



Green Delusions

Martin W. Lewis

An

Environmentalist

Critique of

Radical

Environmentalism

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A Question of Scale

■ The Radical Position

Small Is Beautiful

Radical environmentalists have argued since the late nineteenth century that large-scale economic and political structures are both inherently dehumanizing and deadly to nature (Bramwell 1989). In the 1970s the idea that all organizations should be small of scale was eloquently restated by the economist E. F. Schumacher, whose *Small Is Beautiful* (1973) remains an environmental classic. Schumacher and his followers believe that expansive social entities are invariably governed by stifling bureaucracies whose rule-bound behaviors lead to environmental degradation and social waste. True human values, they aver, can only be realized in intimate groups. Schumacherians have also argued that the wisdom of small-scale organization is mirrored in ecological systems, themselves structured around local transfers of energy and matter.

In recent years Schumacher's vision has been most effectively forwarded by Herman Daly, recently appointed senior economist in the environment department of the World Bank (an organization that evidently believes in hiring its critics). Daly, along with theologian John Cobb, argues that scale is paramount in both human affairs and human-environmental systems (Daly and Cobb 1989). Only by reorienting our society and economy along local lines, they claim, can we maintain healthy community relations and avoid the incessant growth of productive capacity that will eventually overwhelm the planet.

The glorification of the small and the vilification of the large have

wide currency in eco-radical circles. Such notions are implicit in primitivist ideology, since hunter-gatherer societies are by necessity small and localized. Antihumanist anarchists essentially agree; according to Roszak, the common enemy of "person and planet" is simply "the bigness of things" (1979:32–33). Humanist eco-anarchists argue along a similar line, with Bookchin (1989:185) urging us to "rescale communities to fit the natural carrying capacity of the regions in which they are located" (1989:185). Radical eco-feminists similarly stress the need to reestablish intimate communal relations and to shun large-scale bureaucratic structures. The most pointed attack on complex, centralized institutions, however, is probably that of Jeremy Rifkin, legal gadfly of the eco-radical movement. Rifkin regards all large-scale structures as inescapably self-destructive, charging that they will eventually require more energy for their maintenance "than the system can afford" (1989:107). Only eco-marxists, it would seem, diverge from the standard eco-radical position that beauty comes *only* in small packages.

Political Devolution

The yearning for small, decentralized social entities has profound consequences for radical-environmental political theory. In an ecologically enlightened future, sovereign states must devolve into polities small enough to be fully guided by participatory democracy, giving every citizen equal and immediate say in all political affairs. Such truly democratic and autonomous communities might join together to form vague federations, but actual power must remain fixed at the local level. Many eco-radicals view political decomposition as the only real alternative to the opposite course, on which we are now supposedly affixed, of ever mounting centralization. Our current path, Bookchin warns us, will culminate assuredly in an Orwellian nightmare of police-state brutality: "The fervent belief that liberty would triumph over tyranny is belied by the growing centralization of states everywhere and by the disempowerment of people by bureaucracies, police forces and sophisticated surveillance techniques—in our 'democracies' no less than in visibly totalitarian countries" (1989:20).

Interestingly, the eco-anarchist view on this score is virtually identical to that held by the members of the marginal right-wing camp of so-called free market environmentalism. As Cuzan (1983:28) argues in regard to the public control of water resources: "The long run trend of public policies to expropriate water rights and centralize control over the resource in federal and state bureaucracies can be explained by two natural laws of politics: the iron law of political redistribution, and the iron law

of hierarchical centralization." Although conventional eco-radicals support politically mandated economic redistribution, their attitude toward governmental centralization is identical to that of individuals who (supposedly) occupy the opposite extreme of the political spectrum.

Scale in Economic Endeavors

In a down-scaled eco-radical world, economic organization would be drastically reordered. Autarky is the ideal, with each local region producing its own necessities. Interregional trade, except perhaps in a few scarce natural products like salt, should wither away to the greatest extent possible.

Eco-radicals disparage exchange both because they value intimate social connections untarnished by personal gain and because they believe that moving goods over long distances demands too much energy. Firms whose operations span the continents are especially reviled. Such organizations not only embody large-scale, depersonalized, bureaucratic social relations, but they also undermine local communities by subsuming them within their vast webs of profit and exploitation. Among all schools of radical environmentalism, one has simply to append "multinational" to "corporation" in order to move it from the category of the merely bad to that of the truly wicked.

