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Loving Nature

Christian Environmental Ethics

HOLMES ROLSTON III

LOVE IS SO CENTRAL to life that the single English word "love" opens up to become an umbrella. Love is not some distinct behavior with clearly recognized content and boundaries but a varied collection of many kinds of emotions that have in common only some relationship with a quite positive quality. Loves may be self-regarding, mate- and kin-regarding, other-regarding, genetically based, instinctive or acquired during a lifetime, conscious or subconscious, deliberated or spontaneous, proximate or ultimate, intrinsic or instrumental. They may be in-group or out-group, local or global, trans-generational, transformed by experience of the natural world or by cultural and historical ideals, in principle and in practice. These rationales must be mixed and weighted, blended and traded off with consistency and inconsistency. The result may be wandering search and muddling through. The further result can be complex caring amid an embarrassment of riches.

Love brings immediately to mind human interpersonal relationships, but even these are widely diverse and multi-factored. If one asks whether there are trans-human loves, the saints will reply that "God is love"; scientists may doubt that "love" is an appropriate category for describing animal behavior, and certainly, it should not be used for plant behavior. The saints may continue that the two great commandments are to love God and neighbor, but if we ask scientists whether we can or ought to love animals and plants, they may start to say yes and then hesitate in confusion whether scientists can speak on "ought" questions. Perhaps a dialogue about whether we ought to love nonhuman others will be illuminating even if this takes some wandering in this wilderness of rationales.

A recurring contemporary theme is that ethics should be "inclusive." Ethicists often have doubts whether ethics can be universal or even transcultural; they wonder whether ethical laws might be no more than socially constructed mores embedded in particular cultures. Ethics is never absolute—so we are told. Postmodernists know that nobody has a "grand narrative." Our ethics will have to be piecemeal, just as our loves are smorgasbord. But these same ethicists seem rather sure that we ought to widen the scope of moral concern to include those earlier outside the pale. Just how inclusive? Is there place for a grand narrative of love from self to family to community, tribe, nation, humanity, life, land, planet, God?

Love Gone Wild: Misplaced?

Love of the wild? A first concern is that there is no love in the wild. We might be foisting an inappropriate emotion onto a loveless nature. The central Christian virtue is love, agape, and this seems nowhere to be found or even remotely approached in wild nature, which is rather a nature "red in tooth and claw." So can Christians love a nature that is mostly tragic struggle? A central biblical commandment is not to kill, but in the wild, predators are condemned to killing. A divinely forbidden moral evil among humans is the vital essence of predatory life. So it may seem that were humans to love such a nature, love would have "gone wild," off the deep end.

Christian love is expressed through kindness, mercy, generosity, compassion, justice, patience, forgiveness. Those virtues do not seem either present in nature or relevant to deciding how to behave when encountering wild nature. The Bible encourages reconciliation, community, harmony, reciprocity, shalom. If such virtues are relevant when encountering nature, they will have to be much recast. Most of the sensibilities we struggle to nourish in civilized beings, much less in Christian believers, are not there in the wild. There is nothing kind, fair, or decent there. We may notice that humans too are predators (heterotrophs that must eat something else). Still, although humans biologically must eat and sacrifice other lives, humans morally ought not to act like beasts. To go wild is to lapse from civilization.

Any loving of wild nature is a loving of amoral creatures. The element of loving regardless of merit (often thought to be especially pivotal in agape) is not relevant here. A Christian may be called to love others who are sinners, devoid of merit, broken. But even where predators eat prey, these killer beasts are not sinning. Love as it reckons with moral failure is distinctive to interpersonal relations. In nature, one is not loving prodigal sons. There is no repaying of evil with good. Nor are we loving the worthless; to the contrary we are finding—well what? Nature red in tooth and claw? Or goodness in creation?

If we set aside sin and redemption, perhaps we could still use the familiar ethical concepts of justice and benevolence, which are also elements of loving others for their own sakes. Justice is, classically, "to each his due" with reference to persons; perhaps animals also have something due, differently from what is due persons but due according to their kind. "A righteous man has regard for the life of his beast." (Prov. 12:10). Oxen are to be rested on the Sabbath (Deut. 5:14; Exod. 20:10); the ox in the pit requires rescue, even at breach of the Sabbath (Luke 14:5). The ox that treads out the grain is not to be muzzled (Deut. 25:4), nor are ox and donkey to be yoked together (Deut. 22:10). Such concerns urge compassionate treatment of domestic animals but tell us nothing about wild nature.

There are biodiverse natural kinds; each may be worthy of respect, but we do not consider each of equal regard—whether microbes or elephants. Justice is often allied with a concept of rights. There are no "rights" in wild nature. Perhaps "rights" appear when humans interact with nature; that has some plausibility with the higher animals, more so with domestic animals in human care—the ox in the ditch. But ascribing rights to insects or forests seems implausible. Even if it were, we may recognize rights in those we do not love. Predatory killers? Good creatures? With rights? To whom justice is owed? Toward whom we ought to be kind? The better category might be intrinsic values found to be present in creation, to which we are drawn in respect and care.

Theologians such as Christopher Southgate have argued that Christians ought to become redeemers or healers of the evils in nature, moderating the suffering there.¹ Southgate hopes for a "pelican heaven," that is, God resurrecting the myriads of animal lives sacri-

ficed in the evolutionary process.² But if so, is there a frog heaven? A beetle heaven? Heaven for rattlesnakes?

Compassionate concern for redeeming the myriads of lives across evolutionary history, most of them cut short in early death, soon becomes incredible. If these lives are worthwhile, that must be through some kind of contribution to the ongoing process of life on Earth—not in some heaven to come. Pointless suffering in culture is a bad thing and ought to be removed where possible, but pain in wild nature is not entirely analogous to pain in an industrial, agricultural, and medically skilled culture. Pain in nature remains in the context of natural selection; it is pain instrumental to survival and to the integrity of species.

If there seems no space for agape, perhaps there is place for philia, friendship, the companionship of mutual togetherness. But again, this is not evidently relevant in wild nature. Perhaps some animals, notably dogs and horses, have been socialized enough that they do enjoy companionship with a human master. A dog is man's best friend. Aristotle suggests that animals can express philia (*NE* 1155a). St. Francis of Assisi calls the creatures great and small his brothers and sisters. Still, it does not seem that one has friendship with the wild animals, bears or wolves, much less those frogs or rattlesnakes.

If there seems no space for agape and little for philia, perhaps there is place for eros—a love that desires to possess, that needs others in self-fulfillment. Here much will depend on the meaning of "possess." If it means that the self is incomplete without the other and reaches out to achieve this completeness, then humans could well be incomplete without loving wild nature and we ought to reach out to embrace such nature—an embrace that may involve "letting be," leaving the creatures wild. Wild animals do not need our beneficence, they need us to leave space and let them alone. A common injunction in environmental ethics is that if, enjoying nature, the observer is so close that it affects the animal's behavior, that is too close. Back off.

