temples because God's presence is everywhere immediate. This New Jerusalem stands as the reference point from which all our Jerusalems can be judged and inspired to new life.

Given the numerous allusions to Old Testament prophecy and the book's own self-description as a word of prophecy (1:3), we do well to read Revelation as providing us a prophetic vision of God's intention for the church and the world. John offers here a rich and multilayered critique of the current time based upon the divine transcendent perspective that has been given to him. The revelation to John sets out to elaborate God's eschatological purpose for the world. As we will see, this perspective entails a radical reorientation of the world as we currently know it and live in it. As Richard Bauckham has suggested, John's vision is not of another world and place: "It is John's readers' concrete, day-to-day world seen in heavenly and eschatological perspective. As such its function . . . is to counter the Roman imperial view of the world."[49] At issue here is the Pax Romana based on aggressive commerce, exploitive trade, and wealth accumulation—the "peace" that depends on force and coercion and that sustains itself through the subjugation of people, farmland, and forest. To people who think of Rome as the full realization of human or cultural potential, John offers a prophetic vision that counters Roman peace with the peace of God, Roman idolatry with the praise of God.

Not unlike the Jewish prophets, John must demonstrate to his readers that, appearances notwithstanding, God's rule over the earth is supreme. This is why he repeatedly and forcefully says that God is "the first and the last" (compare Isa. 44:6). As God is the first, the sole creator of all, so God is the last, the one who brings all things to fulfillment. God is the origin and goal of history. As God presides over creation, so too will this same God preside over new creation. In this new creation the whole world will worship God: "Then I heard every creature in heaven and on earth and under the earth and in the sea, and all that is in them, singing, 'To the one seated on the throne and to the Lamb be blessing and honor and glory and might forever and ever!' " (Rev. 5:13). Rather than being forced to submit to Babylonian or Roman rule, now all of creation will freely offer its praise to the sovereign God.

There would, of course, be no need for prophecy if what the prophet speaks against were not so attractive or tempting. The desire for power, prestige, and comfort is that strong. Yet as the Jewish prophets make abundantly clear, it often takes the experience of exile and homeland destruction to demonstrate the illusory character of human power and wealth. This point needs emphasis because the destructive character of self-promotion has wide effect. Human

rebellion against God certainly results in the distortion of our own identities and vocation. But it also leads to the exhaustion, pollution, and destruction of the creation as a whole.[50] This is why some of the prophets do not simply stop at the restoration of the nation of Israel but go on to the restoration of creation itself.

We see this particularly well in Second and Third Isaiah (texts to which Revelation often implicitly refers). Though the people of Judah had experienced the desolation of their land and their hope with Babylonian exile, nonetheless God's coming redemption is certain. It is an all-encompassing redemption that is based on God's lordship over all of creation (Isa. 40:21–23). God's control over history goes hand in hand with God's control over the earth: "I made the earth, / and created humankind upon it; / it was my hands that stretched out the heavens, / and I commanded all their host. / I have aroused Cyrus in righteousness" (45:12–13). Once Cyrus defeats the Babylonians and then allows the people to return home, God will make a way through the wilderness to their home in Zion. This "new exodus," however, will make the first exodus from Egypt look pale in comparison because God will bring life to the wilderness, transforming the desert into a garden (41:18–19). The redemptive vision offered here is all-encompassing and is beautifully described in chapter 43: "Do not remember the former things, / or consider the things of old. / I am about to do a new thing. . . . / I will make a way in the wilderness / and rivers in the desert. / The wild animals will honor me, / the jackals and the ostriches; / for I give water in the wilderness, / rivers in the desert, / to give drink to my chosen people, / the people whom I formed for myself / so that they might declare my praise" (43:18–21). This is a vision focused upon the founding authority and continuing creative power of God. And so it is in God rather than ourselves that we must place our hope.[51]

In similar manner, John communicates a vision in which humanity is displaced from the center so that God might instead take the focal or pivotal place. In John's view, self-deification is the problem. Babylon, with its violence and oppression, but also its luxury and wealth, serves as the symbol for all that is wrong with anthropocentric ways of ordering the world. Babylon has become "a dwelling place of demons, / a haunt of every foul and hateful bird, / a haunt of every foul and hateful beast. / For all the nations have drunk / of the wine of the wrath of her fornication, / and the kings of the earth have committed fornication with her, / and the merchants of the earth have grown rich from the power of her luxury" (Rev. 18: 2–3).

The New Jerusalem serves as the contrast to the foul ways of Babylon/Rome. It portrays a political economy founded on the generous ways of God: "God's New Jerusalem is the antithesis of the toxic Babylon with its ecological imperialism, violence, unfettered commerce, idolatry and injustice. The New Jerusalem is a city where life and its essentials are given 'without money,' as a gift, even to those who cannot pay for them."[52] This New Jerusalem is not to

be confused with the old, defeated Jerusalem. It is an eschatological reality that invites people to a new way of living, a new way of envisioning and practicing their lives:

> As a place, the New Jerusalem is at once paradise, holy city and temple. As paradise it is the natural world in its ideal state, rescued from the destroyers of the earth, reconciled with humanity, filled with the presence of God, and mediating the blessings of eschatological life to humanity. As holy city, it fulfils the ideal of the ancient city, as the place where heaven and earth meet at the centre of the earth, from which God rules his land and his people, to whose attraction the nations are drawn for enlightenment, and in which people live in ideal theocentric community. As temple, it is the place of God's immediate presence, where his worshippers see his face.[53]

The fascination and power of Revelation stem from its depiction of a symbolic universe that at once stands in judgment of the current world and offers a fresh, unexpected alternative. John recounts: "Then I saw a new heaven and a new earth; for the first heaven and the first earth had passed away, and the sea was no more" (21:1). In this new creation, God will be with us, and where God is, death will be no more: "Mourning and crying and pain will be no more, / for the first things have passed away" (21:4). Given the current state of the world, such a vision would be fanciful were it not for the fact that it is grounded in the creative power of God. God can do a new thing. Echoing the words of the prophet Isaiah, John insists that God's creative action be understood in terms of joy and delight rather than pain and suffering: "For I am about to create new heavens / and a new earth; / the former things shall not be remembered / or come to mind. / But be glad and rejoice forever / in what I am creating; / for I am about to create Jerusalem as a joy, / and its people as a delight. / I will rejoice in Jerusalem, / and delight in my people; / no more shall the sound of weeping be heard in it, / or the cry of distress" (Isa. 65:17–19).

It has been the temptation of many readers of John to understand the new heaven and the new earth in terms of the destruction (usually accompanied by ample conflagration) of the present space/time order. This is a mistake, primarily because it forgets that the incarnation of God in Jesus Christ represents the most complete affirmation of the creation possible. John reiterates that the home of God is among mortals rather than some far-off place. The heavenly city comes down out of heaven (Rev. 21:2–3)! To be sure, the first creation has gone awry because of humanity's sinful ways. But God is faithful to the goodness of creation. As with the generation of Noah, God will do away with the destroyers of creation, with those who violate the divine intention for creation, and thus make creation secure from any outside threat: "In this way Revelation portrays God as faithful to the Noahic covenant and indeed surpassing it in

his faithfulness to his creation: first by destroying the destroyers of the earth, finally by taking creation beyond the threat of evil. Only then does it become the home he indwells with the splendour of his divine glory."[54]

The new heaven and the new earth does not mean that the first creation turned out to be no good at all and thus needed to be replaced. Rather it signifies God's radical intervening and transforming presence so that creation can be what God most wants it to be. With the presence of God, destruction and mortality will cease. God's presence gives a new form to the present created order, a form that takes existence beyond all threat of evil and suffering. Here the fullness of life attains its most complete realization. As God's presence makes all things new we see what was God's full intention for creation. Since God is the Alpha and the Omega of existence, the significance of creation, its intent and purpose, must finally be found in the desire of God. Nowhere is this more clearly stated than in John's beholding the descent of the heavenly city. Having described the beauty and dimensions of the city, John goes on to say that the presence of God is so intense that the city has no need for the light of the sun or the moon, "for the glory of God is its light, and its lamp is the Lamb" (Rev. 21:23). The new heaven and new earth represent a world that we have not yet seen, that we cannot in fact see, until our perception is so filled with the desire of God as to be come our light and our guide. This created order is new not because the old has been discarded, but because the old is perceived and engaged in an entirely different manner. Rather than seeing creation through the prism of a destructive or narrowly utilitarian calculus, our eyes are opened so we can exclaim with Thomas Traherne that creation is a "Region of Light and Peace. . . . It is the Paradice of God" (1.31).

Revelation closes with a description of the river of the water of life flowing from the throne of God through the city. On either side of the river is the tree of life that produces fruit and healing leaves that are for every nation. Clearly this is a paradisiacal vision meant to draw the reader's attention to the first paradise in the garden of Eden. The difference, however, is that John's vision is urban. Many of John's readers would have lived in cities. In fact, the culture of his day would have assumed that the city is the place where humans can most fully develop as people. But unlike ancient cities, John describes the heavenly city as rooted in and directed toward the intentions of God. And unlike modern cities, the heavenly city fully integrates the sustaining natural world within itself so that altogether the city can be a place of convivial life together. As Barbara Rossing (quoting Dieter Georgi) affirms, "The New Jerusalem vision 'fulfills the ideal that the Hellenistic city aspired to, but never realized, the reconciliation of city and countryside.' The city of New Jerusalem is itself a paradise, integrating nature and urban life, bringing healing to the landscape as well as to the nations."[55] What is crucial to understand is that this integration of wilderness and city (an image dear to many prophets) is mediated and made possible by the presence of God. It is as though without the divine presence

the antagonisms between persons and between persons and their natural environments cannot be overcome. Peace in history, just as peace with the earth, depends on the creative, sustaining, and directing presence of the Lord of creation. It is not something we can accomplish on our own effort. For good reason, then, the vision of the new heaven and the new earth concludes with the plea: "Amen. Come, Lord Jesus!" (Rev. 22:20). We need the presence of Christ, as mirrored in the community of followers who continue his ministry, to take us out of our self-focused and self-absorbed ways. As we are freed from the destructive potential of fallen life, we are at the same time freed to participate in the joyous celebration of God's paradise. All of creation now becomes what it was meant to be from the beginning.

This page intentionally left blank

2

Culture as the Denial of Creation

If there is no God, then nature is not a creation, lovingly crafted and endowed with purpose and value by its Creator. It can only be a cosmic accident, dead matter contingently propelled by blind force, ordered by efficient causality. In such a context, a moral subject, living his life in terms of value and purpose, would indeed be an anomaly, precariously rising above it in a moment of Promethean defiance only to sink again into the absurdity from which he arose. If God were dead, so would nature be—and humans could be no more than embattled strangers, doomed to defeat, as we have largely convinced ourselves that we are.

—Erazim Kohák, *The Embers and the Stars*

There appears to be a law that when creatures have reached the level of consciousness, as men have, they must become conscious of the creation; they must learn how they fit into it and what its needs are and what it requires of them, or else pay a terrible penalty: the spirit of creation will go out of them, and they will become destructive; the very earth will depart from them and go where they cannot follow.

—Wendell Berry, "A Native Hill"

The earth shows up those of value and those who are good for nothing.

—A peasant judgment

Over the last several centuries we have witnessed the steady erosion of the practical and theoretical conditions necessary for the experi-

ence of the world *as creation*. The problem is not that the physical world looks differently than it did at the beginning of time—a development that attests to the vitality of creation as much as it signals the power of humanity to deform and reform the earth—but that the frameworks in terms of which we perceive and handle the world have been fundamentally altered. Put philosophically, our perception of the "being" of the world, its essence, or what we understand to be its character has, in the modern period, taken a turn that is clearly at odds with scriptural views. If it was central to scripture that the whole of reality (ourselves included) exists as the expression of God's good pleasure and that reality is therefore a reflection of a divine intention and goal, it is clear today, especially given naturalist, materialist, and consumer assumptions, that the world has little purpose other than the instrumental purposes humans ascribe to it. As Canadian cultural critic and philosopher George Grant once put it, technology is "the ontology of the age," meaning that our understanding of the world's being and our engagement with it is now accomplished in terms set by the industrial/technological complex.

Since we continue to speak the language of creation, we must, therefore, recognize that it is in many cases a forced speech, theologically thin, contrived, or ornamental, having little to do with the practical ways we organize our lives and our institutions. Think, for instance, of how talk of creation has been marginalized to specialized scholarly debates on the origins of the universe and that the term *creation* rarely appears in broad-based cultural discussions in education, economics, and politics.[1] Though many people still profess a vague belief in a higher power that created the universe, there are almost no signs indicating that people have thought seriously about themselves as created beings enmeshed in a common redemptive fate with the rest of the created order and that this belief should have any effect in practical, day-to-day decision-making. For the most part, our assumptions about reality, its ontological status, reflect modern scientific, economic, and technological views that place humanity and its interests over and against the natural world. Nature, rather than being the realm of God's creative work and plan, the object of God's good pleasure, is the foil for human technique and desire.

As background, we need to understand that what people have meant by the natural world has changed over time and that the term *nature* has a long history with varied meanings, not all of which are compatible with a teaching of creation. For centuries, for instance, the idea of nature was elaborated using organic metaphors, metaphors that communicated nature's vitality and power to nurture and promote life. Not only was the earth described as our mother, but its various parts and functions could be understood in terms analogous with human physiology. The earth, like a body, is made up of tissues and a circulatory system of rivers, creeks, and springs that enable nature's processes of growth and decay. The earth sweats and breathes, just as it occasionally breaks wind in the form of earthquakes. Central to an organic view is the idea

that nature exhibits an integrity of its own which must be respected and maintained. Many authors, ranging from Ovid and Seneca to various Renaissance figures, argued that to mine the earth was akin to reentering our mother's womb and there pillaging and defiling her life-giving organs.[2]

Clearly, a straightforwardly organic view of nature is not fully compatible with the teaching of creation since it occludes, or at least has the potential to occlude, the divine source that animates the organism. Our temptation is thus to confuse the creation and the creator, resulting in forms of animism or pantheism. However, the merit of this organic view (as with more recent ecological thought), particularly when compared to the mechanistic conception of nature that superseded it, is that organic nature maintains the integrity of nature, the idea that value and purpose are not wholly extrinsic to the natural order. Nature is not simply a resource or a "standing reserve" that exists solely for our own benefit and enjoyment.

Given historically varying conceptions of the natural order, we should consider if the presuppositions of nature we are steeped in can be reconciled with a teaching of creation. Getting clear on our presuppositions is crucial since they play a determinative role in how we structure our theoretical and social lives. Consider, as one example, how the ancient Hebraic conception of land as a gift from God worked itself out in economic affairs.[3] The mass accumulation of land by one individual, with its attendant assumptions about absolute human ownership, was strictly forbidden since it mistakenly presumed that land given in trust could be securely taken by right of economic exchange. The land is a gift given to all, and so all, even widows and aliens, must have access to it as the means for their own livelihood. This is why in the year of Jubilee land lost in dire economic circumstances was to be returned to its owners (Lev. 25) and why the prophet Isaiah rails against those "who join house to house, / who add field to field, / until there is no room for no one but you" (5:8). The Israelites were suspicious of outright ownership of land since it often reflects ingratitude and distrust and because it usually comes at the expense of someone else's misery and misfortune. By contrast, consider contemporary land ownership claims that assume little sympathy or responsibility for the needs of the "commons." The Hebrew sense of land as gift and as obligation has virtually dropped from our vocabulary and practice.

In addition to historically contrasting ideas of nature, we should also highlight the unprecedented fact that in the last one hundred years the vast majority of the world's population has moved into urban centers and thereby lost the practical and intimate understanding of our dependence upon the earth that agrarian life promoted. The loss refers not simply to a way of life—the family farm and its attendant responsibilities and sensibilities—but to the daily awareness that our physical lives are maintained by a creative power that comprehends us even as we fail to comprehend it. Urban life, because it is so much the reflection of our own aims and powers, makes it much more likely that

our capacity to acknowledge the graced character of life will be diminished and so severely compromises our ability to appreciate the creator, the author of grace. As urbanites, we are more and more insulated from the contingency and difficulty of biological life because so much of our time is lived in exclusively human-determined and-controlled spaces. As insulated, our experience of reality, and therefore also our moral and aesthetic ordering of reality, is fundamentally different from rural or traditional cultures that lived in close proximity to the forces of life and death.

As sociologist Anthony Giddens argues, modernity transformed space/time relations. Modern life is characterized by what he called its disembeddedness, its gradual extrication from ties of kinship and community with the land and with people and its eventual replacing of those ties with more abstract, impersonal systems—science, technology, the free market—that would henceforth orient and stabilize life. In this transformation the very nature of trust was altered.[4] In certain respects, we see, feel, taste, smell, think, plan, and engage the world in ways that would be unrecognizable to the more traditionally minded and to the scriptural authors who first articulated creation's character and meaning.

Given this short review of the changing character of nature and cultures, we need to highlight and then think specifically about how various historical developments have compromised our ability to experience ourselves and the world as creation. In conjunction with later chapters, especially chapter five, we need to be clear about how changing concrete and social conditions mitigate or promote our capacity for attention, care, and responsibility—all virtues central to the divinely mandated vocation that we till and keep the earth. How, for instance, can we take care of the young, the weak and infirm, the old, when the contemporary view of success makes us impatient with or disdainful of illness, unreason, or weakness? How can we promote the dignity, and thereby preserve the health, of life's basic requirements—food, water, and air—when our industries depend on their mutation or despoliation? Can a culture that denigrates physical labor or an economic order that identifies value with the satisfaction of our own desires rather than the beneficence of the creator understand the biblical mandate "to serve and keep" the ground of the creation? Can a society devoted to the mastery of life and death any longer appreciate God as the author of life and the lord of death? Perhaps most basically, how will we learn to care for creation if we do not value or have the time to appreciate, love, and celebrate it?

In the sections that follow I will consider several features of modern life that directly affect the way we experience and engage reality. My treatment will hardly be comprehensive, since my aim is specifically on those features of modern life that compromise our experience of the world as creation and thus distort our vocations as servants of it. What this means is that the following indictments of aspects of modernity, technology, and urban life are not against

modernity, technology, and urban life in themselves. Rather, I will be highlighting those elements within these developments that are particularly problematic when viewed from the perspective of creation (and recent ecological thought). Clearly, the harvest of modernity is not uniformly bad or good. It is a mixed bag that requires of us that we sort out those elements and practices that mitigate—even militate against—the hope that all creation will be restored and redeemed by God.

Passage to Modernity

Numerous scholars have noted that modernity, particularly modern science and the development of industrial technologies, promoted a radical transformation in social structures and meanings. Because the transition to modernity is very complex, involving numerous philosophical, theological, sociological, economic, artistic, and political developments, I will focus on a few moments that bear directly on our growing inability to experience the world as creation. Among these, one of the more important had to do with the demise of allegorical interpretation of scripture.[5]

For many of the church fathers the allegorical method was a primary mode of scriptural interpretation. Allegory, rather than simply being a devise that promoted liberty and license with respect to difficult or mundane scriptural texts, reminded the reader that meaning is not confined to words alone, but that words refer to objects in the world that are themselves signs or symbols of a higher, invisible world. Allegorical interpretation reflected a mental milieu in which words, the world, and God together formed a whole through which meaning and sense could circulate. The act of reading was thus to draw us beyond the page to the "infinitely more eloquent things of nature," which are themselves an expression of a gracious creator. The church had not only the book of scripture but also the book of nature, a book in which all the elements of the natural world were tied to the divine inspiration and purpose.[6] At root, the allegorical approach aimed to remain true to Irenaeus's insight that "with God there is nothing without purpose or due significance." Nature, as this allegorical view presupposed, is never simply a collection of things, but is always already creation, infused with meaning, since it is part of God's creative, intelligent plan. Clearly this meaning, as the experience of Job suggests, need not necessarily or completely be intelligible to us.

Galileo, and with him the main trajectories of modern science, marked a departure from this approach when he argued that the natural world would no longer be interpreted in terms of its divine or spiritual referent. The language of nature, as Galileo proclaims in *The Assayer*, is the language of numbers and geometrical shapes. Things in the world, rather than being a potential gateway to a higher realm, were simply items within a finite, rational space.[7] The natural

world, to be sure, is meaningful. But its meaning is to be garnered through an examination of the mathematical relations that obtain between things rather than the spiritual relations that suffuse them from within and from without. The effect of this scientific development was to take the book of nature out of its alignment with the book of scripture. In fact, as Peter Harrison points out, without the separation between word and world made possible by the denial of allegory, the development of modern science, as the observation of the world according to systematizing principles, would hardly have been possible. Perhaps strangely enough, the demise of allegorical approaches to scripture was not precipitated by a secularizing assault on the church, but rather the efforts of Protestant reformers to establish the authority of scripture in terms of its literal and historical sense.[8]

The shift away from an allegorical approach to scriptural interpretation was of immense practical and spiritual significance. Allegory presupposes that the whole of reality forms an organic unity in which humans, because they participate in the material and spiritual realms, play an important role. As creatures made in the image of God we are exemplars, a microcosm of the universe, and thus form a bridge or conduit that mediates this world and the divine intention. In our activity we thus represent the opportunity to restore in ourselves the likeness of God and in so doing return nature to the harmonious state of creation:

> The process of the restoration of the divine similitude in man required the similitude between all created things to be restored. This was to take place in two ways: first, by knowing the world, the human mind could restore things to the original unity which they had possessed in the divine mind; second, by controlling and subduing the world, human beings would be restored to their original position as God's viceroy on earth, and harmony would be restored between those creatures within their constituency.[9]

According to several medieval writers, Adam at one time had perfect knowledge of the world because he saw all things in their similitude to God. He understood the world in terms of its divine intention and thus could promote creation's highest goal—the praise of its creator. Had it not been for the fall, his dominion over creation would have continued the harmony with which the creation began.

Modern science, which studied things of the world apart from their divine similitude, apart from the roles that they played in a larger divine drama, characterized knowledge in a radically different way. Advocates like Francis Bacon, often called the prophet of modern science, who insisted that science be freed from traditional and religious authorities, held that religion would be of little help in the practical matters of life on earth. Religious faith could help us with the spiritual fall from innocence, but it would be the mechanical arts and

sciences, now severed from the all-embracing context of creation, that would guide and enable our dominion over the earth and thus free us from the physically damaging effects of the fall. Human work, rather than being guided by and directed to the divine intention (consider the spiritual maxim that "to work is to pray"), became the expression of self-chosen aims and desires.

One lasting effect of the accomplishments of Galileo and Bacon was to consign the divine creator to oblivion, since the natural world was now to be understood in terms of itself rather than its divine significance. This development, which gave modernity its definitive stamp, was of tremendous importance because it altered the structures of meaning. Louis Dupré describes this alteration when he says:

> This removal of transcendence fundamentally affected the conveyance of meaning. Whereas previously meaning had been established in the very act of creation by a wise God, it now fell upon the human mind to interpret a cosmos, the structure of which had ceased to be given as intelligible. Instead of being an integral part of the cosmos, the person became its source of meaning. Mental life separated from cosmic being: as meaning-giving "subject," the mind became the spiritual substratum of all reality.[10]

To be sure, scientists would continue to speak of God, even refer to God as a creator. But the activity of this deistic designer is severely restricted to the role of jump-starting a universe that works according to its own mechanical laws. This God has no intimate, abiding relationship with the world, and so the world can no longer be considered as a created realm daily sustained and directed by the divine creative spirit. The rational laws that govern the material realm bear no intrinsic relation to the reason within the divine mind, because the nominalist philosophy that sits behind much of modern thought dictated that God is entirely inscrutable. God's domain is the supernatural, a domain that stands apart from the natural world we inhabit.

It is important that we not underestimate the cultural and spiritual significance of nominalism. Though this intellectual development, often associated with William of Ockham, was inspired by the desire to safeguard the omnipotence of God (God is entirely inscrutable and beyond our knowing), the effect of this thinking was to separate the order of creation from the character of God. Since God could do whatever God wanted, no parallels between the character of God and creation could be drawn. The result was that we could no longer speak of creation in terms of God's concern, delight, and involvement in a rationally defensible manner. The orders of creation are, even if meaningful, contingent, the expression of our mere attempts to know it.

We can see how nominalist science promoted a transformation in the religious mind if we consider the alteration of the meaning of the term *supernatural*. Up until the seventeenth century, *supernatural* was used in adjectival

or adverbial forms to highlight a change in the power to act. One acted naturally when one performed in accordance with one's ordinary or customary abilities. One acted supernaturally when acting in a way that exceeded or went beyond those abilities. For example, a stingy, mean-spirited person who suddenly acted generously would be said to be acting (with the help of divine grace) in a supernatural manner. In the seventeenth century this all changed as the term *supernatural* now came to refer to a separate realm existing "outside" the world as we know it: "With 'nature' now deemed single, homogeneous and self-contained, we labelled 'supernatural' that 'other' world inhabited (some said) by ghosts and poltergeists, by demons, angels and suchlike extraterrestrials—and by God."[11] God comes to be understood as an inscrutable, unpredictable being, massively large and powerful, that exists, if exists at all, beyond this life and world. Those wishing to talk about God would now find themselves in the uncomfortable position of having to justify their talk in the terms of a mechanistic worldview that banished God in the first place!

The eclipse of divine transcendence, once understood to be the source and goal of the world, created a hole that would be filled by human beings who now positioned themselves as the center or source of meaning and value. No longer microcosms of the creation, people are the autonomous beings who, in an expression of rational freedom, chart and direct the fate of themselves and the world. Again, the history of this development toward autonomy is complex. But what emerges is a self cut off from the world of which it is a part and a world shorn of all remnants of final causality. Nature, a self-regulating mechanism, stands as the arena upon which reason and technique can be exercised. In the view of Bacon, our mastery of the earth, in terms of possibilities laid out by the developing sciences and technologies, is essential if we are to repair the world and make it more amenable to human flourishing and purpose.

René Descartes is usually taken as the scapegoat for the self's disenchantment with the world. No doubt his philosophical method, encouraging as it did the self's enclosure within itself (the thinking ego is the source of certitude and thus the site in terms of which all other knowledge proceeds), militated against the sense of affinity, even identity, with the larger cosmos. The signs of disenchantment, however, were discernable well beyond the heady speculation of a few philosophers. In modern poetry and art it was clear that the artist's point of view originates within the artist rather than the objective places in which he or she resides, just as the modern novel is premised on the cultural condition that meaning is no longer given with reality, but is instead something that must be achieved or gained as a spiritual quest. Modern culture as a whole proceeds on the assumption that meaning and purpose, once given with the order of reality, now find their source and aim in the rational will of autonomous humanity.

We can see how different modern introspection is when we contrast it with Saint Augustine's claim that "truth inhabits the interior man." For Au-

gustine the inward turn opened the soul to the depth of reality as a whole, whereas for a modern Augustinian like Blaise Pascal it meant a confrontation with the dread of "eternal silence" and "infinite space."[12] As Augustine's *Confessions* makes clear, the premodern religious mind was inclined to interpret its existence in terms of an all-encompassing divine drama. In an important sense, it was the divine intention that secured the meaning of the self and world since each of our personal dramas took place within the larger story of the creation, fall, and redemption of the cosmos. The modern mind, however, having severed its transcendent mooring, was left entirely to itself, forced to construct meaning from out of itself. This new role of "meaning-giver," as Dupré describes it, was not born of promethean hubris, but was instead the outgrowth of an anxiety-ridden age. If the self is the source of value, what is to insure that we, as contingent beings, do not remain within the domain of uncertainty (Montaigne) or that the meaning we articulate is not in the end arbitrary? The existentialist cry that "life is absurd!" finds its root in this modern development.

The flip side of the self's disenchantment with the cosmos was the reduction of the world to the status of objects. Since the source of meaning is the scientific mind, the world of things has sense only insofar as it conforms to a scientific (increasingly mathematical) a priori. In order for the scientific method to be successful, among its first two requirements was the elimination of final causality, the idea that things have integrity of their own and are continually moving toward the realization of their own purpose, and the denial of the idea that the goal of things is directed by and toward God. In fact, Baconian control over nature rested on the assumption that nature has no purpose of its own. Things are objects. They bear no trace of the divine imprint. Given this assumption, it is but a short step to the technological ontology that reduces things to *pragmata*, items that exist for the purpose of our own betterment and enjoyment.

Though these philosophical developments are easily dismissed as arcane and as having no practical significance, the social and economic consequences that would follow from them were immense. When value has its source and goal in the autonomy of the individual, then the conditions for a new economic order emerge. Economies cease to be driven and constrained by a transcendent vision of justice and the good. Work ceases to be a vocation, but instead becomes a task for the procurement of money, which now becomes the universally acclaimed "good." How far this new economic way of thinking departed from traditional understanding can be seen in the fact that the virtue of the free-market economy, indeed its necessary precondition—the drive for personal wealth—was considered a vice in almost every spiritual tradition that preceded it.[13]

One way to summarize the harvest of modernity is to say that it reflected and abetted a crisis in meaning. Whereas premodern cultures understood

value to be embedded within the world, the modern mind separated fact and value, housing the former in an objective world and the latter in a form-giving subject. The sense of the world as creation, as ordered in terms of a divine plan, is largely gone. The sense of humans as microcosms of creation, as containing within themselves the responsibility to bring creation to its perfection in God, is eclipsed by the autonomous self who, with the aid of scientific technique, transforms the world according to a human plan. That this should all end in crisis is, perhaps, not surprising, for if the world is without value, are not we too, as members of this world, also without value? Can the value of the world, and thus its integrity and safety, be maintained without an appreciation for its sanctity?

When value is determined by a pragmatic human calculus, thought and action are no longer captivated by wonder, amazement, respect, or admiration. The result is what the philosopher Nietzsche once called a "small soul," a soul that has little connection with the wide world of experience. Personal identity and vocation, rather than being given with the structure of creation, are dependent on the courage of the self to make itself or, failing that courage, to make itself comfortable within herd existence. Not surprisingly, justice becomes an exceedingly thin concept since the idea of the good, the idea that an order exists apart from us and can judge and inspire human intention, is replaced by moral voluntarism. The good, as Grant claimed, is "castrated" since it is merely a feature of ourselves rather than the indwelling principle of reality.[14] Gone is the more ancient view that judged human action in terms of its fittedness within the teleological orders of nature or the scriptural view that evaluated life in terms of its alignment with the creator's will.

The eclipse of transcendence, and with it the loss of a sense of the good (philosophy) or a creator God (theology), transformed religious life in a most fundamental way. One way to describe it is to say that religion became more typographical and less sacramental. To speak of sacraments or, more specifically, to participate in a sacramentally defined universe is to live with the insight that the mundane is never simply mundane. Divine grace, though symbolized in the various actions of the church, is understood by a sacramental mind to pervade the whole of reality, since reality, before being an objective datum that exists to be studied and manipulated by a form-giving mind, bears witness to its own gratuitous givenness.[15] On the sacramental view (as with allegorical modes of interpretation), the sense of reality as creation is palpable because reality is understood in terms of its graced origin. And God as the creator is known in the very life movements of which God is the source. The character of God, and our ability to enter into the presence of the divine life, is not confined to the words of a scriptural text, but is revealed in the grace of work and play, life and death.

Whereas modern science and philosophy associated mystery with darkness and ignorance, the sacramental view of religion affirmed the traditional idea

that our knowledge of God must finally and lovingly embrace the mystery that God is. Divine mystery did not reside in the fact that God was intolerably far away, as the modern spectatorial view of knowing suggested. Rather it had to do with the very intimacy of God: knowledge and language fail because they cannot plumb the unfathomable depths of personality. The sacramental mind, in other words, finds it difficult to talk about God because it appreciates the impossibility of doing justice to the presence of God. To know this God, as contrasted with the God of the philosophers, is to enter into God's intention, which means a participation in the movement of the divine life: "For sixteen centuries, Christian discipleship had been understood as creaturely dependence transformed into friendship: from being subjects of the king of heaven we became his kin. To 'know God' was to know oneself drawn by love outpoured in Christ towards the heart of that imponderable mystery of life and truth 'quod omnes dicunt deum' (as Aquinas put it): 'which everyone calls worshipful.' "[16] Modernity, which separated theological reflection from spiritual life and practice, made the knowledge of God a feature of natural philosophy, with the inevitable result that God would now need to be justified and understood in terms of deistic mechanics. Now that God is no longer intimately involved in the sustenance of the natural (mechanical) world, religious thought and life would take place within a private, increasingly anxious, atmosphere conducive to the development of atheism.[17]

With modernity, religious life took on a more typographical character. We see this on a variety of levels: the Ten Commandments and the Creeds replaced the Seven Deadly Sins as the primary vehicle for moral instruction; individual piety rather than corporate ritual life became the focus of religious institutions; and the idea of religion, particularly Christianity, was identified primarily as a body of beliefs rather than a body of people.[18] Religion as a set of practical dispositions is eclipsed by religion as a set of ideas or doctrines. All of this is to say that the mind of the self, rather than the activity of a social group, comes to determine the way religion is understood. Religion becomes a more abstract affair, separated from the daily habits of its followers. The focus is less on restoring the divine image within humanity and thus fulfilling the practical role of humanity as microcosm of creation: "No longer was salvation considered to be a process in which the divine image in mankind was restored. Instead, the impulse to restore the divine likeness within was redirected outwards into the natural world, and scientific activity became an increasingly material means of obtaining secular salvation."[19] In effect, what modernity did was fragment the religious sensibility such that it could now be segmented and sequestered in particular areas of life. The wholeness of a religious sensibility was broken with the emergence of the secular, the emergence of a scientific worldview that required the severing of God and world. Creation as the all-encompassing order that united God, humanity, and earth was denied.

The Eclipse of Agrarian Life

Though rarely commented on, one of the most decisive practical developments in the movement away from the experience of the world as creation can be found in the transformation of agrarian into industrial and urban societies, a transformation that began in earnest in Europe in the eighteenth and nineteenth centuries, but is now being completed across the globe.[20] Agrarian life, with its concrete and practical engagement with the forces of life and death, makes possible the intimate knowledge of and sympathy for the earth that are indispensable in the care of creation. Urban life, on the other hand, since it limits the vital connection between humanity and the earth, has the potential to thoroughly insulate us from the grace of life and health. Rather than promoting the sense of our interdependence with each other and with the whole of creation, urban life daily confronts us with the work of our own hands and so gives rise to the illusion that we live from and for ourselves. We need to consider how this mass migration from the land to the city at the same time signaled a massive shift in sensibility and self-understanding.

For the ancient Greeks no less than for the ancient Hebrews, daily and practical engagement with the soil was the training ground for a good citizenry[21] and an authentic religious vision or leadership.[22] Put simply, life attuned to the requirements and the possibilities of the land promotes a unique sensibility and disposition within us, a sensibility that recognizes our necessary and beneficial dependence on others and God. As Liberty Hyde Bailey, once the dean of American agriculturalists put it, "A man cannot be a good farmer unless he is a religious man."[23] The reason is that the good farmer sees him- or herself to be the dispenser of the mystery and grace of God. To live intimately and sympathetically with the earth is to see that we are surrounded and sustained by gifts on every side and to acknowledge that the only proper response to this unfathomable kindness is our own attention, care, and gratitude.

It is dangerous, of course, to romanticize agrarian or peasant life. Indeed, there are many elements of past agrarian life that are clearly destructive and harmful and should not be emulated: sexism, xenophobia, and brutality, for example.[24] Nonetheless, working with the earth and making oneself vulnerable to its mysterious ways is to understand in the fiber of one's bones the difficulty and the hard-fought character of life. Grace is not cheap, nor does life come easily. To experience oneself at the mercy of weather, disease, and pests is to cultivate an honest, sometimes tragic, realism that is itself the prerequisite for an authentic estimation of ourselves. Failing this estimation, we invariably think more of ourselves and our plans than we ought. We deprive ourselves of an appreciation for the costliness of God's good gifts, if we see them as gifts at all. Agrarian life, because of its difficulty, makes it more likely that we will

become attuned to the cruciform character of creation, to the sense that the way of life is through suffering and sacrifice.

The roots of the transformation from an agrarian to an industrial and urban life can be found in late medieval Europe as common lands were privatized (various forms of "land enclosure") and the barter economy was replaced by a money economy. In the premodern period land served as the focal point around which the various forms of social life turned. Common ownership of these lands ensured forms of production and exchange that took into account our interdependence and kinship with a neighborhood of other people and natural organisms. As land came to be viewed as a commodity capable of producing goods of easily exchangeable monetary value, its significance as an organizing life-center was eclipsed. This transformation of land-use practice went hand in hand with the development of an industrial economy that would drastically alter our relation to and our sense of the earth. As summarized by Michael Northcott, "The development of an economy independent of land and human work produced a cataclysmic transformation in the human approach to nature, and to natural resources. It brought in its train a new morality which transformed human relations as dramatically as it transformed relations between humanity and nature."[25] Land as the organizing life-center was replaced by market forces.[26] Indeed, the value of land itself came to be defined through its marketability.

Since we cannot treat all the effects of the eclipse of agrarian practices, we will focus only on those aspects that bear directly on our capacity to think about the world as creation. Among these, one of the most important is the loss of the sense for our vital connection with the earth. To live an agrarian life is to live daily with the knowledge that our lives are maintained and supported by the gifts of the earth and that our use of these gifts demands their (sometimes painful) sacrifice. Not only our food, but also our homes and other material provisions, as well as a considerable amount of aesthetic enjoyment, find their source in the beneficence of the soil, water, and air. The earth, on the agrarian view, is not simply a resource, but rather a source of inexhaustible life. Though farmers may work hard to ensure that they can maintain a decent living, the experience of working the soil, tending livestock, and harvesting the crop is permeated by the full awareness that farmers do not through their own effort guarantee a successful livelihood. Instead, the agrarian mind is shaped and trained to realize that any success it achieves comes as the result of cooperation with a goodness that is already there. Failure, which is an ever-present possibility, follows from the inability or unwillingness to bring human desire and practice into alignment with the difficult ways of grace.

At the root of agrarian life we find the experience of waiting and watching, of letting go and trusting the grace of life to accomplish what we ourselves cannot perform. Farmers, though they prepare the soil, plant the seed, work

diligently to eradicate pests, understand that they themselves do not cause the seed to grow. The power of life is entirely beyond their or anyone's control. They know themselves to live at the mercy of forces of life and death that comprehend us, even if we do not comprehend them.

With good reason, therefore, we find in many traditional societies some form of ritual sacrifice. Clearly there are many functions tied to sacrificial activity, including expiation for wrongdoing and the reestablishing or affirming of communal relations between each other and the divine. But one of the more fundamental functions at work is to reflect a disposition of gratitude for costly gifts mercifully given. On this view, "sacrifice is the offering to God as gift that which comes from God."[27] The ancient Israelites, particularly as reflected in the Yahwist account, clearly had this disposition in mind. Indeed, as Theodore Hiebert argues, it was through their agricultural economy that service to God was most adequately rendered: "Israel's primary religious responsibility was the offering to God of the first returns of its investment in its fields and herds. Such a pattern of worship does not derive ultimately from the experience of divine activity in historical or political events, but from a sense of divine involvement in the orders of nature, in the processes of fertility that produced crops and offspring in particular."[28] We need to note the extent of gratitude, as well as the significant cost, reflected in the offering of the very gifts on which they depended. It is one thing to give out of one's abundance. It is quite another to give the best out of one's necessities. The pain of genuine sacrifice thus reflects and is an acknowledgement of the painful conditions of life itself—we kill to live. An so unlike a consumer mentality that comprehends the world primarily in terms of a personal budget, an agrarian mind-set considers the more extensive costs of ecological processes.

The sense of the grace of life here described needs to be contrasted with the sort of farming that dominates contemporary agriculture, a style properly called agribusiness. The agribusiness farmer finds waiting and trusting to be an onerous and frightening prospect. So, rather than submit to the grace of life, agribusiness farmers assault the earth with poisons, fertilizers, and heavy equipment so as to "ensure" maximum crop yield. This capitally intensive form of farming is destructive of the soil and water upon which all farming depends. To be sure, yields have been high in recent years. But they have been secured at the cost of unprecedented soil erosion, aquifer depletion, soil salination and toxification, cheap fossil fuels, species homogenization, cruelty to animals, the destruction of farming communites, and the loss of farming as a means of family life. These costs cannot be absorbed for long, and so agribusiness farming cannot be maintained over the long term.

A central problem with agribusiness farming is that it understands land simply as a resource to be used as quickly and as efficiently as possible for our own ends. It assumes that we do not need to submit to the grace of life, but can instead secure human life by force and ingenuity. More careful examina-

tion, however, reveals that this assumption is a lie, for we can no more control the force of life than did traditional peasants. At the most fundamental level, every farmer must watch and hope that the seed will grow. Honesty demands the recognition that no matter how ingenious and powerful we become, we live, if we live at all, at the mercy of a creative life spirit. Agribusiness, on the other hand, and as British agrarian Sir Albert Howard observed, lives by the principle of banditry: "The using up of fertility is a transfer of past capital and of future possibilities to enrich a dishonest present: it is banditry pure and simple."[29]

It would be naïve to think that all farmers have always lived cheerfully or sympathetically within the bounds of mercy. But when, at their best, they have, they have also lived and understood a central insight of the teaching of creation, namely, that creation as a whole is the expression of God's pleasure and that as members of creation we are called to cooperate with and serve the divine delight manifest in the bounty of the created order. To do this, as I have already indicated, requires a fundamental trust in the goodness of the creator. One of the surest signs of its accomplishment, however, will be a gratified and thankful life, character traits severely wanting in much contemporary agriculture.

Another crucial effect that followed from the eclipse of agrarian life was the growth of ignorance with respect to the requirements and responsibilities of life. One of the striking, as well as one of the more damaging, effects of urban life is the amount of ecological destruction caused by ignorance and blindness. Many urbanites do not see, let alone understand, the effects of many of their actions. Consider simple acts like putting garbage to the curb or adjusting the thermostat dial. Each act presupposes and entails many other acts that the urbanite cannot see and does not need to consider, yet are clearly of consequence. How much waste and energy went into the production of a product which has now itself become waste? Where does our waste go? How much of it is there, and what are its effects on the landscapes and lives where it is finally deposited? Similarly, how is the electricity used to heat or cool our homes produced and to what effect? Is the source of energy limited, and if so, how? Urbanites, for the most part, let others worry about these questions. The problem with this approach, however, is that there is ample room for evasion, misperception, and irresponsibility. We too easily assume that someone else will take care of potential problems, if we acknowledge a problem at all.

The closeness and scale of agrarian life make this sort of ignorance and evasion much more difficult. An agrarian economy is focused on subsistence, which means that the primary responsibility is in procuring and maintaining the conditions that allow for the satisfaction of basic needs. Clearly, surpluses are welcome, but they are not the expressed goal, since they may require that we compromise the long-term health of the land or the happiness of coworkers to get them. Agrarianism presupposes that we will live with the effects of what we do, which means that we will not pass the responsibility for sloppy or greedy

behavior onto someone else. The agrarian knows that improper maintenance of an energy source, such as wood, will mean future deprivation and want. Disrespectful treatment of livestock will result in ill health and the consequent loss of income or food. Excessive waste production will result in the contamination of land upon which the farmer depends.

A further feature of agrarian practice is that it focuses our moral and vocational vision in ways that heighten the sense of ourselves as created beings. A farmer who occupies land and is determined to live and work within its benefits, and to do so without harming the health and longevity of the land, must develop a particular kind of discipline that has virtually disappeared in modern urban life: patient, sustained, attentive care. What is called for is a manner of work that, in the words of Wendell Berry, "gradually removes one's self from one's line of sight."[30] This removal of self is really the outcome of a disposition and commitment to love the place one is in and to care for it over the long term. Self-removal is not a form of self-immolation or self-hatred, as critics of ecological measures often suggest, but is rather a reflection of the requirements of care. As long as I make self-desire the matter of first importance, it becomes difficult, if not impossible, to expand the range of sympathy and care that are prerequisite for wholesome, communal life. The paradox, of course, is that in taking care of the earth, I, at the same time, provide for the care of others and myself.

The difficulty of agrarian discipline is that one must "stay the experience and study and understand the consequences—must understand them by living with them, and then correct them, if necessary, by longer living and more work. It won't do to correct mistakes made in one place by moving to another place, as has been the common fashion in America, or by adding to another place, as is the fashion of any sort of 'growth economy.' "[31] There is, as Berry notes, a basic impropriety about a culture that foregoes this sort of attunement and discipline to place. Should we not see in such impropriety the conditions for an exploitative mind?

It has often been the pattern of civilizations to spoil the places where they are, on the assumption that there will always be other places that will provide for their wants. Consumers assume today that there are no limits to their wants and that the earth, combined with our own technological ingenuity, will always be able to provide for these wants. This assumption is not only unrealistic, but also naïve, since it forgets or ignores the fact that the sources of life can be severely compromised or irreparably harmed. Land that has been turned to desert, often as the direct result of poor farming practices, will not become productive again simply because we want it so.

Perhaps the most damaging effect of so much urban life, however, is that it short-circuits the flow of interdependence that characterizes life. Propelled by the desire for autonomous living, for life on our own terms, we come to believe that we are in fact independent and that the world can be adequately

understood in terms of its various parts rather than the whole. Thinking ourselves to be independent, we proudly succumb to becoming autocrats who believe the world and all that is within it exists for our own pleasure. What will serve as the catharsis that will reveal our presumption and arrogance and remind us of our more fragile or, as the Greeks believed, our "properly tragic," place in the world? Agrarian experience, as when the weather turns bad or when disease overruns our best-laid plans, teaches us to cut short our pretentious striving and live more humbly upon the earth.

Viewed practically, autonomy is an illusion. Berry has put the matter succinctly: "There is, in practice, no such thing as autonomy. Practically speaking there is only a distinction between responsible and irresponsible dependence."[32] We live *from* the lives of others, and, if ecologists are to be believed, we also live *within* the lives of others since we share the common elements of food, air, and water. What is in me and supports my life was, at another time, in someone else. Webs of interdependence, and the history of their interactions, constitute every life form. The merit of agrarian life is that it cultivates this sensibility daily since it experiences practically and concretely the struggles and the benefits that follow from our interdependence.

Though we may bite the hand that feeds us, it is surely the mark of wisdom to care for it instead. How will we care for what we do not know or appreciate? This is the central dilemma of urban life. Since we are now raising generations of children who are ignorant of where food and energy come from and under what conditions it is produced, we cannot seriously expect them to care for the soil and water, to tend and serve the garden of life.

Questions Concerning Technology

It is often said that technology, or more specifically technological devices such as computers, telephones, televisions, robots, tractors, and so on, is neutral or benign since these devices are nothing more than tools in the service of their human inventors and masters. We decide, based on human values, when, where, and how these instruments are to be used, and thus their invention has not fundamentally altered our relation to the earth and to each other. On this view, the ubiquity of technological devices in our work and in our leisure would represent nothing more than a magnification of practices and attitudes that have always been with us—use of "smart machines" in our factories and farms represent a turbocharged version of ancient hand tools that did the same job, only much slower.

What this view overlooks is how a technological device, often in completely unforeseen ways, can transform basic attitudes and practices. Consider the invention of the telescope. Though scientists had speculated about the nature of the heavens for centuries, some even arguing that the earth was not the

center of the universe, the telescope made possible precise measurements that would henceforth preclude the supposition that the earth is the central axis around which the universe turns. Beyond the scientific implications that followed from this discovery, there would also be serious moral and spiritual repercussions. If the earth, and therefore also the whole universe, is given over to the random, perhaps arbitrary, motion of celestial bodies, then the question of its value is cast in an entirely new light. Nietzsche's famous aphorism of "The Madman" put the matter succinctly when he asked if the unchaining of the earth did not at the same time unhinge preestablished or eternal meaning: "Are we not straying as through an infinite nothing? Do we not feel the breath of empty space? Has it not become colder?"[33] The discoveries made possible by the telescope, in other words, forever changed the way we think about ourselves and our place in the universe. In seeing farther, we not only saw more clearly and more honestly. We saw differently. And so what began simply as a perceptual aid resulted in an ontological shift—the world and we ourselves could no longer "be" the same because of the discovery made possible by this magnificent tool.

Most of us do not engage the world with telescopes or other scientific instruments. But we do negotiate our lives increasingly in terms of the more-prevalent gadgets and devices that have changed the nature of our experience in profound ways. We must ponder the fact that our activities and words have taken on new meanings in the last several decades, for in that short time period we have seen the average household move from being equipped with a telephone and radio to one stocked with televisions, fax machines, modems, answering machines, air conditioners, treadmills, microwaves, entertainment centers, camcorders, and their accompanying remote controls. As Sven Birkerts put it, "In less than a half century we have moved from a condition of essential isolation into one of intense and almost unbroken mediation. A finely filamented electronic scrim has slipped between ourselves and the so-called 'outside world.' "[34] The invention of the wireless telephone and internet now means that we need not (perhaps cannot) be alone even when we are alone on a walk. Whereas in the past we tended to engage the world and each other in terms of socially given and personally and practically developed traits, now, as "wired" and "connected," we meet the world in terms of a technological filter that has little personal relation to or history with us.

Given a ubiquitous technological presence, we need to consider its effects in the shaping of our experience. Clearly it would be preposterous to say that all technology is bad. But is it not naïve to think that particular kinds of technology, or the development of a technological mind-set, might not dramatically alter life and the sensibilities that govern it? One change in sensibility can be seen in the enframing character of technological media that further contribute to the modern disenchantment with the world. We do not engage reality on its own terms, but rather as packaged or framed by someone else and in terms

set by the limits of the medium. Not only do we feel cut off from a direct experience with reality, we now wonder, given the power of media to manipulate image and information, if what we see is really real. We have become spectators of a world of someone else's invention and control, particularly when we realize how many hours are spent weekly in front of a television or computer screen. The danger with our reliance on these media is that we are reduced to the role of spectator. As spectators our knowledge of reality, and thus our ability to engage it practically or honestly, is impaired because a sustained, direct encounter with reality is compromised. We lose the deep, complex, multifaceted character of the world because we see only surfaces that have been packaged and filtered for us by others.