Eco-radicalism further disparages transregional economic links because of their supposed powers of cultural demolition. When peoples of non-Western societies are exposed to the products of the industrialized world, such reasoning goes, they are soon seduced by the glamor of commodity consumption. Eventually they may abandon their own cultures and internalize the bankrupt values of the West. Especially villainous is the export of films, music recordings, and soft drinks. Along with such dross come advertisements—blandishments for cultural suicide. If present trends continue, eco-radicals fear, global culture will be massively homogenized, resulting in a dreary world filled with persons shallow of spirit, covetous of base consumer objects, and brainwashed by the latest Hollywood fantasies. As noted marxist geographer Richard Peet (1989:191) argues, "Entertainment is the opium of the people. Culture becomes the aesthetics of anaesthesia." Few eco-radicals would disagree.

These beliefs about scale are also implicated in the green radicals' opposition to advanced technology. Many new technologies, they argue, entail an ever greater centralization of authority, leading to a steady diminution of personal freedoms. In contrast, they favor "appropriate technology" as supporting decentralized structures of social power. Cer-

tain forms of solar energy, for example, allow individual residences to disconnect themselves from the public power grid, the veritable emblem of centralized authority's sinister web.

Several heretical enthusiasts have touted microcomputer networks linked by telecommunication lines as potential vehicles for participatory democracy (Kassiola 1990:208) or even grass-roots subversion, but most of the movement's members scoff at such suggestions as exemplifying technophilic naivete. Langdon Winner (1986), for instance, argues that computers only enhance the power of large firms and bureaucracies, allowing them to devise more sophisticated forms of surveillance and police control. Moreover, he continues, advances in telecommunications will encourage multinational corporations to transfer their operations to whatever areas of the world offer the lowest wages and most compliant workforces. As this happens, footloose firms will abandon whatever residual responsibility they may feel for local communities, resulting in ever greater human alienation and social isolation.

Globalism

Despite their love of all things small and local, many eco-radicals simultaneously espouse global political action (for example, Devall and Sessions 1985:37). The most pressing ecological problems, they recognize, are planetary in scope, requiring international coordination of some sort. Bramwell argues that this tension between radical environmentalism's local and global concerns reveals a deeply rooted paradox, one similarly evident in the fact that in earlier years "both scientists working for a planned world state and atavistic poets [came] together in the ecological movement" (1989:230). While the contemporary mood (exclusive of eco-marxism) shuns both planning and the state, the hope endures that some kind of global congress will spontaneously emerge from properly (un)structured local communities and regional confederacies.

Modern-day radical greens do not view their dual concern with small- and large-scale political frameworks as problematic. Rather, they accord each scale its own sphere of thought and action. Local problems demand the greatest concentration of effort, but if all eco-activist cells, united by common ideological and spiritual bonds, can cooperate, global problems too might prove manageable. Indeed, a reorganization of society at the local level, many believe, will itself greatly reduce planetary environmental pressures. This stance is captured perfectly in the slogan "think globally; act locally."¹ Here again we encounter eco-radicalism's philosophical idealism, its insistence that right thinking alone holds vast potential power.

Bioregionalism

As an extrapolation of these beliefs about the importance of organizing on a small scale, deep ecologists believe that healthy human communities must be explicitly tied to the natural world through the principle of "bioregionalism." The bioregional view is predicated on the notion that the earth may be divided into discrete ecological regions unified by the correspondence of physical features and life forms. If human societies were to organize themselves in accordance with these regional patterns, the argument goes, they would more readily find ecological harmony. The unit accorded primacy varies in different bioregional schemes, ranging from individual watersheds to physiographic provinces (the Ozark Mountains) to entire biomes (the Eastern deciduous forests). The foremost proponent of the philosophy, Kirkpatrick Sale (1985), explicitly arranges variably defined and differentially sized bioregional entities in a hierarchical order, with the "ecoregion" (a biome defined by "climax" vegetation) encompassing the "georegion" (the watershed), which in turn supersedes the more localized "morphoregion."²

The precise definition of the bioregion is an unimportant issue to the committed eco-radical. What matters is rather that autonomous human communities organize themselves around *some* small-scale, naturally constituted, geographical area. Only in such an intimate place-bound setting can people begin to understand their underlying relations with the natural world (Sale 1985:53). In turn, somewhat larger natural regions are expected to give shape to political confederacies emerging spontaneously through the peaceful interactions of autonomous villages. Of course, actual power would remain diffuse, with "nothing done at a level higher than necessary" (Sale 1985:94).

The bioregional principle, many eco-radicals affirm, has long been implicitly employed by primal peoples in devising their own sustainable modes of social organization. Sale (1985:60), for example, argues that the "tribal conglomeration of Algonkian-speaking peoples" corresponded perfectly to the ecoregion of the Northeast hardwoods. In fact, until the modern era began, such associations between human and natural geographical patterns were allegedly ubiquitous. According to Young (1990:136), even some of the "pre-nation-state kingdoms of Europe" were coincident with bioregions. The task of the radical green movement thus once more becomes one of reimagining and then recreating a lost socio-ecological form.