Much Christian love of nature is of the This Is My Father's World vintage, a sentimental praise of what is lovely in nature: mountain grandeur, spring woodlands, wildflowers, clouds, colorful birds. What of the ugly in nature—predator ripping open prey, deer starving in winter? What of the violent—earthquakes, storms? The Psalmist celebrates the stormy wind fulfilling God's command (discussed later), but Jesus does once rebuke the sea and quiet the wind (Mark 4:39). Christian love toward other persons, of course, is nowhere restricted to the lovely or attractive. It is unbounded, indiscriminate. Jesus bids his disciples "love your enemies" and you will be "sons of the Most High; for God is kind to the ungrateful and selfish" (Luke 6:35). But such love seems also directed to reforming the selfish, the ungrateful. Nonscenic nature, however, is not loved in order to be redeemed.

Is there any sense of "love gone wild" that might seem plausible?

Promised Land, Garden Earth

Loving the wild might be out of bounds, but loving the land is a central theme of the Hebrew Bible. Biblical faith is from the start a landed faith. Israel is given their "promised land—a good and broad land, a land flowing with milk and honey" (Exod. 3:8; Deut. 27:3). The land is watched over by God's care: "The land which you are going over to possess is a land of hills and valleys, which drinks water by the rain from heaven, a land which the Lord your God cares for; the eyes of the Lord your God are always upon it, from the beginning of the year to the end of the year" (Deut. 11:11-12). The Lord owns the land—"The land is mine"—and bestows tenure and usufruct on Israel—their "promised land" (Lev. 25:23).

Walter Brueggemann takes "land as a prism for Biblical faith." "Land is a central, if not the central theme of biblical faith." "The land" is both geographical and symbolic. Yearning for a sense of place is a perennial human longing, of belonging to a community emplaced on landscape, and Israel's sense of living on a land given by God, of human placement on the earth, can yet speak to the landlessness, and lostness, of modern persons. All peoples need a sense of "my country" of their social communities in place on a sustaining landscape they possess in care and in love.

Land is *adamah*, the arable land on which plants can grow and animals can graze. Land is '*eretz*, the terrestrial earth, brought forth on the third day of creation. Israel's promised land is their corner of a larger garden Earth on which humankind (symbolized in Adam and Eve) was placed in primordial time. "The Lord God took the man and put him in the garden of Eden to till and keep it" (Gen. 2:15). By this account, humans are "Earth-gardeners." Humans domesticate earth. Earth is the scene of creative wildness, but such wildness also needs to be tamed, made into a garden, park, cultivated. Although paternalism is today rather suspect, the original context of "dominion" (in medieval Europe) was closely related to "dominus," the Latin for Father. Humans are Earth Fathers.

A favored model is that of stewardship, applicable to Israel and primordially applicable to humans on the whole Eden earth. Perhaps the concept of Earth-gardener needs also to be interpreted as Earth-trustee. A steward manages for the benefit of an owner; a trustee cares for that under his or her care. The Hebrews had three different kinds of rulers: prophets, priests, and kings—roles unavailable to nonhumans. Humans should speak for God in natural history, should reverence the sacred on Earth, and should rule creation in freedom and in love. Human "responsibility" on Earth is as good a word as human "dominion" over Earth, indeed a better one, for it captures what dominion originally meant in the famous Genesis charge to Adam and Eve, or what it ought to mean, a stewardship over something entrusted into one's care—the prolific Earth with its hordes of creatures brought forth and found to be very good (Gen. 1:31).

There is concern about proper cares from the first chapter of Genesis. God says to the couple: "Be fruitful and multiply, and fill the earth and subdue it; and have dominion" (Gen. 1:27-28). This seems to teach that the role of humans on Earth is to conquer it. That is what humans should care about: ruling over Earth. Famously, historian Lynn White laid much of the blame for the ecological crisis on the Christian belief that humans had dominion over nature, an attack published in *Science.* God's command for humans to "have dominion" flowered in medieval Europe, licensed the exploitation of nature, and produced science and technology to satisfy human cares, and this has resulted in an ecological crisis. So the Bible launches an arrogantly misplaced care on Earth.

Theologians have replied that appropriate dominion requires stewardship and care.⁵ True, there is a sense of dominion that means "Earth-tyrant," humans subduing nature in a repressive sense, as a conqueror does his enemy. But there are more positive senses of dominion. Even within the military metaphor, a general has command over his own soldiers, about whom presumably he cares. Such an "Earth-commander" finds the interests of the commander and the commanded inseparably entwined. There is a salutary view of the just king, to be contrasted with its opposite, the king who rules "with force and harshness" (Ps. 72; Ezek. 34:4).

Yes, Israel was a landed faith, some Christian respondents will concede. But that was Old Testament, not New Testament. Christianity is not a landed faith. Indeed, Christianity is not a worldly faith. Does not Jesus say, "My kingship is not of this world" (John 18:36)? Per-

haps there is no pelican heaven, but Jesus did teach that he is taking his disciples to heaven— his father's house with many mansions. Jesus was taken up into heaven, and at death, we leave Earth and go there to be with him.

Jesus did say, "My kingship is not of this world." But understanding context is essential. Teaching as he did in the Imperial Roman world, his reference in "this" is to the fallen world of the culture he came to redeem, to false trust in politics and economics, in armies and kings. In the landscape surrounding him, Jesus found ample evidence of the presence of God. The birds of the air neither sow nor reap yet are fed by the heavenly Father, who notices the sparrows that fall. Not even Solomon is arrayed with the glory of the lilies, though the grass of the field, today alive, perishes tomorrow (Matt. 6). There is in every seed and root a promise. Sowers sow, the seed grows secretly, and sowers return to reap their harvests. God sends rain on the just and unjust. Jesus teaches that the power organically manifest in the wildflowers of the field is continuous with the power spiritually manifest in the kingdom he announces. There is an ontological bond between nature and spirit. This also seems to be connecting the good land, the rural landscape, with deeper natural powers, present also in wild nature.

Creation: Let There Be: ... Swarms!

If we are trying to find our bearings toward wild nature, and also to get the most inclusive perspective, perhaps the best place to start is to go back to the biblical beginning: to the Genesis creation, now asking not simply if this creation was a garden Earth for human dominion but wondering what to make of its wildness. Was this garden Earth wild? Is it only there for humans to tame and domesticate?