Spectator knowledge is a deficient form of knowledge because it does not see or appreciate the interconnections, entailments, or implications that follow from our knowing. Knowledge is reduced to bits or data, which means that the context for understanding is limited to the moment of the glance. Consider how a stylized portrait of life–the television sitcom, for instance–contrasts with the complexity of our own experience (if we have the time to reflect on it). The media image selects desirable features and leaves out of account the history that made possible the moment. It also frees us from the need to consider the consequences that follow from the image construction since we do not need to live with the effects of the image. Knowledge is depersonalized, abstract, separated from the practical flow of our lives, and so can be added or deleted without too much trouble. It also verges on romanticism. If we do identify with the image, however, we are deceived, because no life can match the technological construction. The complexity of real life, a complexity that must include a being's history and environment, simply cannot be represented or duplicated in the image since the nature of media is to select, and thereby also discard, parts of a life. Media, therefore, cannot be a substitute for the sustained, direct engagement with the world and with each other that would have been more likely in traditional and premodern societies.

Participation, particularly when it is sustained, is the more fundamental and more realistic relation to reality. Yet it is precisely our participation that a spectator role precludes. Though we may be able to observe a common object such as a house, entertain various house plans and designs, the fact that many of us have no experience with the construction and maintenance of the house means that our perception or evaluation of it will be deficient and distorting when compared to a builder's perception and evaluation. Though we both have the same image in mind, what we see is not at all the same because the builder's participation in the construction or maintenance of the house, his or her intimacy with the characteristics that make for a good house, means that he or she can see qualities, responsibilities, and possibilities that are unknown to us. As spectators it is more difficult to be careful or considerate homeowners because we lack the participatory engagement that comes with working on it.

Though we may be able to talk about the house in terms of our likes or dislikes, we do not have the ability to speak intelligently or responsibly about what would make the house better or what traits would make us more suitable homeowners. We should ask, then, how can we be capable and considerate dwellers on earth if our position with respect to it has, in many cases, and because of a technological filament, been reduced to that of the spectator?

Modern technology forces upon us a new understanding of space and time. The feeling of life, its moral, spiritual, and physical bearing, has changed. Here we might consider as an example the invention of the automobile. Getting behind the wheel means that distance has decreased and the pace of time increased. At the same time, the sense of contact with the earth and with others is diminished since closing the door not only signals our independence and freedom, but also dissimulates our necessary dependence on others. The Amish, for example, in rejecting the ownership of cars, are not simply stubborn or quaint. Rather, they recognize that the automobile represents a telling shift in the way we understand and enact our relatedness with others and in the way we perceive our own identities. Does not the ease of our mobility contribute to the profound loss of place that characterizes so much of our culture, and does not this loss feed the inattentiveness that contributes to the destruction of unknown and unloved spaces? Does not the simple facility of power, as when we merely depress the accelerator, result in an inflated sense of our own power?

One of the fundamental ironies of the technological era is that, while it has abetted the information age, it has at the same time reduced our ability to truly know the world. Information is often superficial since it appears in decontextualized, easily digestible bytes. The medium that increases our access to knowledge thus at the same time decreases our grasp of the world's significance. Moreover, on the level of consciousness we see the gradual diminishing of powers of attention as we are forced to respond quickly to images that appear only briefly. The disposition of patience, so vital to the formation of deep relationships, is compromised by the quick (rash) response or the half-attentive glance.

If in the past knowledge was an achievement that required toil and effort, that is, knowledge that grew out of concrete experience and training, the ease of the information age renders our knowing cheap and distorting. Never before has the mind been able to entertain such a vast panorama of information. Yet the problem with this entertainment-style knowing is that it is thin since it does not grow out of the life of practical involvement. It is knowledge without reason or purpose, without deep significance, and thus it is easily misapplied or misunderstood. It is, perhaps, the very superficiality of our knowing that best explains the irony that today we have more information about how the natural world functions than ever before, yet also are guilty of its most widespread destruction. We seem to see the natural world only as a resource for

our economic or aesthetic enjoyment and thus forgo the deep perception that would see in things the hand of God. Consider here the words of Elizabeth Barrett Browning:

> Earth's crammed with heaven,
> And every common bush is afire with God;
> But only he who sees takes off his shoes.[35]

Should not the effect of our knowing lead to understanding, appreciation, affection, and care? Should it not train our minds into the sympathetic faculty that better (more honestly) places itself into alignment with its object?

Historians of technology regularly show that behind technology's development we see the urge to control, the desire to overcome chance. As such, technology can represent a technique of falsification since, rather than aligning the mind with its object, the goal is to subdue and control the object for our own ends. As Jacques Ellul once put it famously: "Technique is the translation into action of man's concern to master things by reason, to account for what is subconscious, make quantitative what is qualitative, make clear and precise the outlines of nature, take hold of chaos and put order into it."[36] There is in the technological drive a massive impatience with the idiosyncrasies of the world, the sense that reality is unruly and therefore inhospitable to human flourishing. It is as though we must force upon ourselves a requisite blindness and ruthlessness so as to make our existence here palatable. This is why Francis Bacon insisted that we modify the world: "Nature must be 'bound into service' and made a 'slave,' put 'in constraint' and 'molded' by the mechanical arts. The 'searchers and spies of nature' are to discover her plots and secrets."[37] Unlike the artisan who works from an affinity with nature learned through years of attentive practice, the masters of technology, at once proud, fearless, and determined, manipulate the world according to their own ends.

We can understand the novelty of modern technology by contrasting it with the ancient concept of *techne* from which it derived. According to the Greeks, *techne* is a form of productive activity that brings things into being. This bringing into being was a disciplined and ordered affair since the producer needed to be cognizant of the greater order or design in terms of which his or her activity was possible. *Techne*, in other words, was always tied to a preestablished intelligible order (*logos*) that was in the world and constrained our making. The modern term *technology*, itself first coined in the seventeenth century, departs from the Greek sense because the modern master of *techne* is in no way chastened by the *logos* that is in the world. The technician, now understood as an autonomous, rational agent, is free to engineer the world however he or she chooses.

The modern technological mind, in short, destroys the sacred, divests the world of its sanctity or integrity, since its overriding goal is to transform the world into means for decidedly human ends. Strikingly enough, however, this

does not prevent the technical mind from fashioning a new religion: "The individual who lives in the technical milieu knows very well that there is nothing spiritual anywhere. But man cannot live without the sacred. He therefore transfers his sense of the sacred to the very thing which has destroyed its former object: to technique itself. In the world in which we live, technique has become the essential mystery . . ."[38] Though technology destroys the possibility for traditional religious life by denying sacred limits, it at the same time becomes aligned with the religious impulse of salvation. Not surprisingly, in an age that has forsaken the holy, the view is widespread that technology will save us.

The religious character of technology has long been noted by historians. The founders of modern science and technology frequently described their work and their motivation in religious terms. At times their project was identified with the quest to restore or recover the divine likeness in humanity lost with the Edenic fall. At other times it suggested that our essential work was to build the garden of paradise here on earth. Sixteenth-century philosopher Giordano Bruno made the connection between religion and technological innovation explicit when he said, referring to human intelligence and ingenuity:

> This capacity consists not only in the power to work in accordance with nature and the usual course of things, but beyond that and outside her laws, to the end that by fashioning, or having the power to fashion, other natures, other courses, other orders by means of his intelligence, with that freedom without which his resemblance to the deity would not exist, he might himself make himself god of the earth.[39]

Bruno's description is merely the beginning of a long line of scientists and technicians who believe that in their work they are carrying out the biblical mandate that we "subdue and dominate" the earth. At line's end, as scientists are working toward the cloning of human beings, the impulse to become one with God, to manifest in ourselves the divine prerogative and power, is just as strong, if not stronger.[40]

To suggest that there is a historically strong link between technology and religion does not obviate the need to consider the character of this new religion. How does it reflect or distort traditional religious aspirations from which it comes? Does it fulfill or warp the sense of human vocation that emerges from the character of creation as suggested by scripture and the theological traditions? We often see within modern technology a millenarian thrust that sees the end of this world and the beginning of a new world as near at hand. With this emphasis we can observe the felt need to fulfill biblical prophecies of all kinds, ranging from the conversion of all heathens and the restoration of Jerusalem to the annihilation of the earth by fire and the final battle of

Armageddon. Aspirations of this kind are often fueled by a fatalistic attitude that allows for the destruction of the created order. We see this in the views of preachers who support nuclear buildup and conflict because it will hasten the believer's reunification with Jesus, in the view of former Interior Secretary James Watt who supported the rapacious exploitation of America's natural resources, since the earth is expected to survive for only a few short years, and in the collective imagination of space explorers who want to leave this wretched earth for a home somewhere else.

It is fair to say that in each of these examples we see a distortion of Judaism and Christianity since they presuppose a creation that is either not good or beyond the pale of redemption. They represent a religious vision, often gnostic in its orientation, that has forsaken the divine mandate to care for the creation. Clearly there are elements within the religious traditions that speak of the evils of this world and life and the need for their overcoming. But when prophets of technology suggest that the whole of creation is itself evil or outside of God's concern, they violate the fundamental message of creation and the incarnation, that the created order is the medium of God's self-expression and the dwelling place of the divine life (cf. Rev. 21:3–4). To be sure, elements within creation have and can distort God's intention and thus are properly termed evil. But this in no way entails the abandonment of creation or the diminishment of creation's need for redemption.

Another key aspect of the religion of technology is the explicit goal of the perfection of humanity. From its beginning, modern science and technology has assumed that this world is fraught with danger and imperfection and that it therefore needs to be improved, even remade. In our own time we see this obsession carried forward in the Genome Project that will enable us (we hope) to eradicate diseases of every kind, perhaps even death, and in biotechnology research that promises to invent drought- and disease-resistant plant species, all the while increasing yield and nutritional benefits. Clearly we have entered into a new dimension in human history as we anticipate the end of a time when human life is constrained by the vicissitudes of our own biological condition and embark on a period wherein we will be the masters and engineers of our own and the world's fate. My point is not to argue for the end of genetic research, but that we move with greater caution and humility. From an ecological standpoint, altering the genetic structure of organisms is a very complicated—and potentially very dangerous—affair, particularly since it has taken millions of years of evolutionary development to bring about the relatively stable habitats we now enjoy and because affecting one organism always also means affecting many others, often in unforeseen ways. To alter species, in other words, is to run the risk of compromising the stability and integrity of habitats. Following Edward Wilson, we should say that the best response to such "technomania" is caution, for

> to travel even partway there would be a dangerous gamble, a single throw of the dice with the future of life on the table. . . . Each species has evolved to fit together with certain other species in ways biologists are only beginning to understand. To synthesize ecosystems on bare ground or in empty water is no more practicable than the reanimation of deep-frozen human corpses. And to redesign the human genotype better to fit a ruined biosphere is the stuff of science horror fiction. Let us leave it there, in the realm of imagination.[41]

The language of this new religion suggests that we are no longer content to be Adam and Eve, wanting instead to be God. That this view is inspired by hubris is clear, since it presupposes that the deficiency of God's creation can be fully understood and corrected by us. Again, we should note that there are elements within the Christian traditions that speak of human beings as partners in the work of the redemption of creation. As partners, however, we should not assume that we can usurp the divine intent and replace it with our own. The danger in this is that we will presume to know, much like Job's friends, all that is best for ourselves and for others and forget our prideful nature. The testimony of the scriptures, as well as the witness of our bloody history, ought to serve as a clear reminder that self-promotion and progress often go hand in hand with the exploitation and suffering of others. However we develop our technologies, propriety demands that it be worked out with sufficient regard for the complexity and mystery of the world. Precisely here ecological science can be of great service because it alerts us to the biological complexity of our life together.

These brief remarks concerning technology suggest that, even as scientists align themselves with religious aspirations, this in no way guarantees that their work agrees with or promotes the significance of creation. In fact, one of the major effects of technological design is the diminishment of our capacity to understand and experience ourselves and the earth as members of a created whole. If, as the philosopher Martin Heidegger suggests, modern technology is the cultural form that enables the transformation of the world into resources available for our own control, then it may well be the case that technology, since it represents one more instance of the banishment of God's creative spirit and intention, is the most sophisticated form of irreligion masked as religion.

Posing the above questions concerning technology in no way means that all technology is bad or evil. What I have argued is that a technological, instrumental mind-set of a very particular sort has become the defining force of our time. What we need to accomplish is the difficult task of submitting the technological complex to a thoroughgoing critique that judges it in terms of the wholesomeness of creation, in terms of a creation ontology. Should not the test of all technique be whether it promotes Sabbath *menuha*, the enjoyment

and celebration of the being of things? If it does, then certain technological developments, as in fields of medicine and production techniques, can clearly be claimed as good. What we need is an understanding of technique and technological innovation not obsessed with the control of the world, but instead steeped in its attention and care. Here the model of God as creator can serve as the paradigm for our own creativity: our cocreation with God, rather than presupposing a controlling and dominating agency, should be patterned on God's being-for-another, on God's "making room" for another to be.

Abstract Culture

One of the clearest signs of a healthy culture is that it maintains and celebrates the webs of interdependence that make for the flourishing of life. Two kinds of interdependence are especially important: physical/biological and historical/traditional. To celebrate our biological interdependence is to acknowledge and respect the life-giving sources of food, energy, and water, without which we could not live. To celebrate our historical interdependence is to remember and cultivate the ties of community and tradition that infuse biological life with spiritual and moral significance and that guide cultural development with the memory of past success and failure. In both cases, one of the major tasks of a culture is to broaden the scope of its members' vision and sympathy, for it is this broadening that challenges the dishonest assumption that as individuals we live alone, without biological or communal kinship. We necessarily live in time and place, which means that an adequate understanding of ourselves as individuals and as social groups demands attention to the temporal and geographical contexts that surround and enable our lives.

A culture that cultivates its webs of interdependence is a concrete culture because it firmly plants the feet and minds of its members within their life-giving contexts. An abstract culture, on the other hand, is one in which the range of interdependencies are either forgotten, denied, or scorned, the assumption being that persons float above their life-giving contexts, dipping in and out as consumption patterns dictate. That the dominant trends of our own time tend toward forgetfulness, ignorance, or scorn can be seen on a variety of levels. Wendell Berry, while commenting on social trends and aspirations prevalent in the mid-twentieth century, has described the inspiration behind the will to abstraction in the following:

> People had begun to live lives of a purely theoretical reality, daydreams based on the economics of success. It was as if they had risen off the earth into the purely hypothetical air of their ambition and greed. They were rushing around in the clouds, "getting somewhere," while their native ground, the only meaningful destination,

> if not the only possible one, lay far below them, abandoned and forgotten, colonized by machines.[42]

At the heart of the will to abstraction we find a flight mechanism, a desire to get somewhere other than the place and time where we now are. Where exactly we are going is not clear, so long as the place we go to has sufficient money, comfort, and ease. Of course, what would count as "sufficient" cannot be predetermined. Presumably we will know it when we get there.

The flight of abstraction is fueled by impatience and ingratitude and is permeated with a profound disrespect for the past (progress demands it). It is maintained by the sense that where we are and what we have inherited are not good enough and it is exacerbated by media messages suggesting (shouting) that the clearly better is forever on the horizon. Since our present time and place are precisely what need to be overcome, we should not be surprised that a culture of abstraction has little appreciation for the moment, little skill in the art of life and its enjoyment, little time or support for "profitless" knowledge or "useless" knowledge that will not clearly help us get ahead. Berry summarizes several of the traits of this artificial culture as "marriage without love; sex without joy; drink without conviviality; birth, celebration, and death without adequate ceremony; faith without doubt or trial; belief without deeds; manners without generosity; 'good English' without exact speech, without honesty, without literacy."[43] The list could be extended to include intelligence without purpose, success without accountability, and freedom without responsibility. But the end result is the same. An abstract culture is a collection of individuals intent on "bettering themselves" and having little regard for the wider contexts that support and make their ceaseless striving possible. Indeed, personal and cultural success, as our histories so clearly show, will often demand that we sacrifice these life-giving contexts.

Another way to describe an abstract culture is to say that its members have undergone a narrowing of vision and sympathy. This narrowing is reflected and abetted in practical living conditions that promote insularity and blindness with respect to the larger contexts of a healthy life. The suburbanization of life and landscape, for example, described by James Kunstler as "depressing, brutal, ugly, unhealthy, and spiritually degrading,"[44] has gone a long way toward accomplishing this narrowness since it is predicated on the intolerance of diversity (the houses and the families all look the same), the necessity of cars (there are no communal places to walk to), and a blindness to the problems of the rest of the world (manicured yards conceal the blights of poverty, land degradation, and economic injustice). For many people, the feel of a neighborhood, with its communal responsibilities and joys, has never been realized. Suburbia, with its uniform and antiseptic living arrangements, is the culmination of the abstract ideal, a world driven almost exclusively by manufactured desire. In this world a person's history does not matter or factor into decision-

making, because for the most part planning and purchasing decisions are driven by monetary considerations that prize efficiency, standardization, and cheapness over quality and that prize homogeneity over individual expression. Geography, in turn, is beside the point, since all that we need to live can be imported and purchased at the store. While efforts are being made to reconnect urbanites and suburbanites with each other and with their regions (as in the "new-urbanism" movement), the fact remains that many housing developments exist without reference to the needs of particular people or places.

One way to better appreciate the abstract character of our culture and to see its divergence from more traditional cultures is to consider our understanding and treatment of waste. It is important to understand that waste, much like its corollary, consumption, has not always meant the same thing. Prior to the industrial age, households participated in economic cycles that were themselves patterned upon natural cycles. Reuse of goods, or recycling as it would later be called, modeled natural processes in which items no longer useful in one domain could be modified to become useful somewhere else. Suggesting more than frugality, reuse practices acknowledged that our economic lives take place within a larger ecological order that is cyclical—what is waste or excess in one part of the system is food or fuel for another. And so we see that waste was not really waste as we understand it today, since nothing was entirely useless or without value or function. The sense that products should be discarded or thrown away was simply anathema. To throw something away reflected ingratitude and ignorance about the further possible uses of goods.

Industrialism broke this cycle. The material of the earth is now transformed by human labor to make products that can be sold, then readily discarded so that new products can take their place. Indeed, products often must be discarded, since they were originally made with an eye to their obsolescence and thus are not easily adaptable for further use. Nor, given their synthetic (often toxic) character, are they potential nourishment for the ecosystems in which they finally find their homes. Our economy, now severed from the patterns of nature, would be premised on a "throwaway society," a society dedicated to self-satisfaction and freedom from the annoyances and inconveniences of daily, concrete life. Writing of the twentieth century, Susan Strasser notes: "Convenience—brief 'vacations,' easier work, and freedom from attention, care, and responsibility—joined cleanliness as a selling point for a wide variety of products. . . . Spotlessness and ease, once attainable only with servants—if at all—could now be achieved by buying things and by throwing things away. With Kleenex, you could always have a clean handkerchief."[45] Our treatment of "goods," now understood as disposable, meant that we had taken up a new relationship to the materiality of our lives. Since we no longer understood our practices as interdependently enmeshed with the natural world, we proceeded on an assumed freedom from the care and responsibility for the effects of our disposal. We can take and dispose without any concern for the effects of our

taking and disposing. In the meantime the trash, often toxic or nonbiodegradable, simply builds.

The severing of connection between human processes and the processes of the earth can also be seen in the general ignorance about the vital practice of food production. Fewer of us than ever before have an appreciation for the fragility of the processes of life and death, and so we arrogantly assume that food will always be available whenever we need it. Indeed, given the widespread ignorance about basic sustenance practices, it is safe to say that most of us, when provided with the basic tools and the requisite amount of land and livestock, would not be able to feed or care for ourselves. As we have demanded release from the practical encumbrances of life, so we have extricated ourselves from the habits of attention, patience, and work that accompany the growth of food, the maintenance of a home and its economy, the rearing of children, and the conservation of local communities and lands. As with so many areas of life, we now assume that there will be a specialist somewhere else who we can hire to do for us what we cannot or will not do for ourselves. The danger in this flight from and aversion to the demands of practical living skills is that we will, most likely without knowing it, destroy the concrete conditions—fertile soil, adequate water, relatively stable weather, a vibrant farming community—necessary for our own sustenance and growth. In our haste to live a life of ease and comfort, we will forego the demanding labor and forget the inescapable fragility of our lives and so bring ruin to ourselves and our landscapes.

One of the primary driving forces that abets our detachment from the contexts of life is the phenomenon of careerism. Having abandoned the sense of work as vocation, people now pursue the career that will yield the most money or afford the greatest opportunity for personal advancement. Given the indefinite character of money (its meaning is primarily displayed in its use), it is harder to know exactly what all our work is finally for. We work frenetically and for longer hours, often at jobs we don't especially enjoy or find fulfilling, all for the financial reward. Those jobs that don't pay as well we see as degrading and beneath our dignity, no matter how necessary they are (e.g., garbage disposal, child- and elderly-care workers, farmers). The loss of the sense of vocation is thus linked to a crisis in purpose. Many work not as a means of life but for the procurement of money, which will then enable us to buy the things in life we are told we need to make us happy. Since, for the most part, we construct our identities in terms of the work we perform, and given the superficiality of careerism, it is inevitable that we will also come to see our identities as ephemeral and cheap. Our time and our energy are up for sale to the highest bidder.

Careerism is also tied to a crisis in meaning. Because careers demand specialization, it follows that the tasks and roles we perform will be increasingly cut off from the tasks and roles performed by others. Each of us, in other words, sees and works within an isolated sector of the economy. Of course,

not all specialization is bad. What we need to observe, however, is that widespread specialization (especially when combined with consumerism) makes it likely that people will lose a sense for the larger economy and its overall aims and also be ignorant of how what others do aligns with their own work. Compared to traditional societies in which economies focused on the household and where workers performed a variety of integrated tasks, the contemporary worker performs his or her labors in a meaningless vacuum. The wholeness and interconnectedness of economic and vocational life are broken by the specialization of our lives.

In addition to the crisis in identity and meaning caused by careerism, we must also note how an economy no longer tied to nature or to personal vocation promotes irresponsible practices. If we were prepared to perform a variety of roles, or could at least sympathize with the work and aims of others, we could better appreciate the difficulties and the possibilities that emerge from our work together. But as unsympathetic to what others are doing and ignorant of the overall aims of our collective life (is there even such an aim?), it is easy for damaging practices to go unnoticed and for the work of restoration to remain undone. Who assumes responsibility for the cleanup of a toxic spill? Clearly not the corporation itself, since it is made up of shareholders who will never see, let alone live with, the spill. Not the company employees either, since they are, after all, only employees. Those local people who do have to live with the spill, however, are helpless, since they have no connection with the company and since the company has no personal connection with them.

In this brief description of features of our contemporary culture, we can see that abstraction leads to neglect and disregard, a general inconsiderateness toward the needs of others. It isn't that we set out to be cruel or unkind. Rather, the very character of our lives, the practical shape of our living arrangements and the advertised goals of our striving, limits our capacity to appreciate and thus address the need around us. Urban and suburban life frequently have the effect of cutting us off from the contexts on which we necessarily depend, with the striking result that people can be fully aware that their environments are deteriorating, their energy sources shrinking, their elderly dying of neglect, their children growing up cynical and disaffected—and do little about it. After all, how can we care for that which we do not understand or that which is far removed from our daily concern and engagement? People will not change their behaviors and goals if they do not see, fully understand, and live with the effects of what they do.

This observation is of crucial importance if we are to consider seriously the meaning of creation and our vocation within it, for if our task is to care for the earth, to promote its well-being as an expression of worship to the creator, then we need to be clear about how current cultural conditions may militate against the possibility for care. To care for another assumes that we first see and appreciate the need for what it is, understand ourselves as impli-

cated in the need's satisfaction, and then work on the conditions necessary for its alleviation. The abstract, insular character of our culture makes such care extremely difficult, in some cases impossible, for we cannot care for the sources of life if we are mostly blind and ignorant about them.

The Irrelevance of God

Perhaps the most serious obstacle to a recovery of the full meaning of creation is the growing irrelevance of God. To be sure, many in our time speak the language of God and religion in hymns of adoration and praise, the litanies of petition and lament. But it is, for the most part, a forced language, ornamental and hollow, since there is little in our practical experience that feeds and sustains such language, that keeps it honest. We are unaware that our language is false because the conditions that would enable us to recognize or feel with honesty and depth the presence of God are mostly gone. Though we may claim that God exists, it does not matter, since the patterns of our day-to-day lives, as well as the goals of our culture, proceed on terms set by economic demands and without reference to God.

It has often been suggested that religious belief hangs on the freedom of the will. What deserves noting is how little practical freedom any of us have (this in spite of the expressed modern aim of making us free!). Having secured our rights and freedoms we have, often unknowingly, given them up to economic forces. In a few small private pockets of life we may claim some measure of intentionality or choice, but for the most part we feel trapped by economic factors—mortgage payments, threat of unemployment, credit-card debt, stock-market fluctuations—that rule our lives. Few decisions that we make, whether in the domains of employment or leisure, family planning or civic responsibility, are not directly affected by economic constraints. Our overriding questions have become, "Can we afford it?" and "Is it in the budget?" In the sphere of practical life, economic demands (often engaged at a frantic pace and generally perceived to be beyond the control of anyone), far more than personal decision, determine social and personal life.

It would be naïve to think that contemporary religious life has not been affected by this economization of practical life. For many, religious life runs parallel to consumer life, each guided by similar constraints and possibilities. We pick and choose religious moments as our schedules and checkbooks allow. Those who do seek an intentional religious life, a life based on divine authority rather than human autonomy, now find themselves having to take up strong countercultural stances. Authentic religion, in other words, can no longer be assumed to be in step or in alignment with the general aims of culture. The roots behind this divide between cultural and religious aspirations go back to the modern transformation of personal identity that stressed autonomy.

Friedrich Schleiermacher, one of the more influential theologians of the nineteenth century, once argued that religion is born out of and sustained by the creaturely feeling of "absolute dependence." If this assessment is correct, even if perhaps not complete, then we can see how the irrelevance of God might emerge. The force of our cultural lives over the last several centuries has been to make ourselves independent as much as possible, to banish authority whenever we can.[46] The result is not only of epistemological (the meaning of God becomes the expression and the extension of self-understanding), but also of practical and moral, significance. When in former times we may have called upon the power of God to accomplish what we could not accomplish for ourselves, that is, the maintaining and the directing of the creation as a whole, today, as titans of our own destiny and as technicians and engineers of life we have managed to harness the powers of nature to our own end. Not simply personal life, but all life has come within the orbit of our autonomous quests. Even energy has not escaped our grasp. Should we not see the invention of the combustion engine and the nuclear reactor as events of the greatest religious significance, since they enable us to think, whether falsely or not, that power, the means of life itself, are features of our own control and desire? As we have become controllers of our own fate, God has simply become an unnecessary hypothesis. We, rather than God, run the world. Talk of God as a creator who is intimately and concernfully involved in the daily affairs of existence is simply quaint, a reflection of the refusal to deal with the naturalistic assumptions of modern science. How, then, can we think of ourselves and the world as creation, when the idea of a creator has been so severely compromised?

The extent of our own mastery, and of our deformation of God, can be seen in the eclipse of nature. It is increasingly difficult to look at our environments and not see everywhere a reflection of ourselves and our own activity. The evidence of our involvement and manipulation, ranging from resource-development projects to genetic engineering and weather manipulation, suggests that there is little life on earth that is not affected by human hands. Can we speak with honesty the words of the psalmist who claimed that "the heavens declare the glory of God" or the poet Gerard Manley Hopkins who said that "the world is charged with the grandeur of God"? Though we may try, it is hard to discern where the hand of God ends and where the hand of humanity begins, which forces the question: Is our world the creation of God at all? If in our commerce with the world we exhibit primarily our own desires, our own plans, have we not obliterated the meaning of creation? There is little widespread agreement on what limits, if any, can be imposed (and recognized as sacred) on our dealings with the world.

Obviously God-talk has not come to an end with modernity. What we must understand, however, is that the sense of the term *God* has been altered. Whereas the God of former times may have arisen in a context in which the

feeling of our dependence was palpable and clear, the God of our consumer society is dependent upon us for its reality and significance. To be sure, our emotional attachments to this self-generated God can be very high. But the intensity of emotion bears a striking resemblance to the intensity with which we shop. This God has little to do with an understanding of ourselves as creatures held in the grip of a life- and death-giving, unfathomable grace, because the possibility for the experience of grace, given a humanly engineered world, is, if not gone, at least hard to find.

To say that our culture is dominated by the irrelevance of God does not mean that God is dead. Rather, it indicates that God is practically unnecessary or superfluous. We cannot feel, need, or encounter God in a world increasingly of our own making. If God, as the philosopher of religion Rudolph Otto once suggested, appears as the *mysterium tremendum*, the wild and awesome power that undergirds and founds the forces of life and death, then, given the autonomous, market-driven, and technological character of our age, it is safe to say that God is absent. God has been banished by us in the drive to fashion a world according to our own liking or, failing that, the liking of corporate, global, economic forces. In this divine banishment, it is not surprising that the nature of the divine power as being-for-another should be entirely lost on us. We cannot be the caretakers of creation because the divine model for such care has been systematically denied or repressed by the dominant cultural trends of the last several centuries.

3

The Difference Ecology Makes

God has united the entire world which is composed of many different parts, by the law of indissoluble friendship, in communion and harmony, so that the most distant things seem to be joined together by one and the same sympathy.

—St. Basil the Great, *Homelia Hexameron* 2.2

Human beings depend on Earth and its life-forms for every aspect of their survival and life. It is impossible to draw lines that delineate separate categories of air, water, soil and life. You and I don't end at our fingertips or skin—we are connected through air, water and soil; we are animated by the same source in the sky above. We are quite literally air, water, soil, energy and other living creatures.

—David Suzuki, *The Sacred Balance*

We have given up the understanding—dropped it out of our language and so out of our thought—that we and our country create one another, depend on one another, are literally part of one another; that our land passes in and out of our bodies just as our bodies pass in and out of our land; that as we and our land are part of one another, so all who are living as neighbors here, human and plant and animal, are part of one another, and so cannot possibly flourish alone.

—Wendell Berry, *The Unsettling of America*

The teachings of ecology promise a revolution in self- and cultural understanding that matches, if not exceeds, in importance the

sixteenth-century Copernican astronomical revolution. Just as Copernicus forced a fundamental reorientation in how the universe and thus also we ourselves are to be perceived and understood, so too ecological insight compels a transformation in basic presuppositions about nature and human nature. Whereas Copernicus challenged the notion that the earth was the center of the universe, ecologists challenge the belief that humanity is the center and apex of the biological universe. Though we like to think of ourselves as presiding at the top of the food chain and thus somehow immune from the fate of the members down below, we are but one member species among millions that altogether depend on the integrity and stability of a vast food and energy web. Ecological understanding compels us to see ourselves as enmeshed members of an unfathomably complex history of habitat development. Rather than being the autonomous, unencumbered agents we have dreamed ourselves to be, our fate is necessarily bound up with the fate of billions of organisms that everywhere surround and permeate our being.

At the heart of both revolutions we find a fundamental transformation of perception. To Copernicus's colleagues it made perfect sense to argue that the earth was stationary, since commonly available evidence and observation confirmed this presupposition. Copernicus understood, however, that the commonsense view was not able to incorporate anomalies in the motion of other planetary bodies, as when Ptolemaic cosmology required other planets to move forward *and* backward. And so he suggested that the apparent retrograde movements of other planets are better understood in terms of the rotating movement of our own planet. The anomalies made better sense once we recognized that *we* are the ones who are moving.

Copernicus did not provide us with anything like a complete celestial mechanics. We would need to wait for other scientists like Johannes Kepler and Isaac Newton to put that goal within reach. But what Copernicus did do was effect a simple yet profound reorientation in how the heavens are perceived, and it is this reorientation that warrants our labeling his innovation as a revolution in thought. We must understand, however, that while the Copernican view was, scientifically speaking, simpler and had more explanatory power than the Ptolemaic, from a psychological viewpoint it was much more difficult to accept since it went against the seemingly obvious observation that the sun "rose" and circled above us. It also went against a scriptural and theological tradition that suggested a stationary earth.

The ecological revolution has a more mundane focus since it reorients our perception of the earth and our place within it rather than the heavens above us. It challenges ideas that are basic and commonsense, just as the Copernican revolution did. Among these we can list the belief that humans exist over and against nature, as somehow exempt from or superior to the laws and processes of the biological world. Our warrant for this belief has traditionally stemmed from the observation that humans are unique in their ability to manipulate

and redesign the natural world according to their own plans, and from the theological view that identifies humans with the image of God. This anthropocentric view, no less than the Ptolemaic view, gives rise to anomalies that call for explanation: how do we reconcile the superior cognitive and moral intelligence of humans with their violent and destructive histories? How moral or rational, how special, is a species that threatens to terminate the possibility of all life? Do not the brute facts of digestion and respiration point to our indissoluble connection to organisms we otherwise disdain? The central problem with so much anthropocentric thinking is that it yields an abstract and rootless self-understanding, a false picture of ourselves as cut off from the sources of human and nonhuman life.

The anthropocentric character of our perception takes two forms. On the one hand, our perceptions can be guided by the assumption that we ourselves are the center of value. We alone are the bearers of rights and privileges because we are the only species that really matters. There is a long history of this sort of thinking. We matter most because we can think, speak, or engage in the work of culture. The prejudice of this assumption is now becoming more apparent as we study other species (dolphins, primates, and wolves, for example) who show remarkable levels of intellectual and communicative sophistication. We are also beginning to wonder about the convenience of having ourselves in the exclusive position of making value judgments privileging characteristics that clearly favor ourselves.

There is, however, another form of anthropocentrism whose history is not as long, but whose effects are much more systemic and pervasive. As the previous chapter has shown, technological and urban life have made it possible for us to live in a world largely of our own making. We live in spaces engineered by us according to time schedules determined by us. The world we work with, the tools, materials, and media, reflect our intention and our desire. Insofar as a natural or "wild" world appears at all, it appears as heavily circumscribed by human concern. We sometimes call this self-created space a "virtual" world because we sense, however obliquely, that there is a basic unreality about it all. Given the vast scope of our manipulation of the earth, we wonder if the words *nature* and *natural* make sense any longer. We fear that we may be losing touch with ourselves and with reality.[1]

This second form of anthropocentrism has implications that we are only beginning to understand. In a largely fabricated, nonnatural world we are left to puzzle, perhaps fight, over the standards that will guide our lives. Having embraced virtual reality, do we at the same time loosen the grip on our ability to appreciate and handle "real" problems like disease and death, hunger and loneliness? Do we make it more likely that we will come to understand ourselves more abstractly still? What will "ground" our social practices, artistic work, and religious affection? Will these key components of human existence be demoted, perhaps unwittingly, to an ornamental, but finally unnecessary,

position? As many are beginning to sense, a purely human world cut off from the rhythms, limits, and possibilities of natural life quickly becomes an inhuman world governed by stress, suspicion, and fatigue. The biological character of human life requires us to pay attention to biological realities. Communal life, as well as artistic and religious appreciation, depends upon the concrete and practical sense of our identification with and dependence on a larger world that is either human, natural, or divine. Without these connections our lives are severely diminished.

Ecological thought cannot by itself give us a full-blown understanding of human life. But like the Copernican revolution, it reorients our perception at the most basic level by properly situating human existence and uniqueness within biological processes. We cannot, as we have sometimes thought, expect to live a complete or healthy human life by rising above or separating ourselves from the natural world in which we live, for such separation invariably leads to the naïveté and narrowness that promote alienated and destructive lives. We do not simply live on the earth. We live from within it, finding that the well-being of our own existence is inextricably tied to the well-being of the biological contexts that surround and support us. What we do for ourselves never affects merely us, but will inevitably have implications for a wide variety of organisms and habitats for years to come. On the most basic level, the level of respiration and digestion, we are directly and symbiotically tied to the billions of organisms, past and present, that recycle energy and give us food and air. From an ecological perspective it makes little sense to see ourselves as self-standing beings, particularly when we recognize that as much as 10 percent of our dry body weight is not us, but is instead a variety of organisms inhabiting us, organisms that facilitate life processes at work within us and all around us. We simply cannot live without plants that furnish oxygen or without the soil's microorganisms that transform death into new life. Ecology, in other words, promises a revolution in self- and cultural understanding because it relocates our perceptions and by implication our affections and desires, our will and our intelligence, from the lordly spheres above to the common earth below. By helping us understand how we are implicated in the workings of creation, ecological science puts us in a better position to care and take responsibility for it.

Ecology and the Problem of Education

Revolutions are rarely welcome events, particularly if the call to revolution demands a transformation of individual and cultural life. They are even less welcome if the revolutionaries insist that what the mainstream sees as good is in fact bad. Aldo Leopold, perhaps the twentieth century's most influential ecologist, put the matter this way:

> One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to the layman. An ecologist must either harden his shell and make believe that the consequences of science are none of his business, or he must be the doctor who sees the marks of death in a community that believes itself well, and does not want to be told otherwise. One sometimes envies the ignorance of those who rhapsodize about a lovely countryside in process of losing its topsoil, or afflicted with some degenerative disease in its water systems, fauna, or flora.[2]

Leopold understood that our framework of perception was a distorting and destructive one and that if ecological insight was to achieve its revolutionary potential a basic transformation in our educational processes was in order. The goal must not simply be to change a few elements within an otherwise fine schooling program. Rather, the very presuppositions of education, since they reflect the values of the broader culture, need to be reexamined so that educational transformation goes hand in hand with cultural transformation.[3]

For the last several centuries the means and the goals of our major educational institutions has been antiecological. While we may speak idealistically about the life of the mind or the excitement of pure scientific research, from a practical point of view the effect of education has been to enlarge an industrial and consumer base that adds luxury and convenience to human existence by extolling an economy that is extractive and destructive of natural habitats. The extent of the collusion between our major educational institutions and industrialism is now everywhere apparent as universities compete for research money made available by pharmaceutical and biotechnology corporations and the military. The ability of universities to critically engage culture, to honestly retrieve and assess a people's past, and to imaginatively construct a viable and life-affirming future is seriously compromised by the acceptance of money that promotes resource exploitation or degradation. It is surely an indicator of the nonrevolutionary character of academic institutions when we observe that most major protest movements on behalf of workers, women, minorities, and the environment found their inspiration outside the university.

On the level of student life the antiecological character of our education is no less apparent. Students are routinely told by their parents that their primary goal in life is to move forward by moving upward, the telltale sign of upward movement being increased consumption. Educational institutions are perceived to be valuable insofar as they equip our students with the tools for increased financial gain. To this end, the emphasis is on careerism, which includes not only the training for a particular job but also the training to move up the ranks within a job. Success is measured less by the quality of one's life—notice the desperate, frenetic pace of our day-to-day lives—and more by

the quantity of things that one accrues. To be sure, large numbers of people are beginning to voice their dissatisfaction over the fact that their schedules are maintained and made possible by the consumption of antidepressants, sleeping pills, stimulants, and other "life-enhancing" drugs. But they are mostly powerless to do much about their predicaments since the omnipresent pull of our cultural forms is to work, buy, consume, and expect more. We have not, as Henry David Thoreau once suggested in *Walden*, trained ourselves in the art of the minimum, the art that focuses on and cultivates the necessary in life.

We can describe the central flaw of our current educational ethos in terms of its rootless character. Our minds are ever turned to where they want to go, with little thought given to the places where they presently and concretely are. Our attention is fixed on goals that exist in a hypothetical future, and our hope is that the hypothetical, whether or not practical or realistic, will become reality. The result is a thoughtless inattention to the habitats and communal contexts in and from which we necessarily live, concluding in a failure to promote the well-being of the human and biological "roots" that sustain us. In our quest to get ahead, to become the self-standing, self-congratulating beings our culture recommends, we forsake an education into community, an education that clarifies and promotes the many forms of interdependence that make up our lives.

Behind this quest there is often the noble desire to shun parochialism and narrowness of outlook. A broad educational horizon, however, is damaging in other ways if it cannot integrate life's essential elements. As Eric Zencey has observed, commenting on professors who forget or dissimulate the needs of local environments, "From the vantage of cosmopolitan transcendence, even something as large as a watershed can seem a parochial detail. This learned ignorance, felt as a *worthy* ignorance, is a significant root of our culture's ongoing environmental crisis."[4] We cannot be truly happy or properly educated so long as we promote and facilitate lives that are destructive of the basic ecological conditions necessary for health. Every life, no matter if it longs for the abstract universal or the unfamiliar exotic, is a particular, embodied life that must live in a particular context. To forsake the immediate or local context for another hypothetical context is to forsake one's own life. It suggests a fundamental disinterest in and ingratitude for the life and world one now has.

It is time, then, for an educational framework that will train our minds, hearts, and habits in the direction of ecological integrity, for what is at stake is the possibility of a viable future for ourselves and our children's children. It is time for us to recognize that we are living in what Wes Jackson has called a "juvenile culture," a culture that expends and wastes large amounts of energy for the purposes of myopically construed ego satisfaction: "We are unlikely to achieve anything close to sustainability in any area unless we work for the broader goal of becoming native in the modern world, and that means becom-

ing native to our places in a coherent community that is in turn embedded in the ecological realities of its surrounding landscape."[5] The beauty of Jackson's phrase *becoming native* is that it draws our attention to the historical clash between the ways of indigenous cultures that emphasized a deep and far-ranging knowledge of the places in which they lived and the ways of European conquerors who saw the physical landscape primarily in terms of opportunity and personal reward (hence the historical pattern of rapacious land use that necessitates ever moving to new "virgin territory"). By becoming native Jackson does not mean that we somehow turn back the clock and become hunters and gatherers. Instead he means that we educate our young in the ways of homecoming or homebuilding, ways that promote dedication to places and communities over the long term. How can we make the places where we now are, rather than some hypothetical place, better, more suitable for our own flourishing and the flourishing of others? Is not the true test of education the health and beauty of one's life and one's surroundings? The merit of Jackson's approach is that it will finally force us to see and live with the harmful effects of what we do, something our rootless, upwardly mobile culture does its best to prevent. If nothing else, it will force us to make an honest accounting of those practices that harm local communities and their inhabitants.

If ecological integrity, and therefore also long-term human well-being, becomes the inspiration and goal of our educational frameworks, then transformation of our school curricula will be inevitable. The liberal arts will now be infused with "ecological design arts" that develop "the analytic abilities, ecological wisdom, and practical wherewithal essential to making things fit in a world of microbes, plants, animals, and entropy. . . . Ecological design is the careful meshing of human purposes with the larger patterns and flows of the natural world; it is the careful study of those patterns and flows to inform human purposes."[6] The presupposition, of course, is that we first know what it is we are dealing with, which means that ecological design arts must be grounded in an understanding of ecology.

An appreciation for ecological science will not be easy to attain, for even within the scientific community there has been resistance to fundamental ecological insights. Modern science depended heavily on the idea that reality can be understood in terms of its parts. Scientific experimentation demands that we be able to isolate elements and forces so as to obtain the most precise measurement and exacting control over the world possible. Ecology challenges this fundamental notion since it argues that no element stands alone. An organism is what it is because it is with others in a history of mutual involvement. Moreover, the webs of interdependence that tie members of reality together are nonlinear, a layered patchwork, constantly shifting and adapting, making it notoriously difficult to understand, let alone predict or control, them. Clearly there is significant value in the methods and findings of the physical sciences.

But we should not assume that the exactitude and elegant simplicity of physics and mathematics are appropriate in all areas of scientific inquiry, particularly if we take seriously the complexity of data that ecologists must attend to.

When we consider the historical connection between science and technology (and money), we can begin to see that Western science is based on values that are extrascientific, values that cannot be sustained on scientific grounds. That scientific research should so often end in the control and manipulation of the earth does not follow from an "objective" observation of it. In the most fundamental ways, ecological science proposes a different attachment to and engagement with the world than does traditional Western science, if for no other reason than the fact that ecology emphasizes interdependence rather than independence or detachment. We may go too far in suggesting that "all conventional modern science, is inherently anti-ecological,"[7] since ecologists regularly employ elements of mainstream scientific research. But we should not underestimate the subversive potential of ecological inquiry. Nor should we limit the transformational power that ecological insight can have in the reshaping of our educational aims and institutions.

The Rise of Ecology—The Career of Aldo Leopold

Though the term *ecology* was first coined by German scientist Ernst Haeckel in 1866, the idea of ecology, as witnessed in many indigenous cultures, has a history that extends well beyond that date. Haeckel referred to ecology as "the science of relations between organisms and their environment."[8] The point was to investigate the lives of organisms in their life-contexts, taking note of their place in the flows of energy cycles. While this may sound like a purely descriptive endeavor, from early on the study of ecology had a normative dimension that referred to the management of organisms. Here the connection with "economy" as household management came to the fore. Gilbert White, who wrote the widely read *Natural History of Selborne* (1789), went so far as to refer to nature as the "great economist" since it "converts the recreation of one animal to the support of another." Nature doesn't simply function. It is finally aimed for the promotion of good.

It would not take long, particularly in the twentieth century, as the term *ecology* entered into the vernacular and as threats to the environment became more apparent, for ecological science to be held up as the study that would save our society from ruin. For some, ecology held the prospect of a new morality because it would show us the disruptive and destructive character of our actions toward one another and the earth and at the same time model a more holistic relation to other organisms. In Germany, for instance, ecological thought went hand in hand with an antimechanistic rhetoric that distrusted large institutions and instead promoted the organic life of the peasant, a life

in which dependencies upon the earth were clear and affirmed. Oftentimes some form of reactionary, even fascist, politics would follow. It would be a mistake, however, to conclude that ecological thought necessarily leads to a backward-looking conservatism, for as Anna Bramwell's history makes plain, any number of political conclusions have been drawn from the findings of ecologists. In fact, and this point is made especially clear by Donald Worster, ecologists, rather than providing a purely objective description of the workings of nature, often wrote into their accounts the cultural assumptions that held the day. This is as true of Darwin, who imbibed the dark outlook of Thomas Malthus, as it is of ecologists working in the 1950s, who tended to stress harmony among nature's organisms, and ecologists in the 1980s, who tended to emphasize nature's cutthroat competitiveness as each species vied to maximize its own life.

The fact that ecology does not provide one, universally affirmed interpretation of "nature's economy," does not mean that it fails to present a loosely unified account of how living organisms depend on each other for their own survival. That the natural world represents several vast webs of interdependence is clear. What is not so clear is the nature and the extent of those interdependencies. In other words, we do not know completely or without remainder how the life of one element in a biological context is informed by and effects other elements, since the web of relations is unbelievably vast in space and in time. As John Muir once put it in his journals, "When we try to pick out anything by itself, we find that it is bound fast by a thousand invisible cords that cannot be broken . . ."[9] The study of ecology thus represents an extraordinarily complex enterprise, one that demands more patience and humility than most of us can muster, for what ecologists routinely run up against is the knowledge of their own ignorance in the face of nature's intricacies.

Aldo Leopold came to the study of ecology through the door of forest conservation. At the turn of the twentieth century, conservation was only recently in the public eye: Yellowstone was America's first national park established in 1872, and Yosemite followed in 1890. The aim of conservation was plainly utilitarian, since protected lands served the human purpose of enjoyment and use. Progressives like Gifford Pinchot, the founding father of the U.S. Forest Service, believed that nature could be cleaned up, improved upon, and made more productive through the efforts of a science-based management effort. Leopold was clearly influenced by this understanding of conservation, but over time, largely because of his independence of character and mind, Leopold began to move away from this utilitarian approach.

In the name of efficiency and productivity, ranchers out west routinely shot competitors for prized resources. This meant that wolves, cougars, and bears would need to be killed so that livestock could flourish. This management plan had unintended results, for as the predators were eliminated the deer population dramatically increased, posing a new threat to the grazing ranges

of livestock. A revised management plan thus called for the control of the deer population through hunting, which meant that "protected lands" would now have to be opened to the needs (and destructive impact) of hunters. Leopold further observed that the management of predators and deer had effects for flora and fauna that went far beyond what managers could have predicted. In fact, many of the effects did not show up until much later and then often too late for serious restoration to be possible. As he would later put it in 1946, "Here then is a chain reaction of unknown length threatening the integrity of the fauna and flora over great areas, and arising from a single error in prediction: that human predation by rifle is the biotic equivalent of wolf predation."[10] The problem with progressive-minded conservationists was that they thought too much in economic terms and not enough in terms of the integrity of the land itself, integrity that demanded the full functioning of many organisms together. Current methods of conservation had the unforeseen effect of subverting what Leopold thought central in the conservation effort, namely the long-term health of the land. A healthy landscape cannot be judged in terms of the health of a limited number of species, but rather depends on the well-being of the whole, which includes each species in its relation to others over an extended period of time.

Leopold was beginning to see that an ecology-based approach to conservation was called for if the preservation of land and wildlife was to become a reality. This new approach would transcend economics by rethinking basic questions like, what makes a species good or bad? what or how much do we and other species need to survive? can we save one element of the biotic whole to the exclusion of other elements? What Leopold was starting to understand was that the land, and by land he meant the whole assembly of flora and fauna, water and soil, is one organism:

> Its parts, like our own parts, compete with each other and co-operate with each other. The competitions are as much a part of the inner workings as the co-operations. . . . If the land mechanism as a whole is good, then every part is good, whether we understand it or not. If the biota, in the course of aeons, has built something we like but do not understand, then who but a fool would discard seemingly useless parts? To keep every cog and wheel is the first precaution of intelligent tinkering.[11]

This idea of the wholeness of the land, its organic unity, became the basis for a new first principle of intelligent conservation, a principle that would mark a profound advance beyond the utilitarian principle Leopold had inherited from his first teachers.

Leopold once described the transformation into an ecological consciousness as the newfound ability to see through the surface of things into their deep and abiding structures. What he meant was that the ecologist, rather than

simply seeing a tree or flower, a falcon or bison, sees the processes that have been at work throughout evolutionary time to produce this particular creature. No member of a species—not even a human—simply exists by itself. We are what we are because biological patterns and processes are in place that support a particular existence. This is why the genuine understanding of a species must always call to mind the present ecological and the past evolutionary context. The identity of every creature, in other words, has roots that extend far beyond itself to include the whole range of forces and beings that have and continue to impinge upon it. Moreover, individual creatures and species participate in activities and cycles of which they are often unaware yet nonetheless serve to contextualize and give direction and support to them. Life is always life together. To subvert the processes that contribute to the well-being of particular elements is to impair the whole and thus also its many parts.