Such a reinvention, many contend, is already under way. In the far northern reaches of California, for example, a multitude of "neo-tribes" constituted around individual watersheds are now coming together to

form the emergent "Shasta Nation" (see Devall and Sessions 1985:23). From this and other such nuclei, proponents hope, the bioregional movement will spread, ultimately reencompassing the entire earth. Through the bioregional reinvention of political geography human beings can reestablish their lost affinity with nature and begin the desired return to the primordial state of harmony.

Spatial Hierarchies

The eco-radical vision of a decentralized social existence meshes with a longing for a nonhierarchical social order. Hierarchy, it must be noted, has several distinct meanings in ordinary discourse. Primarily, it refers to the social strata, differentiated by wealth and power, that exist in every centralized state. Such social inequality is, of course, opposed by all schools of radical environmentalism. A second connotation of hierarchy, however, is of primary concern here; namely, the organization of geographical space into unequal, "nesting" economic and political sets.

Such geographical hierarchies are ubiquitous in all large-scale societies. In much of the United States, for example, several townships are encompassed within a county, which in turn occupies a similar position vis-à-vis the state, just as the state is similarly subordinate to the federal government. Large corporations are similarly organized through regional offices, smaller district offices, and so on. Similar spatial hierarchies characterize legal systems, church structures, nonprofit corporations—in short all organizations requiring extensive territorial organization (Sack 1986).

To most eco-radicals all such forms of spatial hierarchy are anathema. Indeed, in virtually all versions of contemporary leftist thought, hierarchy itself has become a term of opprobrium. Environmental radicals, therefore must carefully insist that their envisaged bioregional confederations will be "natural" associations, based solely on horizontal affinities, rather than structured organizations relying on vertical bonds. While advocating global thinking, most environmental extremists strictly deny the need for any social, economic, or political organizations existing at any scale larger than that at which direct person-to-person contact can be maintained.

Urbanism

What then becomes of cities in the eco-radical future? Every city, and indeed, every town, owes its existence both to the hierarchical organization of space and to trade. No urban area can provision itself, as all necessarily draw sustenance from outlying rural zones. The relationship

between town and hinterland can be complementary, but it is never horizontal. The concentrated economic power of the city simply cannot be matched in the countryside.

Different urban arrangements found in different cultural milieus exhibit varying degrees of hierarchical organization. In modern industrial societies, however, vertical interurban ties are pronounced. Large cities exert financial and other forms of economic control over smaller cities, which in turn dominate regional towns and so on down the urban hierarchy (see, for instance, Wheeler and Mitchelson 1989). As Braudel (1981:481) writes, "a town never exists unaccompanied by other towns: some dominant, others subordinate or even enslaved, all are tied to each other forming a hierarchy, in Europe, in China, or anywhere else." Geographers debate the reasons why urban systems develop as they do (central-place theorists stressing retail trade [B. Berry 1967], mercantile theorists emphasizing wholesale trade [Vance 1970], and others positing more diverse origins [Conzen 1987]), but all would agree that equality among cities, let alone between cities and their hinterlands, is impossible.

A theoretically coherent, anarchic environmentalism would therefore reject urbanism outright. Many green extremists do just that, reflecting a deep prejudice against cities that has pervaded ecologicistic thought since its beginnings (Bramwell 1989). Still, a certain schizophrenic attitude toward cities is evident in most eco-radical circles. While urbanism may be considered philosophically objectionable, many of the movement's adherents live in cities and admit to enjoying urban life. Some have even suggested that small to medium-sized cities might be incorporated within the bioregional fabric (Sale 1985:114).

Almost all eco-radicals, however, remain firm in regarding *large* cities as intrinsically destructive of both nature and humanity. The philosophy of primitivism certainly leaves no room for anything remotely resembling an urban concentration. But the mainstream eco-radical view is almost as uncompromising; Sale (1985:65), for example, regards the "contemporary high-rise city" as "an ecological parasite [that] extracts its lifeblood from elsewhere and an ecological pathogen [that] sends back its wastes." The eco-radical litigator Jeremy Rifkin again offers the most sweeping broadside against modern urbanism. To Rifkin, large, densely populated cities are little more than "high entropy" environments doomed to expire: "even as the city attempts to preserve itself," he informs us, "it actually fosters its own economic decline" (1989:173).

Humanistic eco-anarchists, who often favor small cities, remain

equally hostile to the modern metropolis. Although Bookchin argues that "[c]ities comprised a decisive step forward in social life" (1989:180), a few pages earlier he complains that large cities generate a dehumanizing anonymity (1989:167). The latter sentiment is widespread in the eco-radical movement. Catton (1980:206), for example, believes that the density of modern cities creates a psychic overload that induces people to commit antisocial acts.