Right at the beginning of the Bible, right at the creation, God is interested in sun, moon, stars, birds, fish, animals—before humans are even on Earth. "In the beginning when God created the heavens and the earth, the earth was a formless void and darkness covered the face of the deep, while a wind from God swept over the face of the waters" (Gen. 1:1 [NRSV]). This wind of God inspires the animated Earth, and "the earth produces of itself" (Mark 4:28). The days of creation are a series of divine imperatives, not so much fiats as commissions: "Let the earth put forth vegetation. ... Let the earth bring forth living things according to their kinds" (Gen. 1:11, 24). Biblical faith has the conviction that species originate in God's wish. God ordered earth to "bring forth swarms of living creatures" (Gen. 1:20). "Swarms" is the Hebrew word for biodiversity! Adam's first job was, we might say, a taxonomy project, naming the animals. Let the earth bring forth biodiversity.

Yes, the apex of the creation is man and woman, made of mud, made in the image of God, incarnate and set on their garden Earth. Humans prove to be the great challenge to God, the contentious creature, but the world is habitat not only for humans but for the myriads of creatures—from "great sea monsters" to "birds," "beasts," and "creeping things"— which, repeatedly, God finds "good" and bids to "be fruitful and multiply and fill" the waters, the earth, the skies (Gen. 1:20-22). God enjoys the biodiversity. That includes the creepy things, and here we might recall the biologist J. B. S. Haldane's famous remark, when asked by theologians what he had learned about the Creator from studying creation in biology, that God had "an inordinate fondness for beetles."

The fauna is included within the Hebrew covenant. The covenant renewed in the days of Noah—after a natural disaster with divine provision for saving the wild creatures—is quite specific about this:

"Behold I establish my covenant with you and your descendants after you, and with every living creature that is with you, the birds, the cattle, and every beast of the earth with you." . . .

God said, "This is the sign of the covenant which I make between me and you and every living creature that is with you, for all future generations: I set my bow in the cloud and it shall be a sign of the covenant between me and the earth." (Gen. 9:5, 12-13)

"Keep them alive with you" (Gen. 6:19). That certainly sounds like God loves wild nature. To use modern terms, the covenant was both ecumenical and ecological. In theocratic Israel, animals belonged to God, as indeed did all property. "For every beast of the forest is mine, the cattle on a thousand hills. I know all the birds of the air, and all that moves in the field is mine" (Ps. 50:10-11). That includes quite a menagerie. In wilderness desert are "fiery serpents and scorpions" (Deut. 8:15; Num. 21:6); "jackals," "hyenas," "owls," "kites," "ravens," "porcupines," "ostriches," "wild goats (satyrs)," "wild beasts" (Isa. 34). Nor does God forget the flora: "The trees of the Lord are watered abundantly; the cedars of Lebanon which he planted" (Ps. 104:16).

Absent humans, God is there, positively blessing such lands:

Who has cleft a channel for the torrents of rain, and a way for the thunderbolt, to bring rain on a land where no man is, on the desert in which there is no man; to satisfy the waste and desolate land, and to make the ground put forth grass? (Job 38:25-27)

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! Beasts and all cattle, creeping things and flying birds! (Ps. 148:8-9)

Thou crownest the year with thy bounty; the tracks of thy chariot drip with fatness. The pastures of the wilderness drip, the hills gird themselves with joy, the meadows clothe themselves with flocks, the valleys deck themselves with grain, they shout and sing for joy. (Ps. 65:11-13)

God not only blesses humans; God blesses the desolate wastes. These fierce landscapes, sometimes supposed to be ungodly places, are godly after all. God does not want all these places subdued and cultivated; rather, God delights in places with no people.

Although wilderness is a locale of human wandering, searching, self-discovery, encounter with divine presence (to which we return later), taken for what it is in itself before using it to symbolize human hopes and disappointments, wildness in the Bible is never a bad thing. For example, under God, wild asses, eagles, goats, lions, badgers (conies) are born free.

Who has let the wild ass go free? Who has loosed the bonds of the swift ass, to whom I have given the steppe for his home, and the salt land for his dwelling place? He scorns the tumult of the city; he hears not the shouts of the driver. He ranges the mountain as his pasture, and he searches after every green thing. (Job 39:5-8)

Is it by your wisdom that the hawk soars, and spreads his wings toward the south? Is it at your command that the eagle mounts up and makes his nest on high? On the rock he dwells and makes his home in the fastness of the rocky crag. Thence he spies out the prey;

his eyes behold it afar. His young ones suck up blood; and where the slain are, there is he. . . . Shall a faultfinder contend with the Almighty? He who argues with God, let him answer it. (Job 39:26-40.2)

The high mountains are for the wild goats; the rocks are a refuge for the badgers. . . . The young lions roar for their prey, seeking their food from God. . . . O Lord, how manifold are thy works! In wisdom hast thou made them all; the earth is full of thy creatures. (Ps. 104:18-24)

This celebrates an ecology, not simply a promised land.

Those roaring lions and blood-soaked eagles are made in divine wisdom. They kill seeking food from God. The nonhuman creation is wild, outside the hand of man, outside culture. But it is not outside both divine and biological order. The Creator's love for these creatures does not conform to human purposes. That God is personal as revealed in interhuman cultural relations does not mean that the natural relationship of God to lions and eagles is personal, nor should humans treat wild animals as persons. They are to be treated with appropriate respect for their wildness. The creatures are the proper object for divine love, and accordingly for human love, caring about them (saving the lions and eagles). And they have to be cared about according to their kinds, which exemplify a spectrum of wild cares (lions caring for their cubs and killing zebras to feed them, eagles caring for their eaglets and killing ground squirrels to feed them). Each form of life has its proper integrity, defended by its successful caring (its adapted fit), and we humans come to respect, to love that creaturely integrity. The meaning of the words "good" and "divine" is not the same in nature and in culture. Nor is the character of the appropriate "love."

Wilderness

Concern for wilderness preservation is sometimes taken as love gone quite wild, new age spirituality that is naive about real nature red in tooth and claw. Postmodernists may claim that the whole idea of "wilderness" is a recent social construction, mostly by upscale urbanites who wish to recreate there. But both the idea of wilderness and love for it have a venerable history, including ancient biblical history.

Words translated as "wilderness" occur nearly three hundred times in the Bible. A formative Hebrew memory is the years of "wandering in the wilderness," mixing experience of wild landscape, of searching for a promised land, and of encounter with God. The Pentateuch wandering is in the *midbar*, uninhabited land where humans are nomads. This common Hebrew word refers often to a wild field, where domestic animals may be grazed and wild animals live, in contrast to cultivated land, hence, sometimes "the pastures of the wilderness" (Joel 1:19-20). Another word is *arabah*, steppe, also translated as desert (Gen. 36:24). "The land that was desolate (*midbar*) and impassable shall be glad, and the wilderness (*arabah*) shall rejoice" (Isa. 35:1). Land that lies waste is *chorbah*; land without water is *yeshimon*.