As this ecological insight matured in his mind, Leopold sought metaphors that would clearly convey to the general audience ecology's meaning. In a short parable called "The Round River"[12] Leopold described the ecological concept in terms of a "biotic stream." What he meant by this stream was a flow of energy through soils, plants, and animals, a flow that made up the never-ending "circuit of life." The merit of the stream metaphor is that it allowed him to communicate the variability of energy flow depending on the various elements and structures that were being considered. In the course of evolutionary time a rock will decay to become soil, which will then provide the nutrients for an oak tree, which in turn produces acorns that feed the squirrel that feeds a predator that feeds the Indian. While the flow of energy may seem unilinear, in fact the flow of energy constantly "leaks" and is diverted into other directions, as when the squirrel dies and becomes nutrition for the microorganisms in the soil. The stream is thus always breaking up into substreams that flow back and forth into other directions and into each other: "The whole system is cross-connected."

The linkages between stages on the stream's path, the bonds that tie natural elements together, are often based on the transmission of food from one element to another. But the ties that bind the elements can also be based on simple mechanics, as when plant roots break apart rocks that then become part of the soil structure, or based on other services and competitions or cooperations, as when bees transport pollen from flower to flower. The end result is a maze that is stunningly complex: "No efficiency engineer could blueprint the biotic organization of a single acre." The complexity, however, is precisely what leads to its stability and permanence, provided that the processes that maintain them are not severely impaired. The course of evolution is to make the stream deeper and even more complex—an intricate and evolving harmony Leopold would say.

Another metaphor Leopold used was the "food chain" made up of links that transfer food from one element to the next. Again, the chain is not a closed

circuit, since food is continually sidetracked to various ends. And as with the biotic stream, "The chains are not only food chains, they are chains of dependency for a maze of services, competitions, piracies, and cooperations."[13] The beauty of the food chain is that such complexity could also give rise to stability, a stability that depends on the unimpaired circulation of energy through the linkages. Healthy land would have the diversity and stability to circulate energy an indefinite number of times. What dismayed Leopold was the fact that a great amount of human activity, in the forms of farming, resource management, and urban development, destroyed diversity and stability either by excessive predation on particular species or the damaging of biotic processes. Though land might suffer occasionally owing to natural disturbance (forest fires, pest invasions, earthquakes, for example), the long-term effect of natural processes is to increase an ecosystem's resilience and diversity. Human presence and activity, all too often, had the effect of compromising nature's self-sustaining powers.

In his essay "The Land Ethic" Leopold opted for what is perhaps his most well-known ecological metaphor, the metaphor of the "biotic pyramid." We should think of the bottom layer as the soil upon which plants, having absorbed energy from the sun, grow. Successive organisms, ranging from insects to animals, become higher levels of the pyramid as they feed on the lower levels. What unites members of a layer is the food or energy they consume. As we go up the levels of the pyramid the numbers of a species declines. But as we travel through time we discover that the diversity of species increases, meaning that the pyramid as a whole is getting larger:

> Land, then, is not merely soil; it is a fountain of energy flowing through the circuit of soils, plants, and animals. Food chains are the living channels which conduct energy upward; death and decay return it to the soil. The circuit is not closed; some energy is dissipated in decay, some is added by absorption from the air, some is stored in soils, peats, and long-lived forests; but it is a sustained circuit, like a slowly augmented revolving fund of life.[14]

The pyramid has an integrity and depth that we are scarcely beginning to see, let alone understand. It is all tied together, as the lower levels of the pyramid support the higher (not only in the form of food) and the higher feeds the lower (in the return of compostable nutrients to the soil). Given this circular motion within the pyramid's life, we would do well to amplify Leopold's metaphor with the metaphor of the "wheel of life" provided by the great British agrarian Sir Albert Howard.[15]

One of Howard's major contributions was to notice how science overemphasized the processes of life to the exclusion of the processes of death and thus put in place what we might call a prejudice against death. To neglect death, however, is to ignore the necessary work of billions of organisms that

transform dead and decaying matter into nutrients for new life. The forest is viable over the long term precisely because it does not interrupt the cyclical flow from life to death to life again, a cycle that is located primarily in the soil and humus that is the forest's foundation. Soil is hardly "dead stuff," the passive receptacle of chemical fertilizers, as nineteenth-century German chemist Justus von Liebig argued. It is the matrix of life and death, the place where life and death meet. In this meeting we find enacted nature's great "law of return," a law stating that what goes forth in the form of life must also come back in the form of death, all in never-ending succession.

Because the range of interdependencies within the pyramid was so vast and complex, Leopold in the last years of his life repeatedly warned us to use great caution as we manipulate the flows of energy for our own use, for what is at stake is the long-term viability of the pyramid *and* ourselves. Humans, who often assume a superior stance owing to their ability to examine and manipulate the pyramid, must be careful not to draw from this ability the false conclusion that they therefore exist apart from the pyramid and are immune from its fate. The fate of the pyramid as a whole and the fate of humanity are necessarily and irrevocably intertwined. This, in short, is the culturally revolutionary insight of ecology.

An Ecological Ethic

Leopold understood that this revolutionary insight had important implications for the development of culture. Ecological understanding had to lead to a new ethic, not because it would be attractive to humans but rather because the evidence of ecology demanded it. The newness of this ethic, understood not as a new series of rules but as an all-encompassing ethos that guides our desire and action, resided in the fact that it expanded the sphere of felt responsibility beyond merely human interest to include the whole biotic pyramid: "The land ethic simply enlarges the boundaries of the community to include soils, waters, plants, and animals, or collectively: the land."[16]

The idea of expanding the range of human concern beyond human interests was not unique to Leopold. In the nineteenth century Thoreau, among others, admonished Americans to "take a wider view of the universe," while John Muir complained, "How narrow we selfish, conceited creatures are in our sympathies! How blind to the rights of all the rest of creation!"[17] Where Leopold made his great contribution was to suggest that the sphere of ethical concern be expanded beyond individuals, human or nonhuman (i.e., pets or other sentient beings), to include ecosystems as a whole, the biotic community itself. The land, beyond possessing economic or instrumental value, merits moral consideration that is akin to the concern we show our fellow humans.

A number of philosophers and ethicists have had difficulty accepting the idea that we have any moral responsibility for the land. For starters, ethicists have sometimes argued that responsibility needs to be mutual for it to be legitimate or binding, that is, we cannot be in a morally responsible relationship with someone who has no responsibilities to us. Morality, in other words, depends on the prior establishment of a covenant relationship in which mutual harm or benefit is possible and in which both parties can accept responsibility for the harm or benefit. Given that organisms within the natural world are oblivious to human concerns, they obviously cannot form a relationship with us and thus should be of no ethical interest to us.

The fatal flaw of this argument is that it presupposes intentional reciprocity as the necessary condition for moral responsibility. Do we have a moral responsibility for a person who, perhaps incapacitated by disability, age, or disease, cannot express or act upon concern for our own well-being? It would seem so. Furthermore, what sort of mutuality counts when deciding moral considerability? Given the ecological insight that none of us are self-standing, self-sustaining beings, is it not an act of hubris to limit mutuality to the level of exclusively human concerns and needs? Simply because we oftentimes do not appreciate how others are of use, value, or interest to us does not mean that they cease to be implicated in our fate and we in theirs. Mutual implication rather than mutual benefit or reciprocity seems to be the more fundamental level on which moral reflection should take place. In other words, the fact that we live because of the lives of others means that we have the responsibility to look after their well-being, for in failing to do so we harm them and ourselves. But the argument does not stop at this egoistic level. Given that human behavior has many implications for other organisms, we are obligated to so comport ourselves that we do not unnecessarily impair their well-being. To do so would be to compromise the health of the whole ecosystem and thus the health of each member.

What we need to understand from the start is that an ecological ethic compels us to think and act beyond the parameters of individual lives and moral subjects. It is not sufficient to talk about individual pain or pleasure in sentient beings, as the eighteenth century utilitarian philosopher Jeremy Bentham long ago advocated, primarily because what needs addressing are organisms and habitats that, properly speaking, cannot be the sites of individual concern, need, or desire. Habitats and the biological processes they invite cannot be talked about in terms of moral agency. And so we need to think in ethical ways that encompass environments and environmental processes without turning them into moral subjects or agents.

Another objection to Leopold's expansion of the moral community is that it attributes ethical value to a natural world that supposedly has none. In moral philosophy it is often argued that humans are the object of moral concern because they are ends in themselves rather than means to someone else's ends.

Human beings have an integrity that prohibits our using them as fodder for an aim that they would not themselves choose or approve. The value they possess is therefore intrinsic to who they are, does not come to them from outside (extrinsic value refers to the valuation of a thing or object conferred on it by us). In large measure, the basis for claiming humans as the only ones who have intrinsic value stems from our ability to make choices, express them in fairly sophisticated form, and then act upon those choices.

A central problem with debates on intrinsic/extrinsic value is that they oftentimes do not get far beyond the truism that humans are the only ones who can express or designate value in the world. However, simply because humans can express or articulate value does not mean that they are the source of value or its medium. From an ecological point of view, we should say that we ourselves and our activities are caught up in and maintained by continuing natural processes that are fundamental and prior to the work of our valuation. Primary or fundamental value, we might say, resides in the long history of natural processes that, in the end, have resulted in a species like us that can conceptualize and articulate it. Properly speaking, life is the medium, if not the voice, of value. We value poorly or falsely when we forget, as in instrumental approaches to valuation, this ecological context.

As we have already seen, the elimination of final causality in modern science has contributed to the idea that organisms, now described as machines, are without purpose (because they cannot consciously choose or articulate such purpose). This assumption, however, needs to be challenged, as it is becoming clear again that living creatures do exert themselves so as to preserve and maintain themselves. There is ample evidence of a "will to life" in creatures—species propagation, self-healing, adaptive mechanisms and strategies—even if this will is not conscious. Is the presence of the will to life not a clear indication of the integrity of nonhuman species being?

In debates on intrinsic/extrinsic value one often senses the fear that if nonhuman species are said to hold intrinsic value, then humans will suddenly appear to be less special or unique. This fear is unfounded, for to say that nonhumans have intrinsic value is not to say that they have the same value. It would be silly to say that an amoeba by itself is as valuable as an individual person. But it would also be silly to say that an amoeba has no value. To place people within an ecological context is not to reduce them to that context. Differences still remain. Perhaps the most important of these is that while other creatures simply live out their interdependence with others, humans are unique because they can reflect upon the nature of the relations that bind them to all else. In other words, because people are self-conscious beings they must decide what the character of their relationships to the rest of creation will be. They must accept responsibility for their interconnectedness with others in a way that other creatures do not.

In highlighting human responsibility we can also see that ecology does

not pose quite the threat to human freedom and autonomy that is often supposed. Ecological thought affirms human integrity, but it also situates that integrity within the integrity of an ecological whole. In so situating human freedom we can be made more aware of the potential irresponsibility of our autonomy, especially since ecological sensitivity will reveal the disregard for contexts evident in much of our decision-making. Ecology, in other words, need not lead to new forms of totalitarianism in which the interests of the self are completely submerged or controlled by the tyranny of the totality. What it does enable, however, is the conscientious regard of those elements that together make possible a complete life. Ecological ethics, in other words, has as a fundamental priority the expansion of our sympathies so that we see the life processes of organisms and habitats as deserving our respect and care. This respect, rather than being founded in little more than our good will, follows from the perception that integrity and value lie deeper than the values we can articulate, that is, that ecosystems reflect the primordial value of the life-and-death process itself.

The expansion of the moral community to the land will lead to a more complicated moral life, since such expansion will mean having to weigh the interests of a variety of creatures we could heretofore ignore. How much should I value the life of a species of bird when compared to the human interest of taking over their habitat? Questions of this sort are obviously complicated, but they should no longer rest on the false presupposition that our interests can be maintained over the long term if the interests of others are systematically denied. The teachings of ecology show this presupposition to be plainly false since our choice is not one of either/or—either the benefit of humans or the benefit of the spotted owl. If we destroy the lives of those on whom we necessarily depend, we damage or destroy ourselves because the destruction of individuals is at the same time the weakening of the habitats and biotic processes that sustain all life, ours included. Again, not all interests are the same. But what ecological insight makes clear is that on some level all interests count, need to be considered, since the systematic dismissal of an individual member's interests eventually, and perhaps without ourselves yet realizing it, leads to the impairment of the whole.

Why or how do natural habitats or ecosystems have value and thus warrant our moral regard? For starters, we must acknowledge that their value does not depend on their ability to consciously choose ends for themselves—on that basis much, though certainly not all (some creatures clearly make choices that are in their best interest), of creation would be excluded. Nor does it depend on the ability of organisms to act morally with regard to us or share similar moral interests. Instead, the value of an ecosystem does not reside exclusively in any one of its parts but in the processes that inform the whole. Speaking of the value of processes and not simply the value of parts has the benefit of stalling our tendency to want to value one element in opposition to another.

There can be no healthy functioning biotic pyramid without the participation of each of its members in the processes of life and death.

Holmes Rolston, a leading contemporary environmental philosopher, has called the value that is to be ascribed to ecosystems "systemic value." He chose this term rather than intrinsic value because he felt that intrinsic value depended too much on an ecological "center" (analogous to a subjective center) that chooses ends for itself. Ecosystems do not have a center in this way. They are loosely organized sites of interaction between species that constantly evolve through time. By emphasizing the importance of the processes in which change can occur, we stay true to Leopold's contextualization of organisms in space and time, that is, organisms are what they are because they are implicated in and nurtured by other organisms in a process of life and death. The system, in other words, cannot be reduced to its constituent parts: "Systemic value is the productive process. . . . When humans awaken to their presence in such a biosphere, finding themselves products of this process too . . . they owe something to this beauty, integrity, and constancy in the biotic community. Ethics is not complete until extended to the land."[18] Land, in other words, is not a thing, not even a collection of things. It is rather an assortment of organisms that are what they are because of the long history of evolutionary processes that enable them to be what they are. Systemic value draws us to the primary importance of safeguarding these processes, which in turn lead to the safeguarding of the organisms that flourish in their wake.

A similar position has recently been defended by Richard Fern, who calls our attention to the difference between sentient and "sentiotic" life. If sentience were our only concern, then organisms that could not feel pain would not be worthy of moral consideration (the position of utilitarians like Bentham and Peter Singer). But if sentiosis, the presence of a deep telos or proclivity toward creative life, is the deciding factor, then habitats and the organisms they support become candidates for moral considerability. Habitats are good, not merely because we say so, but because they are the sites in terms of which life, ours included, go forth. As Fern says, we have a moral obligation to nature not simply because of what it does for us but because nature is the necessary medium through which any life at all is possible.[19]

Leopold believed that with the recognition of value in the natural world, and the corollary acknowledgment that we have moral obligations to it, a fundamental transformation of our human identity would follow. He described the transformation in the famous lines: "A land ethic changes the role of *Homo sapiens* from conqueror of the land-community to plain member and citizen of it."[20] To be a conqueror of the land-community means that one sees oneself as superior to, and in some sense separable from, the various elements of the community and the processes that sustain them in their being. This assumption, which has long been the assumption of Western culture, is not only arrogant but ecologically naïve. It leads to the destruction of our world

and ourselves. But if we think of ourselves as "plain member and citizen" of the land, then we acknowledge the fact that we live with others and participate in evolutionary processes that nurture and sustain us. We no longer desire to see ourselves apart from others or exempt from the limits and possibilities of natural processes. Nor do we cast our lives in adversarial roles with the rest of the natural world. To be a member of a community or a citizen within a commonwealth entails a fundamentally new understanding of humanity's relation to the earth.

Leopold understood that this transformation in self-understanding would not come easily. It had, after all, taken centuries for us to expand the moral community to include women and slaves. But its realization would take us beyond the present economic approach to relating to the world. An economic evaluation of the biotic pyramid assesses other organisms in terms of their instrumental value, which means that others are considered in terms of how they stand to benefit us. Trees, for example, are valuable because they can be transformed into lumber and paper to be used by us. No consideration is given to the role the tree plays in the maintenance of the life of the pyramid as a whole, and thus the steady deforestation of the world is not seen as a problem.

The economic view is naïve and shortsighted. It assumes that we are in a position to assign value to things, to be masters of their being. Leopold's own experience in the Forest Service showed him the hubris of this belief. We simply do not know the many roles that any particular organism may play within an ecosystem. Nor do we know all the effects to evolutionary processes that will follow from the destruction of an ecosystem's members. While chopping down a tree for its lumber value may seem an obvious benefit, does this benefit outweigh other benefits of the tree, often unacknowledged, such as oxygen production, soil and water retention, and temperature stabilization, that form part of a forest's systemic value? Moreover, economic approaches face the problem of not knowing what to do with the many species of organisms that appear to have no value. Are there not yet enough cases to show us that what once appeared to be valueless is very valuable, only we did not know it at the time? "To sum up: a system of conservation based solely on economic self-interest is hopelessly lop-sided. It tends to ignore, and thus eventually to eliminate, many elements in the land community that lack commercial value, but that are (as far as we know) essential to its healthy functioning. It assumes, falsely, I believe, that the economic parts of the biotic clock will function without the uneconomic parts."[21]

Leopold's "land ethic," though much debated and discussed, is fundamental to every attempt to think through the ramifications of ecology's revolutionary insights. It highlights the necessary changes in self- and world-understanding that must take place if we are to be honest with ourselves and others. It also establishes the basic ethos that must guide our action if we are to live long and healthy lives: "A thing is right when it tends to preserve the

integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."[22] Making this statement our fundamental moral axiom by no means lessens the difficulty of thinking and acting responsibly in the world. It does not by itself provide us with a full-blown ethical theory. What it does provide is a reorientation in how our thoughts about the world and ourselves are to proceed.

A Garden Aesthetic

In describing briefly the cultural significance of ecological science, I have argued that people need to rethink who they are and their place in the world. But more basic than our thinking is the matter of human perception. How we see and feel the world is more fundamental because it is in terms of our perception that thought and action take shape.[23] This is why Leopold insisted that an ecological ethic must be preceded by an ecological aesthetic that will engage us on an affective, rather than a strictly theoretical, level: "It is inconceivable to me that an ethical relation to land can exist without love, respect, and admiration for land, and a high regard for its value."[24] The ecological revolution, if it is to be successful, must therefore include the expansion of our sympathies and the redirection of our desires in such a way that our loyalties to the biotic community become automatic, the spontaneous expression of how we feel. Only then will we be able to address the basic problem that we often do precisely those things we "know" to be harmful or wrong. Appeals to understanding alone are not enough. If we are to preach ecological concerns we must at the same time promote the sorts of experience and affection that will internally prompt us to act in the ways we should.

The recommended transformation of heart and mind will depend on the transformation of experience. As we live now, mostly within urban contexts that shield us from any direct or practical contact with the land, it is very difficult to develop an appreciation or sensitivity for the larger world around us. We do not concretely know the life-forms or the processes that surround and sustain us because we do not have contact with them and because we do not have the prerequisite contact we do not feel affection for them either. We value falsely, or do not value at all, because we are largely ignorant of the extrahuman world. So much of our development, Leopold says, amounts not to a "growing up" but a "growing down," since maturation goes hand in hand with the narrowing of focus or attention. In children there is a ready excitement about engaging a world with all the senses involved. But as we become adults we learn to despise these trivial matters for the more important excitement of careers.

What is lost in our "growing down" is the capacity to see the larger ecological context that nurtures the narrower cultural world and the still narrower

personal world. The significance of this loss cannot be overestimated since it clearly leads to a distorted perception and destructive action. We fail to assess ourselves properly, thinking more of ourselves than we ought. We fail to understand the world around us, thinking of it as little more than the arena for our own satisfaction. These are problems of perception before they are indications of evil intent. It isn't that we set out or are born to destroy ourselves and the earth—the experience of children suggests that delight and wonder are more basic forms of engagement and understanding. What does happen, however, is that we adopt and live within frameworks of perception that dissimulate what we otherwise should know to be basic.

A further problem impairing the adoption of a viable aesthetic is our tendency to see in terms of parts. Several moments in our cultural history have contributed to the hegemony of this modality. Among these we can include a scientistic mind-set referred to earlier that isolates, for purposes of analysis and control, member from member. What we need to remember, however, is that focusing on parts rather than wholes has the effect that we lose sight of the action and flow of life, what Neil Evernden has called "the act of being itself."[25] In this loss the potential for alienation and a sense for life's fragmentation grows. Humans come to see themselves as not at home with themselves or with the earth, as disconnected from life's overarching processes. Our life, rather than being characterized by meaningful engagement with all of life's elements, becomes a wandering, pointless existence. Having forsaken the ecological and, in our postmodern time, also the cultural contexts that make up our lives, we should not be surprised to find a generation of people referred to in terms of the abstract, nondescript "X."

Focusing our attention on contextual wholes does not mean that particulars are unimportant. In fact, the integrity of the whole depends on the flourishing and integrity of diverse parts in their mutual interdependence. As mentioned earlier, the effect of natural processes is to promote diversity among members, for it is diversity that insures long-term stability and adaptability. This observation, as Gary Nabhan has observed, is not without cultural significance. Just as biotic communities are impoverished by species extinction, so too are human communities. When we recognize that hundreds of distinct cultures and languages are lost in the name of economic development, we should wonder if the myopic lens that sees land only in terms of economic value has not also been applied to human culture. We should worry about the long-term health of human communities that destroy not only species diversity but also cultural diversity, for what is at stake is a similar durability that comes with particular wisdom and adaptation.[26]

The effect of a viable aesthetic will be to train our minds on wholes and the diverse particulars that constitute them, which means seeing elements in terms of their dependence on other elements and the natural processes that propel them into the future. It will mean that we acknowledge kinds of value

beyond economic or utilitarian value, for it is in terms of such expanded value that the range of our vision and empathy will increase. The "merger of mindscape and landscape," as David Orr's ecological design model recommends, will return to human life its sense of wonder, joy, and excitement. It will situate our lives so that they can be assessed honestly and with less despair. It will also promote the sorts of experience that will foster the attitude and the disciplines of love, respect, and admiration that Leopold thought so crucial.

So far I have talked about this aesthetic in very general terms, laying out its formal requirements and potential benefits. I will now suggest that the best context for making this aesthetic concrete and practically viable is the garden and, more specifically, the experience of gardening. Several reasons can be given for why a "garden aesthetic" is most appropriate. First, gardens, rather than being isolated enclaves set apart from the rest of life, are in fact the world in miniature. As Eleanor Perényi has noted, "A garden is a world, and its parts are not separable."[27] What she means by this is that even though we may be growing only a few species of flower or vegetable, the fact of the matter is that a garden hooks us up with the rest of the natural world (the whole wild world of microorganisms, pests and predators, pollinators, weather cycles, and their evolutionary histories) and so grounds human experience in the realities of soil, water, and light. Second, the activity of gardening represents the most practical lens through which to feel and understand our engagement with the earth. As our histories have shown, for too long we have lived under the erroneous assumption that there is a deep gulf between nature and culture and that the latter can get along without the former or at the former's expense. Gardening shows this assumption to be a lie. Nature and culture, in fact, have and are always interpenetrating each other such that the one cannot function without the other. Of course, there will be those who will say that nature can get along just fine without us. But if we notice that there is virtually no place on earth that has not been affected by a human presence, even if indirectly (as through global warming or ozone depletion), we will also realize that we are now in the position where nature's fate is inexorably tied to human action. And, third, the garden is especially useful for our purposes because the contexts of creation (Eden) and salvation (Gethsemane) are the garden. Numerous writers have noted the importance of gardens in fostering and developing our spiritual capacities. A garden aesthetic will show how, practically speaking, this can be the case. These points need development.

To suggest that gardens represent the world in miniature will sound preposterous to some because it ignores the distinction between domestic and wildlife. Gardens, so the argument would go, are sites of domestication and thus are clearly not to be identified with wilderness habitats that evolve without human interference. I have already indicated that this view is problematic because it is difficult, if not impossible, to find any habitats that are not in some way affected by human activity. To be sure, the effects may be minimal or

indirect, but they are nonetheless discernable. It makes some sense to argue, therefore, and given a ubiquitous human presence, that our notions of a garden should be expanded, all the while recognizing that there will be degrees of human intervention. Clearly a wilderness habitat is not the same as a suburban raised tomato bed, but they are nonetheless on a long continuum of human engagement with the earth. As numerous gardeners have explained, gardens cannot be simply or easily defined because they have served so many different purposes throughout the ages, ranging from food production, pleasure, and beauty to precise control. We are better served if we think first in terms of the activity of gardening, consider what this activity entails, and then observe the kinds of gardens that emerge from this activity.

Gardening, in its most basic form, is the human attempt to manipulate the natural world with the aim of deriving some benefit from it. It presupposes, in other words, an active and intentional stance in the natural world. Viewed this way, humans, even as hunter-gatherers, have always been gardeners, insofar as they have wanted to eat. The birth of agriculture ten thousand years ago indicated a radical change in intentional direction, because with agriculture humans narrowed and intensified their action (focusing on a narrow range of crops and cultivating them aggressively). The point that needs emphasizing here is that our engagement with natural processes has been constant, even if it has varied and been more or less focused. The fundamental error is to think that this activity is unnatural or that it does not depend on a wide array of natural processes and our immersion in them. Though gardens may seem artificial, as when we enclose them within walls or grow hybrid species that betray a great deal of human invention and design or when we cultivate species that seem to serve only our interest and pleasure, the fact of the matter is that they always depend on the continuation and sustenance of natural (wild) processes such as photosynthesis, pollination, and adaptation. Domestication, which we can here define as the deliberate attempt by humans to bend natural processes to suit human design, does not, indeed cannot, take gardens out of the natural realm. If gardeners ever succeeded in taking all wildness out of their gardens they would end up with death.

What I have been suggesting is that the line dividing gardens from wilderness is not distinct, but is rather porous so that wildness can keep things alive. In this respect Thoreau, in his famous essay "Walking," was entirely correct: "In wildness is the preservation of the earth." Gardens, though their contemporary manifestations tend to be on farms and in cities and suburbs, are the hinges that practically connect human life with wildlife. In them we find played out all the biological processes that make up the biotic community we call creation. These processes bind us altogether into a whole, with the consequence that insofar as we fragment or isolate various members within the whole we make them weak and vulnerable.[28] Hence the second part of Perényi's assertion: a garden's parts are not separable. The garden is the most

practical prism through which we can observe the diverse strands of plant and animal and human life coming together in terms of a bewildering array of biological, chemical, and physical processes. It is, we might say, the site through which wildness comes home.

We need to think, now, more carefully about the character of domestication, for it is in these terms that we might come to understand better the nature/culture divide that sits at the root of so much environmental destruction and that prevents us from perceiving and thinking in an ecological manner. It is tempting to think that domestication is a one-way affair: humans decide what they want to domesticate and then simply proceed. But as Michael Pollan has clearly shown, this characterization of domestication is too simple and therefore false.[29] Domestication always presupposes a working with wildness, a cooperation with plants and animals. After all, there are many species of plant and animal that simply resist domestication. And so domestication might better be conceived as the elaborate, tense dance between Dionysian abandon to nature and Apollonian control over nature.

As every good gardener knows, one cannot simply impose one's desire on the earth. Good gardening begins with careful, sustained observation of the ground, the weather, and the interaction of plants and pests. A gardener must adopt nature and its creative processes as his or her tutor if anything like gardening success is to occur. In a very important sense, we must put ourselves at the service of biological, chemical, and physical processes and be prepared to emulate or mimic them. Moreover, the learning process involved is not exact, partly because we do not often learn very well, but also because biological processes are inherently unpredictable (though we can count on some things, we should also be prepared for evolutionary development to go in unexpected ways). To garden is thus to experience success and failure. It is to enter into a world of complexity and mystery that is at once beautiful and overwhelming.

That we have not enjoyed failure or the experience of unpredictable and unmasterable mystery can be seen in the tendency of domestication to go to its Apollonian extremes. Contemporary agricultural and gardening techniques are heavy on domination and control. We see the unwillingness to learn from the particularities of place when we design gardens and fields in such a way that the plants on them cannot survive without heavy doses of pesticide and fertilizer. As Perényi has observed, spraying for weeds and pests is like "using a bomb instead of a bullet, killing the good along with the bad."[30] Having forsaken the patience of attention and the humility of service, we presume to bulldoze, burn, kill, or engineer our way to lawn, vegetable, or flower success. The recent excitement over biotechnology represents the latest and perhaps most extreme form of Apollonian tendencies, because here plants will be made to grow entirely according to a human schedule and plan rather than the cycles and symbiotic relationships characteristic of wildlife.

But domestication taken to its Apollonian extreme is bound to end in failure, if not death, if it is not complemented by a Dionysian surrender to nature's own creative and wild processes. Gardens, however we design them, cannot be successful without the success of the biological processes that contextualize them. This is why the tendency to plant monocultures and to rely on species bearing the genetic imprint of our own designs is dangerous. These techniques isolate and fragment growth insofar as they put plants on a human rather than a biological schedule, making them vulnerable in the face of their biological competitors. For example, consider the difference between organically grown and bioengineered potatoes. The success of organic gardening requires a complex understanding on the part of the grower, an understanding that contextualizes the growth of a potato with the growth of other potato varieties, other plant species, and their evolutionary dance with pests, pollinators, and nutrient fixers. The result is a growing technique that works with rather than against the biotic community. Biotech growing, on the other hand, greatly simplifies our understanding because now a plant is designed to withstand heavy pesticide application (the grower simply kills all other forms of life so that the desired engineered potato species, having been genetically redesigned to withstand the pesticide, can survive; heavy doses of fertilizer are now absolutely essential because the soil's organic and microbial life have been destroyed). One does not need to be attentive to biological processes here, since the growth of the potato is now entirely on the grower's fertilizer- and pesticide-application schedule. This biotech process presumes that plants can flourish apart from the broad natural contexts that otherwise govern the success of life. As Pollan observes, "This new biotechnology has overthrown the old rules governing the relationship of nature and culture in a plant. Domestication has never been a simple one-way process in which our species has controlled others . . ."[31] But now, with genetic engineering, it can be. In manipulating the genome we are attempting to produce a culture without nature. Can it survive? No one knows, primarily because there are so many variables at work in plant success. We do not know if genetically designed species will fair well over the long term in a biological world, just as we do not know if we will be able to control the "biological pollutants" (the new species that become pests and cannot be controlled by us) that are the result of our engineering efforts. To go down the path of a bioengineered world, and thus fulfill the Apollonian dream of total control, is to put ourselves at the mercy of the engineers rather than keep us immersed in the multibillion-year-old flow of evolutionary development that has, until now, kept all life remarkably steady. "To shrink the sheer diversity of life, as the grafters and monoculturists and genetic engineers would do, is to shrink evolution's possibilities, which is to say, the future open to all of us."[32] With undue, impatient control we risk unhinging the world—and in the process fragmenting it into parts that most likely cannot flourish alone.

What I have been suggesting is that domestication, while often understood in terms more or less cultural, is not pure culture, but instead has always assumed the interplay between our desires and nature's ways. With the prospect of aggressive bioengineering we are entering a fundamentally new age in which the nature/culture divide is becoming a true divide for the first time. For the most part, however, gardening remains as the most viable and available activity through which people can reconnect to the broad natural world and in so doing develop the respect, affection, and care that is vital to our mutual success. As we garden for food or for pleasure and beauty, we enter intimately and practically into the mysteries of life and death and so regain a proper sense for our place in the wider, wild world as ones dependent on others and needing to work with them. If we become patient and attentive gardeners, we will learn the lessons of appropriate use and perhaps put a halt to the destructive presence in the world we have so often been. The lesson of gardening is that our presence need not be destructive. Provided that we are prepared to learn from and deal with the destructive effects of what we do, we may, as Pollan says, learn the art of "weeding" ourselves as much as our garden plots for damaging and undesirable elements.

We need now to consider how gardening, besides being the practical activity of providing for our mundane needs, can also be a vital spiritual activity. It is significant that the material context for creation and for redemption should be a garden, for it is precisely through gardening that we most experience ourselves as created beings, as beings tied to a magnificent creation and to God. As I have already indicated, the Yahwist is clear that we become authentic and truly fulfill our vocation as we learn to care for the garden which the creation itself is. In an agrarian ethos, such as the one that permeated the experience of several scriptural writers, we can be sure that, even if they did not think completely in terms of the aesthetic I have outlined above, a feeling for our dependence on and thus responsibility for the earth would have been much more obvious. And where it might have been waning, we can see how God called people into the wilderness or into the fields where they might again learn of their proper place in the world. Even Jesus, we are told (John 18:2), went often to the garden to meet with his disciples for instruction, reflection, prayer, and rest. Why go to the garden?

Gardens have long been a place of spiritual nourishment, because it is here that we can sense the vivifying and gracious power of the creator at work in the creation. Without much help from us, and sometimes in spite of our worst efforts, we can plainly see that we are in the presence of a life- and death-wielding power that overcomes and envelops us all. Though we may contest with the creator, the more honest, and also the deeply liberating, response is to take on a posture of humility that accepts, even welcomes, our association with earth and sky. This is not the forced, self-effacing humility that often accompanies false piety, but rather the authentic, ennobling humility that

comes with an honest sense of our place in the wider world. It is upon such humility that the key theological virtues of faith, hope, and love are built, if for no other reason than the fact that the growth of these virtues depends on the proper placement of us within creation and before God.[33] The redemption of humanity and the earth depends on the forsaking of all arrogance and the taking up of our rightful place as "gardeners" who in serving the needs of creation bring blessing to it and glory to its creator.[34]

To attempt to leave the garden, or to refuse the work of gardening, is to turn ourselves into exiles, aliens cut off from each other and the life-giving contexts that nourish and support us. As exiles we embark on self-chosen paths that we think reflect our own importance, but in fact are the fruit of fret and fuss. In the course of our striving we often enough (sometimes as a consequence of defeat or tragedy) come to the sense of our own desperation and futility, and when we do we seek the wisdom and the peace of the garden.[35] Gardens are spiritually restorative because they mirror, provided they have not gone to Apollonian extremes, the harmony and mutual beneficence that ought to characterize our life within creation. They help us see what is proper, what is fitting, and what is beautiful. They introduce us to the rhythms of birth, growth, decay, and death and help us see these rhythms as good and not as something to be feared or detested. Is it any wonder, then, that we should often choose for our final resting place sites that resemble gardens?

To garden is to enter into our most authentic vocation. On the one hand, this needs to be taken quite literally—we need the experience of taking care of plants, of learning the patience and discernment that comes with such activity. In the physical and practical act of gardening we will come to feel from the inside the pace and the measure of life that is attuned to God's delight and rest. On the other hand, we can also understand this more figuratively as the "making room" for others to grow and flourish. When God created the earth, God "made room" for us all and in so doing showed us that the heart of divine life, indeed all life, is this generous and gracious gesture. As we garden, that is, as we weed out the nonnurturing elements within us and train our habits to be more life promoting, we participate in the divine life and learn to see and feel the creation as God sees and feels it.

As we enter into this garden aesthetic it will be impossible for us not to adopt at the same time something like the ecological ethic outlined above.[36] In feeling our connection to creation, because we have now practically and concretely entered into its processes through the work of gardening, we will be much less likely to destroy it. What will become clear is that we can no longer assume, as we so often have, that we can live at the destructive expense of our habitats. We will learn to live responsibly and charitably with the creation because it is the only proper context in which any life can flourish at all. We will cease trying to rise above our naturally and divinely appointed status and in-

stead take our place as responsible members among and within the created order.

Ecology and Religion

Western religious traditions have not always been very welcoming of ecological insights.[37] One of the main reasons for the poor reception stems from the anthropocentric character of these religions. The monotheistic God, it is presupposed, is a personal God who acts through the processes of history rather than the processes of nature. To connect God too closely to nature would be to enter the world of paganism and thus risk idolatry.

There are several ways to show that not only is this conception of religion false, but it is false in terms set by the religion. As the first chapter has already shown, Judaism and Christianity have an abiding interest in the order of nature simply because they are the reflection of God's goodness, concern, and delight. God works through nature as one of the means for making the divine nature known. Clearly, monotheistic religion does not encourage the worship of things. But it does recognize the will of God in all creation, and so creation becomes a path to the enjoyment of God. As Thomas Merton once said: "In His love we possess all things and enjoy fruition of them, finding Him in them all. And thus as we go about the world, everything we meet and everything we see and hear and touch, far from defiling, purifies us and plants in us something more of contemplation and of heaven."[38] On more than one occasion the scriptures speak of creation's praise of its creator. Refusing the knowledge of ecological insight, as well as the awe and humility that comes from recognizing nature's vast complexity, may signal a refusal on our part to hear and participate in the creation's praise.

And so the temptation of idolatry is not rooted in the natural world per se, but in a distorted personal will that focuses on itself rather than God or that handles creation in terms exclusively devoted to self-advancement. Moreover, understanding God primarily in anthropomorphic, rather than natural, terms does not lessen the risk of idolatry. It may in fact increase it, since the temptation is then to confine God's personal nature to the personal characteristics we possess or desire. The dynamism of natural processes, their openness to change and adaptability, may lessen the risk if we stay attentive to the fundamentally mysterious character of creation. To see God at work in creation is no more idolatrous than to see God at work in personal or national histories provided that we have learned, as Merton suggests, to detach ourselves from ourselves so that we see and use all things in and for God.

A second objection to ecological insight stems from the perception that evolutionary development threatens human uniqueness. Here the shadow of

Darwin looms large since he supposedly argued that humans are little different from other high-order organisms. The religious view will not condone this since it believes that humans are created in the image of God. But does ecology really threaten this religious view? There are good reasons to think not.

What ecology argues is that humans are inextricably and concretely tied to the natural contexts in which we live. As creatures we share lives that are interrelated with all other creatures. As a science, ecology does not specify the character of our interrelatedness. It does not, because it cannot, tell us how we should value our interdependence. Clearly, most organisms live out their interconnectedness in an unthinking or unconscious manner—they do it instinctually. But because humans are self-conscious, we need to think about how to negotiate our interdependence. We can live out our dependence in a responsible or an irresponsible manner, in a manner that welcomes or denies our interrelatedness.

It is this capacity for reflection upon our interconnectedness that marks us as spiritual beings. Religious life, in turn, aims to clarify for us how we are to live within a creation not of our own making or choosing. We can desecrate creation by turning it to our own advantage, just as we can consecrate it by enjoying it as a gift of the creator. The scriptural text that speaks of us as created in the image of God tried to give an indication of how we are to live out our lives *within* rather than *beyond* creation. It in no way suggests that we live apart from an ecological context. In fact, because it is an image that is focused on God as the creator, it deepens our sense of ourselves as created beings and therefore as fellow, though not identical or even equal, members of a created whole.

A more serious deterrent to a religious reception of ecological insight may ride on the nature of death. Not only evolution, but also ecological dynamism, presupposes massive death. Does the omnipresence of death as the engine of life present a problem for religion? Not necessarily. It depends on how death is understood. From a biological point of view death is not only necessary, but good, since it is through death, through the processes of decomposition and decay, that new life emerges. How does the goodness of death here described relate to death understood religiously, where death is either an enemy or a curse (Genesis) or a sign of the deformation of creation that Jesus Christ will eventually set right?

In the religious imagination death is tied to sin. Clearly it is difficult to understand how sin leads directly to general biological death (murder and violence would refer to specific forms of death that are obviously tied to a sinful will), especially when we note that God has built into the order of creation life spans that require organisms to die at their appointed time. And so death, viewed religiously, must mean something different than biological death, and the difference has something to do with human sinfulness. Perhaps the fear of death has to do with the tenacious hold of our own self-importance that is

characteristic of the sinful attitude. Because the range of our sympathies oftentimes does not extend beyond the small circle of our lives, the threat of death suddenly becomes more ominous than it is. Death registers as the force that brings me to an end, and when viewed from a self-centered perspective, this is clearly an evil thing. As David Burrell and Elena Malits suggest, "Because of the way in which sin has become the context of our lives, death has been turned into the reality we most feel and fear. In a disordered creation, death comes to stand for something yet more sinister than itself. Given a world marked by self-deception, the fact of death now serves as a metaphor for the self-destructiveness of sin, which is the root disorder of creation."[39] In other words, if our lives were properly directed to fulfilling God's intention in creation, death would not appear as the ominous reality that it has become. It would signify the fitting conclusion to, yet also continuation in, the ways of grace.

Another dimension to the fear of death has to do with its seeming finality in severing the connection between our life and all other life. Here death registers as the ultimate separation from God, the origin and end of life. But is physical death in fact this separation? From a Christian point of view the answer is no, because Christ's resurrection is the sign that nothing, as Paul would later say in Romans 8, can separate us from the love of God, not even death. The answer is also no from an ecological standpoint because death, rather than being the end of some line, is a moment on the great wheel of life. In both cases it is our arrogance, the tenacious hold on our self-importance, that prevents us from submitting to the greater grace of life's processes and love's intentions.

What this means is that the fear with which many of us approach death stems from the inability to see our lives as supported and surrounded by the grace of life. We resent death because we see it as the extinction of our own existence. But does not such resentment, on a religious and an ecological view, represent self-deception and hubris? We are forever brought into being and maintained by processes far beyond our imagination and control. Would not the more honest response be to submit our bodies and ourselves to this grace even in death, for in this submission do we not affirm our trust and hope in the creator of life? Can we so align our lives with the life of creation as a whole that we see life and death as "a patient willing descent into the grass" (Wendell Berry)?

Among Christian saints few have understood this as well as Francis of Assisi. In his famous "Canticle of Brother Sun" Francis praises the most high God for the Lord's goodness and power. The whole of creation, in the elements of sun, moon, stars, wind, air, water, fire, and earth, manifests God's light and sustaining life. But the creation does not stand at a distance from Francis. Its elements are to him brothers and sisters and so are vital to his own destiny and happiness. Many accounts of Francis speak eloquently of his intimate identification with the wide creation and his intense delight in particular crea-

tures. It is as though by entering into friendship with the creation Francis also entered more deeply into the power and grace of God. The prerequisite for this friendship, however, was the holy poverty that stripped Francis of self-interest and self-possession. Throughout his life he admonished his followers to be like Christ in refusing to grasp anything for themselves alone. The creation does not exist for us to possess or manage, but to celebrate.

It is precisely this refusal to grasp for self, to see oneself as a self-subsisting and self-contained entity, that enabled Francis to welcome death as "sister death." Francis did not fear biological death, nor did he see it as an alien power that needed to be overcome. In fact, his wish was that upon death his body be placed naked upon the ground as a symbol of the poverty of his own spirit and as the sign of his kinship with the creation as a whole. Death is but one dimension of our being: "The man who has put himself into the hands of Being now sees everything, including death, in the positive light of Being. Death is for him no longer the alien destroyer; she is that only to a man who clings to his own ego."[40] Welcoming death becomes the highest expression of the poverty and detachment without which a full embrace of creation is impossible. Referring to Francis, but also to Dostoyevsky's character Alyosha in *The Brothers Karamazov* who undergoes a similar conversion, Éloi Leclerc observes: "To be brother to all creatures, as Francis was, is in the last analysis to choose a vision of the world in which reconciliation is more important than division. It is to overcome separation and solitude and to open oneself to a universal sharing, in which 'the mystery of the earth [comes] into contact with the mystery of the stars' in a vast movement of pardon and reconciliation."[41]

Francis combines in his own life both ecological and spiritual humility. His attention to and gentleness with the elements of creation enabled him to see how they too are expressions of God's grace and thus are finally kin to him. From this identification he saw the dishonesty and destructiveness of sin and pride that finally lead to our collective misery and fear. Insofar as we submit to God's all-encompassing grace, death is not something for us to fear, for having identified ourselves with God and given up our attachment to self, death is but a moment in the eternal union with God. It becomes, as Burrell and Malits suggest, the "offering [of] a completed gift, however imperfect, to the one who gifted us with life initially and has always sustained us."[42]

4

Humanity's Place in Creation

We are not only spokespersons for God, *imago Dei;* we are no less and therewith, spokespersons before God for creation, *imago mundi,* in whole and in part.

—Richard Fern, *Nature, God, and Humanity*

Of all scriptural texts, Genesis 1:28 has played the most determinative role in shaping our understanding of humanity's place within creation. The command given to Adam and Eve that they "be fruitful and multiply, and fill the earth and subdue it; and have dominion over the fish of the sea and over the birds of the air and over every living thing that moves upon the earth" has been the choice text of all who wish to claim for humanity the role of master and judge over the earth. It has, in the minds of many, enabled, if not pardoned, the exploitation of the earth and its many gifts.

It is a mistake, however, to isolate or to put too much emphasis on this one text. First, because it assumes that this passage has one meaning or that the command to subdue and have dominion might not have varying meanings in different contexts. Consider how the modern development of instrumental reason and a commodity market, combined with the idea that people are the sole bearers of intrinsic value, would radically alter the meaning of domination from the premodern sense of nature's intrinsic orderliness and worth.[1] In the absence of nature's telos or goal in God, the character of dominion takes on significantly different aspects. Second, because appeals to this text rarely take into account that the people of God might need to learn over time what domination involves and entails. In

other words, the meaning of subjugation and dominion is not fully given in Genesis 1:28, but needs to be developed as the people of God learn from God what is their proper place within the creation. We cannot simply read off from our own expectations what our lordship should be, but must rather attend to the divine intention of lordship upon which our own lordship is to be patterned. Surely the ancient Israelite notion of royal kingship as entailing responsibility for the well-being of the ruled and Christian claims that "Jesus is Lord," that he is "the image (*eikon*) of God" (2 Cor. 4:4; Col. 1:15), ought to call into question all notions of dominion as exploitation, particularly when we recognize that the hallmark of Christ's lordship and mastery was his servanthood to all. It takes time for the meaning of a command to be understood and realized. We can, and often do, slip away from our conformity to the divine intention, which is why the letter to the Colossians exhorts its hearers to be "renewed in knowledge according to the image of the creator" (Col. 3:10). What is required of us, therefore, is that we attend to our failures at approximating the *imago Dei* and then learn from those failures. The narratives of scripture, particularly when understood in terms of canonical wholeness, as well as the commands uttered within those narratives, should be read as a history of humanity's failures and successes at learning, a history which is itself instructive.

The verses immediately preceding Genesis 1:28 indicate that human life is set apart from the rest of creation because it alone shares in the image of God. As created in God's image, our identity and also our vocation must find their bearing and scope in terms of the relationship to God that this image allows.[2] "The relationship to God," as Claus Westermann put it, "is not something which is added to human existence; humans are created in such a way that their very existence is intended to be their relationship to God."[3] At the most basic level, then, we must acknowledge that however we construe the nature of humanity's place within creation, our thought and action, if they seek to be faithful to God's command, must be worked out in terms of the divine-human relationship, in terms of the history of its engagement as recounted in scripture. Genesis 1 merely establishes that the divine-human relationship exists and that it is constitutive for human identity and vocation. The rest of scripture will contextualize and develop the nature of this relationship and so better equip us to understand our place and our role within the created order.

An adequate characterization of humanity's place in creation therefore requires that we move beyond Genesis 1:28 and consider the scriptural witness more broadly. It also requires that we attend to our own histories, both collective and personal, to see at what stage in the development of the image of God we are. If the image of God is not a possession but a relation that undergoes development through time, it is plain that the nature of our thought and action, and thus the nature of our dominion, will look differently depending on where we are in the "stages on life's way." How close are we to perceiving and handling the creation as gift, and how thoroughly have we transformed our own

lives so that they become an unmistakable expression of gratitude? Have we so ordered our lives and our economies that in our relationships with the whole creation we reflect God's original peace and delight?

The task before us, then, is to consider ways in which the image of domination can be understood so as not to conjure immediately the images of ruthless exploitation and oppression, images that most certainly do not illuminate the character of God. Perhaps we are better served if we remember that among the meanings of the term *dominate* is the image of the dome or spire that "dominates" a land or cityscape. The dome dominates not by exploiting its surroundings but by refocusing and opening up our vision on what is there. Its excellence and presence redefine the place of which it is only one part, oftentimes opening up new possibilities for the place that were formerly not visible. Might it not also be the case that in our being we bear the responsibility for refocusing and redefining the being of the creation as a whole? If so, then our being created in the image of God means that we are to exhibit in our thought and life the full excellence of creation, for in so doing we transform the time and place of creation by our very presence. Our lives, in other words, can be the occasion in terms of which the beauty, peace, and goodness of creation can become more pronounced and effective. Besides being the image of God, we are also in an important sense *imago mundi*, the image of the earth. Orthodox theologian Vladimir Lossky summarizes this view well when he says, "In his way to union with God, man in no way leaves creatures aside, but gathers together in his love the whole cosmos disordered by sin, that it may at last be transfigured by grace."[4]

In offering this view of dominion as transforming presence, we need to be clear that we have moved well beyond the Priestly text. The verbs *dominate* and *subdue* found in Genesis 1, with their monarchical, even military, connotation, clearly do not have this view of domination in mind. I would argue, however, that the earlier Yahwist account, with its mandate to till and keep the garden, and the later prophetic and early Christian accounts suggest a view of dominion that is focused on transformation and healing rather than control or exploitation. This chapter will thus argue for a view of domination that subverts the oppressive logic of domination that has, quite rightly, been the target of ecofeminists and social ecologists.[5]

The Image of God

The publication in 1967 of Lynn White's now famous essay "The Historical Roots of Our Ecologic Crisis" set off a flurry of activity on the part of religious apologists who wanted to show that the Jewish and Christian traditions were not intrinsically blameworthy for our environmental crises. White had argued, among other things, that the Jewish and Christian faiths are profoundly an-

thropocentric, that they proclaim a dualism of humans and nature that encourages the exploitation of the latter by the former. When this religious mind-set was wedded to the development of modern science and technology (indeed, it was most likely elements of the Western religious mind-set that enabled this development since it desacralized nature), the prospect of ecological abuse was imminent. For our current environmental crisis, "Christianity bears a huge burden of guilt," since it rests on the instrumental and utilitarian axiom that nature has no other purpose than to serve human concern.[6] White concluded that since religion was responsible for the destruction of creation, so too religion would need to play the major role in effecting creation's recovery.

Numerous theologians, biblical scholars, and church leaders took up White's challenge. While agreeing that historically it was the case that Christianity encouraged nature's exploitation, this exploitation was not intrinsic to the Christian faith since its founding documents and creeds, particularly its teaching about creation, could be interpreted in a more ecologically friendly manner. The central text, in the minds of many, was Genesis 1:28. Did the command to subdue and dominate warrant the history of exploitation?