Because of this hostility to large, densely inhabited areas, urban-dwelling eco-radicals greatly fear increasing concentrations of population and economic activity in their own cities. Radical green activists of all stripes thus advocate limiting or even forbidding future urban growth (for example, Tokar 1987:66). Antigrowth proposals are often supported with a view to preserving existing city neighborhoods, pictured as small-scale islands of social sanity in death-dealing seas of urban anonymity.

Many deep ecologists further suspect cities of sapping the human spirit simply because they deny people their necessary contact with nature. When this intrinsic human need remains unfilled, as it must be in urban areas, social pathologies inevitably erupt. According to this view, human spirits can only be healed by a return to a natural landscape. Once this happens, many believe, social and ecological harmony may begin to be reestablished.

Ruralism Revisited

Suspicious of the city, dismissing industrialism, and disparaging trade, most radical environmentalists hope to recreate a rural, agrarian, society. Yet the dominant forms of rural life found in the industrialized world are roundly criticized as well. Contemporary American agriculture is singled out, with good reason, for being both ecologically destructive and dehumanizing (W. Berry 1977). Eco-radicals would much prefer a return to old-fashioned, animal-powered forms of cultivation that shun all chemical inputs.

Many green writers recognize that returning to small-scale, nonmechanized agriculture would require the labor of many more farmers than currently reside in the United States. As farmer-philosopher Wendell Berry (1981) argues, good stewardship requires a large number of cultivators to look after the land. Those persons joining the hoped-for exodus from the doomed and stultifying megalopolis could thus potentially find abundant employment as old-fashioned dirt farmers, a process that would simultaneously revitalize American agriculture.

■ The Liberal Rejoinder

The radical environmentalists' extraordinary faith in decentralized political power runs counter to the philosophies of both traditional liberalism and socialism. In the United States, movements espousing the devolution of political power, such as the various states rights campaigns, have often been strategic ploys by the radical right to counteract reforming tendencies at the national level. On environmental as much as on social issues, America's federal government has historically been more forward looking than most local political entities. As Koppes (1988:240) writes in regard to the history of the American conservation movement: "conservationists often found decentralization frustrating for it tended to reflect the immediate economic interests of powerful regional elites rather than national priorities. Arguing that natural resources belonged to the whole country, conservationists thus usually tried to have environmental policy made at the national level." Indeed, the main environmental agenda of the Reagan administration was precisely to shift responsibility for environmental problems from the federal to the state and local levels (Henning and Manguñ 1989:75). While the rhetoric associated with this move may have stressed the desirability of local autonomy and freedom from meddling Washington bureaucrats, its overriding goal was nothing less than the gutting of environmental regulation. This is not to imply, however, that decentralization is always anti-environmental. In certain circumstances a selective shift of authority from the higher to the lower levels of a spatial hierarchy can in fact be highly beneficial.

In recent years political-environmental theorists have carefully examined the ecological consequences of decentralization from the federal to the state level. Several scholars advocating a federalist approach have indeed discovered that certain American states often act as environmental pacesetters (Lowry 1992). Indeed, the national government has at times attempted to weaken state-level pollution standards. But the federalist approach, stressing a carefully constructed balance of federal and local (especially state) authority, must not be confused with the radical decentralization advocated by green extremists. It is necessary to recognize, as Lowry (1992) demonstrates, that the ability of progressive states to enact strong environmental measures is severely hampered whenever interstate competition intrudes. In other words, in the absence of centralized coordination, pollution-generating firms can often thwart state policy by departing, or threatening to depart, for less environmentally sensitive jurisdictions. Even in economic sectors in which offenders

cannot relocate, such as agriculture, the lack of centralized authority will severely limit the diffusion of innovative control programs from the more progressive to the less progressive states. And finally, it must be recognized that some states will simply opt to "abdicate [environmental] responsibility altogether" (Davis and Lester 1987:563).

In industry and government alike, hypercentralization is indeed debilitating. Well-coordinated decentralization programs will thus be necessary in many spheres of power if a sustainable economy is to be devised. But it is equally imperative to recognize the many dangers inherent in the total dismantling of all centralizing structures. What is necessary, however, is a balance of powers among the local, the intermediate, and the central levels of authority. Coordinated decentralization, coupled with flexible centralization, must be the aims of a Promethean environmentalism.

This discrepancy between radical environmental theory (which automatically lauds the local and condemns the central) and the empirical evidence (which suggests that strong environmental legislation often originates in large-scale political entities, that even progressive instances of decentralization require some form of centralized coordination and that a great many local communities consistently oppose strict environmental measures) is completely overlooked by most radical greens. They would probably counter, however, that once we transform our ways of thinking and perceiving, obstacles to effective coordination as well as reactionary tendencies at the local level will vanish. The essential question is whether such a view can be justified.