Whether the desert dry valleys or the more moist steppe, wilderness is a locale for intense experiences—of stark need for food and water (manna and quails), of isolation (Elijah and the still small voice), of danger and divine deliverance (Hagar and Ishmael), of renewal, of encounter with God (Moses, the burning bush, the revelation of the divine name, Mount Sinai). There is a psychology as well as a geography of wilderness. There is a theology gained in the wilderness.⁸

Linguists here will make the point that the Hebrews did not have an exact equivalent of the contemporary English word "wilderness." Those concerned about indeterminacy of translation really ought never ask whether freighted terms from a modern mind-set have exact parallels in ancient languages ("rights," "love," "freedom," "heavens," "hell," "resurrection," "body," "spirit," "soul," "nature"). Ecologists may add that the ancient Hebrews did not know the planetary diversity of wilderness ecosystems, for example, jungles, montane forests, tundra. Such misgivings aside, the Hebrews evidently knew the experience of confronting the wild, perhaps as well or better than any contemporary linguist or ecologist, farmer or wilderness backpacker.

The kind of wilderness the Hebrews did know often seems to have a negative character, especially contrasted with a promised land flowing with milk and honey. But God can be found there, and the fierce character of the wild landscape also seems to intensify the divine encounter. In the wilderness, the people are tempted to be contentious, murmuring, unruly, and ignorant of the promises and power of God. They wander there until they have learned the lessons of the hardships of the wilderness (Deut. 8:3). The New Testament word most often translated as wilderness is eremos (or eremia), an isolated place. (This is also the Greek word most often used in the Septuagint to translate the Hebrew words we examined earlier.) The wilderness figures at critical junctures in the life of Jesus.9 At the opening of Mark's Gospel, John the Baptist, "the voice of one crying in the wilderness," appears, with echoes of Israel's formative Exodus encounters and Moses's crying for God in the Sinai wilderness (Mark 1:3; cf. Isa. 40:3). Jesus is baptized by John and then is driven by the Spirit into the wilderness for forty days. The Devil is there, but so is the Spirit. Jesus is tempted to be the wrong kind of messiah, and the Spirit prevails. Jesus is at once with the beasts and ministered to by angels (Mark 1:12). In his experience is found again a spiritual struggle for self-discovery in an environment of wild forces, threat and grace, which, seen in its depths, is encounter with the divine presence.

Jesus is soon found returning to the wilderness (indeed again in Mark's opening chapter): "A great while before day, he rose and went out to a lonely place, and there he prayed" (Mark 1:35; cf. Mark 6:31-32). This records a search for solitude, but the natural environment is the needed ambiance. Peter, James, and John see Jesus transfigured "upon a high mountain apart by themselves" (Mark 9:2).

So wilderness is both a place for persons to encounter God and for persons to encounter a God larger than themselves, larger than human concerns. There is a discovering of God for us complementary with experience of God for wilderness. Just as Job was pointed out of his human troubles toward the wild Palestinian landscape, it is a useful, saving corrective to a simplistic "Jesus loves me this I know," "God is on my side" theology to discover vast ranges of creation that have nothing to do with satisfying our personal desires. What the wildlands do "for us," if we must phrase it that way, is teach that God is not "for us" humans alone. There, man is not the measure of things. God is "for" these wild creatures too. To be self- actualizing under God is a good thing for humans, and it is a good thing, mutatis mutandis, for coyotes and columbines. That is the blessing of divinity in them.

That the fair land of Palestine, with its cities and fields, should again become desert and wilderness is a frequent prophetic threat. The collapse of cultural life in the promised land is indeed a tragedy, and in that sense, a relapse to the wild is sometimes used in the Bible as a symbol for judgment on an aborted, once-promising culture. Jackals roam the land, destroyed in punishment for sin (Isa. 34). Such wildness is a tragedy only in foil to failed culture. There

are frequent passages in which natural events—rain, drought, storm, flourishing harvests— are interpreted as means for divine blessing or judgment.¹⁰

Certain biblical passages suggest that the natural world is implicated in the fall, resulting from human sin (Gen. 3:18, 6:7, 11-13). But these passages are not to be taken to suggest that existing wildlands are fallen, nor that wild nature needs to be redeemed. A peaceable natural kingdom, where the lion lies down with the lamb, is sometimes used as the symbol of fulfillment in the promised land. This too is a cultural metaphor and cannot be interpreted in censure of natural history.

The Genesis of Caring

We have worried that Christian love might stand in stark opposition to anything found in loveless wild nature. Evolutionary history is driven, rather, by self-interest. The framework one expects in contemporary biology might be termed the evolution of "selfishness." That could be a half-truth that goes wrong if taken for the whole. If we are searching for a more comprehensive picture, a complementary way to think of evolutionary natural history is to view it as the generation of "caring"—elaborating, diversifying, conserving, enriching these capacities.

An immediate objection is that the word "caring" is too anthropopathic. Selfishness is, of course, one form of the more inclusive concept "caring" and hardly less anthropopathic. Whatever the vocabulary, for all living beings some things "make a difference"; they do not survive unless they attend to these. There is caring wherever there is "agency," wherever there is "motivation," where there is "locomotion," perhaps even where there are "motors." In more philosophical vocabulary, there is caring wherever values are at stake.

At least after sentience arises, neural organisms evidently "care." Animals hunt and howl, find shelter, seek out their habitats and mates, feed their young, flee from threats, grow hungry, thirsty, hot, tired, excited, sleepy. They suffer injury and lick their wounds. Call these "interests" or "preferences" or whatever. If "caring" is too loaded a term, then call these animal "concerns." Staying alive requires "self-defense," perhaps a more accurately descriptive word for nonmoral animal and plants than the morally laden "selfish." "Fear" too is a form of caring. Living things have "needs." The biological processes must be "pro-life." If you dislike the connotations of "caring," there are dozens of good biological terms that spiral around it.

When humans arrive, "caring" is present by any conceivable standard. So once there was no caring; now "caring" in various forms is dominant in earthen biology. Asking what humans and nonhumans do care about, and how they got to be that way, invites the question, for any who have choices, what ought they to care about? We might discover that among our rich cares, we ought to care about conserving these processes of our genesis on Earth.

An animal is a "going concern." "Skin" is a sign of caring. Looking at "bark" on trees, we might say only that life has to be "protected." But throughout natural history there has emerged a somatic self, with know-how to protect it. If this isn't yet "caring," it is on the threshold edge of it. Caring gets complicated, since selves are implicated with other selves. They depend on each other—on mates or what they eat. Organisms make a living in a niche; they get networked and fitted into trophic pyramids, into feed loops and feedback loops. Caring is an organism-in-environment dialectic.

Self-defense requires adapted fit; living things are webbed together in ecosystems and hence their cares. There will be "relations"—in today's fashionable term, "networking." Caring

is only self-contained up to a point; after that, it is caring "about" these contacts and processes with which one is networked. The individual is forced to "adapted fit." This requires caring about others, for better or worse, if only a predator caring to catch and eat prey, the prey caring to escape, both caring for their young. Caring will be matrixed and require differential concerns.