Among biblical scholars, the work of Bernhard Anderson played an influential role. In numerous essays on the creation narratives, especially on their style, and meaning, Anderson argued that the White hypothesis, as well as the conclusions of countless previous interpreters, rested on fundamental textual misinterpretations. To be sure, Israelite faith was primarily concerned with the human drama of salvation, but this salvation could not be enjoyed at the expense of the created order. Creation as a whole, and not just human history, is an expression of God's goodness and can be the medium of praise back to God (provided that humans accept their divinely appointed roles). Throughout Israel's history and teaching it is God, not humanity, that is sovereign. Humans possess an elevated status in the order of creation and thus are rightly charged to have dominion over creation. But their dominion is finally to be understood as an expression of worship to God: "Human beings are to exercise sovereignty within God's sovereignty, so that all earthly creatures may be related to God through them and thus join the creation's symphony of praise to the Creator."[7]

Like many others, Anderson argued that we needed to be clear about what our creation in the "image of God" meant, since it clearly had implications for how we understood the command to subdue and dominate the earth. He rejected the view of many later Christian authors who thought that the image referred to some special capacity or faculty—reason, freedom, conscience, will, and so on—that set humans apart from others. This view rests on a dualist understanding of persons, an understanding that falsifies the Hebrew view stressing the unity of the person. Whatever the image of God means, it must be worked out through the whole person, body, soul, and spirit. Nor could the image be the exclusive property of the male species, as some other authors argued, since Genesis 1:27 is explicit in identifying males and females as so

created. More careful scrutiny of the Priestly text yields a striking observation: the image of God, as contrasted with traditional Mediterranean and Semitic royal ideology, has been democratized to include the whole human race. Not simply kings or some special elite class, but the whole of humanity bears the responsibility of representing God's image on earth.[8] Perhaps even more striking, however, is the fact that humans are designated as bearing this image in a culture that strictly condemned as idolatrous all images of God in any form (a point that perhaps stresses the relational character of the image, since inanimate objects are hardly capable of entering into a relation and undergoing the learning process of being conformed to the divine intention).

It has been the temptation of numerous commentators to suppose that the image of God gives to human beings a unique ontological status. Whereas other creatures are "brought forth" from the waters or from the ground, humans, on the Priestly view, and unlike the Yahwist account in Genesis 2, are not brought forth from the earth. This means that we are not "earthlings" in the way that other creatures are. The reference point for human creation in Genesis 1 is the likeness to God. As William Brown suggests, we are something like "corporeal godlings" because of this likeness. We should not conclude, however, that this likeness takes us out of the category of creation and places us in the realm of creator: "Humanity's correspondence with God through the *imago Dei* is one of function and form, not substance."[9] In other words, human beings are set apart from creation not because they are something *other than* creation but because they have a unique role to play *within* creation.

In the view of Anderson, humanity's role within creation is to give concrete expression to God's rule on earth and so to represent God's original peace and delight. Our rule is not an invitation to autonomous mastery, since being the *imago Dei* precludes thinking of ourselves as autonomous at all. Our being created in reference to God means that our being and our desire are to be formed in terms of our relatedness to God. It is the law or intention of God, rather than self-desire or self-rule, that is to animate our thought and action: "Thus the special status of humankind as the image of God is a call to responsibility, not only in relation to other humans but also in relation to nature. Human dominion is not to be exercised wantonly but wisely and benevolently so that it may be, in some degree, the sign of God's rule over creation."[10] Creation does not exist for us, even though it is to be used by us to meet human needs. It is the creator's, and our dominion must in every way reflect the divine intention.

S. Dean McBride Jr. has argued that the human place within creation is inherently ambivalent. Humans blur the otherwise clear distinction between creation and creator because, while clearly planted on the ground, our orientation and inspiration is from above. We belong to the creation, but we also belong intimately to the life of God. In some sense, then, our existence is to be theophanic, a revealing of the life of God on earth.[11] As the history of Israel

will show, the nature of this task, what it entails and requires, is something that will need to be learned through time. Genesis 1 merely lays out what a properly human orientation ought to be. Our rule over creation will require establishing some measure of control over the rest of creation. But it will disallow all forms of ruthless domination, for just as God, in stark contrast to other creation myths, establishes the creation through peaceable means, so too our dominion is to reflect God's peace: "By dint of royal office, human beings have at their disposal the elemental forces of creation, including animate life, and are commissioned to harness them in order to ensure their flourishing on the earth. As there is no combat between God and chaos, so there is no mortal struggle between humankind and creation."[12]

The Priestly account of creation is pervaded with a sense of the orderliness of the created realm. All that lives exists as the expression of the divine intention and command. As created in the image of this God, our own existence is to be an expression of this same intention, an intention that seeks and delights in the flourishing of a creation that is fine and very good (1:31). On this view, the *imago Dei,* rather than being a possession, turns out to be a calling, a task definitive of our humanity. We authentically carry out this task only insofar as we are in relationship with God and attempt to realize God's will and desire for all life: "We are called, accordingly, not to bear the image of God—which we cannot avoid—but, rather, bear it faithfully, mirror God in creation."[13] Clearly this account of the placement of humanity within creation stands in stark contrast with a history of human domination not patterned on the divine intention and not seeking the flourishing of creation as a whole, but instead seeking our own gratification and glorification.

Stewards, Citizens, or Servants of Creation?

The history of human cultures, East and West, suggests that the scriptural command to have dominion over the earth and all its creatures was redundant. Whether by intention or by accident, people have constantly altered the environments in which they lived. Sometimes, as in hunter-gatherer societies, the alteration has been relatively mild. But at other times, and more recently, the scale of transformation has been dramatic.[14] The question, then, is not whether we will dominate, but what the character of our domination ought to be. How should we understand and characterize our mastery of the earth, particularly in a time when humans have the power to destroy or genetically alter all of life's forms? Is our presence an ennobling one, one that models or typifies the excellence of the creator's intention and thus refocuses the creation as a whole?

There have been those, both within and outside religious communities, who argue that there are no constraints placed upon human mastery. The world exists exclusively for us, and therefore we can do with it whatever we

want. Aside from the religious reasons one could give to show the questionability of this view, there is a straightforwardly egoistic reason for doubting the wisdom of outright mastery. Given that people necessarily live from the gifts that the earth provides, it would be foolish to destroy, deplete, or irreparably harm the sources upon which we clearly depend. Harming the earth too much eventually results in self-harm. We need, in other words, to recognize that dominion must at least take into account ecological limits, that freedom must be cognizant of what nature allows and recommends. That many do not appreciate this ecological law is a factor of either hubris, ignorance, or blindness.

Within religious communities there have also been those who consider human mastery to be without limit. Whether out of spiritual arrogance or the conviction that the earth is doomed to destruction anyway, these people have maintained that this earth is not our true home. What we do to it is therefore of no consequence. All that matters is that our souls be suitably prepared for life in another world, a spiritual world in which the inevitable pains and sufferings of this life come to an end. But can a soul that practices destruction and violence against the creation at the same time prepare itself for life with the creator? Is it not naïve to think that having destroyed God's paradise on earth we will not also destroy God's paradise in heaven? The central problem with gnostic or apocalyptic views of this sort is that they deny what scripture affirms: creation, which includes human endeavor and the work of nature, is the place in which God's love and goodness find concrete expression. Redemption occurs through the medium of creation, not at its expense. The direction of life—its origin, meaning, and goal—is throughout circumscribed by the creator's intention. Failure to live within that intention is invariably characterized by scripture as sin.

Since it is foolish, both on ecological and theological grounds, to consider human dominion as being without limit or constraint, how shall we characterize proper dominion? Within religious communities the more recent response has been to say that we are stewards of the earth, that dominion is best understood as a form of stewardship.[15] The etymological meaning of the term suggests that a steward is someone who supervises, administers, or controls the affairs of a household. A steward is thus acknowledged as someone having power and insight, someone able to ensure that the household does not come to ruin. But the steward is not the outright owner of the house. He or she is trusted by someone else, presumably the owner of the house, to manage the affairs of the house in a manner that would be pleasing to the owner. A steward of creation, then, is someone who acknowledges God as the owner and master of the creation, yet recognizes himself or herself as entrusted with the creation's wise management and conservation, rather than its exploitation.

Historically speaking, however, the metaphor of stewardship has not been very prominent as a characterization of human identity and vocation. In the Hebrew scriptures it referred to a technical office of household management

and thus was a role reserved for small segments of the population. In the New Testament, particularly Luke 12:42ff., stewardship takes on broader significance as the office charged with the care of the lord's (Christ's) slaves (followers) or, as Ephesians 3:2 suggests, charged with the maintenance of God's grace. Clearly we can see in this description significant potential for a more complete account of human vocation and identity. But in the postbiblical period, the office of stewardship receives almost no theological development. As Douglas John Hall, one of the most articulate contemporary defenders of the stewardship model admits, "The fact is, the symbol has played almost no role at all in the history of European Christianity."[16] The clearest sign of this would be that where the term is recognized at all, it usually refers to money management within the church. "Stewardship Sunday" is the day when financial matters in the church are publicly addressed.

Given the paucity of the term's historical use, why has stewardship come to play such a dominant role in contemporary discussion? A primary reason is that the symbol of the steward, at least in the popular imagination, maintains the notion that human beings are in control, and so stewardship stands in stark contrast to other environmental approaches that stress a more egalitarian view. Stewardship recognizes that people have unique powers and responsibilities that equip them for the role of management of the earth. In affirming the species superiority of humans it can thus make it easier for us to live with a history of exploitation, since all we need to acknowledge is that our domination has at times gone astray. Though some of the means of our mastery may have been improper, the overall trajectory of mastery escapes sustained examination or critique.

The appeal of stewardship language can be seen in the recent Cornwall Declaration, a statement authored in 1999 and then signed by a number of leading religious conservatives. This declaration is clear in saying that human beings have a responsibility for taking care of the creation and that this responsibility has to do with our being created in the image of God. It is equally clear, however, that stewardship must not call into question economic and political liberty or, more specifically, the free-market economy and the scientific-industrial complex that has contributed to recent "unprecedented improvements in human health."[17] According to its signers, environmental improvement depends on "growing affluence, technological innovation, and the application of human and material capital." Stewardship will be hampered if economic development and private property, freed of government-initiated management, are not empowered to bring improvement in "the material conditions of life for people everywhere." As one of their aspirations makes clear, "We aspire to a world in which widespread economic freedom—which is integral to private, market economies—makes sound ecological stewardship available to ever greater numbers." An economic agenda, in this case, has taken the lead in defining the parameters of stewardship.

The declaration's concern about world poverty is certainly legitimate, especially since it is becoming clear that global ecological health cannot be achieved as long as gross economic disparities between the rich and poor continue. What is questionable, however, is the view that care of the earth will follow, as if automatically, from the growth of our economies. While it is certainly true that we have an obligation to improve the quality of life for the poor, it is not clear that the rich are currently enjoying the "best" life or are living out God's intention for humanity. Behind the writing of the declaration we find the fear that environmentalists have become either alarmist in their predictions or extreme in their denigration of various forms of human activity (particularly industrialism and the market economy) and that they have lost the proper sense for the higher value and superiority of the human species as compared to all others. Writers such as Robert Sirico, head of the Acton Institute, an organization devoted to the protection of religious and economic liberty, are worried that efforts to slow down economic development will reduce poor nations to even greater levels of poverty. The assumption throughout is that economic development, which means an economic order that reproduces First World affluence throughout the world, is not at odds with the integrity of creation, but will in fact "enrich creation."[18] Whereas the signers of the declaration see the freedom and prosperity of the developed nations as exemplifying the excellence of creation—why else would they want all other nations to follow our lead?—environmentalists see our present economic order, which is premised on resource extraction, habitat destruction, unprecedented consumption and waste, and the inequitable distribution of wealth, as the source of the earth's and humanity's degradation.

The Cornwall Declaration reveals persistent problems or temptations that arise within a stewardship model. First, we see the temptation to forget the lordship of the creator. On the one hand, the declaration is clear in stating the need for reverence for God, but it is also clear that this is a reverence that plays no practical (economic) role. The adulation of the free-market economy is carried out with little concern for a critique of its injustices and destructiveness, with little worry over how it leads to the glorification of wealth rather than the glorification of God (we will return to this matter in the final chapter). The vision of stewardship that emerges here assumes, for the most part, an absent owner. The owner has granted the steward outright control and left the premises.[19]

A second major problem with the declaration is that it does not elaborate with any sort of precision what the character of dominion is to look like. It does not appreciate how the meaning of dominion has been radically altered in the modern age or that its significance would need to be learned through a history of sin. Since this model of stewardship is so eager to show a compatibility with private-property rights and a free-market economy, it forgets that the idea of such rights and practices would have been condemned by the ex-

periences of Israel (as in Sabbath legislation and the warnings of the prophets) and the early church community (which gave frequent warnings about the dangers of personal wealth). Dominion within the context of free markets assumes a nominalist heritage in which we, rather than God, assign value and worth. It assumes an economic order that knows no Sabbath or Jubilee and that thrives on competition and war rather than on cooperation and peace. One searches the declaration in vain for an elaboration on the practical mechanisms that would make our stewardship accountable to God. Michael Northcott is clearly correct when he says that in our age, given its individualistic, human-centered assumptions and its association with an instrumentalist frame of mind, the symbol of stewardship can easily become misleading, even potentially harmful.[20]

Obviously not all models of stewardship fall within the economic agenda of the Cornwall Declaration. Hall's treatment, for instance, yields a diametrically opposed view, as can be seen in the following:

> Stewardship is not therefore the gaining of influence, power, property; not the winning of souls and tongues to the Christian confession; not even (as an end in itself) the extension of the manifest sovereignty of Christ in the world, but rather the care and nurture of life, the healing of the one who fell amongst thieves, the feeding of the hungry and the freedom of the oppressed, the befriending of the friendless, the equitable distribution of the earth's bounty, the passion for justice and peace, and dialogue with all who hunger and thirst for authenticity."[21]

Consider too the statement titled "Global Stewardship: The Christian Mandate," developed by the Coalition for Christian Colleges and Universities, which argues that Christians have a special responsibility in the preservation of the earth's integrity and in the correction of economic practices that abuse the earth and people.[22] Statements of this sort suggest that models of stewardship can be somewhat helpful in articulating our place within creation. But problems still remain.

Stewardship, unless supported by considerable external argument, does not have within itself a very clear understanding or program for what our management or dominion ought to look like. Though it serves well as a titular designation, its programmatic neutrality with respect to means and ends (consider the wide disagreement between the above views) makes it susceptible to misuse and distortion. In other words, the image of the steward might serve us very well in a context that already appreciates the significance of creation. But in a time such as our own, one marked by the abandonment of a cultural appreciation for creation, it turns out to be less helpful.

J. Baird Callicott, in the highly regarded essay "Genesis and John Muir," argued that there is a third option beyond outright mastery and stewardship.

Drawing primarily on ideas found in Aldo Leopold's and John Muir's works, Callicott develops a citizenship model as the most appropriate for characterizing humanity's place within creation. In this model, and quoting Leopold, "Human beings are intended to be 'plain members and citizens' of nature . . . neither its tyrannical masters nor benign, managerial stewards."[23] Callicott admits that the Christian stewardship model, when purged of its despotic potential, offers a persuasive, even compelling, basis for an environmental ethic. But it is not radical enough, since it does not consider adequately the anthropocentrism that often sits at the heart of stewardship assumptions.

Muir is helpful because even if he later repudiated his harsh Christian upbringing, his early thought was clearly cast within a scriptural framework (he had as a child been forced to memorize the entire New Testament and much of the Old) that allowed him to appreciate the appeal of stewardship notions. Muir asked, can we be sure that the world was made especially, or perhaps even exclusively, for humans? Does not such a view depend on a narrow appreciation of creation and the creator, since it clearly views both through the prism of human interest and desire? In his examination of the world Muir, much like Job, discovered that many elements of creation serve no human purpose whatsoever and that the order of nature is not directed in every case to human satisfaction or the furtherance of economic development. Complaining of the anthropocentrism of so much education, Muir asked, "Why should man value himself as more than a small part of the one great unit of creation? And what creature of all that the Lord has taken the pains to make is not essential to the completeness of that unit—the cosmos? The universe would be incomplete without man; but it would also be incomplete without the smallest transmicroscopic creature that dwells beyond our conceitful eyes and knowledge."[24] Muir wanted us to understand that all creatures come from the same "elementary fund" and that God cares for the whole of creation, not just humans.

What implications for human vocation follow from this more egalitarian, ecological view? Callicott argues that with the aid of the second, Yahwist creation account a citizenship ethic can be developed that takes into account Muir's insight. This Yahwist account does not stress despotic subjugation and domination, as does the Priestly account. It speaks, rather, of the need to till and keep the garden. It also stresses our common origin in the dust of the ground. The overall sense of the Yahwist is that we are in significant measure to share a common lot with other creatures. The problem is that humans are not content with their lot. Adam and Eve commit the sin of wanting to make themselves, Callicott suggests, "an axiological point of reference." They want the whole of creation to center upon them. Eating the forbidden fruit symbolized the human pretension at thinking that good and evil take their bearing from self-interest and desire. Anthropocentrism, the refusal to understand ourselves as but one part of a larger created whole, is the central sin. Alienation

from nature, symbolized in the expulsion from the garden, is the necessary consequence.

When we combine the insight of Muir with the Yahwist story the result is a citizenship ethic that rests on the transformation of human consciousness from anthropocentrism to a form of ecocentrism, a form of consciousness in which the self identifies itself in terms of the wider ecological world around it. Rather than seeing ourselves in an atomistic, and thus potentially antagonistic, relation with the rest of creation, we are citizens all, struggling and working to maintain all life: "At the core of the citizenship interpretation . . . people are created to be a part of, not to be set apart from, nature. The human/nature bifurcation . . . was unintended by Yahweh. The very concept of conflicting and competing interests emerged, taking the citizenship point of view, from a presumptuous act on the part of the original human couple."[25] Callicott, like proponents of the deep-ecology movement, is not arguing that self-interest be obliterated. Instead, he wants us to see that since we are necessarily embedded within a larger ecological world, our interests must expand to include (and see our own futures identified with) the interests of others. The health of the whole depends on the recognition that we are all citizens entwined together in a common fate and that we harm ourselves and each other if we think and act too much on the assumption of our own individuality. Our individual selves, in other words, are finally illusory since they participate in and are encompassed by a larger ecological Self.

The attraction of Callicott's view is that it takes seriously what Muir and the science of ecology rightly claim: we cannot, except in moments of hubris and dishonesty, claim that the whole creation exists for ourselves. We are through our bodies necessarily and beneficially embedded in a historical and biological context that, while making our individual lives possible, is nonetheless greater than us. Where it fails, however, is in its characterization of human identity and vocation. Callicott, like Leopold and others before him, assumes that human uniqueness, especially when developed in terms of the command to subdue and dominate the earth, will invariably result in some form of oppressive anthropocentrism. Hence his characterization of the Priestly account as necessarily despotic and the Yahwist account as atavistic, as demanding a naïve return to nature in some unblemished form. Callicott also insists that self-consciousness must be transcended on the assumption that it will necessarily result in self-centeredness. But must we think in terms of this either/or? Can we not think about the human relation to creation in nondespotic terms that simultaneously acknowledge human uniqueness and self-consciousness without lapsing into some kind of pan-self-ism that occludes valuable distinctions between creatures? Even if we grant considerable similarity between species, something genetic research is now encouraging us to do, does not our being created in the image of God, as well as common observation, demand that we be able to distinguish our species' identity and

vocation from the identities of other species? In other words, how is human responsibility to be taken seriously when the human self is so closely identified with the all-Self of deep ecology? Does not responsibility depend on traits that identify us as uniquely human? Despite the desire that many have for greater species equality, the fact of the matter is that we are, because of our spiritual endowment or potential and our technological prowess, masters on this earth. The issue is not how we will shed ourselves of our unique potential and responsibility, but how we will transform it for good.

A central problem for the citizenship model is that by so closely identifying human identity and ecological context the moral and spiritual reference point for creation's redemption and restoration that was formerly provided by the *imago Dei* is obliterated. The potential, clearly assumed by the prophets and by John's Apocalypse, that God might judge, inspire, and redirect the course of creation is lost. What we need is not a transformation of consciousness that will unite (and potentially blur) us with nature, but rather a transformation that will bring our hearts and minds into alignment with the divine intention for creation. Moving in this direction does not require us to abandon the valuable ecological insight of our embeddedness in the created order. Nor does this stress on human particularity or uniqueness necessarily lead to new or revived forms of exceptionalism that legitimate exploitation or exemption from biological processes.[26] It merely indicates that the health and peace of creation will be achieved as we better exemplify in our endeavors the excellence of creation, an excellence learned through attention to ecological realities but also in reference to the creator's will.

What we need, therefore, is an account of human dominion that takes seriously the *imago Dei* and that acknowledges our ecological interdependence, an image that recognizes human uniqueness without turning it into despotic exploitation. For this task the image of the servant of creation is appropriate. In proposing a model of servanthood I am not suggesting that it exhausts the whole range of our responsibilities within creation—one should, for instance, also speak of the Eastern Orthodox position that identifies the human role as a priestly role.[27] Nor do I think that stewardship models should be entirely abandoned. My hope, rather, is that the model of the servant, which itself draws on many human responsibilities, can help us as a focal image that animates and is at work in the various tasks we perform. Servanthood, in other words, permeates the many roles of the religious follower, often by informing the specific practices associated with religious life: prayer, worship, and work each require, at some point, exemplification in a life of service. Moreover, to speak of servants, rather than stewards or citizens, of creation is to highlight the countercultural nature of the task before us. Servanthood, unlike major emphases in current cultural life, shifts the orientation of our action away from ourselves to the well-being of others, to the work of "making room" for others to be, and finally to the praise of the creator. It takes our minds off the current

obsession with the consumption of creation and redirects it to the work of enabling the continuity of creation. Servanthood, in short, introduces us to the long, patient labor of fitting ourselves within God's creative work.

On Being Servants of Creation

So far I have been suggesting that human dominion within creation must be informed by our fundamental relatedness to God if it is not to lapse into the forms of despotic mastery characteristic of the instrumental, utilitarian mind. Insofar as we obliterate or deny the image of God within us we contribute to the desecration and destruction of creation, because it is in terms of the creation's orientation to God that the spirit of life is affirmed (remembering that the divine approval on creation sanctifies and grounds our own approval). The turning away from God, as when the gifts of creation are organized primarily to serve human ends, is thus a turning away from life. Clearly, this is not to say that creation should serve no human end whatsoever. Rather, our use of creation should always be a use which is itself directed toward the praise of the creator. In other words, our work and our consumption should themselves be forms of prayer in which the goodness and the purposes of God are foremost in mind. That our present culture, often referred to as a "culture of death," makes this disposition so difficult to realize is an indication of how far we have moved away from authentic life.

The image of the servant is easily misunderstood, since it conjures ideas and practices thought to be demeaning of persons. The role of the servant, we often surmise, is the exclusive domain of abject people, people disqualified from more honorable or prestigious positions. One should think here of the legitimate complaint of feminists and ecofeminists who show that one of the major aims of patriarchal societies is precisely to keep women in the roles of servants or slaves so that decidedly male aims can be satisfied. Historically speaking, the power of this critique stands as an appropriate indictment of oppressive relationships and social structures that pit gender, class, or species against one another (and so do violence to the integrity of creation). The model of servanthood developed here, however, assumes a context of creation in which interdependence and the grace of mutuality, rather than patriarchal oppression, are the guiding norm. Authentic servanthood, in other words, can be realized only in its creation context.

That we often think of service as demeaning our lives indicates our unwillingness to pattern our lives on the divine intention. But is the call of God, as reflected in scripture, anything other than to be servants of each other? Is not this service the primary means through which we express our devotion to God? If the work of God is to serve as the pattern for our own work, then it becomes clear that service is the making welcome and the making room for

another to be itself. When we understand that in creating the world God desired the growth and health of what is not God, then it becomes apparent that our primary vocation must be to work with God so that creation can maximally be. In serving others we participate in God's self-othering life.

A description of human dominion over creation, now understood in terms of our service to it, must always presuppose and then proceed from the *imago Dei* which, as we have seen, refers to our intrinsic relatedness to God. The truth or authenticity of our existence is a feature of how well we bear witness to divine existence. We, like the rest of creation, do not properly exist from ourselves or for ourselves alone, but only insofar as we acknowledge and express our relatedness to God and to each other. Relatedness and interdependence are not extrinsic to our being, but are its very core. At the most fundamental level this means that our living ought to reflect gratitude for the gift of life that we and the creation as a whole are. Our work and play are to be permeated by the joy and freedom that follows from the sense that we are the concrete expressions of God's grace and delight, rather than the "quiet desperation" (Thoreau) that otherwise fills our frantic, often unreflective, striving. In short, our existence is to be a Sabbath existence, a life that relishes the spontaneous, serendipitous effects of God's abiding and sustaining presence: "The World is a Mirror of infinit Beauty, yet no Man sees it. . . . It is a Region of Light and Peace, did not Men Disquiet it. It is the Paradice of God" (Traherne).

Out of the disposition of gratitude the possibility for an authentic orientation toward God and the creation becomes possible. No doubt our dealings with each other can be strictly utilitarian, even rapacious and despotic. But they become so as we become ungrateful, as we become anxious. As our histories so clearly show, dominion becomes ruthless or exploitative precisely at those moments when we feel ourselves threatened, when we feel we have little or nothing to be grateful for. When we think we need to live exclusively by our own hand and might, we demonstrate our suspicion of the grace of God. We typify a life no longer oriented to God. The history of Israel, no less than the history of Christ's followers, centers on the choice of whether we will live according to the promise and blessing of God or rather according to the desires of our own wills.

It is easy to think that gratitude is passive in nature, that it finds its expression in a life of withdrawal and quiet repose. But this is not so. Authentic gratitude is activated in the service that we render to others. The reason for this stems from the fact that gratitude is the acknowledgment of and response to an overabundance of gifts that exceed anything we might plausibly deserve.[28] From this overabundance, and the humility it ought to instill in us, the maintenance and sharing of gifts is the logical outcome. The reception of the gift as gift, we might say, entails its preservation and care. To see creation as a gift, a vision unique to human beings if they live the *imago Dei*, is thus to recognize

that we are responsible for the just distribution of the grace of God, the proper ordering of all things in light of their relation to God. To abuse or exploit the gift of creation is to misunderstand or forget its gifted character. As Paul's Letter to the Ephesians suggests, we have been chosen in Christ by God "before the foundation of the world" to, among other things, "gather up all things in him, things in heaven and things on earth" (1:4, 10).

Dominion, therefore, must always be tied to the gratitude that follows from seeing everything in its relation to God. It must share in and be patterned on the grace and delight manifest in God's creation of the universe. As our practical lives reflect gratitude back to God, we will at the same time transform the look of the creation of which we are a part. Our dominion, like the dome in the cityscape or the temple on the hill, will recast creation in terms of its graced character. The best way to characterize such dominion is to describe it in terms of our service to others, in terms of our responsibility to sustain creation. Once we recognize that it is the obsession with securing our own lives by our own hands that is the source of so much personal terror and anxiety, and then see the falsity of that view in the face of the gratuity of creation, our lives are released from self-occupation into the freedom of service: "Understanding creation as a gift has the effect of releasing me from the onus of a solitary life-project. Once unburdened, what appeared as obstacles may even become opportunities."[29] As David Burrell and Elena Malits remind us, one of the central foci of Jesus's ministry was to subvert conventional attempts to make ourselves first and to teach us that in God's kingdom the way to make ourselves first is to make ourselves last in the order of priorities.

Before turning to the witness of Jesus to God's kingdom and rule, we should return to the Genesis text where human identity and vocation are first expressed in terms of service. If we follow Theodore Hiebert's suggestion that the Yahwist narrative is fundamentally about the relation between humans and the soil and that redemption in large part "consisted of a lasting and stable relationship with this land and the bountiful harvests it produced,"[30] we can begin to see how service, rather than mastery, might emerge as a central human characteristic. To understand this vision, however, we need to think our way as much as possible into an agrarian or gardening perspective.

An agrarian point of view is distinguished from an urban one in terms of its reference point. For agrarians and gardeners, nature is the measure that guides thought and action insofar as inattentiveness and carelessness with regard to the limits and possibilities of the land mark the difference between health or starvation. If one truly wants to live sustainably from the land, in a manner that is long term and does not depend on the exploitation or abuse of other places to support our livelihood in this place, then it is imperative that one make oneself humble before nature's processes, that one make oneself a student and a servant of the land. The point is not that nature is stingy or always hostile to our own well-being. Rather, we need to bring our intelligence,

desire, and will into alignment with processes that are much larger than us. It will do us no good to impose on nature what nature does not recommend, since the processes of nature, though dynamic, are not geared to our exclusive satisfaction. The reference point, in other words, is the land rather than us. People are subordinate to the land, if for no other reason than the fact that we live in terms of biological processes that encompass and sustain our being. To subvert or ignore these processes is to invite mutual peril.

The subordination characteristic of agrarian life is in no way a demeaning subordination, because what we are subordinating ourselves to is the grace of life (rather than some oppressive tyrant). Humility before the land serves, rather, as the introduction to the grace of life, a vast and unfathomable world of which we are a part, and so begins our education into a properly creaturely role. The hallmark of agrarian life is, therefore, very similar to Job's realization that an honest self-estimation begins with the admission of a wide and rich universe, a sublime creation that is distorted if we place ourselves at its center. This agrarian insight helps us see that the first responsibility of servants is that they make themselves the students of what they would serve. Ignorant or proud service amounts to no service at all. In fact, it often leads to unnecessary harm and destruction. As students we first need to learn to place our will and desire to the periphery so that we can see more clearly the truth of what we need to learn. Doing so we will take care of the creation and ourselves at the same time.

With this agrarian background we can now return to the divine mandate given in the garden that we are "to till it and keep it" (Gen. 2:15). The verb *till* or *cultivate* (*abad*) could also be translated "to serve." As Hiebert notes, this verb can mean the servitude of slave to master, of one people to another, or of Israel to God. Its use in an agricultural context, however, points to the acknowledgement that the land has power over us and makes us dependent on it.[31] This insight on our interdependence is of great significance because, like the view of many traditional societies, it affirms the need for humans to define their health and well-being in terms of the health of the biotic communities of which they are a part. There are limits to what we can and should do, limits set by the integrity of the land. The way to show that we respect those limits is to make ourselves the students and servants of the land, for in being servants we relinquish our own will and desire for the sake of the creation's well-being. Anthropocentrism is replaced not by ecocentrism but by theocentrism, a vision that is focused on God's intention together with the sweep of God's creative work.

A strong appreciation of servanthood entails a high estimation of labor. In this regard it is valuable to remember that several of the church fathers saw labor in the garden as a good rather than a curse, since it provided the opportunity to enter into a fruitful conversation with the orders of nature. To be sure, the work of our hands and the sweat of our brow, when distorted, can

reflect a divine curse. But labor in itself need not be bad. It can be the expression of delight. It can be the opportunity through which human intelligence is developed and harmony between humanity and nature established. Work, in other words, can be the expression of thankfulness to the creator for a creation that is productive and, in many cases, amenable to human effort and intelligence.[32] By subjecting ourselves to creation in our work we learn firsthand a sense for the creator's care. We begin to see the integrity, even sanctity, of a world that otherwise may seem of little value. Through our creative work, in other words, we can join with and more intimately appreciate God's own creative, sustaining work.

The thrust of modern culture, however, has been to free ourselves as much as possible from the demands and the supposed drudgery of physical labor. We seek at every turn, and pay handsomely for, the many labor-saving devices that will, we are promised, make our lives richer and more comfortable. There is little evidence to suggest that this has indeed happened. Instead we find more and more people unable to physically engage the world in a fruitful and personally satisfying manner. As Wendell Berry notes, "Our bodies are fat, weak, joyless, sickly, ugly, the virtual prey of the manufacturers of medicine and cosmetics. Our bodies have become marginal; they are growing useless like our 'marginal' land because we have less and less use for them. After the games and idle flourishes of modern youth, we use them only as shipping cartons to transport our brains and our few employable muscles back and forth to work."[33] Having forsaken the wholesomeness of physical labor, we have also forfeited the experience of life and delight that comes from labor's engagement with the processes of life.

We can summarize what we have said so far by noting that servanthood corrects our ideas about dominion in terms of the well-being of others rather than as self-benefit. Servants suspend their own desires, not out of tyrannical pressure or the loss of self-worth, but so that the flourishing of others and the whole creation can occur. This is a unique capacity that is unparalleled in any other species. Because we do not live by instinct and because we do not have to fight and claw our way through life (we have no natural predators), we are freed to restrain our wants and drives and make room for the needs of others. Our domination, in other words, can be of the strikingly different sort that makes the celebration and the knowledge of others the primary concern. As entrusted by God with the care of creation, we (with God's help) bear the responsibility of maximizing creation's health and giving to life a celebratory kick. Poised as we are between the ground and the divine intention, we can, if we choose, establish schools, political institutions, economic practices, festivals, religious communities, and so on that will honor and serve the integrity of creation and its creator. Our lives, in other words, can refocus the created landscape in terms of the grace and delight of God. To do so, however, requires that we become transforming agents seeking God's intention.

One of the finest and clearest expressions of service to creation can be found in the story of Noah. In the experience of the ark we learn about the prerequisites, requirements, and consequences of servant life. The text in Genesis does not give us very much detail about who Noah was before he was called by God. What we do know, however, is that with his birth he is named as the one who will "bring us relief from our work and from the toil of our hands" (5:29). Noah's life will address head-on the curse that God placed on the creation in response to the sin of Adam and Eve, the sin of wanting to be more than we in fact are. As Walter Brueggemann has suggested, "Noah is the new being. . . . He is the fully responsive man who accepts creatureliness and lets God be God."[34] He is the hope for a new creation. Noah will bring relief to the pain that follows from misguided relationships between people, between people and the earth, and between people and God. The effects of the divine curse could be seen on many levels, ranging from the pain of childbirth, to the appearance of thorns and thistles, to the violence of the generations who follow Adam and Eve. The effect of Noah's life, in turn, would be to restore proper relations between the elements of creation and their creator. Noah is "humanity's first righteous ancestor"[35] on account of his fulfillment of the vocation first given to Adam that we "serve and keep" the garden.

The Genesis narrative does not make clear to Noah why he was chosen to build the ark. As readers we are told that he "found favor" (6:8) with God, meaning that he exemplified in his life characteristics that, on the one hand, set him apart from his violent contemporaries and, on the other hand, made him suitable for the arduous task of building the ark and preparing for the success of its mission. Not until the ark is finished and he and his family are entering into it is Noah told that he alone is righteous (7:1). In what, precisely, does his righteousness consist?

One way to appreciate Noah's righteousness is to contrast it with the unrighteousness of his contemporaries. In rabbinic tradition their unrighteousness was understood as a rapacious passion that showed little regard for the integrity or needs of others. As Avivah Zornberg describes it, "It is the arrogant passion of the self, for whom no Other exists. . . . The ruler simply *enters* the intimate domains of others and expresses his mastery. He ignores the sacredness of thresholds, the dangers, the hesitations, the temptations, the respect, due to doors."[36] Put differently, Noah's violent contemporaries lacked compassion, which manifests itself most fundamentally as an attentiveness or regard for the presence and the needs of others. Their disregard for the integrity of otherness is described by the narrative in terms of the corruption of flesh (6:11–12), a corruption that according to the Babylonian Talmud, tractate Sanhedrin 108a, bespeaks the disintegration of identities: "Cattle had perverse relations with wild beasts, wild beasts with cattle, everything with man, and man with everything."[37] Once the integrity of otherness is lost, the possibility for responsible and charitable relations is also lost. The

other simply becomes an extension of our own desire and in the process is distorted or destroyed.

The experience of the ark will show Noah to be a righteous man, for it is here, in this laboratory of compassion and kindness, that the contrast between violence and love, disregard and responsibility, will be most clearly drawn. Even if, as some rabbis suggested, Noah was not yet fully righteous before the time of God's call, the ark experience would serve as the training ground for the development of righteousness. Here Noah would learn the attention and the rigor that follows from the responsibility of taking care of his family and the multitude of animals. Here we see played out the servant mentality that submits the ego to the needs of others.

Food preparation was central to Noah's work. He needed to understand and then make provision for the appetites of all the creatures entrusted to him. In this act Noah mirrored the divine work of preparing for the needs of creation. To be righteous, and thus to be able to stand before God and others without blame, is to be able to care for and provide for the needs of others. Righteousness depends on the knowledge of particular need (the dietary requirements of mute animals) and the compassion to address that need. Indeed, "The knowing of need is the highest measure of that curious, tender concern that characterizes God and God-like man."[38] This is a knowledge of responsibility but also ecstasy, since it introduces Noah to the delight and pleasant satisfaction of created beings well cared for.

The story of Noah allows us to see that service, while it is precise and rigorous in its demands, is by no means a form of drudgery. Being attentive to the presence of others issues into a new sensibility, a sensibility that discerns need and learns love: "To be totally present to the needs of the animals—this is the very meaning of the ark experience. Within the density and compression of the ark, multiple relationships and forms of knowledge open up."[39] The key to this new sensibility depends on the realization that our lives are not solitary but are always already bound up with others. Our being interpenetrates the being of others and vice versa. The enjoyment of others thus redounds to our own enjoyment.

In our own time, this new sensibility is especially difficult to achieve because of its individualism. We tend not to see, especially when we move beyond the narrow circle of family and friends, how our own well-being is intimately tied up with the well-being of many others. Noah's time in the ark compressed his experience so that the vast scope of the mutuality of his life could more plainly (even forcefully) come into view. Noah needed to take all the animals into the ark with him, not simply those he thought were of use or benefit to him, because the sphere of mutual involvement, as confirmed by contemporary ecological science, encompasses the whole of creation.

One way to understand Noah's service is to see it as a form of hospitality. Hospitality involves making room for another, as when a traveler stops at the

door in need of food and lodging, sometimes even protection. More recently we have associated hospitality with the entertaining of friends. But in ancient cultures, including Semitic cultures, hospitality was for the benefit of strangers. Early Christian communities, in turn, understood hospitality as a form of justice, since it attempted to address inequities in economic well-being: those who had more were obligated to give to those who had less since, in the end, all belongs to God. Welcoming another into one's house and providing for their needs were to be done without regard to one's own potential benefit. In fact, "Christians were deliberately to welcome those who seemingly brought little to the encounter."[40] Another's vulnerability or lowliness of station, rather than being the excuse to deny aid, served as the concrete reminder that all of us are vulnerable since we live by the gifts of God. In terms of the experience of Israel, all of us are aliens in need of the gracious help of God.

In building the ark and then providing for the various needs of the creatures on the ark, Noah extended the sharing of table and shelter to the whole creation. This act of hospitality was of more than merely temporal significance, for as Christine Pohl reminds us, earthly hospitality is in certain respects a mirror of eternal, divine hospitality: "Just as God would welcome all to the feast in the Kingdom of God, so earthly hosts ought to open their tables to those in need and without ability to repay the kindness. In God's economy, all would then experience blessing. The character of God's hospitality frames appropriate earthly behavior."[41] Since God shows mercy and favor on those who do not deserve it, so we too are to show mercy and kindness without regard to desert or self-benefit. In our acts of service to another we participate in God's trinitarian life, which teaches us to find true self-fulfillment in the affirmation of the being of others. Through this affirmation God is glorified: "Glory is not a self-directed attitude, but the mutuality of glorifying the other and receiving glory from the other which constitutes the communion of the divine life."[42]

To think of our service to creation as patterned on a fundamental divine hospitality is to recognize that service must finally know no bounds. It does not stop at the limit of personal comfort or social convention. We see this not only in the story of Noah who, no doubt, faced the derision and hostility of his contemporaries, but also in the vision of the Israelite prophets and the early church's experience of Christ.

Like many of the prophets, Isaiah saw a penchant for self-aggrandizement in the religious observance and the economic practices of his time. The desire to amass personal wealth and security—"ah, you who join house to house, / who add field to field, / until there is room for no one but you, / and you are left to live alone / in the midst of the land!" (5:8)—is at root a gesture of inhospitality since it disregards the needs of others, even contributes to their desperate circumstances. Authentic religion is motivated by the desire for justice and is realized in the good work that rescues the oppressed, defends orphans, and pleads for widows (1:17). In the view of the prophets, it is precisely

those who are not in a position to further our own aims who are most in need of our service and care. As we "make room" in our schedules, at our tables, and with our bank accounts for the needs of all others, we prefigure the "way of the LORD."

When we turn to the ministry of Jesus Christ we see a similar expansion of the bounds of hospitality and service. Jesus's ministry, though available to everyone, focused especially on those with the greatest need, those most at the margins of society—prostitutes, tax collectors, lepers, the deranged, and possessed. It is precisely the maimed, the lame, and the blind who are to receive invitations to the feast table of the kingdom of God, says Luke (14:12–14), for they cannot repay us for this kindness. As Paul suggests in Romans 15:7, our welcome of others is to be patterned on the welcome of Christ, a welcome so unrestricted and open that it extended to those who would persecute him and finally put him to death. Throughout the Gospels, Jesus exemplifies in his ministry the inversion of social power relationships. As Luke puts it: "The greatest among you must become like the youngest, and the leader like one who serves. For who is greater, the one who is at the table or the one who serves? Is it not the one at the table? But I am among you as one who serves" (22:26–27).

The supreme description of the self-denying, other-regarding character of service can be found in Paul's letter to the Philippians. Here we see that Jesus, given his exalted status, could have simply left us to ourselves or even compelled us to serve his own ends. But this he does not do. Instead, he "emptied himself, / taking the form of a slave, . . . he humbled himself / and became obedient to the point of death—even death on a cross" (2:7–8). Christ's lordship and mastery are here expressed precisely in the language of slavery and servanthood (*doulos*), indicating that the safeguarding of his own position and stature was not at issue. What motivated Christ, and what should also motivate his followers, is the linking or yoking of personal desire with the needs of the other. Here we see an identification with the creation that surpasses in power and clarity the identification of self and world called for by Callicott and various deep ecologists, for in this christological image of the self-emptying of Christ the integrity of human uniqueness and the image of God are maintained. Humans are uniquely spiritual beings because they can restrain their power and train their desire for the good of others.

Clearly these are difficult words to hear since they suggest that the image of God, and the character of our dominion that follows from it, finally leads in the opposite direction of despotic mastery or utilitarian calculation. Others do not exist for us. Rather, we exist so that we might enter fully and compassionately into the lives of others with the overall aim of their upbuilding and our mutual joy. Our dominion, viewed christologically, is to effect a transformation of the world such that it no longer reflects pain and suffering, but rather health and peace. This is how Christ's dominating presence altered the world with

which he came into contact. Authentic dominion, in other words, requires our transforming presence so that the gifts of God can be maintained and returned to God without shame, their integrity intact and their delight to God uninterrupted.

One might well argue that the extension of hospitality beyond the limit of the human community goes too far, since the prophets and Jesus do not speak directly to the justice owed to other creatures. They do not explicitly state the contemporary ecological insight that justice in the realm of culture is a compromised and ultimately self-defeating justice if it is premised on the destruction of the earth and its inhabitants. But they do have the sense for the wholeness of creation, such that, in the end, the service we render unto each other finally reaches to the transformation of the whole creation. Hence, Isaiah's eschatological vision of the wolf living with the lamb and of the cow and the bear grazing together (11:6–9) and the gospel proclamation that in Christ all things find their beginning and end (cf. John 1:1–5; Eph. 1:10; Col. 1:20; Rev. 21:6). The love of the creator for the creation, God's faithful and passionate "yes!" for a blemished though still fundamentally good creation, is all encompassing.

The biblical witness is clear that as we let our desire be directed by the other's need we enter a world of blessing and peace. It is when we hold fast to our own lives, or aim to secure and protect them by means of our own effort, that we contribute to the injustice and destruction that has characterized so much of our histories. But as we come to recognize that our very being is the effect of the creator's generosity, a recognition that comes through the honest evaluation of communal, creaturely life, the vanity and the injustice of our striving will come into view. Gratitude for gifts beyond all our imagining makes possible the freedom and trust that are crucial for servant work.

Ecology and the Work of Service

So far we have seen that a theologically adequate account of our relatedness to others is best understood in terms of the service we render to them. As created in the image of God, the bearing of our desire and our activity is to be informed by the divine pattern of generosity that makes room for the lives of others, that provides for the well-being of others. Insofar as our desire remains focused on ourselves, we deny our most authentic vocation. How, practically speaking, might this theological insight be combined with the ecological insight that our lives are mutually implicated in the lives of countless organisms? Are we, for instance, to sacrifice ourselves or our interests for the preservation of inanimate natural elements and the well-being of nonsentient, nonrational beings?

A good beginning would be to move away from the idea that dominion most often means control. Given the complexity of natural habitats, as well as

the long duration and multilayered character of cause-and-effect relationships, it is foolish and arrogant to think that we can easily control or manipulate natural processes to suit our own ends. We need to resist the current temptation to become even more of a managerial society. Creation does not exist for us to manage it, because such management presumes that we fully or adequately understand all that we plan to manage. The fact of the matter is that there is too much that we do not understand. It is the mind content with superficial understanding that convinces itself that it knows more than it does.

The first step in our becoming servant of creation will therefore require that we make ourselves the patient and earnest students of creation. Given our *de facto* altering presence, it is imperative that we become attentive to the ways in which we alter our environments, all the while asking how our alteration either ennobles or degrades the places in which we live. Our service, in other words, needs to be an informed service, one that is attuned to ecological complexity. The catastrophic proportions of our contemporary environmental crises indicate that we have not been sufficiently attentive or cautious, but have instead been rash and inconsiderate with the decisions we make. We have not humbled ourselves to learn when our activity and desire compliment the processes of creation and the will of the creator.

Our ecological ignorance, sometimes willful and sometimes not, has been accompanied and abetted by our inability to stay in one place and live with the effects of our actions. Historically speaking, we work and play, and when the physical and spiritual conditions of our activity become onerous and difficult—as when natural resources are depleted or the cultural environment oppressive—we simply move on to virgin territory where, more often than not, the pattern is repeated. The first practical step toward becoming servants and students of creation will therefore be that we not move on, that we stay in the places where we are and make them our long-term dwelling place. As we will see, living with and learning from our mistakes will make our efforts to correct them more careful and humble. This commitment to place will compel us to become attentive in a way that respects and honors the creation on which we depend and of which we are only one part.

Attention to place, as well as the sustained commitment to make our practices more attuned to the processes of creation, will, in some cases, mean that we sometimes need to leave the creation alone. The created world, as Job needed to learn, does not revolve around us and for our own satisfaction. It has an integrity that is damaged if we insist on having our way in all of its domains. Hence the imperative that we make room for wildness, not only in the form of wilderness preserves, but also in the forms of groves and fencerows that intersperse our living places. We need perpetual reminding that the world is not strictly a human world but God's creation, good for the flourishing of all creatures.

Making room for wildness does not mean that we, like some environmentalists, best characterize our presence as an alien presence. People have a rightful claim, as members of creation, to the enjoyment and use of creation. What is crucial, however, is that our use be framed in terms of the wholeness of creation, rather than the myopic or exclusive satisfaction of human need. Our use and enjoyment of creation must bear witness to a wider universe that is the expression of God's delight.

One of the clearest ways in which we can do this is to build upon the grace that sustains creation. So much of our activity reflects a denial of grace since it is premised on the seizure and then manipulation of the gifts of God. We treat our environments as resources rather than as sources of life. Would it not be better if we acted in more cooperative fashion with the beneficence of God by attuning our activity to the graceful activity in creation that is always already going on? What this requires is that we learn to place ourselves firmly within the created order and then mimic processes that are already under way. Such imitation indicates that we do not consider it beneath us to learn from and shape our wills according to the demands of creation. Is not this what the art of being a creature entails, namely the commitment to accept and move responsibly within the places of creation we call home?

Making ourselves the servants of creation will require a new orientation in the way we conduct our work and our business. Our disposition to the earth, particularly in more recent centuries, has been aggressive. We employ great amounts of force, use a lot of heat in the form of fossil-fuel energy, produce numerous toxins and wastes, all to make the many "goods" we need to live. Production, in other words, depends on a great deal of destruction. Must we proceed this way? Clearly not, for as a new generation of scientists and technicians is showing, we can work more gently and cooperatively with the natural world. We can learn, for instance, from spiders who make fibers that are much stronger than anything we produce, yet do it without heat or waste. We can learn from abalones that make polymers, in cool water and without toxins, that are much tougher than any ceramic we currently make. Called "biomimicry," this approach learns from, works with, and respects the integrity of creation. In a way, it welcomes the creation to be itself and encourages humans to enter more fully into its beauty and grace.

Examples of biomimicry can be seen in various areas. In agriculture we should note the work of the Land Institute in Salina, Kansas. For years Wes Jackson, the institute's director, has been arguing that contemporary farming practices simply cannot be sustained over the long term. The reason is that agribusiness depends on cheap fossil fuel even as it wastes massive amounts of water and soil. Crops that are grown depend on heavy applications of synthetic fertilizers and chemical pesticides. The result is a farming system, though currently productive, that eventually must collapse under the weight of its own exhaustion, toxicity, and waste. In place of the agribusiness model of

farming, Jackson proposes that we farm by mimicking the patterns of the prairie or forest. He argues that if we farm like a prairie we will instead build soil and increase water retention, just as we will decrease the need for synthetic fertilizers and insecticides. What this requires, however, is that we learn to farm with perennial plants (much like prairie grasses), which have a deep root structure, and that we learn to grow species together (legumes, grasses, and cereals), since this will improve the quality of nutrient matter in the soil.[43] What Jackson has done is made himself the student and the servant of the prairie so that farming, rather than being in an adversarial relation with creation, cooperates with it.