Small Can Be Ugly

Small-scale communities are seldom as humane and ecologically sound as eco-radicals portray them to be. Opposing the green position here is an old tradition in social thought stressing the parochial, small-minded nature of both rural and small-town life. While the American intellectual tradition has often disparaged urbanism (K. Jackson 1985:68), to most intellectuals throughout history the city has been the scene of individual liberation rather than anonymous repression (Vance 1977:12). Local politics have often been pictured as dominated by grasping oligarchies, not by the equality-minded citizens' councils of eco-radical rhetoric. Significantly, antirural intellectual sentiments were stronger in an era when small-town and village life was fresh in most writers' memories; rural romanticization, in contrast, has flowered in recent years among writers who have grown up in comfortable suburbs, completely lacking direct experience of the small-scale social milieu. Longing for a

more meaningful social experience, American Arcadians long ago appropriated the venerable image of the New England village community as the democratic ideal. Unfortunately, even this utopian vision was in fact never much more than a "romantic literary conceit" (J. Wood 1991:46).

Some of the more thoughtful environmental philosophers acknowledge that small communities can stifle nonconforming or ambitious individuals (Daly and Cobb 1989:170). The dominant view, however, is that any such unpleasanties would vanish under a system of real participatory democracy. When all persons have equal and direct political power, many eco-extremists believe, a domineering elite could never arise. Similarly, the full diffusion of power would protect those individuals choosing idiosyncratic lifestyles. How existing local elites are to be divested of their power, and how existing social conventions and prejudices might be eliminated, are less often addressed.

In addition to the practical difficulties of instituting local egalitarianism, one must question whether small-scale participatory democracy would really eliminate social repression. Just as likely, the result would be a tyranny of long-winded individuals immune to boredom. Indeed, Anna Bramwell (1989:226) goes so far as to argue that participatory democracy is so wastefully time-consuming that members of eco-radical communes ironically "seem to need more of the earth's resources than other people." Or, as Oscar Wilde once reportedly quipped, "the problem with socialism is that it takes too many evenings."

To support the cause of direct democracy, eco-radicals have sought out historical instances of its successful institution. Unable to hold up their own or their forebears' experimental efforts in communal living, whose histories have typically been short-lived, they have turned instead to indigenous American social organization. One popular model of participatory democracy is the Iroquois Confederacy of seventeenth- and eighteenth-century North America (for example, Tokar 1987:13; Nollman 1990:13).

In fact, the Iroquois Confederacy is a particularly ill-considered exemplar. Admiring the Iroquois political system of *that era* for its democracy is akin to praising Nazi Germany for its enlightened forestry. The Five Nations not only engaged in a highly successful campaign of ethnocide against their competitors in the fur trade, the Hurons, but they also raised the torture of war captives (those whom they chose not to adopt, at any rate) to an art. Victims were taunted while being slowly burned alive and having their flesh gouged from their bodies. Even small children were sometimes subjected to this treatment (see Sanday 1986:148; the recent Canadian film *Black Robe* provides a stunning visual portrayal of

such practices). Direct democracy gives absolutely no guarantee of ethical social norms.³

A more far-reaching challenge, however, may be found in the human (or at least, human male) propensity for violence. One does not have to accept the Hobbesian proposition, that without a strong central authority a war of all against all is inevitable, to see that in the absence of some sort of peacemaking and law-enforcing mechanism, war, feuding, head-hunting, and other culturally sanctioned forms of bloodshed have been dreadfully common. Large-scale political organization admittedly can lead to large-scale—and thereby more devastating—conflicts. The immediate point, however, is not to defend the existing geopolitical system (which is in need of reform), but rather to criticize the eco-radical alternative.

Cities and Environmental Enlightenment

While the dream of an anarchic rural utopia may be simply naive, opposition to urbanism per se is directly threatening to nature. As Paehlke (1989) carefully shows, urban living is in a great many respects far less stressful on nature than is rural existence. Given our current political economic structure (which, despite eco-radical hopes, is in no immediate danger of collapse), any movement of the American population away from cities toward the countryside will result only in a hastening of environmental destruction.

Urbanism's environmental benefits are most easily visible in the realm of transportation. Public transport, which is almost always less polluting than travel by private automobile, is feasible only in and between cities. The denser a city's population becomes, the more efficiently its public transport system can operate. Moreover, in urban core areas, walking is often the most convenient mode of travel. In America's countryside, in contrast, the automobile is generally the sole feasible means of transport. At present, rural Americans seem willing to drive ever greater distances to seek modern conveniences; small towns everywhere are decaying as their erstwhile shoppers cruise to the regional centers large enough to support shopping malls or, at least, discount stores.