In this larger horizon of caring, living things must reproduce. In fact, by Darwinian accounts, that is their priority care, else they go extinct. The Genesis God commands the same thing, as we earlier noticed: "Let the earth bring forth living things according to their kinds" (Gen. 1:24). "Be fruitful and multiply" (Gen. 1:20-22). So behaviors are selected that attend proportionately to the whole family, what biologists call "kin selection." Biologists may still insist that the individual acts "selfishly" in his or her own interests, but "selfish" is now being stretched to cover benefits gained by "caring about" the extended lines of kin and kind, lines that fan out eventually to all conspecifics (half of which are also potential mates, which sometimes also need to be cared about).

So it turns out that any individual immediate life is not exclusively individually owned but is scattered about in the family and that the individual competently defends its so-called self wherever and to the extent that this is manifested in the whole gene pool. This means that values the organism cares about can be held individually only as they are more inclusively distributed. Animals can care about others of their kind (as well as about mates, prey, and offspring). Animals are often social; elk form herds, birds of a feather flock together. This can be for their self-interest; each is safer in the company of others. But there may be more.

Frans de Waal complains that biologists regularly ascribe negative descriptions to primates; they are aggressive, or have enemies, or are selfish; they even cheat and are greedy. Such terms appear in scientific papers as acceptable terminology. But there is among scientists, de Waal complains, a simultaneous refusal to ascribe various positive traits to them, to say that they cooperate, or have friends or companions, much less that they share, or care for each other, or show sympathy. Any such language is unscientific and will be edited out of the journals. Biologists go to great lengths to argue away all evidence of animal altruism, interpreting it as disguised selfishness, or kin selection, or nepotism, and so on.

But de Waal, in his studies of primate behavior, finds that they display an enormous spectrum of emotions in different kinds of relationships. Scientists ought to reflect this fact in a broad array of terms. If, for example, animals can have enemies, they can have friends. If they can hurt, they can help. The problem, he suspects, is that the scientists' socially constructed filter, ultra-Darwinism, prevents their seeing and properly interpreting behavior that is counterevidence to their theory.¹²

Reproduction is typically assumed to be a need of individuals, but since any particular individual can flourish somatically without reproducing at all, indeed may be put through duress and risk or spend much energy reproducing, by another logic we can interpret reproduction as the species keeping up its own kind by reenacting itself again and again. In this sense, a female grizzly bear does not bear cubs to be healthy herself, any more than a woman needs children to be healthy. Rather, her cubs are *Ursus arctos*, threatened by nonbeing, recreating the species by continuous performance. A female animal does not have mammary glands nor a male animal testicles because the function of these is to preserve the animal's own life; these organs are defending the line of life bigger than the somatic individual. The individuals are genetically impelled to sacrifice themselves in the interests of reproducing their kind. What they "care about" is something dynamic to the specific form of life; they are selected to attend to the appropriate survival unit.

Though selection operates on individuals, since it is always an individual that copes, selection is for the kind of coping that succeeds in reproducing the kind, distributing the information coded in the gene more widely. The organism contributes to the next generation all that it has to contribute, what it has achieved that is of value about how to live its form of life well. Survival is of the better sender of whatever is of genetic value in self into others. Genes get "spread" around or "distributed" by organisms not simply for their "selves" but to spread what they know to other selves. Genes are selected for what they can contribute to the next generation. To use a metaphor deliberately provocative and contrary to the usual "selfish genes," genes get "shared." If doubters wonder whether this is yet to be called "caring," no doubt it is moving in that direction.

With the evolution of humans, there emerges the most complex caring on Earth. That arises, in part, from the complicated concerns that humans have and their genius for devising ways for pursuing these concerns. Humans care about family, tribe, nation, careers, ideational causes, such as biological science, French literature, or the Christian faith. At basic levels, this is still self-interest, though elaborately networked. But humans do reach some sense of shared common good, of community. Such wider vision requires even more complexity, a complex brain that can evaluate others not only in terms of helps and hurts but also with concern for their health and integrity. This includes knowing a human community, in which mutual reciprocity is possible and treasured, and knowing an ecological community, in which humans can realize and treasure the life-supporting web work. Humans alone on the planet can take a transcending overview of the whole—and care for life on Earth. To that more inclusive caring we next turn.

Person to Planet: Expanding Human Loves

(1) Self-love and Pleistocene appetites. By some biologists' accounts, human capacities for caring are residual from the geological epoch during which we became human. Our appetites are driven by Pleistocene genes. One might first think that since humans presumably evolved as good adapted fits, humans will by nature love the environments in which they evolved. Biologists may call this "biophilia," an innate, genetically based disposition to love animals, plants, landscapes with trees, open spaces, running water. Such biophilia might be a positive Pleistocene relic, but other genetic legacies are problematic.

Any residual biophilia is weak before our much more powerful desires for self-satisfaction and security. People prefer culturally modified environments. The really natural thing for humans to do (our genetic disposition) is to build a culture differentiating (alienating) ourselves from nature. Human agriculture, business, industry, development consumes most of our lives, and the search for pleasant experiences in natural surroundings is only avocational recreation. True, people love a house with a view, with a garden, but they do like a house, a big one, and lots of money (milk and honey) in the bank.

Further—the biologists continue—our evolutionary past did not give us many biological controls on our desires for goods that were then in short supply. We love sweets and fats, of which, in Pleistocene times, humans could seldom get enough. But now we overeat and grow fat. There are few biological controls on our desires to amass goods, to consume; for most people, it has always been a struggle to get enough (indeed for most it still is). When we can consume, we love it and overconsume. Consumer capitalism transmutes a once-healthy pattern of desires into avarice. With escalating opportunities for consumption, driven by markets in search of profits, we need more self-discipline than comes naturally.

Our self-interested tendencies overshoot; we love ourselves (egoism) and our families (kin altruism) and find it difficult to know when and how to say enough.

What we love to do is to increase our security, fencing ourselves off from threatening nature. The Israelites longed to get out of the wilderness into a promised land that could drip milk and honey into their mouths—more and more milk and honey. For all of human history, humans have been pushing back limits. Humans have more genius at this than any other species. Especially in the West, we have lived with a deep-seated belief that life will get better, that one should hope for abundance and work toward obtaining it. Economists call such behavior "rational"; humans will maximize their capacity to exploit their resources. Moral persons will also maximize human satisfactions, at least those that support the good life, which must include not only food, clothing, and shelter but an abundance, more and more goods and services that people want. Such growth is always desirable. That "caring" is of first priority.