Similarly in medicine we are learning that health is tied to our membership with, not our antagonism toward, the wider world. Rather than thinking that we can bulldoze our way to health with the heavy application of synthetic drugs, we are seeing that the natural world has many stores of healing that are available to us if we are willing and patient enough to learn from nature's ways. What this means is that we should turn to animals who, just as we, live in a chemically charged world and know how to make their way through it. Animals of all kinds are much more attuned to the biological and chemical world than we are. Is it beneath us to think that we might learn from primates, bears, birds, even insects, how to eat, and thus also how to live, better? As Janine Benyus has observed, "Wild plant eaters have already filtered and screened, assayed and applied the kaleidoscope of compounds that make up their world and ours. It is through them that we can tap the enormous potential of plant chemicals. By accepting their expertise, we may be retrieving the lost thread to a world we once knew well."[44]

Numerous other forms of biomimicry exist. We see it in the development of alternative forms of energy production and storage, new architectural and engineering designs that use less energy and are more durable, improved production techniques that do not require high energy input and toxic output, and innovative business practices that run according to ecological insights.[45] The point is that we can live, even thrive, in our world if we consider and respect the integrity of the whole creation. We need not pit human interest against the interests of the wider world. In making ourselves the servants of creation we do not demean ourselves. Rather, we build the creation up and in so doing contribute to the health and wholeness of us all. Unlike versions of development and progress that are premised on the destruction of the sources of life for humanity's "improvement," service promotes Sabbath existence, an existence in which the elements of creation are enabled to maximally be as their creator intended for them to be. As we become the servants of creation, we participate in God's own creative life, fulfill our true vocation, and enjoy more deeply the glory of creation, the paradise of God.

5

Becoming a Culture of Creation

Although it is, of course, society that produces the production system, once a particular system has come into existence it begins to mould society: it, as it were, insists that the members of society respect the immanent logic of the system and adapt to it by accepting its implicit aims as their own. Man then becomes the captive of the system whether he approves of its aims or not, *and he cannot effectively adopt different aims or values unless he takes steps to alter the system of production.*

—E. F. Schumacher, "The Age of Plenty"

A change of heart or of values without a practice is only another pointless luxury of a passively consumptive way of life. The "environmental crisis," in fact, can be solved only if people, individually and in their communities, recover responsibility for their thoughtlessly given proxies. If people begin the effort to take back into their own power a significant portion of their economic responsibility, then their inevitable first discovery is that the "environmental crisis" is no such thing; it is not a crisis of our environs or surroundings; it is a crisis of our lives as individuals, as family members, as community members, and as citizens. We have an "environmental crisis" because we have consented to an economy in which by eating, drinking, working, resting, traveling, and enjoying ourselves we are destroying the natural, the god-given world.

—Wendell Berry, "The Idea of a Local Economy"

The defining characteristics of a culture of creation are its acknowledgment of the full range of interdependencies between humanity, creation, and God and its acceptance of responsibility for the wholeness of relations that can exist among them. It is, we might say, a just culture built on a full regard for others, a culture in which we humbly face each other, the creation, and God without evasion or shame since we have to the best of our ability done what is right and best for others. In it people are attentive and dedicated to preserving the conditions of life, all the while patiently developing the bonds of affection that make for adequate respect and care. Here people bring themselves and, where appropriate, the creation of which they are a part into the peaceful rest or *menuha* of God. A culture of creation, in short, is a culture in which celebration and worship find integral roles.

As we have seen, however, the temptation among cultures has most often been to forget or deny interdependence and to pursue dreams of mastery in which humanity is presumed to be unaffected by the degradation of others and their habitats. We have, in other words, short-circuited the flow of interdependence and responsibility in the naïve and shortsighted pursuit of our own gain, forgetting that the path of heedless ambition is also the path of alienation and isolation. The light of ecological insight, as well as attention to the theological and moral significance of creation, now shows us that casting ourselves in a conquering role is both practically foolish and theologically arrogant—foolish because we harm ourselves in harming the sources and memberships upon which we depend and arrogant because we claim for ourselves a power that can rightly be claimed only by God.

If we are to become a culture of creation we must rethink at the most fundamental level the nature of human identity and vocation, rethink what it means for us to assume our rightful place in the order of creation. We must understand that our status as created beings made in the image of God is never something that is simply or completely given (a long time ago) and then passively received, but rather a vocation we are called to learn and fulfill. As our histories have shown, we can fail to be the creatures that we ought to be and thus forfeit our true humanity. We must also realize that our effort in becoming a culture of creation will require the transformation of basic cultural forms and institutions since, as we have seen, current cultural practices and goals often work to deny creation. Personal piety or change of heart is not enough if, as E. F. Schumacher and Wendell Berry suggest, we participate in or are held captive by economic, educational, political, or religious systems that thwart the intent of the creator. Hence this chapter, which considers deep, systemic cultural changes that need to be made so that we and the whole creation can be freed to realize what we most can be.

Our current cultural forms are not inevitable or necessary. It is presumptuous and dangerous to think that, global capitalism having "won," we are at

"the end of history" and that there are no options available to us. To think in this fatalist manner is to deny the power of the creator to intersect and inspire the dramas of creation. It is to deny the eschatological hope that resides deep within Judaism and Christianity. To be created in the image of God is to be open to the prompting of the divine spirit and so to gain access to a vantage point that can call our histories into question. It is also to be called into a series of relationships that found and direct our hope for cultural renewal.

Work and Re-Creation

> If God is to make anything in you or with you, you must beforehand have become nothing. Therefore go into your own ground and work there, and the works that you work there will all be living.
>
> —Meister Eckhart

That our day-to-day living should conform to the rhythms of creation is hard for us to imagine. In part this is because our lives have increasingly been taken over by schedules that are externally imposed. In a global, electronic, and information age all participants are set in a competitive struggle against one another to outperform or succeed where others fail. In the "global village" no one can afford to sleep or rest too long or too deeply for fear that some opportunity will pass us by, some competitive advantage will be lost. There is no synthetic vision ordering or holding together all our activity, nor can there be, since opportunity emerges randomly out of the millions of transactions that daily propel our economy. In this world speed and flexibility are of the essence. Schedules thus become fluid: they are necessary, but given the changeability of our contexts, we need to be ready to scrap them for another one at a moment's notice. The active life, rather than following from our considerate judgment, becomes reactive, characterized by hurried and ad hoc gestures suited to the demands of the moment.

The effects of this global transformation of the workplace on personal and social well-being are getting harder and harder to ignore: hypertension, anxiety, depression, exhaustion, heart disease, numerous stress-related illnesses, obesity, and sleeplessness. Given the material affluence that has accompanied steady economic growth in North America since the Second World War, one would think that now more than ever we should be in a position to enjoy times of leisure and rest. But as Harvard economist Juliet Schor has demonstrated, this has not happened. People are working longer, more-stressful hours than before, and those moments when they are not at the job, people are pursuing leisure activities with unprecedented intensity and expense.[1] The fast pace of consumer life, with its built-in frustration (advertising succeeds by making us

unhappy with what we have and who we are)—perfectly suited to feed a growing global economy—makes it virtually impossible that we will appreciate or practice rhythmic lives that promote health and well-being.[2]

Must our lives be this way? The answer depends on whether we view present cultural trends as inescapable. What is clear, however, is that a culture of creation must envision an alternative to the frenetic, chaotic scheduling that has come to dominate our work and leisure lives. In developing this alternative it will be helpful to keep in mind that life attuned to the rhythms of creation builds upon traditional understandings of work that had been in effect for centuries before the modern transformation of daily practices and cultural institutions. My point will not be to see all modern innovations as uniformly bad, for clearly we live with the blessings of personal freedoms, improved health, safety, comfort, and security. But we must be fully aware of how broad cultural changes dramatically affected the way we practice and think about work and leisure.

A good place to begin, in lieu of a lengthy historical investigation into the transformations of the workplace, is to ask what our work is ultimately for. Why do we work at all, and what does our work mean? It is surprising, given their importance, that basic questions like this rarely receive sustained, public discussion. For many people, when sufficiently pressed, the answers eventually turn to money. We work as a means to secure the finances we need to have the things we want or need and to do the things we do. Levels of personal investment in and responsibility for work, as well as worker satisfaction—does work bring us pleasure and personal fulfillment, and does it contribute to the positive growth of our personal and communal identities?—are disturbingly low. Moreover, it seems that many have simply resigned themselves to the fact that work will not be the avenue through which to realize their own potential or the potential of those around them. While work is not always perceived as a necessary evil, there is nonetheless the widespread sense that if we could avoid it altogether we would.[3] Of course, financial security is not the only reason we work. For some people work is the arena for self-expression or the place where we can feel that our energy serves a larger purpose. But this experience, especially as reflected in the phenomenon of changing careers, seems to be the exception rather than the rule. What we need to consider, given these indicators, is how the character of work, its structure and enactment, affects the way we think about the purpose of work. Viewed this way, the issue of work's attunement to the rhythms of creation becomes more intelligible and more significant. Does our work complement and contribute to the work of the creator?

The fact that for most of us work is wage labor is a matter of great significance, because the idea of wage labor, particularly in its modern forms, assumes a specific relation to time and place. It presupposes a particular sort of relatedness to neighbors and a neighborhood. We know this most directly, as

when we make something (a quilt, for example) or provide a service for a close friend who then insists on paying us for our "services." Payment complicates and distorts the relation because it ignores the care and the history that exists between friends. We know that no amount of money could possibly compensate for the time and labor we devote to the making because, in this instance, our making is not to obtain money but is rather one response to innumerable kindnesses already received. In making the quilt or in providing the service, I bear witness to webs of interdependence that make my life possible and meaningful. In fact, my labor can be understood as the celebration of these interdependencies. My making, rather than being a means to financial gain, becomes an expression of gratitude, devotion, and respect, even worship, since what I am doing here is acknowledging my self-insufficiency. Financial payment, in this context, would represent a denial of those particular relationships, since payment is what we would expect from strangers who have no history with us.

No doubt, many would not consider service to friends as a form of work. But why not? Is not what we do for a friend, whether that be construed in terms of physical exertion, personal and time expense, imaginative effort, or sheer productivity, entirely similar to what we might do in a "workplace"? To work is to perform a service, to be productive for some end. The fact that we might differentiate between work done for friends and work done for strangers or for society at large, and perhaps assume that the latter can be done with less affection or care, suggests the sort of compartmentalization that interrupts or fragments the wholeness of life. Unity of purpose and affection are thus compromised. Should we perform any labor without some modicum of gratitude, devotion, respect, or worship, particularly when we understand our work as the broad response to the creative work of God?

What this brief example indicates is that wage labor, in many instances, involves some form of decontextualization and indicates the severing of bonds of interdependence. When we work primarily for money or when compensation becomes the determining feature of our work experience, then the conditions are set not only for the various forms of alienation described by Marxists, but also the anonymity of workers and their beneficiaries. By this anonymity what I mean is the isolation, even obscurity, that makes it impossible for workers to see practically how what they are doing might benefit or harm others, and vice versa. What we do, our productivity, serves a neighborhood that is unfamiliar to us, and so the affection and care that are the hallmarks of quality work, as well as the inspiration for a fulfilling and enjoyable work experience, are untapped. In a global economy, for the most part, we do not see the effects of what we do because they take place, oftentimes, thousands of miles away. Compensation serves as the substitute for the felt kindness and experienced blessing that otherwise would come from the close, affirming interaction among friends. Many have become resigned to the fact that if it were

not for the money, they would not do what they do. But if we could directly and consistently experience and also promote the many kindnesses of interdependence, would we not come to see the irrelevance of money?

None of the above is an argument for the elimination of all wage labor since, practically speaking, that would be impossible. It is rather to suggest that the character of authentic work should not be defined in terms of wage labor. More fundamental to work than its compensatory or its obligatory aspects is its ability to express gratitude and respect for innumerable benefits received. Viewed this way we can more readily understand the medieval injunction *laborare est orare*, "to work is to pray." Work is prayer when it honors the worker, the tools, and the materials of work and blesses the recipients of the work. Altogether, work done in the spirit of gratitude and worship testifies to the graced character of existence, to life preserved and enhanced by the kindnesses and sacrifices of countless others.

As work comes to be understood in terms of prayer, we can more readily see how the rhythms of creation might shape and give direction to work and leisure. Indeed, the framework of creation becomes paramount, because it provides the most complete context in terms of which we are to understand the interdependencies of our lives and our activities. And if we appreciate that for many traditional cultures all work was re-creative in the sense that our own creative acts take as their pattern and inspiration divine creativity,[4] then the idea that our work and leisure follow from attention to the range of interdependencies, human and nonhuman, readily follows. Work and play, at the most fundamental level, are our responses to God's own work and delight in a creation well made. They show, when most authentic, a sympathetic attunement to the orders of creation and their divine goal.

The character of our response, as reflected in countless decisions and acts, will determine the authenticity of our work. For instance, our work can deny interdependence, as when we seek self-aggrandizement. Here the worker does what is necessary to "get ahead," even if it costs the degradation of creation or the oppression of coworkers. Such work is inauthentic or improper because it presupposes a worker separable from the many networks of reciprocal support, when the central insight of ecological thought is that we are not separable. We live necessarily and beneficially through the lives of others. That is inescapable. The only choice we have to make is whether in our activity we will honor those through whom we live. Not to show honor is to betray either ignorance or hubris. Propriety demands that we make the effort to understand how we fit into the larger contexts of life. The master craftsperson, as a traditional society would have understood it, is the one who knows how things fit with each other and in his or her own work contributes to overall "fittedness."[5]

Put positively, authentic or proper work and leisure reflect an attitude of attention to the orders and the needs of creation and a disposition to care for and preserve the rhythms and flow of life. This is why the Rhineland mystic

Meister Eckhart maintained that for God to do a good work through us we must first become nothing. In returning to our "ground," as he put it, we come upon the experience of the grace of creation and there find our proper bearings for action. We learn that work is not foremost about us, but is instead the holy activity through which creation as a whole is sanctified. Work, rather than following from divine punishment, becomes the noble activity of presenting to God a creation strengthened and restored through the exercise of our hands, heart, and head. It is to join with God in the divine work of cultivating and maintaining a garden (Gen. 2:8–9). It is to enter into the flow of the divine beneficence and hospitality.

Understanding the rhythms of creation is no easy matter, as the complexity of life revealed by ecological research shows. To think that we can easily know how our action improves or harms a habitat is a mistake we have made too often. We must, therefore, proceed with caution and humility, recognizing that inactivity will sometimes be the wiser course. But we are not lost altogether either. As we dedicate ourselves to understanding our place in the wider world, we can learn something of a habitat's or community's limits and possibilities. We can draw upon past practical experience to see where we have failed and where we have succeeded. And we can draw upon the faculty of our imagination to envision possibilities for improvement.

In calling upon the imagination I do not simply mean our inventive powers. Rather, I refer to the faculty within us that negotiates the material and the ideal realms. It is the power that enables us to assess a context and see how it is being damaged and how it might be strengthened or restored. In traditional societies this faculty was referred to as art, the capacity and knowledge to design one's activity so that its result would be useful and beautiful. Art, in this context, does not refer to the thing produced, but the means or the skill by which things are done or made. Viewed this way, ethics refers to "the right way of doing things" and art to "the right way of making things," "the making well of whatever needs making."[6] The results of work, then, when artfully made, will necessarily be beautiful, useful, durable, a delight to the hand, eye, and heart, and thus a compliment to the creator.

To speak of the "art of creation" is thus to describe at once the fittedness and usefulness of the created order, the skill in terms of which the creator saw fit to make things, and our own cooperation in that skill. We are to reflect in our daily living the same art and care that the creator displays in the creation of the world. Understood from a scriptural point of view, this means that we will immerse our lives in the rhythms of birth, growth, death, and decay, Sabbath rest, the free abandon and exercise of life (Job), healing and restoration (Christ), and the future peace of creation. Practically speaking, our work will not needlessly thwart the biological and ecological processes that everywhere maintain life (consider the massive, and oftentimes highly destructive, alteration of the world's watersheds), but will instead preserve and work with—and

where possible repair (as in wetlands restoration projects)—these processes so that life's maximum potential can be realized. These are the many dimensions of the divine creative work and so must inform our own activity. Art, rather than taking us beyond the mundane day-to-day, as when we go to special places to have an aesthetically enriching experience, takes us deeper into the mystery and richness of the everyday and enhances and consecrates that experience to God.[7] Artful living will express the integrity and coherence of the creation of which we are a part. Our work, in turn, will be the practical and grateful response to this integrity.

One of the more beautiful expressions of artful living, of life attuned to the integrity and rhythms of creation, can be found in Leo Tolstoy's *Anna Karenina*, when Constantine Levin joins his field-workers in the act of mowing a field. Tolstoy writes: "The longer Levin went on mowing, the oftener he experienced those moments of oblivion when his arms no longer seemed to swing the scythe, but the scythe itself his whole body, so conscious and full of life; and as if by magic, regularly and without a thought being given to it, the work accomplished itself of its own accord. These were blessed moments."[8] Levin discovers here the pleasures of a non-contentious life integrated with the rhythms of his coworkers and the patterns of the natural order. The flow of his life, we might say, has here linked up with and become indistinguishable from the larger flow going on around him. It bears witness to the beauty and goodness that can come from a life that has returned to its ground and found there the inspiration for authentic action.

To speak of the flow of one's life being immersed in the flow of creation is to call us to a renewed conception of time, a conception not driven by the demands of economic efficiency or growth but by the more natural rhythms of activity and rest, sympathy and celebration, attention and prayer. What I mean here can be seen by considering the invention of the clock. Previous to clock-time, people measured their days, established a pace, according to natural constraint and opportunity—weather, daylight, community festivals, physical strength or energy levels, personal and social need. But with clocks, managers could hold workers to the steady, unrelenting pace of exact and impersonal time. For good reason, many workers came to despise clocks that made such inhumane demands on their otherwise more balanced schedules.

In our own time, of course, schedules have become even more stressful and unaccommodating of particular needs and pleasures. On this most of us are agreed: we do not have the time to do or enjoy the things we want. Our compressed clocks keep us running constantly. And because the standard of modern time is driven almost exclusively by anonymous or manufactured desire and is unconstrained or uninformed by the natural rhythms of sleep, rest, play, work, celebration, and so on, we find ourselves more and more in an unhealthy, even uninhabitable, state of mind. We all want a "break" from our lives, because their pace and demands leave us exhausted and unwell.

A more healthy time will be one attuned to the rhythms of creation, a notion of time that is moored in the limits and possibilities of place. What this means is that our schedules will be determined by the particular requirements and needs of the specific places we live and the personal and social bodies we work through.[9] It will not do to let our schedules be determined by those ignorant of or unsympathetic to our circumstance and context, because then a foreign (and potentially oppressive) standard of time will dictate our activities. In other words, and here we go directly against the anxiety-inducing ways of globalization, we must move away from the standardization of time so as to make room for the particular, often idiosyncratic, needs of creatures and creation.

If what has been said so far is at all true to the moral and spiritual significance of creation, then a number of practical changes will be in order. To begin, workers of all kinds will need to demand a more humane work environment, one that is sensitive to the needs of workers, communities, and natural habitats. Here, sadly, the trends of American and global economic development are not encouraging. Rather than translate increased productivity into more leisure, personal, or celebratory time, companies have instead used the competitive, global market as a device to keep us toiling twenty-four hours per day, seven days per week, and to be careless with the sources upon which our lives depend. Surely Jews, Christians, and Muslims who have the teaching of creation as a guiding resource can lead the way in speaking to this widespread social concern and need. Following this demand, workers must also learn to tame their consumer habits, habits that are trained and encouraged through our reception of advertising and television media.[10] We must face the fact that many of us allow ourselves to be duped into the work-shop-consume treadmill, when we know that this is not the road to our own or creation's well-being or happiness. The issue is simple: we must cut off the influence that fuels our inordinate desire to have what we do not need. This simple, if difficult, act will have the immediate effect of making available time that we previously did not have and so create the space in which leisure can be practiced. By leisure I do not simply mean inactivity, but the conscious enjoyment and celebration with our neighbors of our collective neighborhoods, the re-creation of schedules that have as their climax the *menuha* of God. Viewed this way, leisure becomes the summation and the most complete expression of work, just as the divine rest and delight marked the completion of God's creative work. Leisure becomes the time in which we can reflect upon and enjoy the work of God and the work of our own hands.

What do we really need? This age-old question must remain ever before us, becoming part of the regular regimen of our reflective lives. The harried and frantic pace of our current lifestyles suggests that we cannot have enough. And since we cannot have enough, we also cannot work enough to supply ourselves with all our wants. Attention to the life-sustaining gifts all around

us, however, ought to teach us otherwise. Should not the gift character of creation elicit from us a work response that is steeped in gratitude and respect rather than anxiety and greed? We must learn to fix our gaze and our commitments more directly upon our immediate environments, see there the rhythms of creation, and in so doing minimize as much as possible the anonymity, wastefulness, and destruction of our working lives. When we do so, we will see more clearly the beneficence and the joy that is our life, if only because we will experience firsthand the grace of creation.

Toward a Sabbath Economy

> There is no wealth but life.
>
> —John Ruskin, *Unto This Last*

If we understand by a good economy the orderly and thoughtful management of a household, and then consider the traits that would make for a healthy and thoughtful home—peaceful, nonexploitative relations among the home's inhabitants; knowledge of and respect for the natural and cultural conditions that make home life possible; availability, maintenance, and wise use of the natural sources that feed and fuel the home; careful and responsible planning for the long-term needs and health of the home's various members; and opportunity for delight in the contributions and presence of all—then it becomes clear that our present economy is in need of transformation. Our economy, as is widely presupposed by its boosters, succeeds by the ingratitude, dissatisfaction, irresponsibility, ignorance, and anxiety of its consumers. Both advertising and the television programming that increasingly serve to promote what advertisers have to offer aim to make us see how our lives are a poor reflection of what they could be if only we had the new car, the stylish clothes, a more attractive or interesting group of friends, or a better retirement plan. Economic growth, which seems to be the only widely agreed upon standard of success, is measured by the steady extraction and consumption of limited resources, as well as by the growing exhaustion of consumers who can never buy enough. The message of many economists is now clear: we should, in fact, feel guilty if by not buying more consumer goods we precipitate economic recession. In our culture one must look very hard for authentic expressions of peace, gratitude, and joy that are the direct outgrowth of our economic aims. If one finds them at all, they tend to be found in dispositions and acts that define themselves in opposition to conventional economic goals.

Clearly it would be naïve to think that an economy of joy and peace, an economy that promotes the *menuha* of God among all its members, has ever been fully realized in our past. But if we give up the hope for Sabbath freedom and rest we condemn ourselves and the creation of which we are a part to

loneliness and want, destruction and war. Our lives are meaningful to the extent that we open ourselves to the presence of the eternal that is always already in our midst. As Erazim Kohák has argued, "Without the vision of eternity, there can be no tenable vision of history and no freedom, only a historicism which entraps humans in the order of time."[11] Or to put it in economic terms, without some appreciation for the creator's intention for things, we will become trapped in unending cycles of spend and consume. The finite dramas of creation, in other words, need to find their origin, goal, and fulfillment in the infinite purposes of God. The temporality of this life is always circumscribed and judged by the Sabbath rest of God. Just as the divine work of creation found its meaning and completion in the delight and rest of God, so too our striving must find its fulfillment in a peaceful vision that supports and enfolds it. The mistake of our current economy is that it assumes that striving is all that there is—and so the more striving the "better"—and that there is no eternal rest. We no longer seem to know what all our striving is ultimately for.

Current social cynicism and environmental degradation suggest that our economic paradigm is in need of reevaluation. Though it may be the case that more people than ever before are living an affluent life, it is also clear that this affluence cannot last for long since it is based on the systematic destruction or deterioration of life's sources and since it comes at the cost of the impoverishment of the vast majority of the earth's (human and nonhuman) populations. Though the short-term gains in wealth are high and the benefits of some industries (in healthcare and engineering, for example) are laudable, it is also clear that the long-term costs resulting from soil erosion, species extinction, pollution, desertification, social anxiety, economic inequalities, anger, and boredom are higher and are not being duly noted or accounted for. Speaking of the boosters of our economic paradigm, Berry has noted their inability, perhaps their refusal, to think of gains in terms of net: "It is as if a whole population has been genetically deprived of the ability to subtract."[12] Has there not been a downside to so much of our "success," a downside that might even call our success into question?

What, given our reflection on the moral character of creation, should an ideal economy look like? What conditions would need to be met so that our economy might approximate Sabbath existence and thus bring to rest the futility or destructiveness of much of our striving? Three broad traits are essential in a Sabbath economy:

1. It will promote the integrity and health of the creation as a whole and its various members.
2. It will foster the conditions in which human responsibility for and care of creation will be optimized.
3. It will enliven the sense of delight in and gratitude for the gifts of

creation, that is, economic activity will itself be a form of worship to God the creator.

While this list is not exhaustive, it nonetheless focuses our attention on the fundamental requirements of an economy that takes seriously the world and ourselves as God's creation.

The Integrity and Health of the Whole Creation

Our current economy cannot possibly secure the integrity and health of the whole creation, for the simple reason that it is not comprehensive. It proceeds on the assumption that human life can be extracted from the created context in which it thrives and that economic decision-making need only concern itself with human aims. All life, as well as the natural sources that enable life, is simply reduced to human desire and whim. We can see this in the virtual disappearance of the category of land (meaning soils, water, forests, air, etc.; i.e., what ecologists call the biotic community) from economic discussion—the focus is almost entirely on issues of capital and labor, exchange value and consumption.[13] The macroeconomy, as envisioned by most textbooks, is a closed or isolated system in which natural-resource inputs or pollution or the fact of entropy, never appear.[14] Human invention and creativity, as amply displayed in our technological prowess and when supported by sufficient capital investment, can overcome any obstacle to economic growth, including the obstacle of a limited and finite resource base. As Jonathan Rauch suggests, the earth's natural limits are no longer of concern because the growth in technical knowledge, as well as the easy movement of capital resources, means that the only limit to economic growth will be the (presumably unnecessary) self-imposed limits of our thinking.[15] The fear that we are running out of oil is misplaced because new technologies are finding and harvesting more efficiently new reserves every day. The "ultimate resource," as many economists clearly believe, is not the created order on which we depend, but the ingenuity of the mind: "You see, in the end copper and oil come out of our minds. That's really where they are."[16]

Besides showing how alienated and insular human life and thought have become, this sentiment indicates that our understanding of economic life has been severely truncated. The scope of economic concern, despite its global pretensions, is shockingly narrow. Can we take seriously and expect to live long and well by an economic vision that destroys local, indigenous communities and disregards the broad cultural and natural conditions that make human life possible and worthwhile? Surely it is no accident that as we insulate ourselves from our natural contexts we would at the same time turn those contexts into a "standing reserve" that exists primarily for our own extraction and use. We exploit the earth and then feel few qualms about our exploitation,

because we do not appreciate the significance of what we are doing. In fact, having reduced creation to a collection of objects without meaning and purpose of their own, creation becomes insignificant, thus freeing us to do with it whatever we want. What we fail to realize is that in depleting the sources (they are not simply resources) of life we often condemn ourselves and our children to less rather than more. Returning again to John Ruskin, we must remember that every act of consumption is an expense and that expenditures, while they may promote life, may just as well as slay it.

Nowhere is the commodification of the world's sources more striking than in the recent corporate hustle to control the world's fresh water. Here water is redefined as a consumable "good" (by the World Trade Organization), rather than a basic right, and then made to fall within the controls of (corporate-influenced) market forces. Because fresh, clean, safe water is becoming such a precious commodity (due to increased population and severe water contamination and overuse), corporations have clearly seen that profits potentially exceeding those of oil exist in the future.[17] This corporate view of water, besides depriving millions of people of a necessary life-source because they cannot afford it, is immoral precisely because it makes abstract (a tradable commodity) what is a practical necessity for all life forms. Can an economy last for long and be supportive of all its members when it privatizes and puts up for sale to the highest bidder what is clearly to be held and shared in common? Here we can dramatically see how the narrow vision of profit maximization distorts and disfigures the creation on which it so clearly depends.

What we need is a more comprehensive economy, a macroeconomic view that highlights the gifts of creation, if for no other reason than that we tend to destroy and damage whatever falls beyond our consideration or care. It isn't simply that we will falsely value things, as when we give organisms and habitats little value because we do not see how they directly benefit us or promote our desires, or when we reduce all value to exchange value, but that we will fail to value them at all. Consider the power that the Gross National Product (GNP) or corporate profit figures have over the minds of politicians and economists. Because the focus is on the flow of capital—the more flow the better—what is clearly a loss will nonetheless appear as a gain. For example, a toxic spill, because it involves great amounts of capital expenditure, will appear as a good since the GNP will rise. But in what meaningful sense can a toxic spill be valued as a good if the health of a habitat and its members, even those members we deem insignificant, is impaired? Clearly the system of accounting here employed is skewed, if not perverse.

Recent attempts to estimate the full value of nature's services, a value not often computed in exchange prices, can go a long way to helping us appreciate the significance of our dependence on the created world. But as Robert Costanza, a leader in the field of ecological economics, has clearly shown, determining with any precision the monetary value of these services is extremely

complicated.[18] Nonetheless, expanding our gaze to include as much as possible the many kinds of value in the created order must be a first and continuing step.

A comprehensive, therefore more honest, accounting system would need to register the health and well-being of the whole creation because no member can exist in isolation. As ecology is teaching us, all members of ecosystems are tied together in vast webs of interdependence, such that the deterioration of one will eventually lead to the harm of another. Are we to believe that God would create a superfluous creation, a creation in which many members are unnecessary or expendable? It is hubris to think that because we do not see or understand how these effects play themselves out, or appreciate how we might be adversely affected by them, that the effects are not real or important. Perhaps it is precisely the very complexity and vastness of the contexts for economic life that prompts Wes Jackson and Wendell Berry to affirm that a comprehensive economy must finally be equated with the kingdom of God.[19]

The mistake of existing economies, particularly the modern industrial economy, is that it forgets the kingdom of God, what Berry also calls the Great Economy.[20] This Great Economy includes the whole universe of things and organisms, as well as the processes that enable them to be what they are. In short, it includes everything. Given the finitude and weakness of human power and thought, as well as the arrogance of much of our own ambition, it would be foolish to suppose that we could adequately or justly value, appropriate, or manipulate the whole of reality. Yet this is precisely what the modern economy does. It appropriates without caution and without humility. It assumes that what is good for the humanly contrived economy is all that matters and that its program of valuation is beyond question. And so we have an industrial economy based, as Berry says, on "the invasion and pillage of the Great Economy."

In times past, when a frontier mentality still ruled, we could hide from the destructive effects of our pillage. But no longer. The frontier is closed. (The frantic search by multinational corporations for new markets, besides being disrespectful of indigenous cultures, should, in some of its manifestations, be understood as a form of economic imperialism.) The challenge before us is to integrate our human economy with the Great Economy. We must, in a manner like the biomimics referred to earlier, bring into alignment current economic practices with the overall limits and possibilities of creation. To do so will require seeing that value comes primarily from the creation itself and that the value we produce through our own effort and ingenuity is secondary and derivative. It must preserve this original value, what we might call the grace and creativity of God, since all present and future economic life depends on it: "The human economy, if it is to be a good economy, must fit harmoniously within and must correspond to the Great Economy; in certain important ways, it must be an analogue of the Great Economy."[21] Because the Great Economy is the

source and sustenance of life, it is also the fundamental context of value and wealth.

For the most part we are oblivious to the volume and value of services the Great Economy performs for us daily. These services, ranging from oxygen production and wetland water filtration to the decomposition and recomposition of organic matter in healthy soils, rarely factor into our economic accounting. We simply take and damage without knowledge, gratitude, or reverence. It is as if we were to enter the scene of a lavish celebration and there assume that all the preparation and work exists solely for our own pleasure and whim. Even more naïvely and arrogantly, we might actually come to think that our presence validates and makes the celebration worthwhile, that without our presence nothing of note would be occurring, since we are the ones who are so effectively using up the goods of the party. We fail to see that our presence, while it should certainly be affirmed, should not be taken for granted. Nor should we forget that the celebration enfolds the lives of all others present as well. The Great Economy, as reflected in God's Sabbath delight, is finally a celebration of all life, an affirmation of the right of all to be and to thrive, not simply a celebration of our own.

To suggest that our economic life is to come into alignment with the processes and purposes of the Great Economy is thus to give expression to humanity's involvement in God's continuing creative work. Clearly, when we pillage the creation for its goods we dishonor God. No less significantly, however, when we falsely estimate the value of our own work or goals, we become guilty of idolatry, guilty of denying the presence of the eternal in the temporal. In our economic life, no less than in our religious life, we give expression to the truth or falsity of our piety.

What practical effect does the appreciation of the analogous character of human economies and the Great Economy have? To begin, we can see how the common adversarial approach that governs industrial and instrumental thinking must come to an end. To argue, as so many do, that human interests must be protected against the interests of the environment (jobs or the spotted owl?) or that human interests must come before environmental concerns (global warming or economic growth?) is clearly to be thinking in a myopic way. If we are all part of and sustained by a Great Economy and if we also recognize how our fates are mutually intertwined, then we can see how foolish it is to pit one member or element of the created community against another. We must not parcel the creation into economic bits that can then be factored against one another, for in doing so we violate the wholeness of creation. If spotted owls are in decline and the earth is warming to destabilizing levels, then we can be sure that the decline of other organisms and habitats (and thus we ourselves) is well underway. As Berry observes, "Competitiveness cannot be the ruling principle, for the Great Economy is not a 'side' that we can join nor are there 'sides' within it. Thus, it is not the 'sum of its parts' but a *mem-*

bership of parts inextricably joined together, indebted to each other, receiving significance from each other and from the whole."[22] Long-term economic health and wholeness depends on cooperativeness, for "no . . . house divided against itself will stand" (Matt. 12:25).

This is a revolutionary insight since it suggests that the sufficiency of God's grace, rather than the principle of economic scarcity, should guide economic life. Competition depends on the belief that there is finally not enough to go around. But "*if* the righteousness of God is present, there is always enough to go around."[23] After all, was not a significant portion of Jesus' ministry devoted to the satisfaction of life's basic needs of food and health? Is not the kingdom of God defined in part by the just distribution of God's grace? The response to grace, as the witness of God's faithful has repeatedly shown, is cooperation, the commitment to the equitable distribution of the gifts of creation, but also frugality, the recognition that we should not take what we do not genuinely need. To do this requires that we first take the time to learn the needs of all creation, for again our long-term health and happiness depend on the sustenance of all life's sources. If we are genuinely cooperative with creation we will recognize that we cannot succeed while other elements of creation languish and suffer.

Picturing economic life in these more comprehensive terms will cause us to rethink the idea of development. Nobel Prize–winning economist Amartya Sen has argued that we measure development too often in terms of economic means rather than goals. We thus focus on an expanding market or growing profits, when what we ought to be focusing on is the ultimate goal of our economic striving. That goal, says Sen, should be the expansion of substantial human freedoms. Clearly this is a noble goal, since it reintroduces ethical and social questions about the quality of life into discussions that too often center on quantitative measures alone. It also is helpful because it highlights the Sabbath idea that we are finally and maximally to become who we are before God, freed from the oppressive forces that destroy or distort our being.

Where Sen's analysis falls short, however, is in the scope of the extension of freedom. His understanding of freedom does not include the whole of creation. To be sure, Sen's analysis shows some awareness of environmental concerns, but his perspective is still negligent in its appreciation for the Great Economy. His narrowness of vision becomes clear in his discussion of the supposed "food crisis." Is there a crisis? Sen's answer is a resounding no because his analysis focuses only on production (and thus remains true to the invade-and-pillage model of economic life).[24] If Sen were truly interested in the freedom of creation as a whole, its freedom to be what God intended it to be at creation, then he would need to be more alarmed at the destructive and wasteful preconditions of our current "remarkable food production." The fact of the matter, as numerous agrarians have noted, is that current food-production practices are premised on massive soil erosion, water depletion and

contamination, soil salination and toxification, and species loss. We are literally killing our soils and then at great fossil-fuel cost pumping them full of chemicals and pesticides to make plants grow. Though current production practices may be high, the manner of production presupposed by agribusiness cannot be sustained over the long term. Nor are they conducive to the health and well-being of the creation as a whole.[25]

If our economy is to move toward Sabbath rest as its only meaningful goal and purpose, it must overcome the dichotomy that separates human well-being and concern from the well-being of the creation upon which we depend.[26] Economic health must be comprehended and judged by the health of the Great Economy. Economic decision-making must become more attentive to the limits and possibilities of particular ecosystems, for it is here that the work of God's grace is practically encountered and negotiated. No doubt this will require that we be more cautious and humble in our planning. But such caution and respect is the first step to honoring the creation around us and the creation at work within us.

The Conditions for Responsibility and Care

For many of us, meaningful and purposeful responsibility for the creation is impossible because we are more or less ignorant about the extent to which our economic practices make us, whether willingly or unwillingly, accomplices in the destruction of habitats and the communities they support. The insular character of our increasingly suburban lives is only one element contributing to this ignorance. Equally important is the fact that few of us could have any direct contact with the processes of economic production even if we wanted to, because production is increasingly carried out far away. The items we purchase are mined, fabricated, processed, designed, and shipped at distances far from our own sphere of influence or concern. As ignorant consumers we are prevented from being the attentive servants of creation we are called to be. We do not know, and thus are powerless to affect, any injustices that may be perpetrated along the ways of economic progress.

The first requirement for responsible action is that we become knowledgeable about the contexts in which our action takes place. Politicians and business leaders have become very good at hiding from us the true costs and conditions of our consumer ways. The media does not report when companies use cheap labor, defy environmental regulations, or weaken safety standards so as to maximize corporate profits. Nor do journalists investigate the effects of corporate practices on traditional ways of life and on natural habitats. And so we live our lives as in a bubble, oblivious to the real damage that is masked by the slick, packaged portrayals of it we receive from our cultural leaders.

If we are to become responsible we must forsake our passive ways and become attentive to the world around us. We will investigate and determine

the total costs of our economic activity. What this means is that we will not accept the purchase price of a product as its true price, for what this price overlooks are the many costs to the environment and to communal well-being that have been externalized for others to assume. For example, the purchaser of a television, automobile, or chair must be attentive to the product's longevity (how long before it enters the dump and takes up or pollutes valuable space that could be used otherwise?), its effect on the community that produced it (were workers fairly compensated, and was their living context compromised by deforestation and urban sprawl?), and its contribution to our present quality of life (do I need to work harder or longer simply to buy what I really do not need?). Someone will need to pay the costs of deforestation, anxious consumers, tired workers, and so on. Who will it be? While we might often hear that we cannot afford the total cost, the fact of the matter, as Herman Daly and John Cobb suggest, is that the price is being paid by someone.[27] What may appear as cheap electricity is not as cheap when we factor in increased health costs for miners, cleanup costs for habitat destruction, tax subsidies for massive energy projects, and worry over stockpiles of toxic waste.

Obviously we cannot become attentive overnight. We lack the teachers and the will to know. We prefer to assume that our activity is as benign as our economic boosters say it is, for there is blissful comfort in not knowing the destructive effects of what we are doing. And so we do not pay attention to the remnants of traditions that hold within themselves the patient accumulation of wisdom necessary for a sustainable life. We want instead to believe that we can take the shortcut to success.

As a child Paul Brand lived in the uplands of India. He remembered how the hills were forested, had clear-running rivers, and were dotted with carefully constructed and maintained terraces that enabled rice production. Centuries of Indian wisdom and planning made this system work. But under the direction of new landowners, owners who sought no help from the successful traditions of farming that preceded them, the forests were cut down and the terraces were destroyed so that the more financially lucrative potato might be grown. For a time, the payoff was large. The long-term effects, however, were visible only to the attentive, who saw that the felling of trees and the elimination of the terrace system would inevitably lead to massive soil erosion. Clear rivers of water turned to rivers of mud. In the short period of sixty years (compared with the hundreds of years of sustainable farming that preceded it), the hills of south India were barren, incapable of supporting any viable agricultural crop.[28]

This story of degradation caused by inattentiveness and greed could be repeated over and over again across the globe. The march of the global economy is often premised on the overthrow of traditional economic practices that were attuned to the ecological and communal parameters that previously sustained them. Of course, many traditional economies were destructive in their own ways. What made them destructive, however, was their inattentiveness,

their unwillingness to fit themselves within the Great Economy of which their smaller economy was but one part.

The importance of attention, the patient learning of the particular responsibilities and opportunities that accompany each ecosystem, raises the question of appropriate economic scale. More recently the focus has been on getting bigger. As companies become larger, even global in their scale and reach, they are presumed to become more efficient. Movement of capital and technologies is simplified so as to assure the quickest and the most streamlined production of products imaginable.

There are several reasons why we might be suspicious of this movement toward bigness. First, and given recent concerns about terrorism, we should note the vulnerability of large systems to disabling attack and their inability to adapt quickly to crisis or need. But perhaps more important, the growth and consolidation of companies means that transportation of goods, often over great distances, depends on cheap fuel, all the while increasing the risk of species degradation. As consumer goods are shipped around the world, exogenous pests and disease often travel with them and enter habitats not prepared to fend them off. Habitats and the organisms they support are thus compromised. While we may think that consumer goods are universally interchangeable, living species are not, since species, often over a period of centuries, are adapted to thrive in particular ecosystems. They cannot be moved about like objects and be expected to survive.

The corporatization of economic life makes responsibility difficult because it effectively does away with the moral agent. In a corporation, especially a very large one, it is very difficult to know who could claim responsibility for a company's actions. We cannot simply point to a CEO or a board of directors, since they are to serve the interests of shareholders, who are themselves widely dispersed. Shareholders are driven by increasing their company's market share, often giving their proxies with little sustained consideration. If we recognize that the market largely ignores the interests of natural and human communities, then we can see how corporations will act irresponsibly with respect to environmental concerns.[29] The connection between corporate action and effect is clouded, if it is seen at all. Shareholders do not know, let alone live with, the effects of what their money is doing, particularly if their money is at work thousands of miles away.

A further problem with the drive to become bigger is that it almost always requires a simplification of knowledge and process. Whereas traditional wisdom is tailored to the specific and complex, even idiosyncratic, characteristics of a place and task, corporate efficiency, especially when covering disparate regions of the globe, demands uniformity and generalization. There simply isn't the time to pay attention to, nor is there someone who can master all the specifics of, the needs of particular places. What this simplification amounts to is a distortion of the reality engaged. Economic and business leaders, much

like the potato farmers of India, make decisions that work against the long-term viability of regions because they cannot see (if they care to see at all) how what they are doing will in the end bring about ruin or destruction.

Responsibility requires attention to details and complexity, especially when we recognize that the health of any one created member is intricately involved in the health of countless others. It is unrealistic to suppose that any one person, or any small group of persons, can in a short time adequately assimilate the complex array of experience and information that would enable nondestructive activity. This is why the handing down of traditional wisdom is so important. We need the knowledge of forefathers and foremothers who patiently acquired the wisdom to appreciate what is suitable, life-giving activity in a place and what is not. The homogenization of cultures and wisdoms that follows from global corporatism is thus a significant threat to the possibility of ecological responsibility.

If the drive to bigness is often an impediment to responsible economic activity, it makes sense to say that a virtue can be made of smallness. This has often been done, most notably in E. F. Schumacher's classic book *Small Is Beautiful*. Schumacher argues that we have not thought enough about limits and that this is nowhere more evident than in economic thinking. Big technology and big markets invariably lead to habitat destruction, as well as to the disempowerment of peoples who often do not have the capital resources to compete with corporations. Yet it is precisely local people that we need, since they are the ones who possess a more complete understanding of the limits of regions. They have an appreciation for "the depths of things" because they see "the natural or social facts that lie behind them."[30] In part, this understanding follows from their not being simply consumers of goods but also producers. When economic activity is driven from the perspective of consumption, the complexity of production, which is always region specific and does a better job helping us appreciate the true costs of things (in materials, work, durability, etc.), is often overlooked.

Schumacher is clear that not all forms of bigness are bad. In certain contexts and for specific purposes, such as promoting unity and coordinating peaceful efforts between countries, large organizations can play an important role. But for the purposes of solving particular practical problems and of empowering particular groups of peoples, small-scale organization is far superior because of its immediacy. As important as general economic categories like GNP, input-output analysis, capital accumulation, and labor mobility are, they are finally abstractions that can avoid the concrete issues of habitat destruction, worker poverty, alienation, frustration, and despair.[31] As Schumacher suggests, if economic decision-making does not address these issues, "let us scrap economics and start afresh."[32] Is not the point of economic life to ensure that its members, both human and nonhuman, are adequately provided for? When economic practices impoverish habitats and the people they support and when

these practices provide for the increased wealth (in some cases obscene wealth) of only a small percentage of the total population, then it is time for a transformation of economic institutions. In other words, though many people speak of "sustainable" economic practices, it is not always clear that they mean practices that will sustain the life of the *whole* creation.

More recently Wendell Berry has made the case for a local economy as providing our best hope for responsible and wholesome life together. The test of good economic practice is whether it works toward the good here and now. A central problem with free-market ideology is that it is prepared to sacrifice so much—farms, forests, lakes, families, small communities, private pleasures, leisure—for the sake of a hypothetical future in which we are promised that life will be great. Perhaps even worse, as individuals we have given our proxies to business leaders who then use them against us (we support Wal-Mart, which then uses its size advantage to destroy locally owned businesses). How can a global economy that despises regional loyalty and diversity and that destroys habitats and communities be good for us and the creation as a whole?

A better alternative would be to promote local economies in which the distance between production and consumption, between seller and buyer, is short. As we see, understand, and live with the effects of what we do, we put ourselves in a better position to maintain a higher quality of life. We put ourselves more in control of our own present and future because, unlike the worker in a corporation who produces for unseen and unknown consumers, we have an interest in the results of our work. We care about what we do and how we do it because its effects are immediately felt. We will avoid toxins as much as possible, just as we will promote a fair and equitable workplace, because we and the people and places we love are implicated in the decisions we make.

A local economy rests on two principles: neighborhood and subsistence: "In a viable neighborhood, neighbors ask themselves what they can do or provide for one another, and they find answers that they and their place can afford."[33] A neighbor does not work so as to take advantage of those he or she lives with or from. The principle of subsistence, in turn, depends on people's cherishing and protecting what they have in common. The focus is on producing what the community's members need, rather than on producing for export. In fact, a viable community will import and export as little as possible, importing and exporting only surplus from a region, since it would be unjust to import goods from a region that itself needs them or to import goods from a region that practices inequitable labor practices or that degrades its own land.

In the eyes of many, Berry's proposal will sound protectionist and isolationist. But must we not work hard to protect the sources of life, given the propensity of global corporations to abuse them? Given that free markets often contribute directly to the degradation of workers and workplaces, do we not have an obligation to protect them? Furthermore, a focus on subsistence in no

way implies the end of charity abroad. Rather, it grounds the ability to give on ecologically and communally sound and just production practices at home. Charitable giving abroad cannot be sustained on the basis of irresponsible production at home. It depends on the attentiveness, sympathy, understanding, and neighborly work that follows from lives lived in close proximity to each other.

The significance of proximity, of face-to-face familiarity, should not be underestimated as we try to recover a sense of responsibility for creation. In large part it is because the moral sense depends on it. Is it an accident that the eclipse of the moral sense of the world goes hand in hand with the practical and the theoretical distance between humanity and the earth that is fully developed in the modern world? So long as we treat others, whether they be human or nonhuman others, in an abstract manner as objects or workers or consumers, we invariably tend to degrade them, to misunderstand and misuse them. We overlook their intrinsic value or at best assign to them a value derived from our economic or utilitarian calculus.

As Kohák has argued, for centuries the moral character of societies and the natural world was simply assumed. It is only in the last several centuries that we have divested the earth of moral worth. The recovery of the moral sense will depend on our ability to cultivate the sense of belonging within the creation, the sense that the earth does not simply belong to us as a possession but that we also belong to it, that our lives are intimately and inextricably bound up in its health. The category of outright possession is here simply out of place. Central to belonging are the bonds of love and respect that are acted out in the course of seasons. In fact, argues Kohák, "It is crucial to have no more than we can love, for without love the claim to having becomes void. Loveless having, possessing in the purest sense, remains illegitimate, a theft."[34] As we learn to belong to the creation, learn to love and respect it by working practically with it, the bonds of responsibility will grow.

The Practice of Sabbath Joy

As the seven-day creation account in Genesis finds its completion in the creation of Sabbath rest, so too does Isaiah's eschatological vision of the creation of a new heaven and a new earth usher in Sabbath worship:

> For as the new heavens and the new earth,
> which I will make,
> shall remain before me, says the LORD;
> so shall your descendants and your name remain.
> From new moon to new moon,
> and from sabbath to sabbath,
> all flesh shall come to worship before me, says the LORD. (66: 22–23)

Life finds its fulfillment in the rest and tranquility that are expressed in authentic worship of God the creator. The worship of God is the action in which created beings show forth their gratitude in being created. In worship, creation comes most fully into its own as it takes stock of the complete manifold of blessing that the creation itself is.

Clearly worship can take many forms: prayer, sermon, dance, eucharistic celebration, liturgy, singing, and so on. Its aim, however, is to reorient our busy, increasingly frantic, lives around the truth of God's creative and sustaining presence. Coming into the presence of God or, perhaps more properly, opening ourselves to the presence of God all around and within us enables us to see where our lives have denied God and the creation and how we have replaced trust in the goodness of God with anxiety in the face of the many things we seek to accomplish for ourselves. Worship, we might say, is the returning of ourselves and the creation to the presence of God so that we might enjoy God's grace. Sabbath worship, in other words, is the standard, the corrective site and time, in terms of which our lives are to be judged and reoriented.

It is a peculiar feature of modern religious life that the significance of the Sabbath and its appropriate forms of worship are largely confined to one day, or one part of a day, of the week. To be sure, Jews and Christians set apart one day to highlight Sabbath observance. But the significance of the Sabbath was not to be restricted to that day. Sabbath life was to amount to a disposition that would have its effect in every aspect of life, each day of the week. In our work, no less than in our business dealings and our family organization, Sabbath peace and joy are to make themselves felt. In whatever we do, the question of paramount importance should be, how does this activity contribute to joy in the grace of God?

It is tempting to think that it is only our own joy that we need concern ourselves with. The biblical witness suggests otherwise. In numerous passages we are told that mountains and forests, indeed all the earth, are capable of breaking forth into song unto their creator (Ps. 98:4; Isa. 55:12; 1 Chron. 16:33). Nowhere does the breadth of the worshiping community become more expansive than in Psalm 148:

> Praise the LORD!
> Praise the LORD from the heavens;
> praise him in the heights!
> Praise him, all his angels;
> praise him, all his host!
> Praise him, sun and moon;
> praise him, all you shining stars!
> Praise him, you highest heavens,
> and you waters above the heavens!