The intrinsic energy efficiency of cities is evident in other aspects of life as well. Detached dwellings require far more energy to heat than do rowhouses, let alone apartments. Cogeneration, a process by which industries use what would otherwise be waste heat, is most feasible in areas of high density. More significant is the reduced energy costs of trucking goods from business to business and from business to consumer

in the urban environment. Simply by virtue of its energy efficiency, the city pollutes far less on a per capita basis than does the countryside, given the same living standards. Noxious by-products may be more quickly diluted in rural environs, but the total output per person is generally much greater.

Equally revealing is a comparison of actual land use in the two environments. Urban dwellers typically require a small fraction of the space required by country people. This is readily apparent both in housing (multistory apartments versus detached, single-family dwellings) and in infrastructure (the more scattered the population, the greater the expanse of roadway). If America's present urban population were to be dispersed over the countryside, vast tracts of land would have to be converted to housing and transporting them, tremendously reducing wildlife habitat.

Radical greens may argue that if only city dwellers would move to underpopulated but overcultivated agricultural zones, wildlife habitat would not significantly diminish. This may be valid in theory, but one sees few back-to-the-land environmentalists relocating in northern Iowa. When Americans find themselves exhausted by urban living and inspired by the panegyrics of eco-radicals, they generally seek solace in forests, mountains, and sea coasts rather than in regions noted for their hog farms. As urban refugees stream into scenic landscapes, roads and subdivisions follow in pace.

One way to appreciate the environmental benefits of urbanism is to compare Japan and California, two areas of roughly the same land area with equivalent levels of economic development. Japan must support over 120 million persons, while California is home to only some 30 million. The Japanese population is highly concentrated in dense agglomerations; as many as 30 million persons reside in metropolitan Tokyo alone. California, on the other hand, is characterized by vast suburban sprawls of relatively low population density. Los Angeles County's 9 million persons, for example, are spread out over 4,068 square miles of land, an area larger than greater Tokyo. Moreover, most of California's rural zones, whether farmland, desert, or forest, have been experiencing rapid low-density growth in recent years. Due to outward migration from urban areas, a vast, vague, quasi-metropolitan corridor now spreads from San Francisco east as far as the Nevada border at Lake Tahoe.

The Japanese, not surprisingly, require far less energy on a per capita basis than do the Californians. Certainly population concentration is not

the only reason for Japanese energy efficiency; a Spartan attitude in regard to residential heating and cooling, as well as vigorous investments in modern, energy-saving technologies, are also significant factors. In building a low-cost transportation network, however, population density is paramount. Sprawling greater Los Angeles, let alone California's vast exurbia of metropolitan refugees, could never support the efficient interlocking system of subways and commuter rail-lines that characterizes the Tokyo metropolitan area.

Even in such an unlikely area as wildlife preservation the Japanese are ahead of the Californians on several fronts. Japan, for example, supports a healthy population of *Ursa arctos*, the grizzly or brown bear. In California the same creature—the state symbol—was exterminated decades ago. Environmentalists (Promethean and Arcadian alike) advocate reintroducing grizzlies to California, but they are always shouted down with cries that the state is too crowded to support such a “wilderness species.” Japanese brown bears have been able to survive in part because the country lacks a rangeland cattle industry (ranchers are usually the main enemies of large carnivores), but equally important is the concentration of its population in cities. Only the intensity of its urbanism allows Japan the space needed to maintain adequate brown bear habitat. If California had to support four times its present population, given its residents' aversion to urban settlement, it is doubtful whether any prime wildlife habitat would remain.

The Return to Nature and Its Destruction

The environmental destruction that would accompany ruralization on a massive scale is evident in the behavior of many back-to-the-landers themselves. Most well-intentioned, suburban-raised nature lovers quickly discover that nature itself conspires against their utopian plans for harmonious living. Insects, birds, and mammals soon begin raiding their gardens, while predators begin devouring their lambs and kids. Many neo-homesteaders do take pains to avoid harming their competitors; some California greens even purchase cougar manure, the scent of which will supposedly prevent deer incursions, to spread about in their vegetable patches. But many others, including some I have known personally, simply return to the behavior that humans have exhibited for millennia when faced with animals that threaten their livelihoods: they kill them.

In a great variety of circumstances eco-radicals seeking communion with nature are forced to compromise their ethics and mete out their own small forms of destruction. A precious example is provided by Jim

Nollman (1990) in a brief book called *Spiritual Ecology*. Nollman details the heroic efforts he undertook to keep deer out of his garden and insects away from his house. He had enjoyed modest success until an ant had the temerity to bite his young daughter. At this point, any sense of ecological responsibility seems to have evaporated immediately; Nollman promptly poured gasoline over the nest of the offending creature and set it ablaze.