Perhaps humans will come to desire sustainable growth, for themselves and their children, extended to tribe and nation. But this Pleistocene legacy leaves humans poorly equipped to deal with the sorts of global-level problems we now face. The classical institutions—family, village, tribe, nation, agriculture, industry, law, medicine, even school and church—have shorter horizons. Far-off descendants and distant races do not have much "biological hold" on us. Across the era of human evolution, little in our behavior affected those remote from us in time or in space, and natural selection shaped only our conduct toward those closer. Global threats require us to act in massive concert of which we are incapable. If so, humans may bear within themselves the seeds of their own destruction. More bluntly, more scientifically put: our genes promote levels and kinds of preferences, human loves, that once enabled our adaptive fit but will in the next millennium prove maladaptive and destroy us.

(2) Communitarian loves: my tribe, my country. Human love can expand to communities in which the self participates. Humans are attracted to appeals to a better life, to quality of life, and they want this not only for themselves but for kindred, not only immediate kin but for future generations. We can use an appeal to still more enlightened self-interest, or perhaps better, to a more inclusive and comprehensive concept of human welfare. Humans have long loved their communities and their countrysides: "America: The Beautiful." That expands the ambience of love from self past family to one's people, one's tradition, one's place. That will support sustainable development, an environmental ethic.

This is quite congenial to a bioregional ecology. "That land is a community is the basic concept of ecology, but that land is to be loved and respected is an extension of ethics." Abraham and Lot, and later Jacob and Esau, were already caring for their lands, dispersing their flocks and herds, because "the land could not support both of them dwelling together" (Gen. 13:2-13, 36:6-8). They surveyed the pastures "from the Negeb as far as Bethel" and on to where Abraham's tent was pitched "between Bethel and Ai," on which these nomads realized they were trying to keep too many sheep and goats (Gen. 13.3). The Hebrews worried about livestock trampling and polluting riparian zones (Gen. 29:1-8; Ezek. 34:17-19). They knew to let land lie fallow, on Sabbath. Residents on landscapes live immersed in their native range ecology. They grow to love and respect their landscapes, their promised lands.

Communitarian love is quite congenial not only to ecology but also to evolutionary biology. Well-adapted genetic drives are labile, flexible, especially in vertebrates with well-developed brains. Group selection has been returning to the biological scene. Loyalty to tribe conveys survival value on all, on average, so that it is in any individual's probable advantage to cooperate, even though he or she has some risk of losing (being killed in battle, for

instance). So natural selection has favored those genes that caused the early humans to be altruistic toward members of their own tribe. Humans still have those Pleistocene genes innate today.

That makes patriots who love their country, both tribe and lands that the tribe possesses. So the Israelites loving their promised land makes excellent sense from a Darwinian point of view. Elliott Sober and David S. Wilson find both self-interest and altruism as we do "unto others." Within the community, there are the patriots who love their country, the Rotarians building their public spirit, even the Presbyterians loving both self and neighbors. Wilson particularly studied the Calvinists in Geneva.¹⁵

But as before, such love, admirable as a half-truth, becomes dangerous if taken for the whole. Equally, Sober and Wilson insist there is no "universal benevolence": "Group selection does provide a setting in which helping behavior directed at members of one's own group can evolve; however, it equally provides a context in which hurting individuals in other groups can be selectively advantageous. Group selection favors within-group niceness and between- group nastiness. Group selection does not abandon the idea of competition that forms the core of the theory of natural selection." Darwinian accounts of any behavior need differential survival advantage—a behavior leaving more of one's genes in the next generation than competitors leave. If that vanishes, Darwin is out of business. So we might get human loves expanded to my tribe and my country, agreeably to both biology and Hebrew monotheism. But can human love expand further?

(3) Communitarian loves: cosmopolitan and global. In religious faith, ideas become widely shared. The transmission process is neural, not genetic. One has to be indoctrinated into a religion. Biologically speaking, the problem now is that the new adherents soon cease to have any genetic relationship to the proselytizers. There are more Christians in Europe or North America than in the Middle East, and more Christians in Asia, or Latin America, or Africa than in Europe. Yes, the Calvinist tribe in Geneva prospered, but today there are more Presbyterians in Korea than in any other nation in the world, and those Korean Presbyterians have themselves sent out forty thousand missionaries to over a hundred countries.

Disciples are moved to act not just by their genetic programming. Ideas shared become ideals shared. Disciples teach kindness by word and example and preach about the Good Samaritan and the God of love. When such a religion has been universally shared, it generates concern for other humans near and far, relating to them with justice, love, and respect. The commitment that one has to make transcends one's genetics. Any account of in-group altruism to achieve out-group competitive success is powerless to explain the universalism in the major world faiths. But the major world faiths have escaped tribalism, not only in ideal but also in the real proportionately to their success. The widely shared faith no longer provides any differential survival advantage because it is equally advantageous to all.

This is somewhat like the discovery of fire. That discovery provides survival advantage to those who discover it—for the first winter. By the second or third winter, the competing tribes, who have been peeping through the bushes, know how to build fire too. Maybe the Jews first learned about the benefits of being a Good Samaritan. But today it is a global ideal—at least for disciples in the several faiths who practice it. "You have heard that it was said, 'You shall love your neighbor and hate your enemy.' But I say to you, Love your enemies" (Matt. 5:43). Monotheism is capable of a wider vision. "Go therefore and make disciples of all nations" (Matt. 28:19).

From evolutionary theory, also more inclusively, one can get some reciprocity even with the otherwise competing out-groups. This kind of reciprocity forms the basis of world

trade, both cooperative and competitive. Christianity is not adverse to being a good neighbor or being fair and reciprocating in international business. But in the end, when the question is asked, "Who is my neighbor?" the answer comes in terms of who is in need that I can help, with my time, or money, or religion, not who is likely to reciprocate with net gain to my genetic line. There is no longer any differential survival benefit, because all these out-group converts are also winners. There is no longer that competitive edge that Sober and Wilson required at the core of natural selection.

Universal and cosmopolitan convictions crisscross races, nations, and centuries and involve some logic of the mind that is tracking what is trans-genetically right, what is more inclusively loving. Genetic success is necessary but not sufficient to explain this universalism. It makes more sense to say that such religions were discovering what is trans-tribally, transculturally valuable. Something has emerged for which biology is not giving us a convincing account. If some missionaries say that "God commands this altruism," that this kind of suffering love is divine, there seems no reason yet forthcoming from the biologists to think otherwise. "Do to others as you would have them do to you" helps us to cope because here is insight not just for the tribe, not just for the nation, but for the world.

(4) Inclusive environmental altruism. The most inclusive of human loves can become cosmopolitan, global, trans-genetic—especially if such expansion is funded by religious conviction. But that might not yet be inclusive enough if it remains devoted to one species. True, Homo *sapiens* is the aristocratic species on Earth. Ethics to date has struggled with impressive, if also halting, success in an effort to evolve altruism in fit proportion to egoism. That has yielded a sense of ethical priority, often ethical exclusivism, toward humans. Humans are on top; only humans count. Love your (human) neighbors, as you do yourself.