Let them praise the name of the LORD,
for he commanded and they were created.
He established them forever and ever;
he fixed their bounds, which cannot be passed.
Praise the LORD from the earth,
you sea monsters and all deeps,
fire and hail, snow and frost,
stormy wind fulfilling his command!
Mountains and all hills,
fruit trees and all cedars!
Wild animals and all cattle,
creeping things and flying birds!
Kings of the earth and all peoples,
princes and all rulers of the earth!
Young men and women alike,
old and young together!
Let them praise the name of the LORD,
for his name alone is exalted;
his glory is above earth and heaven. (148:1–13)

In tones reminiscent of the creation in Genesis, the psalmist is suggesting that the whole of creation was made to praise God. Though cedars and flying birds may not offer audible prayers or speak sermons, they nonetheless can reflect in their very being the grace of God. They can show forth the power and presence of God, as when they fulfill their creator's intent. The cedar does this when it grows strong and majestic as a cedar can. The blue heron, as it soars above a marsh.

It is difficult for us to imagine that the whole of creation can praise God. In part this stems from the depersonalization and secularization of our understanding of reality. Viewed in terms of the popular scientific understanding, nature is simply matter in motion guided by impersonal laws. Viewed economically, nature is a resource ready for us to be appropriated at will. These forms of understanding, however, reflect a distanced, abstract, and unsympathetic relation to the world around us. They deny to creation its place within the divine sovereign will. As Kohák suggests, "When we conceive of the world as God's creation, we cannot dismiss even the boulder as 'dead matter' in our modern sense. Even the boulder is an expression of God's loving will, testifying to the glory of its maker—and, as such, to be approached with respect. Its relation to us is personal in the sense that it, too, is a part of a value-endowed, meaningfully oriented cosmos."[35] That the rock shows no signs of consciousness does not mean that it is bereft of moral significance if we grant that it is the expression of God's joy and love.

Human beings are unique among creation not only because we have the choice about whether we will make our lives a reflection of God, but also because we can in our activity severely impair the ability of other members of creation to reflect God's grace. We can make the rest of creation become a reflection of ourselves, as when we manipulate it to serve exclusively self-chosen ends and in the process silence its praise to God. Or we can in our work and in our use of creation choose ends that would highlight and focus the graced character of creation. In this sense we need to hear John Zizioulas's idea that people are the priests of creation responsible for elevating in our own lives the whole of creation to God. In our work we have the opportunity consciously and emphatically to mark the presence of the eternal in time.

What this means economically is revolutionary, for if Sabbath joy, peace, and delight represent the perspective in terms of which we are to judge practical affairs, then it is clear that the utilitarian, grasping, anxiety-ridden ways of our culture must be transformed. Since the goal of our lives, and the goal of all creation, is to share in the *menuha* of God, then our work no less than our play must consciously strive to enable all members of creation to fully be what God intended them to be. While this policy may sound noninterferist and could be interpreted to say that people should not use creation at all, this is not the case. Built into the ordering of creation is the necessity of creatures living with and from each other. We, as many other organisms, use each other to live. The question, then, is not whether we will use creation, but how we will use it.

Felling a tree, killing an animal, throwing away a tool, is never a task that is to be taken lightly. Each is a gift graciously given. As gifts they merit our respect and care. But as gifts they are not ours to possess in an absolute sense. They are to be treasured in such a manner as to show creation's relation to the creator. They are, in other words, to be used in a manner that testifies to their being the effect of a divine love that defies imagination and comprehension. Practically speaking, this means that we will attempt to learn as best we can when our use defiles and when it honors creation. In this effort we have the help of agrarians and ecologists, but also architects and urban planners, who aim to show us how nature works and how our activity either promotes or thwarts that work.[36]

One way for us to transform our work and our use of creation is for us to let our activity be informed by ritual and sacramental significance. What this means is that key moments in our day—eating, disciplining a child, implementing an action plan, tending a garden, refueling our cars, watching television—be punctuated with reminders of how our acts bear directly upon the wide world of creation.[37] The aim of such ritual observance is to clear the space and time in which we can cast our striving in the light of God's creative intention and presence and there judge it to be the affirmation or denial of God's

will. These "Sabbath moments" will not only make our lives more meaningful, since we hereby consciously place our dramas within the context of the much larger divine drama, but will also remind us of our more humble station within the orders of creation. In short, we will begin to figure out our responsible and fitting place on earth.

Can we turn our work into a form of worship in which we, through our handling of the creation, honor God? Can we, in the tradition of the spiritual masters, make our lives into one long sustained prayer that gives thanks for the gifts of God? The current goals of economic thought and practice are decidedly against this possibility. But does not the recovery of a genuine religious sensibility rest precisely on the capacity to show through our practical living arrangements respect, thanksgiving, and praise?

In Praise of Community

> We are made to lov: both to satisfy the Necessity of our Activ Nature, and to answer the Beauties in evry Creature. By Lov our souls are married and sodderd to the creatures: and it is our Duty like GOD to be united to them all. We must lov them infinitly but in God, and for God: and God in them: namely all His Excellencies Manifested in them. When we dote upon the Perfections and Beauties of som one Creature: we do not lov that too much, but other things too little. Never was any thing in this World loved too much, but many Things hav been loved in a fals Way: and all in too short a Measure.
>
> —Thomas Traherne, *Centuries of Meditations* 2.66

It is one of the great features of Thomas Traherne's poetry that by reminding us of the glory and loveliness of creation he at the same time shows us the bleakness that can overtake our lives. Our perspectives can become narrow, more and more insulated from the wider social, natural, and divine contexts that support us, as we choose self-promoting paths of careerism and individualism, paths that confine us to a space of anxiety and exile. This pursuit offers only the "riches of darkness," riches manifest in envy, malice, covetousness, fraud, oppression, discontent, and violence. Prefiguring our current economic and social milieu to a remarkable degree, Traherne writes: "For having refused those [Riches] which God made, and taken to themselves Treasures of their own, they invented scarce and Rare, Insufficient, Hard to be Gotten, litle, movable and useless Treasures."[38] In our faithless grasping and hording we fool ourselves into thinking that we have more and that by having more we are better for it. Though many of us are sensing the loss that goes with this choice, few understand the depth of our distortion. Could it be that in cutting ourselves

off from others, whether that be human or nonhuman others, we are in reality destroying ourselves, condemning ourselves to misery and want? Should we not rather choose the "riches of light," the works and gifts of God? These treasures are freely given and proceed from the creator's infinite love. Receiving them, they make us grateful, causing us to overflow with praises and thanksgiving to God: "The Works of Contentment and Pleasure are of the Day. So are the Works which flow from the Understanding of our Mutual Serviceableness to each other: Arising from the Sufficiency and Excellency of our Treasures, Contentment, Joy, Peace, Unitie, Charity &c. wherby we are all Knit together, and Delight in each others Happiness."[39] Can we develop the patience and the slowness of life that are necessary for us to notice these gifts and so come into a full appreciation of their benefits?

The marvel of Traherne's insight is that he identifies communal life not in terms of a shared understanding or outlook, which is then susceptible to the many critiques of community that see in communal life covert forms of power and overt expressions of coercion. Rather, the heart of community is expressed in our "mutual serviceableness" to each other. Community is not built up around the fact that all its members share the same vision, as when clubs are formed around political platforms, hobbies, or social causes. In fact, sameness or similarity is not the key factor at all. What matters is that each member be able to serve another and thus help another flourish in ways that it could not if it were alone. Rather than requiring the difference of another to be sacrificed for the sameness of the group, Traherne's vision encourages the difference of another so that it can be most fully what it is.

At the heart of Traherne's vision is a sense for the dynamism of the created world, a dynamism reflected in its growth and development as it becomes what God loves for it to be. The image we should have in mind here is of the loving parent who provides the space, encouragement, and confidence that enables the child to realize and discover itself. The problem, however, is that because of our fearful, anxious, domineering, and otherwise sinful natures we stall or hamper the child's growth. Rather than enabling the child to become itself, we prefer that it become an extension of ourselves or the fulfillment of our own desires and needs. In doing so we subvert the desire of God.

Traherne's poetry invites us to see the misery in such fearful, controlling behavior. By minimizing or negating the integrity of others, what the medieval theologian Duns Scotus called the *haecceitas* or "thisness" of others, we at the same time impoverish the wealth of God's creation, dull its multifaceted splendor, because now the goals of created beings have been reduced to our own light rather than the light of God. Creation can become what it is divinely meant to be only as we dedicate ourselves to its well-being, as we "marry and solder" ourselves to its success and full development. Love is the action that will properly unite and bond us to creation: in our commitment to care for and promote

the potential in others, we will contribute to the flowering of God's paradise. Mutual serviceableness will result in the experience of pleasure, the happy delight that sees in others the treasures of God.

In a remarkable passage Traherne reflects on the power of love as the being and end of the divine life. Love makes possible the propagation and contraction that are the movements of life itself. Indeed, were it not for love, there would be no soul, no possibility for delight. In loving, the soul attains itself, becomes what it fully and completely is because it is now knit together with the rest of creation. The refusal to love, we should see, amounts to our separation and exile from the garden of God. Traherne then continues to say this about souls:

> They were made to lov and are Dark and Vain and Comfortless till they do it. Till they lov they are Idle, or misemployed. Till they lov they are Desolat; without their Objects: and Narrow and Little and Dishonorable: but when they Shine by Lov upon all Objects, they are accompanied with them and Enlightened by them. Till we becom therfore all Act as GOD is, we can never rest, nor ever be Satisfied.[40]

What this passage reveals is that the "riches of light" can be enjoyed only as we participate in this divine love that unites us to the world of creation around us and to the creator above us. Without love, which is expressed in our service to one another, we close in upon ourselves, dragging the goods of creation with us into the dark recesses of our own envy, spite, and fear. We lose the accompaniment, the enlightenment, and the satisfied enjoyment that comes from our trusting embrace of the creation. But as we learn to see creation in God, that is, as we come to see creation as God sees it, our delight approximates the delight of God. We become whole and complete insofar as we stretch our concern to include the full sweep of God's action in the world. In this stretching our personal, ego-driven soul reaches out and sympathetically identifies with its broad, life-giving surroundings. The world around us is now engaged and handled in such a manner that its serviceableness to us and to others, and vice versa, is enjoyed and preserved.

Traherne's vision of the glory of the creator's love enables us to think about the *imago Dei* in a profoundly communal manner. As suggested earlier, our being created in the image of God confers upon us a unique orientation. We do not simply live a biological life, but carry also the capacity for openness to God. We are, in a sense, bridge-beings, creatures that live in a temporal realm but also bear witness to the eternal. In our action we can, if we choose, articulate and bear witness to the moral, aesthetic, and spiritual character of the universe. Traherne suggests that in our openness to God we are exposed to the divine delight in the sufficiency, loveliness, and goodness of creation. God's pleasure is not confined to the divine trinitarian delight, but is manifested in the work of God's love in the very materiality of creation. God's love and

delight, in other words, is necessarily communal—it entails a sharing of goodness that extends through the soul to include the materiality of the whole creation. All that is, is the expression of love and delight and is bound together by a shared effect and purpose. If we share in God's image, we must also share in this vision. We too must look upon creation with affection and joy, even if what we see does not match our distorted expectations or fallen desires:

> Since we were made in the similitud of God, we were made to Enjoy after his Similitude. Now to Enjoy the Treasures of God in the Similitud of God, is the most perfect Blessedness God could Devise. For the Treasures of GOD are the most Perfect Treasures and the Maner of God is the most perfect Maner. To Enjoy therfore the Treasures of God after the similitud of God is to Enjoy the most perfect Treasures in the most Perfect Maner.[41]

No doubt this is a peculiar foundation upon which to base a communal understanding of life. But it is the basis that follows from an understanding of the goodness of God's creative life. We are joined together by virtue of the fact that we are all creation, all expressions of God's joining, healing, expanding love. The communal nature of reality stems from its shared origin, means, and end in God. It does not depend on whether each element can articulate itself as a member of the community or if it can accept responsibility for its membership in the community. If it did, then community would be restricted to the human community. Nor does it depend on a shared outlook defined by the exclusion of other points of view. Communal life is based on the growth and health made possible by God's love, which relishes and creates the space for others to be themselves. Community, rather than simply being a static form of unity within difference, is the dynamic upbuilding and care for difference that is rooted in the sort of love that nurtures and encourages others to flower into the beautiful beings that God intends. It is the vast interconnection of difference as difference held together by divine love, the mutual serviceableness of one to another.

Francis of Assisi understood the communal nature of reality when he referred to the sun, wind, and fire as his brothers and to the moon, water, and earth as his sisters. These elements of creation have their own ways of expressing praise to their creator. They do not speak the language of mutual responsibility and accountability as we do. They simply exist as in their creation they were meant to, and for them that is enough. But for us, created in the image of God, it is not. In our existence we are to bear witness to our solidarity and our interconnectedness in God. To do so, however, requires that we learn to trust in the goodness of God and not see interconnectedness as somehow to our own detriment or diminishment. The strength and beauty of humanity becomes authentic only as we elevate and promote our interconnectedness with the whole creation in God. As we carry out the divinely appointed work

of communal upbuilding—what could be more conducive to the delight of God and our own delight than to facilitate as we are able the joy of the creation around us?—among others, human and nonhuman, we realize and make manifest God's own sustaining and life-giving presence and so catch a glimpse of the divine delight. We bear witness to the integrity of creation by making ourselves responsible for its abiding integrity.

In our own time it has become increasingly difficult to appreciate this communal sense because we do not participate much in the creation around us. The practical contexts of our lives are not only insulated from the wider ecological world, they are self-enclosed as we have become embroiled in self-chosen pursuits. We do not have the time or patience to sit in the presence of the creation and see there the gifts and treasures of God. We do not receive the enlightenment that comes from the accompaniment of creation, and so we have lost the art of being creation. Having convinced ourselves that we are self-standing beings, we reject our fellowship with creation with disbelief or disdain. And when we do engage creation, more often than not it is the sort of engagement that denies creation's integrity: we force creation to serve our ways and fulfill our desires.

But if we combine Traherne's insight into the communal nature of reality with ecological insight, then the folly of our ways becomes more apparent. To disdain the biological membership of which we are but one part is not only to violate the viability of life but also to dull the splendor of God's creation. As we bring destruction and grief to the elements and life-processes of earth, we bring grief to the delight of God. While an ecological sensitivity may not lead us to Traherne's vision of communal delight as the effect of an infinite, creative love, it can prepare us to take our place as servant members of a larger life-giving whole.

We now need to ask: how can this sense of the communal nature of all being, with the recognition that beauty and pleasure grows as we strengthen and cherish the bonds that unite us through acts of mutual serviceableness, become a defining feature of our cultural life? No doubt, and especially given the frantic and anxious character of our time, this sense seems far, far away. A fantasy perhaps. But it must be our goal, the standard in terms of which we judge cultural success and failure, if for no other reason than its systematic and compelling portrayal of what all our cultural striving is finally for.

The Feast of Creation

Though life is more than food, we cannot imagine life without it. Since food is the indispensable prerequisite for the maintenance of all life, it is also a fundamental category and symbol in terms of which the ordering of creation can be evaluated as just or unjust, at peace or at war. Adopting this perspective

will require us to stop thinking about food as narrowly as we often do. Food is more than fuel that propels us through space and time. It is the intimate nexus that joins us together with the rest of creation in a mundane, yet most profound, manner. We should dwell for a while on William Bryant Logan's observation: "While we live, we ourselves are inhabited. A full ten percent of our dry weight is not us, properly speaking, but the assembly of microbes that feed on, in, and with us. Our bodies are the kitchens where our food is cooked, digested, and then burned to cook us."[42] Though we are perpetually feeding on other creatures, it is no less the case that creation feeds on us. In our eating, as in the eating of others, the bonds that necessarily and beneficially tie us all together become practically and concretely apparent.

But food is also a cultural symbol, expressing our moral and spiritual relatedness to the world around us. In food production, harvesting, distribution, preparation, and consumption, we enact and make concrete our understanding of our place in creation. In these practices we show whether we are attentive and respectful eaters and if we take our food, and thus the creation as a whole, for granted. Given the significance of the meal in sacrifice, festival, and Eucharist, food represents one of the most basic entry points for evaluating our companionship (from the Latin *companio*, which refers to the sharing of bread between fellows) with God, with others, and with the earth. A companion is one who comes "with bread" and so welcomes and enables others to join in the journey of life. Have we been hospitable to the rest of creation, and have we made ourselves welcome in its midst?

Everything that lives eats—whether it be centuries-old fir trees, with their miles of roots reaching out in all directions; bacteria, which turn corpses into the conditions for new life; earthworms, who nurture themselves and promote soil quality by burrowing through the earth; or human infants, who nurse themselves at a mother's breast. The cycle of life is everywhere preserved and maintained by a steady flow of food. What is waste or fruit, even death, for one member, is food for another. How shocking and disturbing it is, then, that the modern food industry, which is increasingly dominated by global corporations and biotechnology firms, should be predicated on the interruption and short-circuiting of this flow. Modern agriculturalists or agribusiness representatives, because of their obsessions with control and profit margins, are engaged in what Vandana Shiva calls the hijacking of the global food supply: "Industrial agriculture has not produced more food. It has destroyed diverse sources of food, and it has stolen food from other species to bring larger quantities of specific commodities to the market, using huge quantities of fossil fuels and water and toxic chemicals in the process."[43] Industrial and commercial food production short-circuits the flow of food because in its practices it compromises or destroys the sources of life upon which food flow depends.

To many people Shiva's statement will sound alarmist and false. Is it not the case that we have more food in stores than ever before in history, and is

not this increased yield the direct result of improved farming techniques?[44] An answer to this question depends on how inclusive and how long term one's vantage points are. Shiva's perspective is one that takes into account the food needs of all the earth's people (including the hundreds of millions of those now starving), as well as the needs of the billions of organisms—plants, bugs, microorganisms, fish, birds, animals, and so on—that share the earth with us. When we note their suffering and consider the daily destruction of vast stretches of the earth's habitats (the site of food production) through deforestation, water contamination and depletion, soil erosion, desertification, coastland and wetland destruction, and species loss, then the optimism of agribusiness boosters is questionable, if not sadistic. Though the wealthy few have access to an abundance of food, its long-term viability, quality, and safety, let alone the justice of its procurement, are open to serious debate.

Modern food production is tailored to efficient management and maximum profit. To accomplish these goals, farmers clear the land so that one crop variety, usually wheat, corn, soybean, or rice, can be grown. Other plant varieties are thus necessarily weeds that must be destroyed. As Aldo Leopold once observed, the current wisdom of agricultural colleges seems to be that if it cannot be fed to humans or livestock or if it interferes with the production of plants that can be fed to humans or livestock, then it's a weed.[45] There is little sense that these plants might play an important role in the life cycle of the Great Economy. Weed disposal, in turn, is accomplished through the heavy use of pesticides that are expensive and are widely known to be inefficient if they are effective at all—the pesticide does not always kill the designated "weed" even though it kills much else besides. This is why companies like Monsanto, which together with a few other corporations now owns the majority of the world's seed banks and pesticide- and food-production facilities, have genetically engineered seed varieties that are compatible with their own pesticides. Farmers planting this seed can thus apply highly toxic chemicals that kill all other plants while sparing the designated crop because of its genetic resistance to specific toxins.[46]

The viewpoint supporting this practice is narrow and antagonistic. It assumes that growth is a competition rather than a cooperation and that the life of one species can be procured only through the elimination of a variety of others. This is why the president of Monsanto once remarked that all species not patented and owned by them are weeds that "steal the sunshine"! It is also why major biotechnology firms are traveling across the globe to buy up and patent thousands of indigenous seed varieties and then preventing local farmers (through heavy fines and criminal charges) from growing and passing on local seed stock.[47] Corporate agribusiness denies the worth of all species that fall beyond or might jeopardize their own sphere of profitability. Despite their claims to being the guardians and the guarantors of the world's food supply, they are in fact the despisers of grace.

Food safety and longevity depend on the health of the whole living community. It is ecological foolishness to think that one element in a food chain can be preserved at the expense of another. This is why the very notion of the wholesale destruction of weeds is problematic. That a species is of little direct use to us does not mean that it is not of use in some other way (hence the once-widespread farming practice that preserved fencerows, marshes, and woodlots). This is especially important to recognize since many of the world's poor derive their food and livelihood from the harvesting of what others take to be weeds or pests. To be sure, food production will clearly need to deal with pests (first by answering the question, how much of the pest problem stems from improper land management?), and so some forms of plant management will need to be practiced. There are ways to accomplish this, however, that are ecologically friendly, ways that include field and crop rotation and the planting of perennials and polycultures. We need not be ruthless in our treatment of the diverse species of the earth. We can, if we are patient and are willing to make ourselves the students and servants of creation, work with the manifold species of the earth and in so doing ensure their well-being and our own. The alternative is to mount chemical attacks that run the risk of producing superweeds and superpests—plants and insects that develop resistance to our most toxic pesticides and insecticides.

If food is the means through life, and if culture is to devote itself to the health of all creation, then it is clear that dominant food-production practices must change. They must become safer, more democratic, and more attuned to the needs of human and nonhuman creation. When food is not grown locally, but is instead chemically processed so that it can be shipped thousands of miles, its quality and nutritional value decreases. When corporate executives rather than a community's citizens make decisions about what and how much food is raised or produced, quality control, responsibility, and safety decrease. When the focus on food production turns exclusively on human needs, then the health of supporting habitats is jeopardized (and with that the viability of long-term food production). The quality of food and the quality of life go hand in hand. We will not have one without the other, and we will have neither if we do not ensure that food production is tied to local economies that promote attention, responsibility, and affection for the diverse sources of life. In other words, we need to stop thinking about food production in the narrow terms of commodity volume. Responsible food growth requires all manner of moral and spiritual reflection and insight, reflection that takes seriously ecological complexity, justice, and health. Authentic farming and gardening that are attuned to the grace and mystery of all life will also be vigilant to make sure that production practices fall into alignment with the wide contexts of life and death.

If we are to enjoy the feast of creation, a feast that invites and enjoys the whole creation, it is not enough to think about food-production practices. We must also consider issues of distribution and consumption. Is food simply a

commodity like other commodities that can be bought and sold? What do current eating patterns suggest about the value of food and the value of life? Does the degradation or abuse of creation, and thus also the degradation of food, entail the degradation of eaters? We can no longer separate the act of eating from the health and integrity of the creation as a whole, for as Berry suggests, "Violence against one is ultimately violence against all. The willingness to abuse other bodies is the willingness to abuse one's own. To damage the earth is to damage your children. To despise the ground is to despise its fruit; to despise the fruit is to despise its eaters. The wholeness of health is broken by despite."[48]

Of the developments in food-consumption patterns, one of the more shocking would have to be the apathy and ignorance about food quality. To be sure, there is a vocal minority that continually raises the specter of unhealthy food and unhealthy consumption patterns. But the dominant practices, as revealed in the unprecedented growth of fast-food chains and the decline in home vegetable- and fruit-gardening plots, as well as rising obesity levels among our young, suggest that people do not worry about the quality of food or the health effects of their consumption practices.[49] There is little concern, for example, over the fact that a few decades ago the idea of buying bottled water to drink would have been preposterous. Now great numbers of people pay companies again (we paid them the first time to pollute our waters) to provide for us what should be ours for free if we took the time to care for our water systems. How long before we pay to breathe clean air (some are already doing this by moving to expensive "estates" and gated communities that are far removed from the smog of urban and industrial centers) or pay for rights to absorb the energy of the sun's rays?

Perhaps the greatest single problem evident in current food-consumption practices is the ignorance of food consumers. We do not know what we are eating, sometimes do not care to know, nor do we consider how the food we are eating was prepared. For the most part, the food that we buy at the store was processed and shipped to us from far away. And since fewer of us care to prepare and cook our own food, consumption goes on in the dark. The only factors that matter to us any longer are comfort (which is not the same as taste), price, and convenience. And so we fill our bodies with chemical additives, synthetic fats, toxic sweeteners, and flavor capsules. Since food is not fresh and since it needs to be shipped hundreds of miles, it needs to be processed with an eye to a long shelf life. In effect, this means that food, which is a living reality, must first be killed to make the long journey to our mouths. Then, before we eat, flavoring produced at flavor factories must be added so that we will enjoy what we consume.

Consumption patterns of this sort suggest a profound disengagement from the vitality of creation. Rather than seeing eating as the most intimate engagement with the life forms all around us, a sharing in the well-being and

flow of all life, we have instead turned eating into the purchasing of commodities that we can manipulate, control, and use according to convenience. In some cases we even use food as a weapon against others (as in wars and political battles) and against ourselves (as in eating disorders like anorexia and bulimia). We eat without a sense of responsibility or accountability, figuring that food consumption is equivalent to fuel consumption—we buy the fuel as cheaply as we can so that we can get on with our other, more important tasks. We have lost the sense that eating is a moral act, that in our eating practices we exhibit the authenticity of spiritual piety.

In the past, often because of scarcity, but also because of its inherent spiritual significance, food was central to a culture's attempt to define itself and what it held dear. It carried immense symbolic power since food consumption was the concrete act in terms of which social relations, work life, geographical identity, and religious ritual came together. Nowhere is this more evident than in Jewish dietary laws. The meal, what one ate and who one ate it with, as well as when one ate it, all played a crucial role in the formation of Jews as a distinct people and faith. What one did or did not eat served to locate the person within a moral space that reflected the orders of creation. Consider here the commandment of Deuteronomy 12:23 not to eat blood with the flesh. Eating blood signified the overstepping of one's proper place within creation, since to eat blood is to take the power of life within oneself, a power that belongs exclusively to God. Consider too the place of food in sacrificial life. Offering to God the firstfruits of the land and herd signified profound thanksgiving and dependence on God to provide what we cannot provide for ourselves. These examples, and many more besides,[50] show that whether we are intentional about it or not, the act of eating, perhaps more honestly than our public piety, expresses our moral and religious sensibilities.

In Christian traditions we need highlight only the central significance of the Eucharist, the Lord's Supper, to see the profound spiritual dimensions of eating. Participating in this meal signifies a reordering of our sensibilities and relationships, for now Christ's flesh and blood become part of us with the effect that old patterns of exclusion, violence, and injustice are replaced with new practices of welcome, hospitality, and service. The very materiality of the meal indicates that religious life, far from being a personal "spiritual" quest, is the embodied expression of God's peace and joy on earth. As Rowan Williams puts it, "To take 'the world' in the eucharistic elements and name them as signs of Jesus, signs of creative love and reconciling gift, is to recognize the possibility of the world's transfiguration, in the name and power of Jesus, into a world of justice and peace . . ."[51] As we share in Christ's body and blood and as we share the gifts of creation that are under his lordship, we herald the kingdom of God.

Eating is a holy and complex act. It is entirely necessary and natural, since all that lives must eat. But it is also morally difficult, for in eating we kill. We

live by the life and death of others, just as eventually others will live through our life and death. For good reason Genesis identifies the limits to human life in terms of a prohibition to eat of one particular tree. To eat without limit or gratitude, to eat without respect for the orders of creation that surround us and make our lives possible, is to forfeit the possibility of moral discernment and to promote destruction. It is to deny that we are members of creation, members of a moral community that carries obligations as well as opportunities: "To live, we must daily break the body and shed the blood of Creation. When we do this knowingly, lovingly, skillfully, reverently, it is a sacrament. When we do it ignorantly, greedily, clumsily, destructively, it is a desecration. In such desecration we condemn ourselves to spiritual and moral loneliness, and others to want."[52]

The whole of creation is one lavish feast to which the creator invites all. We are called to enjoy each other, be grateful for each other, as we eat and live, for in doing so we participate in the delight that characterized God's own response to the work of creation. To be sure, sin, in the forms of greed, pride, spite, willful ignorance, fear, and ingratitude, has marred the feast and injured its participants. There is yet, however, an interior beauty that shines within the creation and that attracts us through its peace, its loveliness, and its power. As Thomas Traherne so well understood, nothing could please God more than for us to enjoy creation so lovingly made and maintained. Indeed, God's desire from the beginning was that we might experience God's own enjoyment. This enjoyment, however, is no simple matter. It requires that we desire, as Noah learned in the ark, the happiness of others, for this is what God's own delight was founded upon. This is why the needless harming of even the smallest creature leads to creation's deformation. The path of enjoyment must finally follow the path of God's eternal love: "Your Enjoyment is never right, till you esteem evry Soul so Great a Treasure as our Savior doth: and that the Laws of God are sweeter then the Hony and Hony Comb becaus they command you to lov them all in such Perfect Maner."[53]

The Way of Salvation

In our time it has become difficult to envision, let alone affirm, a meaningful, creation-inclusive concept of salvation. On the one hand, there are those who believe the idea to be implausible or dishonest because it resembles the end product of a long line of wish fulfillment—salvation in this view amounts to little more than an escape from existing, difficult circumstances and a flight to their mirror opposite. On the other hand, there are thoroughgoing naturalists who insist that the law of life is the law of a redemptionless jungle—as we destroy others to live, so, in turn, we will be destroyed by others. Can a

meaningful teaching of salvation be developed in this context? How might the teachings of ecology and creation help us address this matter?

In the course of this study I have noted that human flourishing and health cannot be sustained over the long term if it comes at the expense of the unnecessary destruction of other species and their life-supporting habitats. I have suggested that human life ought to be lived more cooperatively and less competitively since it will then be guided by a vision of God's original peace. But does not this suggestion fly in the face of what we know to be nature's dynamic and death-wielding ways? As we heard from Annie Dillard, is not the march of evolution fueled by massive amounts of death? Have I not acknowledged that to eat we all must kill?

Clearly, it would be naïve to ignore or downplay the significance of death. The wheel of life, as Sir Albert Howard correctly noted, depends on a cycle of life *and* death, a cycle in which the soil and its billions of microorganisms, via the work of decomposition, turn corpses into the conditions for new life. It would also be rash, in the name of the ideal of cooperation, to suggest that humans should not play a role in the elimination or control of disease-inducing agents: viruses, insects, rabid critters—all living things in their own right. Do we not in fact have a responsibility to cure illness whenever we can? How can we and others avoid killing if it is necessary for survival, let alone flourishing?

Ecological complexity makes it impossible to give a simple, universally applicable answer to these sorts of questions. Here the testimony of Job to an unfathomably vast and sublime creation must not be forgotten. But so too the words of leading ecologists who repeatedly remind us that we have barely begun to understand even a fraction of the nature and functioning of species that currently make up creation or the multifarious web of relations that exist between them and us. We do not know, for instance, how much our manipulation of species and habitats, as when we encourage the development of superviruses because of the over- and misuse of antibiotics, has contributed to an increase in human suffering. Nor do we have a simple answer to the nature of illness and suffering. Like Job, there are times when we must confess that we do not know the complete story behind our ills and that the stories we tell ourselves might be naïve and shortsighted, a product of hubris rather than humility. Are illness and suffering, even death, always evil? Is it arrogant to consider all discomfort or adversity as foes to be destroyed? Is it sinful not to alleviate the suffering in another creature? Honesty with respect to the limits of our knowledge on these matters requires that we think of salvation less as the solution to our woes and our ignorance and more as the invitation to a particular way of life, one inspired by the life-promoting, relationship-restoring, and relationship-building examples found in the scriptural witness.

The doctrine of salvation aims to articulate and make concrete the path of God's design in what sometimes appears to us as God's abandonment or con-

demnation. Because God is good, we assume that God intends goodness for us, intends that the creation lovingly brought into being should also flourish and maximally be. This is why salvation in its root meaning refers to the mundane, though still miraculous, concept of health. If we are healthy, then our bodies, our minds, our hearts, our relationships, and our environments will be whole. The character of our relationships will be so constituted as to bring delight to the heart of God.

We must affirm that human health, viewed ecologically, is impossible without the long-term health of the natural habitats that surround and support us. Who we are and, to a considerable extent, the range of what we can become depends on a complex history and potential of the many relationships and interdependencies that exist between us and the billions of organisms that make up creation. Health as a solitary phenomenon or as a state achieved in opposition to or at the expense of other organisms is simply a contradiction in terms. This is why Berry has insisted that a good beginning for understanding health is to say that it consists in our membership with others: "To be healthy is literally to be whole; to heal is to make whole."[54] If our lives are destructive of the natural and social communities upon which we depend, then we cannot hope to live long or well. Our work, in other words, has turned against the way of salvation.

It is not difficult to see that when health is defined as expansively as it must be, that what the health industry calls healthy falls drastically short. Our communities, both social and natural, are in serious decline and are under steady assault from an economy that claims to be raising our quality of life. Is it not time to see, as Berry avers, that those who claim to heal our ills are remarkably similar to those who caused our disease in the first place and that together they stand to make an enormous amount of money from our ill health? It will not do to claim we are healthy if our bodies and minds, well fortified by the pharmaceutical industries, function relatively smoothly but to no good purpose. As we depend on others to sustain us in our being, so too others depend on us for their well-being. If the patterns of our lives dissimulate or deny the memberships of which we are a part, then our lives are so much compromised, so much more vulnerable. This is why religions are clear in stating that we should not simply endure but instead must seek out and help the wounded and the hurting. We cannot be safe, healthy, or whole if another is in pain or in need. This is an ecological and a religious truth.

More difficult to understand is how the wholeness of health must be expansive enough to include death. As has been said, death is a necessary complement to life, if for no other reason than the fact that we all feed on the death of others. But death, no matter how necessary and how ubiquitous, is not the final word. Though the paths of evolution may be strewn with corpses, the march, even the dash, toward life remains unabated. The surge to ever more

life is a marvel that defies the imagination. Do people have a redemptive role to play in this dance of life and death?

To discern what the character of uniquely human life should be takes us beyond the range of ecology into the domains of faith and love. Here I would suggest that Christians have a response that is compelling and is congruent with an ecological understanding of our interrelatedness with others. To appreciate this Christian response, even if only in part, requires that we move beyond the individualistic conception of salvation that dominates so much contemporary spirituality. Salvation is not a private guarantee to entrance into heaven. It refers much more broadly to the restoration of wholeness and health between and among ourselves, the earth, and God.

The experience of the early church was that Christ called members into a new community in which they and the world were to be transformed into the likeness of God. Baptism signaled entrance into this new order and way of being. Old patterns of living and relating to others were to be abandoned so that converts might experience the blessing and joy that followed from being united with Christ. Far from being a gnostic flight into a perfect world that exists somewhere else, the life of God, which entails a life of joy, peace, and delight, is among us and is to be found in the healing of the world, the building of a new Jerusalem—Jesus feeds the hungry, heals the sick, exorcises demons, forgives sinners, and brings the dead to life, while Paul calls us to the unending task of mutual communal upbuilding through praise, generosity, solicitude, and singing. As we enter into the body of Christ and as we imitate Christ's ministry in our own service to others, we prefigure in our own bodies and our relations what health and wholeness look like. We become agents of and witnesses to God's saving ways.

Following the insightful study on salvation by David Ford, I would suggest that the clearest sign of the dawning of salvation Christianly understood would be a singing community. Ephesians 5:18–20 says, "Be filled with the Spirit, as you sing psalms and hymns and spiritual songs among yourselves, singing and making melody to the Lord in your hearts, giving thanks to God the Father at all times and for everything in the name of our Lord Jesus Christ." The whole of Ephesians reads as a long letter describing the many reasons for which we are to be thankful and over which we can sing: God has blessed us in Christ and has included us in a drama that promises redemption for all, a drama that entails the gathering up of all things on heaven and earth into the glorious grace of Christ. But to sing this song requires that believers first be transformed into the image of Christ and live for his glory. Christ, in other words, is the pattern for a new humanity restored in its relatedness to others, the creation, and God. The barriers of hostility and violence that otherwise would divide us—and keep us from singing—are broken in him.

Music is an excellent metaphor and practice for helping us understand the character of our memberships with others. In part this is because music invites us to be intentional about and more fully acknowledge our involvements with others. As Ford summarizes:

> Sounds do not have exclusive boundaries—they can blend, harmonize, resonate with each other in endless ways. In singing there can be a filling of space with sound in ways that draw more and more voices to take part, yet with no sense of crowding. It is a performance of abundance, as new voices join in with their own distinctive tones. There is an "edgeless expansion" . . . , an overflow of music, in which participants have their boundaries transformed. The music is both outside and within them, and it creates a new vocal, social space of community in song.[55]

Of course, it is possible that we can create noise. But noise is a feature of voices that are inattentive to the voices around them, voices that are intent on individual prominence at the expense of others. When we sing properly, with the propriety that gives due acknowledgment to the supports that enable song, the joy of life finds its best articulation. Music, like communal life viewed generally, is enhanced by the encouragement and respect for the differences and potential of others that arises out of our "mutual serviceableness" (Traherne).

A musical life is one that acknowledges the interwoven character of life. It takes seriously our responsibility to be alert to each other, to be responsive to changes in tempo and tone: "Singing together embodies joint responsibility in which each singer waits on the others, is attentive with the intention of serving the common harmony."[56] In this compact expression Ford draws our attention to many of the themes we have been developing: attention, responsibility, care, service, enjoyment. As we sing we communicate our willingness to participate in the well-being of others, knowing that they cannot sing well as long as their lives are governed by misery.[57] We proclaim our hope that the song we sing will be beautiful and lovely and that it will invite others to join with us.

The loveliness of the Christian song depends on the health and wholeness of the members singing the song. This is where Paul's emphasis on communal edification becomes most important: "I therefore, the prisoner in the Lord, beg you to lead a life worthy of the calling to which you have been called, with all humility and gentleness, with patience, bearing with one another in love, making every effort to maintain the unity of the Spirit in the bond of peace" (Eph. 4:1–3). Insofar as we are gentle with one another, we will work to ensure the other's well-being. We will not seek self-advantage, but will instead promote practices that bear witness to the glory of God. In this work the practices of silence and restraint will be essential. We have assumed for too long that the song of creation depends on our individual voices being heard all the time. We

have dominated the music by our volume and not with our silence. It is time for us to develop the patience and humility that will enable us to hear and appreciate the music of others, since we have all but forgotten that others can sing too. In this time of sustained silence we may yet learn that other voices are equally beautiful. We may yet learn how more modestly to reposition ourselves in the great chorus of God.[58]

Christian singing and salvation is directed by the ministry of Christ. It is he who shapes the character and extent of our relations with others. Since he is Lord of all creation, we should not be surprised that singing and salvation are applicable to all creatures. Scripture repeatedly tells us of a singing creation, of trees clapping their hands and hills singing together for joy. But in times of suffering and struggle (consider here the passion of the Psalms and prophets), and most pointedly in a time of mass destruction, the whole creation, not just humanity, groans in pain and suffering. The tone of its singing carries the passion and truth of the lament. Rather than being a joyous celebration of the gifts of life, the sound of creation becomes the cry of pain and hurt.

In the midst of this lament the witness of Christ again speaks powerfully. If Christ is the heart of the world in the sense that he is creation's origin, sustaining power, and end, we should expect that he above all should be acquainted with the pain of a suffering world. In his own life he bore the pain of hubris, hatred, and violence. The promise of Christ, however, is that pain is not the end of the story nor is lament the final movement in the song of creation. Resurrected life, life that participates in the holiness and peace of God, restores creation to its fullness and joy by showing us that death need not mean isolation and separation. Resurrection, in other words, becomes the basis for a transformation of culture that will usher in a new song because it teaches us a new way to be alive:

> Because his resurrection embodies the paradigm of merciful reconciliation, it enables men and women to be at home with themselves and with one another as well as with God. . . . The resurrection community shows humanity in its ultimate reality. It speaks the truth about our present condition, but it also speaks the truth about humanity as God wills it to be: it manifests the primary and irreducible *meaning* of what it is to be human, the fundamental context of human existence, as the purpose of a compassionate, creative will, a will for love.[59]

We should not think that the way to salvation is anything like a "solution" to the problem of evil and suffering. It is much more the merciful path of forgiveness and service, a path that enfolds the world's suffering and redirects it to wholeness and joy. Why reality is cruciform in its nature, why the way of life is also the way of sacrifice and death, is not something that we can definitively know. What we do know, however, is that creation is not yet finished.

It is a dynamic reality sustained by God as the expression of self-othering love. God seeks the flourishing and the integrity of the whole creation. In this flourishing we, as created in the image of God, play a significant role. Insofar as we in our cultural lives promote Sabbath rest, we help usher in God's peace in the midst of struggle and God's joy in the midst of suffering. This is our calling and our identity: to be the witnesses to and the agents of God's original delight in creation. In this delight we find the climax of creation and the fulfillment of all our yearning:

> Surely his salvation is at hand for those who fear him,
> that his glory may dwell in our land.
> Steadfast love and faithfulness will meet;
> righteousness and peace will kiss each other.
> Faithfulness will spring up from the ground,
> and righteousness will look down from the sky. (Ps. 85:9–11)

Conclusion

But whoever is joined with all the living has hope.

—Ecclesiastes 9:4

It is tempting to suggest that the most important thing we can do in the interests of God's creation is to leave it alone—or at least set aside large tracts of wilderness that will remain unspoiled by human hands. This is certainly an approach much favored by various forms of environmentalism. While not minimizing the importance of preserving intact some wilderness areas, mostly for purposes of our own education—we need both the experience of leaving something alone, as well as sizable areas where we can observe and appreciate, even mimic, natural processes (as when we farm by following the evolutionary success and durability of the prairie)—we should also be clear that this approach is not sufficient, that it can be dangerously and destructively misleading. Thinking too much in terms of wilderness preservation can lead, as it clearly has, to the mistaken idea that we need to exercise caution and care only when we are in wilderness areas, the assumption being that what we do in our cities or on our farmlands is entirely up to us. What we need are practical suggestions that, rather than taking us out of nature, promote a more wholesome and beneficial human presence within it.

To take seriously the moral, spiritual, and cultural significance of creation means that we must learn to relate properly to the created order *wherever we are* in ways that bring honor to God. This is not to say that we treat all organisms and habitats the same way. Rather, since all creation comes within the scope of God's care and

delight and since no part of creation is superfluous or without purpose, we are to order our practical lives and our economies to insure that all aspects of our work, rest, and play—whether they transpire in wilderness areas or not—circulate within the orbit of God's creative intention. It makes little sense to equate God's creation with wilderness, because this view bifurcates a world that is otherwise whole. If we have learned anything from ecologists, it is that though we may speak of regions and specific habitats, all are joined together in ways that implicate each other. Cities cannot exist apart from watersheds, farmlands, woodlots, mountain snowpacks, and the physical and meteorological conditions that maintain them. Nor, given our ubiquitous presence, will these natural sources thrive without the deliberate, culturally laden efforts of people to care for them. The flourishing of the whole creation will depend on the patient, attentive, compassionate, and convivial integration of human ways with physical, chemical, and biological processes.

As we think about our place on earth and the various responsibilities we have for it, we are better served if we think in terms of the garden aesthetic elaborated earlier. We are a species that, far from being an alien or cancerous presence, must learn to take up its proper place and role. We are creatures endowed with special responsibilities to care for a world much in the way that a gardener looks after his or her garden. In this garden there will be regions that are more or less domestic, and thus more or less wild. But altogether a garden forms a seamless whole. We need to be attentive to all of its diverse needs, acknowledging that at times our attention will prompt us to stand back in quiet, noninterfering repose. Our job must not be to take humanity out of the creation or simply to sequester as many parts of it in preserves as possible. Rather, we must learn to live wiser, more compassionately, and more patiently within all of it, which means that we will have to develop our ecological intelligence and our full faith potential. This is what the art of being a human creature is all about. And since, for the most part, we will spend the bulk of our time and energy in nonwilderness areas, it will be in our cities and on our farmlands and woodlots that we will have to practice this art.

To be an authentic creature, therefore, does not mean that we shed ourselves of our unique spiritual endowment, "return to nature," and there achieve an imagined harmony with it. Nor can we simply (naïvely) advocate a "back to the land" movement in which we all become honest farmers. Views of this sort presuppose an understanding of nature as pure and culture and civilization as inherently problematic.[1] The more realistic course would suggest that we need to imaginatively construct and then develop more-authentic cultures that better approximate wholesome relations with their surrounding, sustaining natural habitats and that promote just relations among its members.[2] Though there is much to criticize about urban and suburban life, just as there has been much to criticize about traditional agrarian societies, the issue is how we can transform all our living arrangements so that natural and cultural health can be

optimized. Cultural success, if it is to be achieved at all, still lies before us as we anticipate and promote the expression of God's creative intention for the world. The paramount question is whether we have the courage, the imaginative capacity, and the trust in God's goodness to envision cultures and economies differently than they now are. As we have already seen, work that has taken up this question is already well under way in certain segments of our society. The growth of ecodesign production, as well as interest in the "new urbanism" and genuinely sustainable agriculture, suggests that we are gradually learning not to take our responsibilities as created beings for granted.

This concluding chapter will highlight practices that can help us as individuals understand and develop the art of being creatures. The suggestions I offer will enable us to see ourselves as responsible members within a larger creation, blessed by its many gifts (provided we have learned to notice and appreciate them), and more richly aware of our role as servants of God, each other, and the earth. In other words, my goal will be to encourage the sense of creation to be more richly and concretely felt within our daily lives. My goal, though sympathetic and in broad alignment with mainstream conservation efforts, will not rehearse the many good suggestions that can be found in books like *The Consumer's Guide to Effective Environmental Choices*.[3] Nor will it directly address the many large-scale, global efforts being attempted by governments and international organizations to effect sustainable, just development. My focus here will be much smaller, because it will be on the practical things we can do as individuals and as small communities to make the sense of creation real and vibrant.

Our first priority, the priority that should accompany all suggestions, must be to settle down, make an honest accounting of where we are, and then see in this accounting both the pervasive and sustaining presence of divine grace and the life-denying character of many of our practices. The fast pace of contemporary life, with its emphasis on self-chosen, often self-serving, goals, will make this objective difficult. We do not have a sufficient appreciation for the costliness of our lives, what it takes for us to live, and what the cost to others of our living is. But it is absolutely crucial that we make this accounting effort if we are to see and then come to terms with the useless and the destructive fret and fuss that permeate so much of our own activity. We simply must slow our lives down so that a more faithful reception of and engagement with creation can occur.

Given that the climax of the divine creative work was God's own *menuha*, we should not be surprised to discover that learning the art of being creatures should lead us away from frantic striving and into a similar delight and rest. It is a mistake to believe that living as creatures (rather than as gods) leads to our own deprivation or that it ends in frustration and want—as though being a creature was not good enough for us. Careful analysis of our current cultural assumptions should lead us to the conclusion that the path of acquisition and

material success, so much driven by our own anxieties and fears, is in fact the culprit leading to our own unhappiness. In the effort to make ourselves and our desires the goal of creation we have forfeited the peace and rest that comes from trusting in God to provide us "every good and perfect gift." Being a creature within the larger creation requires that we learn to attune our desire to the desires of God (this is what the life of faith is finally about) and so come to see the whole of creation—every bit of it, and not just the scenic parts—as God sees it. It will mean letting go of our contentious grasp on the world so that we can engage all of creation through God.

Some Practical Suggestions

Become Gardeners

There can be no substitute for the activity of gardening because it is the richest, most multifaceted entry into the experience of being a creature. Even if one does not grow all one's own food (a very large undertaking), there is no reason why we cannot grow some of it.[4] Of course, gardening is not only about raising fruits and vegetables. But in growing some of our own food we will reap the benefits of healthier, more-nutritious food, all the while developing the habits—patience, attention, humility, responsibility, joy—that will potentially make us better servants of each other and the earth. Gardening will help us see practically and concretely that we are directly tied to the lives of myriads of creation's members and that our well-being is tied inextricably to theirs.

One of the primary benefits of gardening is that it forces us to slow down and become acquainted with another's schedule and time. Indeed, if we want gardening success, we need to be attentive to what plants need and so learn to adjust our lives accordingly. This experience, frustrating as it sometimes is, is crucial to developing the habits of care that are central to our vocation as servants of creation. As we learn to fit our lives into the lives of others and match our timetables with theirs, we will feel our lives take on the qualities of rootedness and purpose that are absent from so many human-obsessed activities. Raising one's own food, or taking responsibility for another life, ennobles our activity by bringing it into direct contact with authentic joy, suffering, and pleasure. In our culture so many people no longer know what their lives and their activities are finally for. They are very busy, but the satisfactions they often feel seem hollow or superfluous. The pleasures of gardening, and the attitudes of care that can emerge from it, are enduring and fundamental and thus true and to be trusted[5] because they connect us to what is necessary (we all have to eat) and life promoting. For good reason, many health professionals now acknowledge good gardening as good therapy.

As we garden we will learn to eat less ignorantly and thus perhaps develop a more sacramental approach to the world. Eating is our most intimate en-

gagement with the powers of life and death. Making ourselves attentive to these powers, and also assuming greater responsibility for them, will create in us a more grateful, less wasteful attitude. From out of this gratitude the likelihood of sharing will increase, if for no other reason than the fact that gardening teaches primordial beneficence—though we may do all we can to make a garden successful, in the end its success depends on another. A gardener may work very hard, but for all the work that is done the gardener must in the end wait and graciously trust and receive the gifts of creation.

Gardening has rarely been actively promoted by religious institutions. In the past, such promotion would have been unnecessary since most of humanity was involved, whether directly or indirectly, in the production of food. In the last decades, due to unprecedented urbanization around the globe, this situation has changed dramatically. It is now incumbent upon religious leaders to invite laity into this important work. They can do this by turning some of their property (which is often kept in lawns that, while attractive, often depend on heavy applications of fertilizers and pesticides that are destructive of soils and watersheds) into garden plots and then inviting congregations and community members to cooperate in the growth of food and flowers. These could then be distributed to those who have need. Gardening, besides being a community-building activity, can also become a visible expression of the biblical mission to feed the hungry and take care of the poor.

Support Local Economies

One of the heaviest indictments against religious people is their ignorant or willing participation in economies that are life denying or destructive. And so while professing belief in God the creator in worship, in work we perpetuate and support (through our spending habits) the very practices that subvert creation. In many instances this happens because of massive ignorance and blindness. The products we buy are made far away under conditions that we do not know (in some cases, companies do their best to make sure we can't know). The result is that we do not take into account the full costs of our purchases. Would we still buy gold jewelry if we knew that for every pound of processed gold many thousands of pounds of toxic chemicals—primarily cyanide and mercury—would need to be released into soils and watersheds to leach the gold out of tons of crushed ore? Would we purchase garments made in sweatshops that are unsafe and unhealthy and that pay workers near slave wages? Would we buy the food we do if we understood the destructive toll of current agricultural practices that, as Wes Jackson once said, "hammer the soil and then put it on life-support" through heavy doses of fertilizer and pesticides? Of course the list of questions could go on and on.