The philosophy of deep ecology, especially the primitivist variant, is threatening to wildlife in a more direct manner. Since predation is an inescapable aspect of nature, these self-styled protectors of the wild believe that human beings should feel no qualms about living a predatory existence. In fact, a glorification of hunting runs deeply through their own literature. One of the movement's heroes, Aldo Leopold (1949 [1966]: 129), found no greater joy than in slaughtering waterfowl on frosty autumn mornings: "I cannot remember the shot; I remember only my unspeakable delight when my first duck hit the snowy ice with a thud and lay there, belly up, red legs kicking."

As a nonradical environmentalist, I do not necessarily oppose hunting. Where predators are absent, it is often necessary to cull fecund herbivores lest they degrade their own habitats. More importantly, a coalition between hunters and environmentalists is absolutely vital if habitat is to be preserved. Yet I can only shudder on hearing an avowed environmentalist boast of "unspeakable delight" in the petty act of slaughtering another living being.

Unless either human numbers are extremely small or some form of wildlife management (whether technical or traditional) is instituted, hunting is inherently destructive. The close-to-nature American pioneers eliminated virtually every large mammal remaining in most parts of this country. Only when scientific game management was developed near the turn of the twentieth century did certain game species, such as the whitetail deer, begin to rebound. Yet many deep ecologists denounce the concept of professional wildlife management as an arrogant affront against the natural world.⁴ Nature will manage itself, they believe, and if only we would become a part of the natural world we would never have to fear the consequences of our own acts. Many seem to believe that if hunters "ask forgiveness" of the animals they kill, all will be well. This did not work for the Rock Cree, nor will it work for our own neo-tribals. Wildlife management as presently practiced does deserve criticism for its focus on game species, but only careful wildlife oversight can make hunting a tolerable activity. Otherwise, the more Earth First! warrior-hunters we have prowling our forests, the more wildlife will suffer.

The Political Geography of Ruralization

The ruralization of the American populace would also appear to threaten nature insofar as it might undermine electoral support for environmental reform. American urbanites consistently support environmental measures to a far greater extent than do rural dwellers. As Henning and Mangun (1989:8) argue, rural values are simply more utilitarian than urban values. Neither does this seem to be merely a measure of the residual conservatism of traditional small-town life. Even urban refugees show a marked propensity to ignore environmental problems as soon as they leave the polluted, traffic-snarled city. Calaveras County, California, a rapidly growing green refuge on the west slope of the central Sierra Nevada Mountains, provides a good example of such tendencies.

The population of Calaveras mushroomed after 1970 as immigrants fleeing the congestion of the Bay Area and greater Los Angeles began to arrive, growing from 13,700 in 1970 to 31,000 in 1988. Newcomers now outnumber natives by a substantial margin. But the county continues to vote solidly against every conservation proposition on the California ballot. The spring 1990 Passenger Rail and Clean Air Bond Act (Proposition no. 108), for example, received 42 percent of the vote in Calaveras; San Francisco, in contrast, awarded it 75 percent of its vote, while even hyperconservative Orange County gave it 51 percent of its vote. Overall, the correlation in California's 1990 elections between population density and support for environmental protection is profound, as can be seen for three representative issues in tables 1 and 2.⁵

Other political-geographical studies have uncovered similar patterns. Greenburg and Amer (1989), for example, show that in New Jersey, urban dwellers, both rich and poor, were far more likely to vote in favor of a bond issue to clean hazardous waste sites than were rural residents. Overall, in the United States at least, the higher the concentration of humanity, the greater the electoral concern for nature.

In casual conversation the reason many residents of Calaveras County give for voting against the environment is simple: "we don't have traffic and pollution problems up here, so why should we pay to solve them—let the city people clean up their own mess." This attitude seems to be nearly as common among those who recently moved to the mountains, precisely to enjoy its pristine landscape, as it is among long-term residents. As table 2 shows, rural counties in California that have experienced population explosions in recent years—fueled almost entirely by outmigration from urban areas—vote consistently against environmental propositions of all kinds. Here one sees the variety of local environmentalism that is actually produced by the eco-radical agenda of total

Table 1 Population Density and Support for Proposition 128 (Environment Public Health Bonds, or "Big Green," November 1990; Northern California Counties Only) (Vote in Percentages)

Population Density (Aggregated by county)	Yes Vote	No Vote
Counties containing:		
Over 2,000 persons per square mile	62	38
1,000–2,000 persons per square mile	39	61
200–1,000 persons per square mile	36	64
50–200 persons per square mile	29	71
10–50 persons per square mile	20	80
Less than 10 persons per square mile	22	78

decentralization and local autonomy. Only when outside agents seek to dispose of toxic wastes in places like Calaveras do their residents take on environmental colorings. In the face of such threats, not surprisingly, their pro-environment response is rapid and overwhelming.