From a narrow, organismic perspective that can seem right, since in the prehuman world, everything is making a resource of everything else, so far as it can. Culture is impossible except as built on value capture from nature, assimilating and transforming biotic resources, such as energy, nutrients, and structural materials that were formed by other organisms for their own needs. Every other living natural kind defends only its own kind; humans behave that way too, maximizing their own kind—and justifying (defending) their position by claiming to be the central species with and of moral concern. Always prefer humans.

From a wider, ecosystem perspective, such a rationale is oblivious to the way that the system has hitherto contained myriads of species in interdependent tension and harmony, with nothing maximizing itself except by optimizing a situated environmental fitness. From this more comprehensive perspective, persons operating with the prevailing humanistic focus are blind to most of their neighbors. All the rest of the products of the evolutionary ecosystem (or, if you prefer, of God's creation) are counted as resources.

Look at how this plays out with World Health Organization policy: "Priority given to human health raises an ethical dilemma if 'health for all' conflicts with protecting the environment. . . . Priority to ensuring human survival is taken as a first-order principle. Respect for nature and control of environmental degradation is a second-order principle, which must be observed unless it conflicts with the first-order principle of meeting survival needs." That seems quite humane. But "second-order" will typically cash out as "never." In India, this policy certainly means no tigers. In Africa, it means no rhinos. Both will only remain in Western zoos. To preserve, even to conserve, is going to mean to reserve. If there are biodiversity reserves, with humans on-site or nearby, humans must limit their activities. Else there will always be some hungry persons who would exploit these reserves. The continued existence in the wild of most of Earth's charismatic endangered species — the felines, canines, rhinos,

elephants, primates—depends on some six hundred major reserves for wildlife in some eighty countries. ¹⁸ If these reserves are not policed, they will not be there. And they will not be policed unless some persons in power think that at times saving nature is more important than using the land to feed people directly. Will this include Christians in India and Africa?

Human (humane) ethicists who argue that humans are always first-order only halfway emerge from their environment. They are right about the human excellences. But they defend only their own kind, and in this respect, even when they become cosmopolitan, they do not emerge, they just merge and play by the rules of natural selection; they become moral agents in encounter with other humans, but they do not become moral agents in encounter with nature. Trying to defend the high human value, they act like beasts—looking out for themselves and their kind. In this aggressive attempt, these humane ethicists, Christian or secular, stunt humanity because they do not know genuine human transcendence—an overview caring for the others.

Plainly, humans have expanded their territories all over the globe. But what is an appropriate lifestyle for residing in this globally occupied territory? Always to put themselves first? Nothing more? Rather than using mind and morals, hand and brain, as survival tools for defending the human form of life, the better answer is when mind forms an intelligible view of the whole and defends ideals of life in all their forms. Humans are cognate with the humus, made of dust (as Genesis 2:7 teaches, *adam* from *adamah*), yet unique and excellent in their aristocratic capacity to view the world they inhabit. They rise up from the earth and look over their world (Greek: *anthropos*, to rise up, look up). Persons have their excellences, and one way they excel is in this capacity for overview. They are made "in the image of God" (as Genesis also teaches).

The novelty in the human emergence is class altruism emerging to coexist with class self-interest, sentiments directed not simply at one's own species but at other species fitted into biological communities. Humans ought to think from an ecological analogue of what ethicists have called the original position, a global position that sees Earth as an evolutionary ecosystem. In occupying this position, humans play roles in the storied achievements on Earth. Interhuman ethics, often inspired by Christian compassion, has spent the last two millennia waking up to human dignity. As we expand ethics in this new millennium, a Christian environmental ethics invites awakening to the greater story of which humans are a consummate part.

This is what human dominion potentially meant in Genesis, or should have meant. This is what living in a God-given land of promise offers for a land ethic. This takes humans past resource use to residence and constrains their policy, economics, science, technology. Being a "resident" is something more than maximum exploitation of one's environment, though it requires resourceful use. Being a "resident" is more than being a "citizen." Such residing takes us past management questions to moral questions. Humans can get "let in on" more value than any other kind of life. They can share the values of others and in this way be altruists. Humans are of capstone value because they are capstone evaluators.

Seen this way, in earlier eras, humans needed an exodus out of nature into culture, but now they want to be liberated out of egoism, out of humanism, into a transcending overview that sees Earth as a blessed land, exuberant with life, a land filled with integrity, beauty, dynamic achievement, and storied history. This is exodus within a promised land.

Without denying that there is value superiority within humans, a Christian environmental ethics says more. It is not just our capacity to say I, to actualize a self, but our capacity to see others, to oversee a world, that distinguishes humans. Environmental ethics calls for seeing nonhumans, for seeing the biosphere, the Earth, ecosystem communities, fauna, flora, natural kinds that cannot say "I" but in which there is formed integrity, objective value independent of subjective value. Environmental ethics advances beyond humanistic ethics in that it can treat as ends others besides humans. Environmental ethicists see further morally. They can see *without* as well as *within*. They really see the neighbors Jesus commanded us to love, the sparrows that God notices fall, the lilies of the field so splendidly arrayed. In this sense, the capacity for thoughtful residence, for experiencing community with nonhuman others, is as requisite for ethics as any capacity for human self-actualizing. That very self-actualizing in this ethic seeks human self-transcending.

It is commendable to be altruists humanistically speaking. But a really exciting difference between humans and nonhumans is that while animals and plants can count (defend) only their own lives, with their offspring and kind, humans can count (defend) life and even nonlife with vision of greater scope. Humans can be genuine altruists; this begins when they recognize the claims of other humans, whether or not such claims are compatible with their own self-interest. But the evolution of altruism is not complete until humans can recognize the claims of nonhumans—ecosystems, species, landscapes. In that sense, environmental ethics is the most altruistic form of ethics. It really loves others. It transforms residual egos into resident altruists. This ultimate altruism is, or ought to be, the human genius. In this sense, the last becomes the first; this late-coming species with a latter-day ethics is the first to see the story that is taking place. This late species takes a leading role. If this is not *agape*, it is *altruism*.

(5) Promised land, planet with promise. Both Judaism and Christianity, emerging from Judaism, became more universalist and less land-based. In the Diaspora, the Jews were a people without a country, and though this was widely regarded as tragic, Judaism remains a faith that transcends residence in Palestine. Christianity has often been regarded as more spiritual and less material, more universal and less provincial than its parental Judaism. Both these movements out of a geographically particular promised land, which are sometimes thought to make the land irrelevant to faith, can as well make every people residents of a divinely given landscape. In that sense, these faiths may have been mistaken when they became uprooted from encounters with the land. Rather, Christians and Jews ought to have re-rooted in whatever the landscapes of their residence. In this sense, the Jewish vision of a promised land is inclusive, not exclusive.