The point that needs to be made is that we can be more-responsible consumers if we learn to promote and support local farmers, producers, and busi-

nesses. Responsibility will grow because we will see directly what happens in the production process. We will see what is being done to our food and other household products and how workers producing them are being treated. And because there is the greater likelihood that relationships between consumers and producers can be built, there will be a stronger desire to make and consume in ways that promote health and durability. Quality, rather than cheapness, will become the overriding concern. Though locally produced goods often cost more, there is enough evidence to show that people prefer the relationship building that comes with personal contact over the anonymity that otherwise characterizes our shopping experiences.

One of the most destructive things about our economy is its evasiveness. It is evasive in the sense that we assume someone else will always take responsibility and pay the costs for our mistakes. And so we waste land or water, or produce toxic landfills that we then leave to others to clean up. A local economy will be less evasive because it will be made up of people who are dedicated to the places where they live. They will not support industries that pollute or degrade life. Nor will they treat workers who are friends and acquaintances, people they play with or go to school and church with, poorly. In a local economy the community learns to live with the effects of what it does. It learns to focus on what is fundamental and life promoting rather than on what is profit promoting. In short, people devoted to supporting a local economy stand a much better chance of taking care of the networks of communities that sustain creation if for no other reason than the fact that, unlike the decision-makers of megastores and multinationals, they see and live with them.

Rethink Energy Use

To talk about energy is to talk about the sources, the very movement, of life. For good reason, therefore, William Blake referred to it as "eternal delight."[6] How we think about energy, the movement in and among things, cannot be separated from how we think of things themselves. Energy introduces and connects us to the holy power at work within all creation and so is a deeply religious matter. Given its religious character, we should find it peculiar and disturbing that we have come to treat the matter of energy use in such a cavalier manner. We consume and waste thoughtlessly, not recognizing that in such waste we dishonor creation. How we use energy reflects how we value it, and whether we appreciate the costly and precious ways of life.

It may well be that our thoughtlessness with respect to energy use stems from the passive and inactive nature of our sedentary, consumer lives. Not exercising our bodies in a very sustained or rigorous manner, we no longer appreciate the true costs of energy. And because energy has been reduced to a consumer commodity, it has become abstract, limited only by our ability to

buy it. But when we exercise our bodies physically, preferably through meaningful physical labor or exertion, we directly feel the strength and pain, the limits and possibilities, that come from all exertion. We experience intimately, and thus honestly, the flow of energy through our own bodies. The result of this experience ought to be the acknowledgment that energy, in whatever form, is not cheap or without cost and that it ought to be valued highly and used responsibly and respectfully. Moreover, we may come to appreciate the need to maintain energy flows rather than exhaust them.

My point is not simply that we use less energy (especially when the form of energy has the destructive ecological potential that fossil fuels and nuclear power have), but that we learn to appreciate the costs of energy. Can we become more frugal in our energy use and wiser in the ways of energy's sustainable procurement, and thus more meaningfully respect the effort and exertion of creation's members on our behalf? The development of technologies that enable us to harness renewable and less-damaging energy forms should clearly be a high priority. But so should the encouragement of people to exercise their bodies in useful ways be a priority. Exercising our bodies, not just for purposes of recreation but also for work and daily life, besides the obvious health benefits, has the potential to help us see how our own energy cycles fit into the larger energy cycles that keep creation on the move. It may help us measure energy more accurately and treasure it more honestly, seeing that we can waste our bodies just as we can waste our habitats through recklessness.

Unplug the Media

A great deal has been said by others about the destructive effects of advertising, television, and the internet. Oftentimes the focus is on the sex and violence that can be accessed here. While these are legitimate concerns, a greater concern, because it is insufficiently noticed, is the ability of television, magazines, and the internet to shape our desires in ways that turn us away from the care of creation. The overwhelming message of the media is that we deserve to be served, that we owe it to ourselves to have every comfort and pleasure satisfied. And so programs and advertisements have the effect of making us dissatisfied with what we have because we can always purchase or upgrade to something better or newer. In this context it becomes virtually impossible to live "the art of the minimum," as Thoreau once called it. We subvert the virtue of frugality and at the same time keep our gaze firmly focused on ourselves and our wants.

It is impossible to care adequately for others when the extravagant lifestyles we desire (as promoted by the media) rob others of their ability to live at a decent or subsistence level. We simply cannot have ecological peace or justice, a state in which the whole of creation can flourish on its own terms, so long as incredible gaps between rich and poor continue and so long as the media

portray the life of the rich as the only successful human life. We should unplug the media not because they are inherently bad (they do have their good uses after all), but because they so easily tempt us away from being the servants of the particular places or contexts we are in. It is a question of influence. Though we may think we are strong enough to resist advertising messages or the lure of lavish lifestyles, the fact that millions of devout religious folk thoughtlessly purchase and consume (even when they know their consumption habits are destructive of habitats and excessive when compared with the world's poor) suggests that we are not.

My suggestion may sound reactionary and terribly old-fashioned. But it follows from the logic of care that is attentive to the needs of others and then puts that need before our individual wants. We will not see, let alone respond to, the needs of our human and nonhuman neighbors so long as the media keep us thinking that another place is better or keep our attention and our desire trained on maximum self-satisfaction. It is a lie to believe that the more we consume the better it will be for all (a more-vigorous economy will result, we are told), because it rests on the sinful assumption that the purpose of an economy is for us to be served. The view from creation sees it as the reverse. Our most important function and objective is to serve others. This can be done only as we put our wants after the needs of others.

Putting the needs of others first does not mean that we must languish in self-deprivation. To think this way is to presuppose an economy of scarcity and competition rather than an economy of abundance and mutual help. If the desire of people made in the image of God were genuinely to serve each other, do we seriously believe that we would lead lives of deprivation and want? If that were the case, then we would have to doubt the conviction that God and creation are good.

As we reduce media influence, we will come to a more honest assessment of where we are, what we have, and what we really need. We will, for the first time perhaps, begin to appreciate what is already given to us and sense the life-giving potential of our local economies. We will see that what we really need is, for the most part, directly available to us and can be organized and distributed in ways that are equitable and less wasteful. Unplugging the media will help us fit our desire within the context of our actual living places, rather than the unreal, fabricated contexts of media moguls that spend great amounts of money and time manufacturing a world suited to their own enrichment.

Design a Generous Household Economy

For many of us a two-car garage is no longer big enough, not because we have three cars and a boat but because we need the garage to store the mountains of stuff we have. Do we really need all that we store there? The fact that we sometimes live for extended periods (sometimes for reasons of travel or job

relocation) without the many things we have suggests that we probably do not need the witness of impoverished people in developing countries to know that we do not need all that we possess. In our households the house often serves as the stuff collector. We pump more and more in, then build bigger and bigger homes, without thinking seriously about the necessity of what we are doing. If things leave the house at all, they do so only as trash (this in increasing quantities).

If we remember that God's creative work was a "making room" for others, then we should readily see that one of the major goals of household management should not be the procurement of more stuff but rather the training of ourselves and our children in the work of giving and hospitality. Our primary responsibility should be to learn how to make the things we have available to those in need. We make room for others as we make our homes sites of generosity. Such generosity will require not simply the giving away of some of our things but also a good measure of creative purchasing and sharing (as when we buy some things together with others—lawnmowers, tools, recreation equipment, etc.—thereby minimizing our expenditures and our extractive toll on creation). If we make the generosity of God the model for our own household economies, we may yet learn that a primary dimension of all our dwelling is the art of neighborliness.

Develop Sabbath Rituals

When we forsake our identity and vocation as creatures made in the image of God, the inevitable outcome is an unbalanced life, a life that lacks propriety. We tend to think more of ourselves and our plans than we ought, perhaps becoming rapacious or anxious in our striving. The most potent antidote to such impropriety is the faithful observance of Sabbath ritual. By such ritual I do not necessarily mean the recovery of a strict Sabbath code (though that may be appropriate in certain cases), but rather the deliberate, communally supported effort to keep divine *menuha* as the overriding goal in all that we do. Here our ever-present question should be, how does what I am about to do contribute to the peace and tranquility, the joy and delight, of the creation as a whole? This question can serve as a handy talisman that we can repeat to ourselves daily.

As moderns we think we can do quite well without rituals of any kind. What we fail to realize is that we have traded the ritual of religious superstition (so-called) for the rituals of frantic consumerism. We need communal ritual markers in our lives to keep us focused and properly oriented. Without them the sense of who we are dissipates. No doubt, advocating a recovery of ritual will require that we slow down the pace of our living. But given the stress that accompanies so much of what we do, this should be viewed as a welcome thing.

Here again religious institutions can take the creative lead as when they host festivals that remind us of our proper place in the created order. These ritual events can serve to highlight and celebrate the range of interdependencies that tie us to each other, our environments, and God. In the past, churches would regularly punctuate natural events like seedtime and harvest with religious symbolism and meaning. Why can't similar observances that highlight the gifts of creation be reinvented for our contemporary urban contexts? As rituals of this sort again become features of our daily schedules and lives, we will gain a deeper appreciation for the life-giving creation all around us.

These suggestions have as their aim the dawning of the practical sense of creation in our personal and social lives. Clearly they do not constitute anything like a comprehensive program or plan of action because, as yet, we do not know what all the details of such a program will look like. Indeed ecological complexity and regional idiosyncrasy and integrity demand that we eschew as presumptive all programs that would claim to be universal in their application and scope. Establishing a culture of creation will require the building of many different cultures, each attuned to the particularities (the limits and the possibilities) of the places and communities diverse people find themselves in. It will require the patient accumulation and handing down of wise homecoming practices, the willingness to accept responsibility for our destructive pasts, and the humility to dedicate ourselves to an education in the ways of creation and the creator. And it will require the revisioning of many of our faith traditions that, admittedly, have underestimated or devalued the full power of creation teaching.

This monumental work will call for unprecedented creative power. Recognizing that, for the most part, we live and act in terms of our cultural inheritances and received economic paradigms, we find it difficult to think that our personal and social lives, our economic practices, and our institutions and organizations can be different than they currently are. This all the more so since boosters abound who proclaim the inevitability and necessity of where and how we now are.

Besides our critical intelligence, it will take the power of the imagination to challenge this resigning, accepting posture. What we need is an eschatologically formed imagination that challenges and calls into question our prevailing cultural paradigms, an imagination tuned to the possibility and dynamism latent within God's continuing creative work. If we believe that creation is not yet finished and that it can be understood (even if not completely) with reference to a divine intention, then our perennial task must be to open ourselves to this intention and so genuinely fulfill our identity as beings created in the image of God. The claim of this book has been that we become authentic creatures as we commit ourselves to the service of creation, which means that we resolve to make ourselves the students and hosts of the created order so

that we can offer it back to God as an expression of worship and praise. Above all, it will mean that we accept responsibility for our failures, learn from them, and then adjust our lives and practices so that creation as a whole can become the occasion for God's delight.

Practically speaking, this will mean the readiness and the determination to promote ways of being that are at once open to what we know to be good about past practices and courageous enough to attempt what has never been seen before. As but one example, can we imagine and implement built environments that overcome the chasms now separating wilderness, farm, and city? For too long there has been an antagonism between these realms, an antagonism based on the assumed superiority or goodness of differing ways of life.[7] What we need to see is that the wild, the rural, and the urban each have an integrity of their own that deserves our respect and that these elements depend on each other for their own maintenance and success. In this work I have emphasized the significance of agrarian practices because these are close to becoming extinct. But we must remember that the farm needs the city, just as the city needs the farm. Together they, in turn, depend on the vivifying power of wildness. A most urgent question, therefore, is whether we can imagine and then implement human environments that take seriously the needs of each, that do not collapse all topographical regions into one undifferentiated whole, all the while creating living places and economic practices that promote the well-being of all creation's members.[8]

No doubt, imaginative power of this scope, besides needing to draw on the many disciplines of human learning and creativity, will need to find its wellspring in the divine creativity itself. As we saw in John's Apocalypse, the vision of the new heaven and new earth is finally the transformation of our vision and practices so that we now see and act with the eyes of God. If we deny this transformative possibility, we at the same time condemn ourselves to the established, destructive patterns of the past. We deprive ourselves of the hope of redemption promised in the scriptures.

Our most urgent and important task is to recover a sense of ourselves as creatures before God. A central claim of this book has been that we have not adequately understood or realized the moral and spiritual potential latent within the teaching of creation, a teaching that describes and holds the promise of the practical manifestation of God's delight and peace. The work before us is to wed our future with the future of "all the living" and find in that bond our hope and our joy.

This page intentionally left blank

Notes

PREFACE

1. Thomas Berry, *The Dream of the Earth* (San Francisco: Sierra Club, 1990), 123. Berry has collaborated with Brian Swimme in crafting an alternative story, an "evolution epic," in *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era—A Celebration of the Unfolding of the Cosmos* (San Francisco: Harper, 1992).

2. Rowan Williams, *The Truce of God* (New York: Pilgrim, 1983); 96–97.

INTRODUCTION

1. Jonathan Bates describes this transformation: "prior to the nineteenth century there was no need for a word to describe the influence of physical conditions on persons and communities because it was self-evident that personal and communal identity were intimately related to physical setting. The influence of, for instance, the climate and the soil was taken for granted. But from the late eighteenth century onwards, there was an increasing awareness of industry's tendency to alter the quality of our surroundings, even to affect the air we breathe" (*The Song of the Earth*, Cambridge, Mass.: Harvard University Press, 2000, 13–14). The first chapter "Going, Going" does an excellent job showing how the meaning of culture changes in modern society, and how this change is reflected in the prose of English writers like Thomas Hardy and Jane Austen.

2. Mircea Eliade, *Cosmos and History: The Myth of the Eternal Return* (New York: Harper & Row, 1959), 18.

3. The contemporary development of "ecopsychology" or "green psychology" builds directly on this archaic insight. As we have cut ourselves off

from our bodies and the natural habitats that sustain and feed us, we have at the same time developed various forms of mental illness that manifest themselves in behaviors destructive of human and natural life. For a sample of this development, see Theodore Roszak, Mary E. Gomes, and Allen D. Kanner, eds., *Ecopsychology: Restoring the Earth, Healing the Mind* (San Francisco: Sierra Club, 1995).

4. Wendell Berry, *The Unsettling of America: Culture and Agriculture* (San Francisco: Sierra Club, 1977), 99.

5. For an extended analysis of the profanation of culture and its effects for the natural and human worlds, see Seyyed Hossein Nasr's *Religion and the Order of Nature* (New York: Oxford University Press, 1996). For Nasr the desacralization of the world, which is a uniquely modern and Western phenomenon, led inevitably to humanity's alienation from nature and nature's destruction at the hands of "a purely earthly man."

6. Eliade was well aware that the modern juxtaposition between freedom (history) and impotence (nature) was simple and naïve. Has modern freedom really enabled people to make themselves and their history? One could just as well say in defense of the archaic view that history, due to factors mostly beyond human control, makes itself, or that it is determined by a few powerful individuals who then make followers of the rest. Perhaps the archaic-minded individual, rather than being the hapless victim of the vicissitudes of fate, is, in his or her recapitulation of the founding of the cosmos, on the path to a more rooted existence and thus genuinely free to transcend the vicissitudes of time and live within an horizon of eternity. See *Cosmos and History*, 154–59.

7. There is a Hebrew parallel to this Indian practice in the building of the tabernacle. For an extended discussion of how the tabernacle, its construction, and its presence focused human and divine dwelling see William P. Brown, *The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible* (Grand Rapids, Mich.: Eerdmans, 1999), 73–89.

8. The full text of the "World Scientists' Warning to Humanity" can be accessed through the publications of the Union of Concerned Scientists (see their website at www.ucsusa.org).

9. For a historical assessment of the acceleration and scope of ecological change in the twentieth century directly brought about by human activity, see J. R. McNeill's *Something New under the Sun: An Environmental History of the Twentieth-Century World* (New York: Norton, 2000).

10. For a description of the unpredictability of environmental effects, see the essay by Chris Bright, "Anticipating Environmental 'Surprise,' " in *State of the World, 2000*, ed. Lester Brown (New York: Norton, 2000), 22–38.

11. For a descriptive account of how environmental problems are affecting citizens around the world, see Mark Hertsgaard's *Earth Odyssey: Around the World in Search of Our Environmental Future* (New York: Broadway, 1998).

12. Quoted in ibid., 7.

13. See David Ehrenfeld, *The Arrogance of Humanism* (New York: Oxford University Press, 1978). Ehrenfeld's target might better be described as pretentious humanism, for what he aims to question is the "supreme faith in human reason—its ability to confront and solve the many problems that humans face, its ability to rearrange

both the world of Nature and the affairs of men and women so that human life will prosper" (5).

14. For an extensive listing and description of the ways in which natural habitats support human well-being, see the volume edited by Gretchen C. Daily, *Nature's Services: Societal Dependence on Natural Ecosystems* (Washington, D.C.: Island, 1997).

15. Wes Jackson, *New Roots for Agriculture* (Lincoln: University of Nebraska Press, 1980). In this book Jackson articulates in summary fashion the major problems facing truly sustainable agriculture and then develops his own farming model based on perennial polycultures. This farming method, because it leaves the soil base intact and because it mixes plant species together, makes us less dependent on the use of pesticides and fertilizers, thereby decreasing the threat of soil erosion and toxification and increasing water retention and microbial and soil-nutrient development.

16. See Daniel Hillel's *Out of the Earth: Civilization and the Life of the Soil* (London: Aurum, 1991), especially chap. 11. Hillel, an internationally respected agronomist, does an excellent job of describing the nature of soil and its significance for human cultures past and present.

17. A.T. Murray's translation (Loeb Classical Library) quoted in ibid., 103.

18. Quoted in *The Land Report* 63 (Spring 1999): 5. For an extended historical treatment of nineteenth-century farmers' responses to depleted soil, see Steven Stoll's *Larding the Lean Earth: Soil and Society in Nineteenth-Century America* (New York: Hill & Wang, 2002).

19. For a fine collection of essays describing the kenotic character of God's creative work see John Polkinghorne, ed., *The Work of Love: Creation as Kenosis* (Grand Rapids, Mich.: Eerdmans, 2001). Kenosis refers to God's "self-emptying," God's self-limitation so as to make room for others. More broadly, it speaks of the humility that enables and serves others so that they can maximally be.

20. Mircea Eliade, *The Sacred and the Profane: The Nature of Religion* (New York: Harcourt Brace Jovanovich, 1959), 45 (emphasis original).

21. Rowan Williams, "On Being Creatures," in his *On Christian Theology* (Oxford: Blackwell, 2000), 77.

22. Langdon Gilkey, *Maker of Heaven and Earth: The Christian Doctrine of Creation in Light of Modern Knowledge* (Lanham, Md.: University Press of America, 1959), 24.

23. Michael Welker, *Creation and Reality* (Minneapolis: Fortress, 1999), 10.

24. Quoted in Richard L. Fern, *Nature, God, and Humanity: Envisioning an Ethics of Nature* (Cambridge: Cambridge University Press, 2002), 167.

25. Nicholas Lash, *Believing Three Ways in One God: A Reading of the Apostles' Creed* (Notre Dame: University of Notre Dame Press, 1992), 104.

26. Irenaeus, *Against Heresies* 4.20.1 (in Robert M. Grant, *Irenaeus of Lyons* [London: Routledge, 1997], 150).

27. For an extended treatment of this theme see Tarsicius van Bavel's "The Creator and the Integrity of Creation in the Fathers of the Church, Especially in Saint Augustine," *Augustinian Studies* 21 (1990), 1–33.

28. Robert W. Jenson, "Aspects of a Doctrine of Creation," in *The Doctrine of Creation: Essays in Dogmatics, History, and Philosophy*, ed. Colin E. Gunton (Edinburgh: T. & T. Clark, 1997), 24.

29. Holmes Rolston III, "Does Nature Need to Be Redeemed?" *Horizons in Biblical Theology* 14.2 (1992): 160–61.

30. Thomas Traherne, *Poems, Centuries, and Three Thanksgivings*, ed. Anne Ridler (London: Oxford University Press, 1966), 242.

31. William Bryant Logan, *Dirt: The Ecstatic Skin of the Earth* (New York: Riverhead, 1995), 19.

32. Wendell Berry, *The Long-Legged House* (New York: Harcourt, Brace & World, 1969), 204.

CHAPTER 1

1. Holmes Rolston III, "The Bible and Ecology," *Interpretation* 50.1 (January 1996): 19.

2. Cornford writes: "Primitive beliefs about the nature of the world were sacred (religious or moral) beliefs, and the structure of the world was itself a moral or sacred order, because, in certain early phases of social development, the structure and behaviour of the world were held to be continuous with—a mere extension or projection of—the structures and behaviour of human society. The human group and the departments of Nature surrounding it were unified in one solid fabric of *moirai*—one comprehensive system of custom and taboo. The divisions of Nature were limited by moral boundaries, because they were actually the *same* as the divisions of society" (*From Religion to Philosophy: A Study in the Origins of Western Speculation* [New York: Harper & Row, 1957], 55). Cornford reminds us that the term *cosmos* was first, among the Dorians at least, a political term before it came to be used by philosophers as a designation of universal order.

3. John Polkinghorne has argued that a scientific approach to the world invariably comes up against the apprehension of value within the world, and not simply because science is a value-laden discipline. The beauty of the universe suggests, even if it does not prove, a mind that holds it together. And so morality, as in natural-law traditions, rather than simply being the expression of cultural conventions, "is a true insight into the way things are, another window into reality" (*Belief in God in an Age of Science* [New Haven: Yale University Press, 1998], 18). Of course, this assumes that we give up on the idea of a merely mechanical universe. The universe expresses value, and our cultures reflect or dissimulate this value to a greater or lesser degree.

4. William P. Brown, *The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible* (Grand Rapids, Mich.: Eerdmans, 1999), 12.

5. For a concise statement on how biblical scholarship is turning its attention to creation and thus shedding its allegiance to the nature/history dichotomy, see the preface and essays edited by William P. Brown and S. Dean McBride in *God Who Creates: Essays in Honor of W. Sibley Towner* (Grand Rapids, Mich.: Eerdmans, 2000).

6. Gerhard von Rad, "Some Aspects of the Old Testament World-View," in *The Problem of the Hexateuch and Other Essays*, trans. E. W. Trueman Dicken (London: SCM, 1966), 154–55.

7. English translations of the Bible are notorious for distinguishing humans from animals by designating the former as "living being" or "living soul" and the latter as "living creature" when the Hebrew text refers to both as *nephesh chayyah*. Both come "from the ground" and share a common origin.

8. Theodore Hiebert, in *The Yahwist's Landscape: Nature and Religion in Early Israel* (New York: Oxford University Press, 1996), has done a great deal to elucidate this agrarian context. In my own account I have drawn frequently on his discussion.

9. Ronald Simkins, *Creator and Creation: Nature in the Worldview of Ancient Israel* (Peabody, Mass.: Hendrickson, 1994), 180.

10. Hiebert, *Yahwist's Landscape*, 66.

11. For clear, nontechnical accounts of the nature and benefits of soil, see Daniel Hillel, *Out of the Earth: Civilization and the Life of the Soil* (London: Aurum, 1991), especially part II; Yvonne Baskin, *The Work of Nature: How the Diversity of Life Sustains Us* (Washington, D.C.: Island, 1997), especially chap. 5; and David Suzuki, *The Sacred Balance: Rediscovering Our Place in Nature* (Vancouver, B.C.: Greystone, 1997), especially chap. 4.

12. Brown, *Ethos of the Cosmos*, 138.

13. Practically speaking, what this work amounts to requires sustained reflection and attention because it is tempting to equate the promotion of the earth with the promotion of ourselves. As we will see later, seeking the well-being of the earth does not mean modifying it according to hastily, if well-intentioned, plans. Sometimes caring for the earth will mean leaving it alone.

14. Jack P. Lewis, *A Study of the Interpretation of Noah and the Flood in Jewish and Christian Literature* (Leiden: Brill, 1978), 127–28.

15. Brown, *Ethos of the Cosmos*, 175.

16. Some rabbis liked to claim that during the twelve months Noah was so busy attending to the animals, and so enjoying himself in the process, he did not have time to sleep! See Lewis, *a Study of the Interpretation of Noah and the Flood*, 145.

17. See the rich discussion of the Noah story in Avivah Gottlieb Zornberg, *The Beginning of Desire: Reflections on Genesis* (New York: Doubleday, 1995).

18. Brown, *Ethos of the Cosmos*, 227.

19. Abraham Joshua Heschel, *The Sabbath: Its Meaning for Modern Man* (New York: Farrar, Straus & Giroux, 1951), 54.

20. Ibid., 31–32.

21. The lasting importance of Sabbath celebration can be seen in the Jewish view that on the day of judgment we will need to give an account for those times when we did not enjoy God's gifts.

22. Jürgen Moltmann, *God in Creation: A New Theology of Creation and the Spirit of God* (Minneapolis, Minn.: Fortress, 1985), 277.

23. The Deuteronomic version of the Ten Commandments makes the link between Sabbath observance and the exodus from Egypt explicit: "Remember that you were a slave in the land of Egypt, and the LORD your God brought you out from there with a mighty hand and an outstretched arm; therefore the LORD your God commanded you to keep the sabbath day" (Deut. 5:15). In Exodus, Sabbath observance is linked to the action of creation: "For in six days the LORD made heaven and earth, the sea, and all that is in them, but rested the seventh day; therefore the LORD blessed the sabbath day and consecrated it" (20:11).

24. "The world is lost in loss / Of patience; the old curse / Returns, and is made worse / As newly justified. / In hopeless fret and fuss, / In rage at worldly plight / Creation is defiled, / All order is unpropped, / All light and singing stopped." Wen-

dell Berry, *A Timbered Choir: The Sabbath Poems, 1979–1997* (Washington, D.C.: Counterpoint, 1998), 29.

25. For an examination of the many practical ramifications following from the Sabbath and year of Jubilee, see Richard H. Lowery, *Sabbath and Jubilee* (St. Louis: Chalice, 2000).

26. Jon D. Levenson, *Creation and the Persistence of Evil: The Jewish Drama of Divine Omnipotence* (San Francisco: Harper & Row, 1988), 106.

27. "Sabbath," in *Encyclopedia Judaica Jerusalem* (New York: Macmillan, 1971), 562.

28. Moltmann, *God in Creation*, 292.

29. Ibid., 282.

30. Annie Dillard, *Pilgrim at Tinker Creek* (New York: Harper & Row, 1974), 176.

31. Stephen Mitchell, "Introduction" to *The Book of Job* (New York: Harper, 1987), ix.

32. Ibid., 28.

33. William P. Brown, "*Creatio Corpis* and the Rhetoric of Defense in Job 10 and Psalm 139," in *God Who Creates: Essays in Honor of W. Sibley Towner*, ed. William P. Brown and S. Dean McBride (Grand Rapids, Mich.: Eerdmans, 2000), 123.

34. Dillard, *Pilgrim at Tinker Creek*, 177.

35. William P. Brown, *Character in Crisis: A Fresh Approach to the Wisdom Literature of the Old Testament* (Grand Rapids, Mich.: Eerdmans, 1996), 91.

36. Leo G. Purdue, *Wisdom and Creation: The Theology of Wisdom Literature* (Nashville, Tenn.: Abingdon, 1994), 175.

37. Brown, *Character in Crisis*, 97.

38. Ibid., 100.

39. Mitchell, *Book of Job*, 88.

40. Ibid., xxviii.

41. Brown, *Character in Crisis*, 113.

42. For a concise account that situates the lessons of Job in an ecologically informed, contemporary cultural context, see Bill McKibben, *The Comforting Whirlwind: God, Job, and the Scale of Creation* (Grand Rapids, Mich.: Eerdmans, 1994).

43. Richard B. Hays, *The Moral Vision of the New Testament: A Contemporary Introduction to New Testament Ethics* (San Francisco: Harper, 1996), 20.

44. This side of the biblical story is told clearly by Levenson in *Creation and the Persistence of Evil*.

45. Brown, *Ethos of the Cosmos*, 397.

46. Hays, *Moral Vision of the New Testament*, 24.

47. Quoted in Larry L. Rasmussen, *Earth Community, Earth Ethics* (Maryknoll, N.Y.: Orbis, 1996), 303. Rasmussen's book contains an excellent discussion of Bonhoeffer's thought as it relates to ecological themes.

48. Paul Fiddes, *The Promised End: Eschatology in Theology and Literature* (Oxford: Blackwell, 2000), 167–68.

49. Richard Bauckham, *The Theology of the Book of Revelation* (Cambridge: Cambridge University Press, 1993), 8.

50. We should distinguish destruction of earth that follows from God's judgment of the nation and destruction that follows from the unjust character of the inhabitants' actions. In the former God causes the land to suffer as a judgment against the people (cf. Amos 1:2, where pastures wither due to the roaring voice of the Lord),

whereas in the latter it is human greed, violence, and malpractice that cause the land to languish (cf. Hos. 4, where the land is said to languish because of the stealing, lying, and murder of the land's inhabitants: here the sad state of the land stands in judgment of the people). Both senses convey that the fate and hope of humanity and earth are inextricably intertwined.

51. For a more nuanced reading of the prophetic literature as it relates to nature, see Simkins, *Creator and Creation*, 207–51.

52. Barbara R. Rossing, "River of Life in God's New Jerusalem: An Eschatological Vision for Earth's Future," in *Christianity and Ecology: Seeking the Well-Being of Earth and Humans*, ed. Dieter T. Hessel and Rosemary Radford Ruether (Cambridge, Mass.: Harvard University Press, 2000), 212.

53. Bauckham, *Theology of the Book of Revelation*, 132.

54. Ibid., 53.

55. Rossing, "River of Life in God's New Jerusalem," 218.

CHAPTER 2

1. One might think that the evolution-creation debate is an exception, but further examination shows that this is an ideological, much more than it is a theological, debate in which conservative and liberal agendas are at battle.

2. For a description of the various meanings of nature, see Carolyn Merchant, *The Death of Nature: Women, Ecology, and the Scientific Revolution* (San Francisco: HarperCollins, 1980), especially chap. 1, where she describes the idea of nature as mother. Merchant makes the valuable point that with the scientific and industrial revolutions of the seventeenth century, with their emphases on order and control, the former prohibition against mining was now sanctioned as a rapacious exploration and subjugation of the earth for human benefits. Merchant further demonstrates that the domination of nature, often characterized in feminine terms, has had clear affinities with the political and social domination of women.

3. See here the important study by Walter Brueggemann on land as a nation-defining principle in the life and theology of the Israelite people: *The Land: Place as Gift, Promise, and Challenge in Biblical Faith*, 2d ed. (Minneapolis, Minn.: Fortress, 2002).

4. See Anthony Giddens, *The Consequences of Modernity* (Stanford: Stanford University Press, 1990), and his follow-up work *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Stanford: Stanford University Press, 1991); but also Zygmunt Bauman, *Liquid Modernity* (Cambridge: Polity, 2000).

5. In developing this account I draw on Peter Harrison's compelling study, *The Bible, Protestantism, and the Rise of Natural Science* (Cambridge: Cambridge University Press, 1998).

6. Meister Eckhart sums up this view nicely when he says, "If the soul could have known God without the world, the world would never have been created."

7. Northrop Frye has traced this same transformation of meaning in the realm of language. In their earliest stage (before Plato, though at times witnessed in the Hebrew scriptures), the "hieroglyphic," words are not simply signs for things in an objective world but rather symbols that evoke and connect us with the power and dynamic forces at work within and between things. In the later "hieratic" stage, language becomes less poetic and more proselike, dialectical so that words can act as

the outward expression of inner thoughts and ideas. Beginning in the sixteenth century, however, a clear separation between subject and object emerges such that language, now described as "demotic," becomes a descriptive, ostensive tag for things existing objectively apart from us. The connection between word and world, no longer given, is now established primarily through convention. See his *The Great Code: The Bible and Literature* (Toronto: Academic Press, 1982). For a complementing, though more directly ecological, assessment of similar linguistic concerns, see David Abram, *The Spell of the Sensuous: Perception and Language in a More-Than-Human World* (New York: Vintage, 1996), especially chaps. 3–5.

8. "The literalist mentality of the reformers thus gave a determinate meaning to the text of scripture and at the same time precluded the possibility of assigning meanings to natural objects. Literalism means that only words refer; the things of nature do not. In this way the study of the natural world was liberated from the specifically religious concern of biblical interpretation, and the sphere of nature was opened up to new ordering principles" (Harrison, *Bible, Protestantism, and the Rise of Natural Science*, 4).

9. Ibid., 60.

10. Louis Dupré, *Passage to Modernity: An Essay in the Hermeneutics of Nature and Culture* (New Haven, Conn.: Yale University Press, 1993), 3.

11. Nicholas Lash, *The Beginning and the End of "Religion"* (Cambridge: Cambridge University Press, 1996), 168.

12. Pascal gave powerful expression to this uniquely modern mood in the following: "When I consider the brief span of my life absorbed into the eternity which comes before and after . . . I take fright and am amazed to see myself here rather than there: there is no reason for me to be here rather than there, now rather than then. Who put me here?" (*Pensées*, trans. A. J. Krailsheimer, London: Penguin, 1966, 48).

13. For a clear and popular summary of this transformation in economic thought and practice, see Robert L. Heilbroner, *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers*, 7th ed. (New York: Simon & Schuster, 1999), especially chap. 2.

14. George Grant, "Knowing and Making," in *The George Grant Reader*, ed. William Christian and Sheila Grant (Toronto: University of Toronto Press, 1998), 414.

15. Consider here the remark of Dupré that "transcendence is not merely what lies beyond the world, but first and foremost what supports its givenness" (*Passage to Modernity*, 251).

16. Lash, *Beginning and the End of "Religion,"* 168–69.

17. For an excellent treatment of this development, see Michael J. Buckley's *At the Origins of Modern Atheism* (New Haven, Conn.: Yale University Press, 1987). The eclipse of the experience of the world as creation, in other words, subverts the viability of natural theology.

18. An excellent introduction to the transformation of Christianity in the wake of modernity is provided in John Bossy's *Christianity in the West, 1400–1700* (Oxford: Oxford University Press, 1985). Bossy writes: "Shortly after 1400 the word 'religion,' which had for centuries usually meant a 'religious' rule or order and those who followed or belonged to it, was revived by humanists to mean what it had meant in classical Latin, a worshipful attitude to God or a respect for holy things. . . . By 1700 the Christian world was full of religions, objective social and moral entities characterized

by system, principles and hard edges, which could be envisaged by Voltaire as cutting one another's throats" (170).

19. Harrison, *Bible, Protestantism, and the Rise of Natural Science*, 273.

20. We should not forget that for most of our history we have lived as hunters and gatherers and that in some respects the hunter-gatherer life represents an even more intimate engagement with the grace of creation. I do not consider in great depth the significance of the hunter-gatherer life since (a) it represents a form of life that is not, especially given our large population, practically feasible in our own time and (b) the account of creation I develop here grew out of an agrarian, rather than a hunter-gatherer, ethos. Saying this does not mean that we cannot learn from hunter-gatherer societies or that they cannot play a critical role in the formation and evaluation of cultural forms.

21. Classicist Victor Davis Hanson, among others, has made this point in several works, most notably *The Other Greeks: The Family Farm and the Agrarian Roots of Western Civilization* (Berkeley: University of California Press, 1999) and *The Land Was Everything: Letters from an American Farmer* (New York: Free Press, 2000).

22. Numerous scriptural stories, beginning with Adam and Eve, but then continuing through Noah, Moses, David, Jesus, and others, speak varyingly of the importance of the wilderness experience, of shepherding, of tending vines, of caring for animals, as crucial moments in the formation of religious and political life. Virtues learned here, we are to assume, could not be learned in any other way.

23. L. H. Bailey, *The Holy Earth* (New York: Scribner, 1915), 33.

24. There is an extensive body of fictional work that does a good job describing the difficulty and harshness of past agrarian life. Good places to begin are John Berger's *Pig Earth* (New York: Random, 1992), Knut Hamsun's *Growth of Soil* (New York: Vintage, 1972), and Frederick Philip Grove's *Settlers of the Marsh* (Toronto: McClelland & Stewart, 1996). For an excellent survey of literary portrayals of agrarian life, particularly as it relates to urban environments, see Raymond Williams's *The Country and the City* (New York: Oxford University Press, 1973). What needs to be observed is that much of farming's difficulty stems not from farm work per se but from surrounding adverse economic trends that undervalue, even denigrate, farmers, farm work, and farm products.

25. Michael S. Northcott, *The Environment and Christian Ethics* (Cambridge: Cambridge University Press, 1996), 48. Northcott (48–56) provides a useful summary of the literature on this topic.

26. Consider here the Marxist assessment of Ellen Wood, who writes, "The distinctive and dominant characteristic of the capitalist market is not opportunity or choice but, on the contrary, compulsion. This is so in two senses: first, that material life and social reproduction in capitalism are universally mediated by the market, so that all individuals must in one way or another enter into market relations in order to gain access to the means of life; and second, that the dictates of the capitalist market—its imperatives of competition, accumulation, profit maximization, and increasing labor productivity—regulate not only all economic transactions but social relations in general. As relations among human beings are mediated by the process of commodity exchange, social relations among people appear as relations among things, the 'fetishism of commodities,' in Marx's famous phrase" (*The Origin of Capitalism* [New York: Monthly Review Press, 1999], 6–7).

27. Northcott, *Environment and Christian Ethics,* 156.

28. Theodore Hiebert, *The Yahwist's Landscape: Nature and Religion in Early Israel* (New York: Oxford University Press, 1996), 137.

29. Albert Howard, *The Soil and Health: A Study of Organic Agriculture* (New York: Devin-Adair, 1947), 63.

30. Wendell Berry, "People, Land, and Community," in *Standing by Words* (San Francisco: North Point, 1983) 70.

31. Ibid., 70–71.

32. Wendell Berry, *The Unsettling of America: Culture and Agriculture* (San Francisco: Sierra Club, 1977), 111.

33. Friedrich Nietzsche, *The Gay Science* (New York: Vintage, 1974), 181.

34. Sven Birkerts, *The Gutenberg Elegies: The Fate of Reading in an Electronic Age* (New York: Ballantine, 1994), 5.

35. Quoted in Wes Jackson, *Altars of Unhewn Stone: Science and the Earth* (San Francisco: North Point, 1987), 47.

36. Jacques Ellul, *The Technological Society* (New York: Vintage, 1964), 43.

37. Merchant, *Death of Nature,* 169.

38. Ellul, *Technological Society,* 143.

39. Quoted in David F. Noble, *The Religion of Technology: The Divinity of Man and the Spirit of Invention* (New York: Penguin, 1999), 39.

40. In 1998 physicist Richard Seed explained his quest to clone human beings in explicitly religious terms: "God intended for man to become one with God. We are going to become one with God. We are going to have almost as much knowledge and power as God. Cloning and the reprogramming of DNA is the first serious step in becoming 'one with God' " (quoted in ibid., vii).

41. Edward O. Wilson, *The Future of Life* (New York: Knopf, 2002), 130.

42. Wendell Berry, *The Hidden Wound* (San Francisco: North Point, 1989), 66.

43. Ibid., 67.

44. James Howard Kunstler, *The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape* (New York: Simon & Schuster, 1993), 10.

45. Susan Strasser, *Waste and Want: A Social History of Trash* (New York: Henry Holt, 1999), 187.

46. Useful literature on this topic abounds. Two very good places to begin are Jeffrey Stout's *The Flight from Authority: Religion, Morality, and the Quest for Autonomy* (Notre Dame, Ind.: University of Notre Dame Press, 1981) and more recently Adam Seligman's *Modernity's Wager* (Princeton, N.J.: Princeton University Press, 2000). Seligman's investigation defends the claim (ix) that "without a sacred locus of self, any attempt to account for action cannot rise beyond the purely calculative, power-oriented acts of utility maximization."

CHAPTER 3

1. For an account of how our perception of and relation to nature have been fundamentally altered in the last several decades, see Bill McKibben, *The End of Nature* (New York: Doubleday, 1989).

2. Aldo Leopold, "Foreword," in *Companion to "A Sand County Almanac": Interpretive and Critical Essays,* ed. J. Baird Callicott (Madison: University of Wisconsin

Press, 1987), 286. This foreword, never published in Leopold's own lifetime, was sent to Knopf publishers in 1947 as the foreword to an earlier version of *A Sand County Almanac* entitled *Great Possessions*.

3. David Orr has written eloquently about the need for an ecology-based transformation, and the consequences that follow from it, in *Ecological Literacy: Education and the Transition to a Postmodern World* (Albany: SUNY Press, 1992) and *Earth in Mind: Education, Environment, and the Human Prospect* (Washington, D.C.: Island, 1994).

4. Eric Zencey, "The Rootless Professors," in *Rooted in the Land: Essays on Community and Place*, ed. William Vitek and Wes Jackson (New Haven, Conn.: Yale University Press, 1996), 16.

5. Wes Jackson, *Becoming Native to This Place* (Washington, D.C.: Counterpoint, 1994), 3.

6. David W. Orr, "Environmental Literacy: Education as If the Earth Mattered," in *People, Land, and Community: Collected E. F. Schumacher Society Lectures*, ed. Hildegarde Hannum (New Haven, Conn.: Yale University Press, 1997), 245–46.

7. John E. Carroll, "Limitations of 'Western Science': A Critique of Failed Inclusivity," in *Ecology and Religion: Scientists Speak*, ed. John E. Carroll and Keith Warner, (Quincy, Ill.: Franciscan Press, 1998), 9.

8. Valuable histories of ecological thought have been written by Anna Bramwell and Donald Worster. Bramwell's *Ecology in the Twentieth Century: A History* (New Haven, Conn.: Yale University Press, 1989—the quote from Haeckel appears on p. 40) treats more the European context, whereas Worster's *Nature's Economy: A History of Ecological Ideas*, 2d ed. (Cambridge: Cambridge University Press, 1994 [orig. 1977]) focuses more on the Anglo-American scene.

9. Quoted by Roderick Nash in "Aldo Leopold's Intellectual Heritage," *Companion to "A Sand County Almanac": Interpretive and Critical Essays*, ed. J. Baird Callicott (Madison: University of Wisconsin Press, 1987), 85.

10. Aldo Leopold, "The Land-Health Concept and Conservation," in *For the Health of the Land: Previously Unpublished Essays and Other Writings*, ed. J. Baird Callicott and Eric T. Freyfogle (Washington, D.C.: Island, 1999), 222.

11. Aldo Leopold, "Conservation," in *Round River: From the Journals of Aldo Leopold*, ed. Luna B. Leopold (New York: Oxford University Press, 1953), 146–47.

12. Leopold, "The Round River: A Parable," in ibid., 158–65.

13. Leopold, "Biotic Land-Use," in *For the Health of the Land*, 205.

14. Leopold, *A Sand County Almanac, and Sketches Here and There* (New York: Oxford University Press, 1949), 216.

15. Albert Howard, *The Soil and Health: A Study of Organic Agriculture* (New York: Devin-Adair, 1947).

16. Leopold, *Sand County Almanac*, 204.

17. For a history of the expansion of the moral community see Roderick Nash, *The Rights of Nature: A History of Environmental Ethics* (Madison: University of Wisconsin Press, 1989).

18. Holmes Rolston III, "Duties to Ecosystems," in *Companion to "A Sand County Almanac": Interpretive and Critical Essays*, ed. J. Baird Callicott (Madison: University of Wisconsin Press, 1987), 270. It should be noted that the above discussion on value and the natural world has been central to environmental philosophical debate. A great deal of technical discussion on the differences between instrumental

and intrinsic value has occurred and on which of these two can be meaningfully applied to the natural world. The merit of Rolston's position is that it begins with the ecological insight of the primary significance of the processes of nature. Its focus is secondarily, though not unimportantly, on the individual elements at work within these processes: "The objective, systemic process is an overriding value, not because it is indifferent to individuals, but because the process is both prior to and productive of individuality. Subjects count, but they do not count so much that they can degrade or shut down the system, though they count enough to have the right to flourish within the system. Subjective self-satisfactions are, and ought to be, sufficiently contained within the objectively satisfactory system" (272). For a discussion of the complexities of the issues raised by Rolston, see the essays by J. Baird Callicott in *Beyond the Land Ethic: More Essays in Environmental Philosophy* (Albany: SUNY Press, 1999), 221–61.

19. "The good of a sentiotic process, its well-functioning, is constitutively related to the well-being of those creatures who not only owe their existence to it but are themselves living manifestations of its continuing proclivity. This constitutive intimacy makes the contribution of a sentiotic process to the well-being of its creations more than instrumental" (Richard L. Fern, *Nature, God, and Humanity: Envisioning an Ethics of Nature* [Cambridge: Cambridge University Press, 2002], 63–64).

20. Leopold, *Sand County Almanac*, 204.

21. Ibid., 214.

22. Ibid., 224–25.

23. For a wide-ranging, multicultural analysis of the role of affective transformation as the key to social and cultural change, particularly as these relate to environmental concerns, see E. N. Anderson, *Ecologies of the Heart: Emotion, Belief, and the Environment* (Oxford: Oxford University Press, 1996).

24. Leopold, *Sand County Almanac*, 223.

25. Neil Evernden, *The Natural Alien: Humankind and Environment* (Toronto: University of Toronto Press, 1985).

26. See Gary Paul Nabhan's *Cultures of Habitat: On Nature, Culture, and Story* (Washington, D.C.: Counterpoint, 1997).

27. Eleanor Perényi, *Green Thoughts: A Writer in the Garden* (New York: Random, 1981), 175.

28. Those plants that are the most domesticated, i.e., those that have the most wildness bred out of them, are also the weakest and thus are entirely dependent on human intervention (in the forms of pest management and fertilization) for their survival. Many species of flower and vegetable grown specifically for contemporary gardens could not survive on their own in the wild.

29. In the following discussion I have learned a great deal from Pollan's two very helpful books: *Second Nature: A Gardener's Education* (New York: Dell, 1991) and *The Botany of Desire: A Plant's-Eye View of the World* (New York: Random, 2001).

30. Perényi, *Green Thoughts*, 173.

31. Pollan, *Botany of Desire*, 196.

32. Ibid., 244. Pollan's entire chapter on the potato industry should be read since it provides a clear examination of the biological, economic, historical, and cultural issues that have surrounded the growing of this plant. The tensions that exist between Dionysian and Apollonian domestication are clearly drawn, as are the dangers of extreme control.

33. An indication of how theological reflection and development can be nurtured by gardening can be found in Vigen Gurioan's *Inheriting Paradise: Meditations on Gardening* (Grand Rapids, Mich.: Eerdmans, 1999).

34. The experience of many prison inmates and juvenile delinquents, often taken to be hopelessly caught in cycles of violence and destruction, makes the insight of Koheleth abundantly clear: "But whoever is joined with all the living has hope" (Eccl. 9:4). Inmates who participate in gardening programs gradually shed their violent, aggressive ways as they take care of garden plots. They become gentle and proud, knowing they have tended a plant and yielded a useful food product. For a description of such restorative programs see Cathrine Sneed's report on the San Francisco Garden Project in "The Garden Project: Creating Urban Communities," in *People, Land, and Community: Collected E. F. Schumacher Society Lectures*, ed. Hildegarde Hannum (New Haven, Conn.: Yale University Press, 1997), 178–87.

35. One should consider here the popularity of farmers' markets among urbanites. Besides going to get fresh fruit and vegetables, people clearly crave the fellowfeeling, the community, and the sense of honesty and proportion that can be experienced at these events. People sense that they are dealing here with the fundamentals of life and that by being there they reconnect to what is most important.

36. For the development of a "garden ethic," an ethic that is ecologically informed but also takes seriously the insight that comes from gardening activity, see Pollan, *Second Nature*, 225–33.

37. Non-Western religions, on the other hand, are often interpreted to be more amenable to ecological insight (see, for instance, *Worldview and Ecology: Religion, Philosophy, and the Environment*, ed. Mary Evelyn Tucker and John A. Grim [Maryknoll, N.Y.: Orbis, 1994]). We must be careful, however, not to judge religious traditions unfairly. This happens when Eastern traditions are judged by their expressions of the ideal and not by their histories of trying to implement the ideal. On the ideal plane most religions look very good, making it too easy to avoid the complexities that accompany any tradition's historical relation to the natural world (see Rod Preece, *Animals and Nature: Cultural Myths, Cultural Realities* [Vancouver: University of British Columbia Press, 1999]).

38. Thomas Merton, *New Seeds of Contemplation* (New York: New Directions, 1961), 25.

39. David Burrell and Elena Malits, *Original Peace: Restoring God's Creation* (Notre Dame, Ind.: University of Notre Dame Press, 1997), 30.

40. Éloi Leclerc, *The Canticle of Creatures: Symbols of Union: An Analysis of St. Francis of Assisi* (Chicago: Franciscan Herald, 1977), 181.

41. Ibid., 224–25.

42. Burrell and Malits, *Original Peace*, 39.

CHAPTER 4

1. Jeremy Cohen, in his exhaustive history of earlier interpretations of this text, writes, "Rarely, if ever, did premodern Jews and Christians construe this verse as a licence for the selfish exploitation of the environment" (*"Be Fertile and Increase, Fill the Earth and Master It": The Ancient and Medieval Career of a Biblical Text* [Ithaca, N.Y.: Cornell University Press, 1989], 5). The assumption was that the world was

made for human benefit, without much consideration being given to the nature of our dominion. Genesis 1:28, in this premodern period, was read more in terms of its ability to elucidate our uniqueness within the creation (both spiritual and terrestrial beings) and our need to develop a spiritual vocation in relation to God. As Peter Harrison puts it, many of the early church fathers argued that dominion, rather than referring to the exploitation of the natural world, spoke to the subduing of sinful and rebellious beasts within us: "The imperative force of the biblical injunction 'have dominion' thus became, during the patristic period, a powerful incentive to bring rebellious carnal impulses under the control of reason" ("Subduing the Earth: Genesis 1, Early Modern Science, and the Exploitation of Nature," *Journal of Religion* 79 [1999]: 91). Since humans are a microcosm of creation, the order and harmony produced within should also be reflected without in the broad context of creation. In the modern period (seventeenth century), dominion would take on more exploitative dimensions as the new science made possible new forms of mastery in the natural world. Dominion shifted from dominion of the mind to dominion of the physical earth. Even so, in many cases this dominion, rather than condoning ruthless exploitation, called for a restoration of creation to its prefallen, paradisiacal state.