The American landscape with its purple mountain majesties, fruited plains, fauna and flora from sea to shining sea is divinely created, no less than Canaan from the Negev to Mount Hermon. John Muir, recalling the Psalmist, sings, "The forests of America, however slighted by man, must have been a great delight to God; for they were the best he ever planted." And landscapes around the globe, east and west, north and south, on six continents (though not the seventh), have proved homelands that peoples can come to cherish and on which they can flourish.

Anciently, Palestine was a promised land. Today and for the century hence, the call is to see Earth as a planet with promise, destined for abundant life. When Earth's most complex product, *Homo sapiens*, becomes intelligent enough to reflect over this earthy wonderland, nobody has much doubt that this is a precious place. Even Edward O. Wilson, a secular humanist, ever insistent that he can find no divinity in, with, or under nature, still exclaims, "The biospheric membrane that covers the Earth, and you and me . . . is the miracle we have been given."²⁰

Viewing Earthrise from the moon, the astronaut Edgar Mitchell, was entranced: "Suddenly from behind the rim of the moon, in long, slow-motion moments of immense majesty, there emerges a sparkling blue and white jewel, a light, delicate sky-blue sphere laced with slowly swirling veils of white, rising gradually like a small pearl in a thick sea of black mystery. It takes more than a moment to fully realize this is Earth . . . home." Mitchell continued, "My view of our planet was a glimpse of divinity." The astronaut Michael Collins recalled being earth-struck: "Earth is to be treasured and nurtured, something precious that must endure."

When this biospheric miracle is seen as divine gift, grace, that vision of a planet with promise makes all the more alarming our current discovery that this is also a planet in peril. "A generation goes, and a generation comes, but the earth remains forever" (Eccles. 1:4). That ancient certainty needs now to become an urgent future hope.

Love Gone Wild: Good Earth, Cruciform Creation

Christian and Darwinian encounters with wild nature, whatever their differences, both find that life is perpetually renewed in the midst of its perpetual perishing. Life is ever "conserved" as biologists might say; life is ever "redeemed" as theologians might say. In this generating of new life, the good Earth is also cruciform. Such processes, set in their ecological settings, perennially transform disvalues in nature into prolific values, generating the global richness of evolutionary natural history and its exuberance of life.

Christians today, as did ancient Hebrews and New Testament Christians before them, often encounter nature with ambivalence, a seeming mix of some goods and some bads. Looking more deeply into such encounter, we realize the creative character of conflict and resolution. Superficially, so far as nature is antagonistic and discomforting, it has disvalue. With deeper insight, we do not always count environmental conductance as good and environmental resistance as bad, but the currents of life flow in their interplay or, to be more philosophical about it, in their dialectic. An environment that was entirely hostile would slay life; life could never have appeared within it. An environment that was entirely irenic would stagnate life; without struggle, neither biodiversity nor biocomplexity would have evolved. Most of the beauty of life comes out of such conflict and resolution.

Human life too fits into such an ambivalent nature. Without such challenge, human life would never have appeared on Earth. The human hand, with opposable thumb, the human mind, the most complex object in the known universe, came out of such challenging encounter. None of life's heroic quality is possible without this dialectical stress. Evolution and ecology have taught us that every kind of life is what it is environmentally, in its surroundings, not autonomously. Humans too are environmental reciprocals, indebted to our environment for what we have become in ways that are as complementary as they are oppositional. Humans can respect the alien in nature not only in its autonomous otherness but even in its stimulus, provocation, and opposition. This is ethics comprehensively extended once again: Love nature, the gift of grace. Love nature, even when nature confronts us as enemy. Such gift with challenge is a more sophisticated form of creative beauty.

When we confront death, we also think of birth, for the two are inseparable, alike in evolutionary biology and in religious faith. The root idea in the word "nature" is "birthing," as of a woman in labor (Greek: *natans*, giving birth). Birth is a transformative experience in which suffering is the prelude to, the principle of, creation. The world is not a paradise of

hedonistic ease, but a theater where life is learned and earned by labor. Mothers suffer and regenerate the human community. Death *in vivo* is death ultimately; death *in communitatis* is death penultimately but life regenerated ultimately: life, death, and regeneration. "Travail" "birthing" is a key to understanding these evils. Paul writes, "The whole creation has been groaning in travail together until now" (Rom. 8:22). That maternal labor is archaic in the antique sense and equally archaic in the foundational sense: perpetual perishing, perpetual regeneration.

Nature is *cruciform*. Every life is chastened and christened, straitened and baptized in struggle. Everywhere there is vicarious suffering, one creature dying that another may live on. Experiences of the power of survival, of new life regenerated out of the old, of creative resilience in the ongoing life struggle—these are Darwinian themes, but they resonate too with the religious conviction that there is something divine about the power to suffer through to something higher. The global Earth is a land of promise, and yet one that has to be died for. The story is a passion play long before it reaches the Christ. Since the beginning, the myriad creatures have been giving up their lives as a ransom for many. In that sense, Jesus is not the exception to the natural order but a chief exemplification of it.

Redemptive suffering is a model that makes sense of nature and history. Darwinians see this truth: there is a struggle for survival. But so far from making the world absurd, such struggle is a key to the whole, as a transformative principle, transvalued into its opposite. The capacity to suffer through to joy is a supreme emergent and an essence of Christianity. Yet the whole evolutionary upslope is a lesser calling of this kind, in which renewed life comes by blasting the old. Life is gathered up in the midst of its throes, a blessed tragedy, lived in grace through a besetting storm.

The care of a shepherd for his sheep is used as a model of divine care. Recall that, as in the metaphors of Psalm 23, the environment of such care is the wilderness, in which there are green pastures, beside still waters, and also valleys of deep darkness. Sheep need water and forage, and life is like that. Lift this up into an archetype for human life. Pastoral peoples need pasture, but they have also to be led in "paths of righteousness for his name's sake." Divinely given, earthen nature is the original act of grace, but this can be received only by a people disciplined as "thy rod and thy staff, they comfort me." Then, "surely goodness and mercy shall follow me all the days of my life, and I shall dwell in the house of the Lord for ever." There are valleys of deep darkness, but there is a vast earthen and spiritual providence that supports the righteous life. This is the Hebrew "land ethic" continued and enriched when the Christian good shepherd searches for the lost sheep (Matt. 18:12).

On Earth, we are shepherded through order and chaos, trials and hardships, rewards and blessings, in both nature and culture. There is continuing grace in a challenging environment. What we get is manna in the wilderness—one day's supply at a time, our daily bread, precariously, and yet day after day after day—all the days of life (Deut. 8:3). It could not be any other way and have authentic lives with their own integrity. Maybe such somber beauty is the gift of an agape love.

Notes

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- 21. Mitchell, quoted in Kevin W. Kelley, ed., *The Home Planet* (Reading, MA: Addison-Wesley, 1988), at photographs 42-45.
- 22. Michael Collins, "Foreword," in Roy A. Gallant, Our Universe (Washington, DC: National Geographic Society, 1980), 6.