2. One could object to a stress on the image of God on the grounds that this idea does not receive sustained or repeated mention in other biblical texts. But if the image is characterized primarily as our being related and oriented to God, then its development is implicit throughout the whole of scripture.

3. Quoted in Richard J. Clifford, "The Hebrew Scriptures and the Theology of Creation," *Theological Studies* 46 (1985): 522.

4. Vladimir Lossky, *The Mystical Theology of the Eastern Church* (Crestwood, N.Y.: St. Vladimir's Seminary Press, 1973), 111.

5. The literature on ecofeminism is very large. A summary statement of ecofeminist principles has been suggested by Janis Birkeland, who writes: "The very essence of ecofeminism is its challenge to the presumed necessity of power relationships. It is about changing from a morality based on 'power over' to one based on reciprocity and responsibility ('power to'). Ecofeminists believe we cannot end the exploitation of nature without ending human oppression, and vice versa" ("Ecofeminism: Linking Theory and Practice," in *Ecofeminism: Women, Animals, Nature*, ed. Greta Gard [Philadelphia: Temple University Press, 1993], 19).

6. White's essay, often reprinted, was originally published in *Science* 155/3767 (March 1967): 1203–7.

7. Bernhard Anderson, "Biblical Perspectives on the Doctrine of Creation," in Anderson's *From Creation to New Creation* (Minneapolis, Minn.: Fortress, 1994), 33. This essay was originally published in 1962, before White's essay, and signaled Anderson's early awareness of ecological concerns, a theme that would continue in subsequent essays.

8. Psalm 8 speaks in a similar manner of humanity as a whole being crowned with the glory of God and thus suitable to exercise dominion over God's creation.

9. William P. Brown, *The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible* (Grand Rapids, Mich.: Eerdmans, 1999), 44.

10. Anderson, "Human Dominion over Nature" (1975), in *From Creation to New Creation*, 130.

11. S. Dean McBride Jr., "Divine Protocol: Genesis 1: 1–2: 3 as Prologue to the Pentateuch," in *God Who Creates: Essays in Honor of W. Sibley Towner,* ed. William P. Brown and S. Dean McBride (Grand Rapids, Mich.: Eerdmans, 2000), 15–18.

12. Brown, *Ethos of the Cosmos,* 45.

13. Richard L. Fern, *Nature, God, and Humanity: Envisioning an Ethics of Nature* (Cambridge: Cambridge University Press, 2002), 171.

14. For a concise summary and history of human impacts on environments see, I. G. Simmons, *Changing the Face of the Earth,* 2d ed. (Oxford: Blackwell, 1996).

15. For a concise treatment of the tradition of stewardship, see Robin Atfield, *The Ethics of Environmental Concern,* 2d ed. (Athens: University of Georgia Press, 1991), chaps. 2–3.

16. Douglas John Hall, *The Steward: A Biblical Symbol Come of Age* (Grand Rapids, Mich.: Eerdmans/New York: Friendship Press, 1990), 65.

17. The full text of the Cornwall Declaration, as well as supporting documents, is available at the Interfaith Council for Environmental Stewardship's internet site: www.stewards.net.

18. In the supporting document "A Biblical Perspective on Environmental Stewardship" it is claimed that ill-defined property rights and inadequate enforcement are at the heart of environmental despoilment: "Resource misuse occurs when property rights are incomplete." The assumption is that "the fullest realization of the image of God in the human person" can be realized only within a system of private-property rights. One wonders how the biblical injunction "the earth is the Lord's" is to be heard within this context. Should not the prophets, even Jesus Christ himself, have been the prescient entrepreneurs and land-developers of their time? What is lacking here is an account of land ownership that takes seriously ecological constraints and possibilities and that ties ownership to our membership with the creation as a whole. For a land ethic that focuses on ownership rights in light of ecological realities, see Eric T. Freyfogle's *Bounded People, Boundless Lands: Envisioning a New Land Ethic* (Washington, D.C.: Island, 1998).

19. In his recent book *The Good of Affluence: Seeking God in a Culture of Wealth* (Grand Rapids, Mich.: Eerdmans, 2002) John Schneider, a theologian in broad sympathy with the aims of the Cornwall Declaration, complains of liberal environmentalists who attack western affluence (and the individual pursuit of happiness) as a key factor in environmental destruction. The goal of created life, he says, is to enjoy creation. Clearly Schneider is correct to say that creation is to be enjoyed. Where he errs, however, is in thinking that the character of our enjoyment does not itself require careful moral and theological scrutiny. He fails to understand that the character of our enjoyment changes depending on the economic context in which it occurs (forgetting that affluence in a peasant society is not at all the same as contemporary American affluence), and that economic activity of any kind needs to be attentive to ecological limits and possibilities. The delight found in a consumer lifestyle that is clearly excessive and wasteful (and primarily focused on ourselves) becomes obscene when compared to the humble delight of St. Francis who found in the gifts of God (and their sharing) his abiding joy.

20. Michael S. Northcott, *The Environment and Christian Ethics* (Cambridge: Cambridge University Press, 1996), 180.

21. Hall, *Steward*, 249.

22. The full text of the statement can be accessed at the website http://cesc.montreat.edu/gsi/chmand.html.

23. J. Baird Callicott, "Genesis and John Muir," in *Beyond the Land Ethic: More Essays in Environmental Philosophy* (Albany: SUNY Press, 1999), 188–89.

24. Quoted by Callicott in ibid., 197.

25. Ibid., 217.

26. This is a major concern of Anna Peterson, who argues for a vision of human nature more closely tied to our embeddedness in the natural world. See *Becoming Human: Ethics, Environment, and Our Place in the World* (Berkeley: University of California Press, 2001).

27. An articulate account of humanity as a liturgical being can be found in the series of lectures delivered by John Zizioulas entitled "Preserving God's Creation: Three Lectures on Theology and Ecology," *King's Theological Review* 12.1 (1989): 1–5; 12.2 (1989): 41–45; 13.1 (1990): 1–5. Central to this liturgical view is the offering back to God, in eucharistic action, God's own creation. Zizioulas summarizes the priestly role of humanity in the following: "The Christian regards the world as sacred because it stands in dialectical relationship with God; thus he respects it (without worshipping it, since it has no divine presence *in its nature*), but he regards the human being as the only possible link between God and creation, a link that can either bring nature to communion with God and thus sanctify it, or turn it ultimately towards Man—or nature itself—and condemn it to the state of a 'thing' the meaning and purpose of which are exhausted with the satisfaction of Man" (13.1: 5). As priests we liberate creation from its limitations so that it can be what it truly is to be in reference to God (recognizing that without the sustaining presence of the creator creation would die). Zizioulas does not elaborate on the nature of these limitations, but one can presume that in part they have to do with human activity that has hampered creation's ability to praise its maker.

28. In one of his letters Augustine writes: "That we are raised above nothingness, and are not like a lifeless corpse . . . but are human beings which exist, live, possess feeling and understanding, and are able to thank the creator for such a great gift, all this can rightly be called grace . . . because it is bestowed upon us by the undeserved goodness of God" (quoted by Tarsicius van Bavel, "The Creator and the Integrity of Creation in the Fathers of the Church, Especially in Saint Augustine," *Augustinian Studies* 21 [1990]: 9). Augustine argues that the whole of creation forms a book in which we can read, through our working participation in it, the manifold grace of God.

29. David Burrell and Elena Malits, *Original Peace: Restoring God's Creation* (Notre Dame, Ind.: University of Notre Dame Press, 1997), 32.

30. Theodore Hiebert, *The Yahwist's Landscape: Nature and Religion in Early Israel* (New York: Oxford University Press, 1996), 152–53.

31. Theodore Hiebert, "The Human Vocation: Origins and Transformations in Christian Traditions," in *Christianity and Ecology*, ed. Dieter T. Hessel and Rosemary R. Ruether (Cambridge: Harvard University Press, 2000), 140.

32. Van Bavel, "Creator and the Integrity of Creation," 11.

33. Wendell Berry, *The Unsettling of America: Culture and Agriculture* (San Francisco: Sierra Club, 1977), 108.

34. Walter Brueggemann, *Genesis* (Atlanta: John Knox, 1982), 79.

35. Hiebert, *Yahwist's Landscape*, 48.

36. Avivah Gottlieb Zornberg, *The Beginning of Desire: Reflections on Genesis* (New York: Doubleday, 1996), 52.

37. Quoted in ibid., 50.

38. Ibid., 61.

39. Ibid., 63.

40. Christine D. Pohl, *Making Room: Recovering Hospitality as a Christian Tradition* (Grand Rapids, Mich.: Eerdmans, 1999), 18. Pohl provides a concise history of the practice of hospitality in chap. 2–3.

41. Ibid., 21.

42. Christoph Schwöbel, "God, Creation and the Christian Community: The Dogmatic Basis of a Christian Ethic of Createdness," in *The Doctrine of Creation: Essays in Dogmatics, History, and Philosophy*, ed. Colin E. Gunton (Edinburgh: T. & T. Clark, 1997), 169.

43. See Wes Jackson, *New Roots for Agriculture* (Lincoln: University of Nebraska Press, 1980).

44. Janine M. Benyus, *Biomimicry: Innovation Inspired by Nature* (New York: Morrow, 1997), 184.

45. For a description of these many new developments, see *Biomimicry*, but also the work of Paul Hawken, Amory Lovins, and L. Hunter Lovins in *Natural Capitalism: Creating the Next Industrial Revolution* (New York: Little, Brown, 1999).

CHAPTER 5

1. See Juliet B. Schor, *The Overworked American: The Unexpected Decline of Leisure* (New York: Basic Books, 1992).

2. As the collection of essays edited by Jerry Mander and Edward Goldsmith entitled *The Case against the Global Economy: And for a Turn toward the Local* (San Francisco: Sierra Club, 1996) makes clear, it is the health of the planet as much as the health of societies that is at stake in the push toward global competitiveness. The question we are left with is: "Who and how much are we prepared to sacrifice for the sake of global markets?"

3. There is a long tradition in Christianity that (building on the Genesis story) sees work as the punishment that follows from sin. In this context work is onerous at best, an outright affliction at worst. For a contrasting view, however, consider Simone Weil's judgment that "man placed himself outside of the current of Obedience. God chose as his punishments labour and death. Consequently, labour and death, if man undergoes them in a spirit of willingness, constitute a transference back into the current of supreme Good, which is obedience to God" (*The Need for Roots: Prelude to a Declaration of Duties Towards Mankind* [London: ARK, 1952], 286). Though still considering work as the effect following from divine punishment, Weil's account has the virtue of highlighting work as a vehicle toward our own healing and wholeness. We still need to consider, however, if all work must be understood in terms of a divine-punishment framework.

4. This pattern is not unique to the Christian traditions, as Brian Keeble rightly notes: "In the context of the Indian tradition works of art imitate Divine forms and

the craftsman recapitulates the cosmogonic act of creation as the artifact itself recapitulates the rhythms of its Divine source. By his action of making, and in conjunction with his practice of yoga, the craftsman as it were reconstitutes himself, and thereby goes beyond the level of his ego-bound personality" (*Art for Whom and for What?* [Ipswich: Golgonooza, 1998] 81).

5. Here we should remember that the cluster of terms having to do with art and technique have at their Indo-European root the sense of weaving or joining together.

6. For an elaboration and defense of a traditional conception of art as integral to day-to-day living, see Ananda K. Coomaraswamy's *Christian and Oriental Philosophy of Art* (New York: Dover, 1956).

7. Crispin Sartwell has developed this conception of art, minus the strong theistic dimension, in *The Art of Living: Aesthetics of the Ordinary in World Spiritual Traditions* (Albany: SUNY Press, 1995).

8. Quoted in *Working: Its Meaning and Its Limits,* ed. Gilbert C. Meilaender (Notre Dame, Ind.: University of Notre Dame Press, 2000), 35.

9. Edward Casey has traced the modern subordination of place to abstract time in *Getting Back into Place: Toward a Renewed Understanding of the Place-World* (Bloomington: Indiana University Press, 1993). As abstract, time has no clear limits. It thus falls prey to those who can objectify it (with clocks and schedules) and use it for their own purposes. What should be understood together—place and time—and as mutually informing each other are separated and thus opened to distortion.

10. Juliet Schor has continued her analysis of the economy and human well-being in her equally important book *The Overspent American: Why We Want What We Don't Need* (New York: Harper, 1999).

11. Erazim Kohák, *The Embers and the Stars: A Philosophical Inquiry into the Moral Sense of Nature* (Chicago: University of Chicago Press, 1984), 174.

12. Wendell Berry, *Life Is a Miracle: An Essay against Modern Superstition* (Washington, D.C.: Counterpoint, 2000), 21.

13. For a discussion of this problem see Herman E. Daly and John B. Cobb's *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future,* 2d ed. (Boston: Beacon, 1994), especially chap. 5.

14. Herman E. Daly, *Beyond Growth: The Economics of Sustainable Development* (Boston: Beacon, 1996), 46–48.

15. Jonathan Rauch, "The New Old Economy: Oil, Computers, and the Reinvention of the Earth," *The Atlantic Monthly* 287.1 (January 2001): 35–49.

16. Julian Simon, *The Ultimate Resource* (Princeton, N.J.: Princeton University Press, 1981), 207 (quoted in Daly and Cobb's *For the Common Good,* 109).

17. See Maude Barlow and Tony Clarke's *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water* (New York: Free Press, 2002) and Vandana Shiva's *Water Wars: Privatization, Pollution, and Profit* (Cambridge, Mass.: South End Press, 2002). Under the cover of free-trade agreements, corporations can now legitimately sue countries if they attempt to block (whether for environmental reasons or simply to keep the water for their own needs) the sale of water abroad.

18. See Robert Costanza and Carl Folke's essay "Valuing Ecosystem Services with Efficiency, Fairness, and Sustainability as Goals," in *Nature's Services: Societal Dependence on Natural Ecosystems,* ed. Gretchen C. Daily (Washington, D.C.: Island,

1997), 49–68, as well as Costanza's *Ecological Economics: The Science and Management of Sustainability* (New York: Columbia University Press, 1994).

19. Wendell Berry, "Two Economies," in *Home Economics* (New York: North Point, 1987), 54.

20. Herman Daly puts it this way: "The necessary change in vision is to picture the macroeconomy as an open subsystem of the finite natural ecosystem (environment), and not as an isolated circular flow of abstract exchange value, unconstrained by mass balance, entropy and finitude" (*Beyond Growth*, 48). We need to understand our economic life as enfolded and maintained by a much larger context that is life giving.

21. Berry, "Two Economies," 59. In her book *The Nature of Economies* (New York: Modern Library, 2000), Jane Jacobs develops a similar position.

22. Berry, "Two Economies," 72–73.

23. M. Douglas Meeks, *God the Economist: The Doctrine of God and Political Economy* (Minneapolis, Minn.: Fortress, 1989), 12.

24. Amartya Sen, *Development as Freedom* (New York: Knopf, 1999), 206.

25. Consider here the judgment of Vaclav Smil: "Farming increasingly dependent on unceasing inputs of fossil fuels, and hence inherently unsustainable on a civilizational timescale (1000 years), is now a universal reality. Continuous intensive monocropping—repetitive planting of one crop species supported by high applications of synthetic chemicals—may be profitable in the short run and in narrow monetary terms, but is surely not the best way to promote longevity and stability of agroecosystems" (*Feeding the World: A Challenge for the Twenty-First Century* [Cambridge, Mass.: MIT Press, 2000], xiii). Smil does not end on a despairing note, nor should we. Though we need to exercise caution and practice wisdom and restraint, we can alter our food-production practices to make them more sustainable. The key, however, is attentiveness to and humility before the grace of creation.

26. For a current and wide-ranging discussion of some practical possibilities that are already underway, see Lester Brown's *Eco-Economy: Building an Economy for the Earth* (New York: Norton, 2001).

27. Daly and Cobb, *For the Common Good*, 51–58.

28. Paul W. Brand, " 'A Handful of Mud': A Personal History of My Love for the Soil," in *Tending the Garden: Essays on the Gospel and the Earth*, ed. Wesley Granberg-Michaelson (Grand Rapids, Mich.: Eerdmans, 1987), 136–50.

29. The "Washington consensus" in global economics assumes that liberal markets should govern economic relations around the world. As a result, even governments are giving up their responsibility to protect the common heritage of humanity (natural resources and social services) as private companies put everything up for sale.

30. E. F. Schumacher, *Small Is Beautiful: Economics as If People Mattered*, 25th anniversary ed. (Port Roberts, Wash.: Hartley & Marks, 1999), 29.

31. Similarly, we need to be suspicious of approaches that would answer all problems with market solutions. Daly writes: "The market, of course, functions only within the economic subsystem, where it does only one thing: it solves the allocation problem by providing the necessary information and incentive. It does that one thing very well. What it does not do is solve the problem of optimal scale and of optimal

distribution" (*Beyond Growth*, 50). Scale, distribution, and allocation are distinctly different issues. When addressing issues of scale and the just distribution of goods, we need to move beyond market solutions to consider the moral and spiritual concerns of this book.

32. Schumacher, *Small Is Beautiful*, 56.

33. Wendell Berry, "The Idea of a Local Economy," in *The Art of the Commonplace: The Agrarian Essays of Wendell Berry*, ed. Norman Wirzba (Washington, D.C.: Counterpoint, 2002), 260.

34. Kohák, *Embers and the Stars*, 108

35. Ibid., 210.

36. Here we should note the growth of the ecodesign movement that promotes ecological design and production methods for a wide variety of consumer goods. For a powerful statement of this emerging paradigm, see William McDonough and Michael Braungart's *Cradle to Cradle: Remaking the Way We Make Things* (New York: North Point, 2002).

37. We must be careful to distinguish a spiritual from a sacramental approach. A spiritual approach would condone (as it has historically) the leave-taking of this world for another, whereas a sacramental approach radicalizes our relationship to this earth by encouraging us to see the physical places in which we move and from which we live as expressions of the divine life. As we make this life and this world the site through which our spiritual lives are negotiated, then issues like the salvation and redemption of souls are expanded to include the salvation and redemption of our environments. For a helpful discussion on these matters, see T. J. Gorringe, *A Theology of the Built Environment: Justice, Empowerment, Redemption* (Cambridge: Cambridge University Press, 2002).

38. Thomas Traherne, *Centuries of Meditations* 1.33, quoted from Traherne's *Poems, Centuries, and Three Thanksgivings*, ed. Anne Ridler (London: Oxford University Press, 1966), 179.

39. *Centuries of Meditations* 1.35 in ibid., 180.

40. *Centuries of Meditations* 2.48 in ibid., 237.

41. *Centuries of Meditations* 3.59 in ibid., 294.

42. William Bryant Logan, *Dirt: The Ecstatic Skin of the Earth* (New York: Riverhead, 1995), 55.

43. Vandana Shiva, *Stolen Harvest: The Hijacking of the Global Food Supply* (Cambridge, Mass.: South End Press, 2000), 12.

44. Historians will readily point out that hunger has been a feature of many civilizations and that it is not until the twentieth century that widespread starvation comes to an end. What we need to consider, however, is the fact that starvation is still a reality for millions today. We need to inquire into the causes of hunger, both past and present. Are they attributable to poor farming or distribution practices, the economic exploitation of peasants by their lords and masters, insufficient or unwise storage, and so on? In other words, we should not count current "success" in food production as unqualifiedly good simply because current success compares well with previous failure.

45. Aldo Leopold, "What Is a Weed?" in *For the Health of the Land* (Washington, D.C.: Island, 1999), 208–12.

46. This expensive technique of weed control is showing itself to be highly prob-

lematic. On the one hand, genetically altered seed may have harmful effects on the whole range of organisms, human and nonhuman, that feed on it (there has hardly been adequate testing yet). On the other hand, pesticide-resistant seed has been known to cross-pollinate with its weed competitors, making the weed resistant to the pesticide meant to kill it! Farmers must then pay again for yet another technology to solve the problems created by a previous technology. The faulty assumption behind so much biotechnology research is that species exist in isolation and thus can be modified to suit limited and controlled contexts. From an ecological standpoint this makes little sense because plants grow, evolve, and adapt not as individuals but in terms of their relatedness to a wide variety of other species. These mutual interactions are what determine species success. Engineering species for very limited concerns such as weed control makes them inherently, weak, unstable, and susceptible to failure.

47. For a description of corporate food practices see Shiva's *Stolen Harvest*, but also Maria Margaronis's "The Politics of Food" and John Stauber's "Food Fight Comes to America," both in *The Nation* 269.22 (December 27, 1999): 11–16, 18–19. Under the guise of "free trade," multinational corporations make illegal the sale and distribution of "uncertified seed," i.e., seed not patented and owned by them. The obsession with patenting and owning seeds clearly indicates that the issue for these corporations is control of the global food supply. The rights of local farmers—many of whom are poor and are women—to save, trade, and pass on seed (a widespread and much cheaper traditional practice), as well as the divinely bestowed right of creation to be, are systematically denied.

48. Wendell Berry, *The Unsettling of America: Culture and Agriculture* (San Francisco: Sierra Club, 1977), 106.

49. For a description of the ill health and injustice of contemporary American food production and consumption practices, see Eric Schlosser's *Fast Food Nation: The Dark Side of the All-American Meal* (Boston: Houghton Mifflin, 2001).

50. For a detailed account of the role of food in the religious worlds of Judaism and Christianity in their formative periods, see Gillian Feeley-Harnik, *The Lord's Table: The Meaning of Food in Early Judaism and Christianity* (Washington, D.C.: Smithsonian Institution, 1981).

51. Rowan Williams, *Resurrection: Interpreting the Easter Gospel* (Harrisburg, Pa.: Morehouse, 1982), 115.

52. Wendell Berry, "The Gift of Good Land," in *The Gift of Good Land: Further Essays Cultural and Agricultural* (New York: North Point, 1981), 281.

53. Traherne, *Centuries of Meditations* 1.39 in Ridler, 181.

54. Wendell Berry, "Health Is Membership," in *Another Turn of the Crank* (Washington, D.C.: Counterpoint, 1995), 87.

55. David F. Ford, *Self and Salvation: Being Transformed* (Cambridge: Cambridge University Press, 1999), 121.

56. Ibid., 122.

57. Saying this is not to deny the validity of songs of lament or musical styles such as blues music. The cruciform character of the Christian community and of creation as a whole demands full recognition of pain and suffering as central (even if not the final tone) to life.

58. Evan Eisenberg has suggested that the best musical style for this repositioning would be an "earth jazz": "Ditch your notated score—whether ascribed to nature

or yourself—and learn to improvise. Respond as flexibly to nature as nature responds to you. Accept nature's freedom as the premise of your own; accept that both are grounded in a deeper necessity. Relax your rigid beat and learn to follow nature's rhythms—in other words, to swing" (*The Ecology of Eden: An Inquiry into the Dream of Paradise and a New Vision of Our Role in Nature* [New York: Vintage, 1998], 293). The merit of this suggestion is that it takes seriously our role as students and servants of a created order we have barely begun to understand.

59. Williams, *Resurrection*, 91.

CONCLUSION

1. Evan Eisenberg has made the valuable point that we necessarily live between the two poles of wilderness and urbanity since both speak to deep human aspirations. To be fully human we need both, which means that we need to learn to maintain both in their mutual relatedness and in terms of their unique potential: "Wildness must penetrate civilization, but it must not overrun it. Civilization, too, has a right to its own center and its own province. It even has a right to its own forms of wildness" (*The Ecology of Eden: An Inquiry into the Dream of Paradise and a New Vision of Our Role in Nature* [New York: Vintage, 1998], 373). Saying this, however, does not excuse urbanites from living responsibly within necessary ecological bounds.

2. For an excellent example of such imaginative work, see Gene Logsdon, *The Man Who Created Paradise: A Fable* (Athens: Ohio University Press, 1998).

3. Michael Brower and Warren Leon, eds., *The Consumer's Guide to Effective Environmental Choices* (New York: Three Rivers, 1999). This book, written by staffers of the Union of Concerned Scientists, contains valuable practical suggestions, as well as an extensive list of resources people can consult, to live more responsibly wherever we are.

4. Gardening does not require large tracts of land. Apartment dwellers have been known to grow extraordinary amounts of foods simply through the careful tending of window boxes. If one prefers to be outdoors, however, there are shared community garden plots to be considered. In short, there is abundant opportunity for gardening, even in large urban centers.

5. We should recall that in one of its earliest manifestations the meaning of the word *true* was tied to the solidity of a large tree. Truth refers to something that is well grounded, can be trusted, because its roots are deep into experience and its growth able to withstand the trials of life.

6. Quoted in Wendell Berry, *The Unsettling of America: Culture and Agriculture* (San Francisco: Sierra Club, 1977, 81). For an excellent discussion of energy use as a cultural and moral concern Berry's chapter "The Use of Energy" should be read.

7. The history of this antagonism and codependency has been well presented in Raymond Williams, *The Country and the City* (New York: Oxford University Press, 1973).

8. T. J. Gorringe's *Theology of the Built Environment: Justice, Empowerment, Redemption* (Cambridge: Cambridge University Press, 2002) represents a fine starting point upon which such imaginative work can build.

Bibliography

Abram, David. *The Spell of the Sensuous: Perception and Language in a More-Than-Human World*. New York: Vintage, 1996.

Anderson, Bernard. *From Creation to New Creation*. Minneapolis: Fortress, 1994.

Anderson, E. N. *Ecologies of the Heart: Emotion, Belief, and the Environment*. Oxford: Oxford University Press, 1996.

Atfield, Robin. *The Ethics of Environmental Concern*. Athens: University of Georgia Press, 1991.

Bailey, L. H. *The Holy Earth*. New York: Scribner, 1915.

Barlow, Maude, and Tony Clarke. *Blue Gold: The Fight to Stop the Corporate Theft of the World's Water*. New York: Free Press, 2002.

Baskin, Yvonne. *The Work of Nature: How the Diversity of Life Sustains Us*. Washington, D.C.: Island, 1997.

Bate, Jonathan. *The Song of the Earth*. Cambridge, Mass.: Harvard University Press, 2000.

Bauckham, Richard. *The Theology of the Book of Revelation*. Cambridge: Cambridge University Press, 1993.

Bauman, Zygmunt. *Liquid Modernity*. Cambridge: Polity, 2000.

Bavel, Tarsicius van. "The Creator and the Integrity of Creation in the Fathers of the Church, Especially in Augustine." *Augustinian Studies* 21 (1990): 1–33.

Benyus, Janine M. *Biomimicry: Innovation Inspired by Nature*. New York: Morrow, 1997.

Berger, Peter. *Pig Earth*. New York: Random, 1992.

Berry, Thomas. *The Dream of the Earth*. San Francisco: Sierra Club, 1990.

Berry, Wendell. *Another Turn of the Crank*. Washington, D.C.: Counterpoint, 1995.

———. *The Art of the Commonplace: The Agrarian Essays of Wendell Berry,* edited by Norman Wirzba. Washington, D.C.: Counterpoint, 2002.
———. *The Gift of Good Land: Further Essays Cultural and Agricultural.* New York: North Point, 1981.
———. *The Hidden Wound.* San Francisco: North Point, 1989.
———. *Home Economics.* New York: North Point, 1987.
———. *Life Is a Miracle.* Washington, D.C.: Counterpoint, 2000.
———. *The Long-Legged House.* New York: Harcourt, Brace & World, 1965.
———. *Standing by Words.* San Francisco: North Point, 1983.
———. *A Timbered Choir: The Sabbath Poems, 1979–1997.* Washington, D.C.: Counterpoint, 1998.
———. *The Unsettling of America.* San Francisco: Sierra Club, 1977.
Birkeland, Janis. "Ecofeminism: Linking Theory and Practice." In *Ecofeminism: Women, Animals, Nature,* edited by Greta Gard, 13–59. Philadelphia: Temple University Press, 1993.
Birkerts, Sven. *The Gutenberg Elegies: The Fate of Reading in an Electronic Age.* New York: Ballantine, 1994.
Bonhoeffer, Dietrich. *Ethics.* New York: Macmillan, 1955.
Bossy, John. *Christianity in the West, 1400–1700.* Oxford: Oxford University Press, 1985.
Bramwell, Anna. *Ecology in the Twentieth Century: A History.* New Haven, Conn.: Yale University Press, 1989.
Brand, Paul. " 'A Handful of Mud': A Personal History of My Love for the Soil." In *Tending the Garden: Essays on the Gospel and the Earth,* edited by Wesley Granberg-Michaelson, 136–50. Grand Rapids, Mich.: Eerdmans, 1987.
Bright, Chris. "Anticipating Environmental Surprise." In *State of the World, 2000,* edited by Lester Brown, 22–38. New York: Norton, 2000.
Brower, Michael, and Warren Leon. *The Consumer's Guide to Effective Environmental Choices.* New York: Three Rivers, 1999.
Brown, Lester. *Eco-Economy: Building an Economy for the Earth.* New York: Norton, 2001.
Brown, William P. *Character in Crisis: A Fresh Approach to the Wisdom Literature of the Old Testament.* Grand Rapids, Mich.: Eerdmans, 1996.
———. "*Creatio Corpis* and the Rhetoric of Defense in Job 10 and Psalm 139." In *God Who Creates: Essays in Honor of W. Sibley Towner,* edited by William P. Brown and S. Dean McBride, 107–24. Grand Rapids, Mich.: Eerdmans, 2000.
———. *The Ethos of the Cosmos: The Genesis of Moral Imagination in the Bible.* Grand Rapids, Mich.: Eerdmans, 1999.
Brown, William P., and S. Dean McBride, eds. *God Who Creates: Essays in Honor of W. Sibley Towner.* Grand Rapids, Mich.: Eerdmans, 2000.
Brueggemann, Walter. *Genesis.* Atlanta: John Knox, 1982.
———. *The Land: Place as Gift, Promise, and Challenge in Biblical Faith.* 2d edition. Minneapolis: Fortress, 2002.
Buckley, Michael J. *At the Origins of Modern Atheism.* New Haven, Conn.: Yale University Press, 1987.
Burrell, David, and Elena Malits. *Original Peace: Restoring God's Creation.* Notre Dame, Ind.: University of Notre Dame Press, 1997.

Callicott, J. Baird. *Beyond the Land Ethic: More Essays in Environmental Philosophy*. Albany: SUNY Press, 1999.

Callicott, J. Baird, ed. *Companion to "A Sand County Almanac": Interpretive and Critical Essays*. Madison: University of Wisconsin Press, 1987.

Carroll, John E. "Limitations of 'Western Science': A Critique of Failed Inclusivity." In *Ecology and Religion: Scientists Speak,* edited by John E. Carroll and Keith Warner, 3–12. Quincy, Ill.: Franciscan Press, 1998.

Casey, Edward. *Getting Back into Place: Toward a Renewed Understanding of the Place-World*. Bloomington: Indiana University Press, 1993.

Clifford, Richard J. "The Hebrew Scriptures and the Theology of Creation." *Theological Studies* 46 (1985): 507–23.

Cohen, Jeremy. *"Be Fertile and Increase, Fill the Earth and Master It": The Ancient and Medieval Career of a Biblical Text*. Ithaca, N.Y.: Cornell University Press, 1989.

Coomaraswamy, Ananda K. *Christian and Oriental Philosophy of Art*. New York: Dover, 1956.

Cornford, F. M. *From Religion to Philosophy: A Study in the Origins of Western Speculation*. New York: Harper & Row, 1957.

Costanza, Robert. *Ecological Economics: The Science and Management of Sustainability*. New York: Columbia University Press, 1994.

Costanza, Robert, and Carl Folke. "Valuing Ecosystem Services with Efficiency, Fairness, and Sustainability as Goals." In *Nature's Services: Societal Dependence on Natural Ecosystems,* edited by Gretchen C. Daily, 49–68. Washington, D.C.: Island, 1997.

Daily, Gretchen C., ed. *Nature's Services: Societal Dependence on Natural Ecosystems*. Washington, D.C.: Island, 1997.

Daly, Herman E. *Beyond Growth: The Economics of Sustainable Development*. Boston: Beacon, 1996.

Daly, Herman E., and John B. Cobb. *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future*. Boston: Beacon, 1994.

Daly, Herman E., and Kenneth N. Townsend, eds. *Valuing the Earth: Economics, Ecology, Ethics*. Cambridge, Mass.: MIT Press, 1993.

Dillard, Annie. *Pilgrim at Tinker Creek*. New York: Harper & Row, 1974.

Dupré, Louis. *Passage to Modernity: An Essay in the Hermeneutics of Nature and Culture*. New Haven, Conn.: Yale University Press, 1993.

Ehrenfeld, David. *The Arrogance of Humanism*. New York: Oxford University Press, 1978.

Eisenberg, Evan. *The Ecology of Eden: An Inquiry into the Dream of Paradise and a New Vision of Our Role in Nature*. New York: Vintage, 1998.

Eliade, Mircea. *Cosmos and History: The Myth of the Eternal Return*. New York: Harper & Row, 1959.

———. *The Sacred and the Profane: The Nature of Religion*. New York: Harcourt Brace Jovanovich, 1959.

Ellul, Jacques. *The Technological Society*. New York: Vintage, 1964.

Evernden, Neil. *The Natural Alien: Humankind and Environment*. Toronto: University of Toronto Press, 1985.

Feely-Harnik, Gillian. *The Lord's Table: The Meaning of Food in Early Judaism and Christianity*. Washington, D.C.: Smithsonian Institution, 1981.

Fern, Richard L. *Nature, God, and Humanity: Envisioning an Ethics of Nature*. Cambridge: Cambridge University Press, 2002.

Fiddes, Paul. *The Promised End: Eschatology in Theology and Literature*. Oxford: Blackwell, 2000.

Ford, David F. *Self and Salvation: Being Transformed*. Cambridge: Cambridge University Press, 1999.

Freyfogle, Eric T. *Bounded People, Boundless Lands: Envisioning a New Land Ethics*. Washington, D.C.: Island, 1998.

Frye, Northrop. *The Great Code: The Bible and Literature*. Toronto: Academic Press, 1982.

Giddens, Anthony. *The Consequences of Modernity*. Stanford: Stanford University Press, 1990.

———. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Stanford: Stanford University Press, 1991.

Gilkey, Langdon. *Maker of Heaven and Earth: The Christian Doctrine of Creation in Light of Modern Knowledge*. Lanham, Md.: University Press of America, 1959.

Gorringe, T. J. *A Theology of the Built Environment: Justice, Empowerment, Redemption*. Cambridge: Cambridge University Press, 2002.

Grant, George. "Knowing and Making." In *The George Grant Reader,* edited by William Christian and Sheila Grant, 407–17. Toronto: University of Toronto Press, 1998.

Grant, Robert M. *Irenaeus of Lyons*. London: Routledge, 1997.

Grove, Frederick Philip. *Settlers of the Marsh*. Toronto: McClelland & Stewart, 1996.

Guroian, Vigen. *Inheriting Paradise: Meditations on Gardening*. Grand Rapids, Mich.: Eerdmans, 1999.

Hall, Douglas John. *The Steward: A Biblical Symbol Come of Age*. Grand Rapids, Mich.: Eerdmans, 1990.

Hamsun, Knut. *Growth of Soil*. New York: Vintage, 1972.

Hanson, Victor Davis. *The Land Was Everything: Letters from an American Farmer*. New York: Free Press, 2000.

———. *The Other Greeks: The Family Farm and the Agrarian Roots of Western Civilization*. Berkeley: University of California Press, 1999.

Harrison, Peter. *The Bible, Protestantism, and the Rise of Natural Science*. Cambridge: Cambridge University Press, 1998.

———. "Subduing the Earth: Genesis 1, Early Modern Science, and the Exploitation of Nature." *Journal of Religion* 79 (1999): 86–109.

Hawken, Paul, Amory Lovins, and L. Hunter Lovins. *Natural Capitalism: Creating the Next Industrial Revolution*. New York: Little, Brown, 1999.

Hays, Richard B. *The Moral Vision of the New Testament: A Contemporary Introduction to New Testament Ethics*. San Francisco: Harper, 1996.

Heilbroner, Robert L. *The Worldly Philosophers: The Lives, Times, and Ideas of the Great Economic Thinkers*. New York: Simon & Schuster, 1999.

Hertsgaard, Mark. *Earth Odyssey: Around the World in Search of Our Environmental Future*. New York: Broadway, 1998.

Heschel, Abraham Joshua. *The Sabbath: Its Meaning for Modern Man.* New York: Farrar, Straus & Giroux, 1951.

Hiebert, Theodore. "The Human Vocation: Origins and Transformations in Christian Traditions." In *Christianity and Ecology: Seeking the Well-Being of Earth and Humans,* edited by Dieter T. Hessell and Rosemary Radford Ruether, 135–54. Cambridge, Mass.: Harvard University Press, 2000.

———. *The Yahwist's Landscape: Nature and Religion in Early Israel.* New York: Oxford University Press, 1996.

Hillel, Daniel. *Out of the Earth: Civilization and the Life of the Soil.* London: Aurum, 1991.

Hopkins, Gerard Manley. *The Poems of Gerard Manley Hopkins.* Oxford: Oxford University Press, 1967.

Howard, Albert. *The Soil and Health: A Study of Organic Agriculture.* New York: Devin-Adair, 1947.

Jackson, Wes. *Altars of Unhewn Stone: Science and the Earth.* San Francisco: North Point, 1987.

———. *Becoming Native to This Place.* Washington, D.C.: Counterpoint, 1994.

———. *New Roots for Agriculture.* Lincoln: University of Nebraska Press, 1980.

Jacobs, Jane. *The Nature of Economies.* New York: Modern Library, 2000.

Jenson, Robert W. "Aspects of a Doctrine of Creation." In *The Doctrine of Creation: Essays in Dogmatics, History, and Philosophy,* edited by Colin E. Gunton, 17–28. Edinburgh: T. & T. Clark, 1997.

Kearney, Richard. *The God Who May Be: A Hermeneutics of Religion.* Bloomington: Indiana University Press, 2001.

Keeble, Brian. *Art for Whom and for What?* Ipswich: Golgonooza, 1998.

Kohák, Erazim. *The Embers and the Stars: A Philosophical Inquiry into the Moral Sense of Nature.* Chicago: University of Chicago Press, 1984.

Kunstler, James Howard. *The Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape.* New York: Simon & Schuster, 1993.

Lash, Nicholas. *The Beginning and the End of "Religion."* Cambridge: Cambridge University Press, 1996

———. *Believing Three Ways in One God: A Reading of the Apostles' Creed.* Notre Dame, Ind.: University of Notre Dame Press, 1992.

Leclerc, Éloi. *The Canticle of Creatures: Symbols of Union: An Analysis of St. Francis of Assisi.* Chicago: Franciscan Herald, 1977.

Leopold, Aldo. *For the Health of the Land: Previously Unpublished Essays and Other Writings,* edited by J. Baird Callicott and Eric T. Freyfogle, Washington, D.C.: Island, 1999.

———. *Round River: From the Journals of Aldo Leopold,* edited by Luna B. Leopold. New York: Oxford University Press, 1953.

———. *A Sand County Almanac, and Sketches Here and There.* New York: Oxford University Press, 1949.

Levenson, Jon D. *Creation and the Persistence of Evil: The Jewish Drama of Divine Omnipotence.* San Francisco: Harper & Row, 1988.

Lewis, Jack P. *A Study of the Interpretation of Noah and the Flood in Jewish and Christian Literature.* Leiden: Brill, 1978.

Logan, William Bryant. *Dirt: The Ecstatic Skin of the Earth*. New York: Riverhead, 1995.

Logsdon, Gene. *The Man Who Created Paradise: A Fable*. Athens: Ohio University Press, 1998.

Lossky, Vladimir. *The Mystical Theology of the Eastern Church*. Crestwood, N.Y.: St. Vladimir's Seminary Press, 1973.

Lowery, Richard. *Sabbath and Jubilee*. St. Louis: Chalice, 2000.

Mander, Jerry, and Edward Goldsmith, eds. *The Case against the Global Economy: And for a Turn toward the Local*. San Francisco: Sierra Club, 1996.

Margaronis, Maria. "The Politics of Food." *The Nation* 269.22 (Dec. 27, 1999): 11–16.

McBride, S. Dean, Jr. "Divine Protocol: Genesis 1:1–2:3 as Prologue to the Pentateuch." In *God Who Creates: Essays in Honor of W. Sibley Towner,* edited by William P. Brown and S. Dean McBride, 3–41. Grand Rapids, Mich.: Eerdmans, 2000.

McDonough, William, and Michael Braungart. *Cradle to Cradle: Remaking the Way We Make Things*. New York: North Point, 2002.

McKibben, Bill. *The Comforting Whirlwind: God, Job, and the Scale of Creation*. Grand Rapids, Mich.: Eerdmans, 1994.

———. *The End of Nature*. New York: Doubleday, 1989.

McNeill, J. R. *Something New under the Sun: An Environmental History of the Twentieth-Century World*. New York: Norton, 2000.

Meeks, M. Douglas. *God the Economist: The Doctrine of God and Political Economy*. Minneapolis, Minn.: Fortress, 1989.

Meilander, Gilbert C., ed. *Working: Its Meaning and Its Limits*. Notre Dame, Ind.: University of Notre Dame Press, 2000.

Merchant, Carolyn. *The Death of Nature: Women, Ecology and the Scientific Revolution*. San Francisco: HarperCollins, 1980.

Merton, Thomas. *New Seeds of Contemplation*. New York: New Directions, 1961.

Mitchell, Stephen. *The Book of Job*. New York: Harper, 1987.

Moltmann, Jürgen. *God in Creation: A New Theology of Creation and the Spirit of God*. Minneapolis, Minn.: Fortress, 1985.

Nabhan, Gary Paul. *Cultures of Habitat: On Nature, Culture, and Story*. Washington, D.C.: Counterpoint, 1997.

Nash, Roderick. "Aldo Leopold's Intellectual Heritage." In *Companion to "A Sand County Almanac": Interpretive and Critical Essays,* edited by J. Baird Callicott, 63–89. Madison: University of Wisconsin Press, 1987.

———. *The Rights of Nature: A History of Environmental Ethics*. Madison: University of Wisconsin Press, 1989.

Nasr, Seyyed Hossein. *Religion and the Order of Nature*. New York: Oxford University Press, 1996.

Nietzsche, Friedrich. *The Gay Science*. New York: Vintage, 1974.

Noble, David F. *The Religion of Technology: The Divinity of Man and the Spirit of Invention*. New York: Penguin, 1999.

Northcott, Michael S. *The Environment and Christian Ethics*. Cambridge: Cambridge University Press, 1996.

Orr, David. *Earth in Mind: Education, Environment, and the Human Prospect*. Washington, D.C.: Island, 1994.

———. *Ecological Literacy: Education and the Transition to a Postmodern World*. Albany: SUNY Press, 1992.

———. "Environmental Literacy: Education as If the Earth Mattered," In *People, Land, and Community: Collected E. F. Schumacher Lectures,* edited by Hildegarde Hannum, 236–49. New Haven, Conn.: Yale University Press, 1997.

Pascal, Blaise. *Pensées*. Trans. A. J. Krailsheimer. London: Penguin, 1966.

Perényi, Eleanor. *Green Thoughts: A Writer in the Garden*. New York: Random, 1981.

Peterson, Anna. *Becoming Human: Ethics, Environment, and Our Place in the World*. Berkeley: University of California Press, 2001.

Pohl, Christine D. *Making Room: Recovering Hospitality as a Christian Tradition*. Grand Rapids, Mich.: Eerdmans, 1999.

Polkinghorne, John. *Belief in God in an Age of Science*. New Haven, Conn.: Yale University Press, 1998.

Polkinghorne, John, ed. *The Work of Love: Creation as Kenosis*. Grand Rapids, Mich.: Eerdmans, 2001.

Pollan, Michael. *The Botany of Desire: A Plant's-Eye View of the World*. New York: Random, 2001.

———. *Second Nature: A Gardener's Education*. New York: Dell, 1991.

Preece, Rod. *Animals and Nature: Cultural Myths, Cultural Realities*. Vancouver: University of British Columbia Press, 1999.

Purdue, Leo G. *Wisdom and Creation: The Theology of Wisdom Literature*. Nashville, Tenn.: Abingdon, 1994.

Rad, Gerhard von. "Some Aspects of the Old Testament World-View." In *The Problem of the Hexateuch and Other Essays*. 144–65. London: SCM, 1966.

Rasmussen, Larry L. *Earth Community, Earth Ethics*. Maryknoll, N.Y.: Orbis, 1996.

Rauch, Jonathan. "The New Old Economy: Oil, Computers, and the Reinvention of the Earth." *The Atlantic Monthly* 287.1 (January 2001): 35–49.

Rolston, Holmes, III. "The Bible and Ecology." *Interpretation* 50.1 (January 1996): 16–26.

———. "Does Nature Need to Be Redeemed?" *Horizons in Biblical Theology* 14.2 (1992): 143–172.

———. "Duties to Ecosystems." In *A Companion to "A Sand County Almanac": Interpretive and Critical Essays,* edited by J. Baird Callicott, 246–75. Madison: University of Wisconsin Press, 1987.

Rossing, Barbara R. "River of Life in God's New Jerusalem: An Eschatological Vision for Earth's Future." In *Christianity and Ecology: Seeking the Well-Being of Earth and Humans,* edited by Dieter T. Hessel and Rosemary Radford Ruether, 205–24. Cambridge: Harvard University Press, 2000.

Roszak, Theodore, Mary Gomes, and Allen D. Kanner, eds. *Ecopsychology: Restoring the Earth, Healing the Mind*. San Francisco: Sierra Club, 1995.

Sartwell, Crispin. *The Art of Living: Aesthetics of the Ordinary in World Spiritual Traditions*. Albany: SUNY Press, 1995.

Schlosser, Eric. *Fast Food Nation: The Dark Side of the All-American Meal*. Boston: Houghton Mifflin, 2001.

Schneider, John R. *The Good of Affluence: Seeking God in a Culture of Wealth*. Grand Rapids, Mich.: Eerdmans, 2002.

Schor, Juliet B. *The Overspent American: Why We Want What We Don't Need*. New York: Harper, 1999.

———. *The Overworked American: The Unexpected Decline of Leisure*. New York: Basic Books, 1992.

Schumacher, E. F. *Small Is Beautiful: Economics as If People Mattered*. Port Roberts, Wash.: Hartley & Marks, 1999.

Schwöbel, Christoph. "God, Creation, and the Christian Community: The Dogmatic Basis of a Christian Ethic of Createdness." In *The Doctrine of Creation: Essays in Dogmatics, History, and Philosophy,* edited by Colin E. Gunton, 149–76. Edinburgh: T. & T. Clark, 1997.

Seligman, Adam. *Modernity's Wager*. Princeton, N.J.: Princeton University Press, 2000.

Sen, Amartya. *Development as Freedom*. New York: Knopf, 1999.

Shiva, Vandana. *Stolen Harvest: The Hijacking of the Global Food Supply*. Cambridge, Mass.: South End Press, 2000.

———. *Water Wars: Privatization, Pollution, and Profit*. Cambridge, Mass.: South End Press, 2002.

Simkins, Ronald. *Creator and Creation: Nature in the Worldview of Ancient Israel*. Peabody, Mass.: Hendrickson, 1994.

Simmons, I. G. *Changing the Face of the Earth*. Oxford: Blackwell, 1996.

Smil, Vaclav. *Feeding the World: A Challenge for the Twenty-First Century*. Cambridge: MIT Press, 2000.

Sneed, Cathrine. "The Garden Project: Creating Urban Communities." In *People, Land, and Community: Collected E. F. Schumacher Society Lectures,* edited by Hildegarde Hannum, 178–87. New Haven, Conn.: Yale University Press, 1997.

Stauber, John. "Food Fight Comes to America." *The Nation* 269.22, (Dec. 27, 1999), 18–19.

Stoll, Steven. *Larding the Lean Earth: Soil and Society in Nineteenth-Century America*. New York: Hill & Wang, 2002.

Stout, Jeffrey. *The Flight from Authority: Religion, Morality, and the Quest for Autonomy*. Notre Dame, Ind.: University of Notre Dame Press, 1981.

Strasser, Susan. *Waste and Want: A Social History of Trash*. New York: Henry Holt, 1999.

Suzuki, David. *The Sacred Balance: Rediscovering Our Place in Nature*. Vancouver, B.C.: Greystone, 1997.

Swimme, Brian and Thomas Berry. *The Universe Story: From the Primordial Flaring Forth to the Ecozoic Era—A Celebration of the Unfolding of the Cosmos*. San Francisco: Harper, 1992.

Traherne, Thomas. *Poems, Centuries, and Three Thanksgivings,* edited by Anne Ridler. Oxford: Oxford University Press, 1966.

Tucker, Mary Evelyn, and John A. Grim, eds. *Worldview and Ecology: Religion, Philosophy, and the Environment*. Maryknoll, N.Y.: Orbis, 1994.

Weil, Simone. *The Need for Roots: Prelude to a Declaration of Duties toward Mankind*. London: ARK, 1952.

Welker, Michael. *Creation and Reality*. Minneapolis, Minn.: Fortress, 1999.

White, Lynn, Jr. "The Historical Roots of Our Ecologic Crisis." *Science* 155/3767. (March 1967): 1203–7.

Williams, Raymond. *The Country and the City*. New York: Oxford University Press, 1973.

Williams, Rowan. *On Christian Theology*. Oxford: Blackwell, 2000.

———. *Resurrection: Interpreting the Easter Gospel*. Harrisburg, Pa.: Morehouse, 1982.

———. *The Truce of God*. New York: Pilgrim, 1983.

Wilson, Edward O. *The Future of Life*. New York: Knopf, 2002.

Wood, Ellen. *The Origin of Capitalism*. New York: Monthly Review Press, 1999.

Worster, Donald. *Nature's Economy: A History of Ecological Ideas*. Cambridge: Cambridge University Press, 1994.

Zencey, Eric. "The Rootless Professors." In *Rooted in the Land: Essays on Community and Place*, edited by William Vitek and Wes Jackson, 15–19. New Haven, Conn.: Yale University Press, 1996.

Zizioulas, John. "Preserving God's Creation: Three Lectures on Theology and Ecology." *King's Theological Review* 12.1 (1989): 1–5; 12.2 (1989): 41–45; 13.1 (1990): 1–5.

Zornberg, Avivah Gottlieb. *The Beginning of Desire: Reflections on Genesis*. New York: Doubleday, 1995.

This page intentionally left blank

Index