Urbanism Reconsidered

Many Americans (myself included) cannot abide life in an urban environment and will continue to reside, at least on weekends, in rural or quasi-rural areas. There is nothing intrinsically wrong with such a personal decision, and a Promethean environmentalism would never advocate forced urbanization. But it is equally imperative to realize that another sizable segment of the populace cannot tolerate rural existence and in fact craves city life. Any attempt to demolish the framework of contemporary urbanism would be simultaneously an attack on human freedom and dignity.

Yet few eco-radicals, it would appear, would be willing to tolerate the life-style proclivities of urbanites. Regarding major cities as wretched pits of technological devastation, extremists like Rifkin argue that massive agglomerations of humanity must simply vanish if the planet is to survive. Few realize the totalitarian implications of such thinking, perhaps because it does not occur to them that anyone would actually choose to live in such a degraded and degrading habitat. The Manhattan and San Francisco housing markets provide ample testimony, however, that a good many Americans want to live in *densely* concentrated urban environments. Indeed, the social sterility of many American cities re-

Table 2 Environmental Voting Records of California Counties with Population Densities under 50 Persons per Square Mile (1989) Whose Populations More than Doubled between 1970 and 1988

A. Proposition 108 (Passenger Rail and Clean Air Bond), June 5, 1990 (Vote in Percentages)			B. Proposition 117 (Wildlife Protection), June 5, 1990 (Vote in Percentages)		
County	Yes Vote	No Vote	County	Yes Vote	No Vote
Alpine	48	52	Alpine	49	51
Calaveras	42	58	Calaveras	41	59
Lake	38	62	Lake	39	61
Mariposa	41	59	Mariposa	42	58
Mono	47	53	Mono	52	48
Tuolumne	46	54	Tuolumne	37	63
Statewide	56	43	Statewide	52	48
Counties with more than 1,000 persons per square mile (Northern California only)	61	39	Counties with more than 1,000 persons per square mile (Northern California only)	55	45

sults partly from the fact that they are not crowded enough to support a truly urban, pedestrian way of life, offering instead only a vast collection of suburbs centered around a small collection of lifeless high rises and strung together by congested freeways.

In other industrialized societies the attractiveness of large urban centers is even more pronounced. In the United States most cities do suffer horrendous social ills that force many to flee to the suburbs, but this reflects America's unique social pathologies, not the urban condition *per se*. Japanese, European, and Canadian cities are not particularly violent places. Nor is city life necessarily dehumanizing. Anyone who thinks that urban pressures make people rude and short of temper is advised to visit Tokyo. Nor is it entirely coincidental that the livable cities of Japan and Europe are characterized by much higher population densities than are the depopulating American cities so despised by eco-radicals.

An environmentally sound society should *encourage* the growth of high-density urban centers, cities in which residential, commercial, and industrial functions are closely configured. But any concerted movement

toward urban intensification would be strongly countered by neighborhood activists, individuals who mistakenly believe that in opposing development they are protecting the environment. Urban preservation movements can be a positive force, especially when they fight to maintain residential districts that would otherwise be converted to less intensive land uses. But at its worst, neighborhood environmentalism becomes a parochial movement more concerned with the availability of parking spaces for the upper middle class than with the ecology of the planet. Acting locally in this case is coupled not with thinking globally but rather with considering above all one's own convenience.

The demographic trajectory of the United States presents anti-urban eco-radicalism with a serious dilemma. The population of the United States is presently growing at roughly 1 percent a year, an increase due almost entirely to immigration. As would-be progressives, eco-radicals can hardly call for migration restrictions without appearing racist, yet as nature lovers they abhor the kind of development necessary to provide newcomers with jobs and housing. With the notable exception of the few primitivists, who firmly advocate closing America's borders, few have faced this contradiction. Regardless of anyone's stance on immigration, the population of the United States will continue to grow for the foreseeable future. Urban areas have the potential to absorb most of the increase, but only if abundant, high-density housing is provided. Where this is politically unfeasible, continued suburbanization will be the only alternative.

Similarly, as population mounts, new commercial developments will be essential if we are to avoid entering a period of per capita economic decline. Since urban environmental activists typically oppose commercial developments even more strongly than residential construction, a strong impetus is provided for firms to locate new office complexes far into the suburbs. This trend, already underlain by land price differences and especially by the desire to find a compliant "pink-collar" workforce (Nelson 1986), will result in the continued geographic expansion of low-density metropolitan zones. As back offices move out of urban cores, the suburban fringes around many cities are swelling to encompass extensive, formerly rural tracts. In northern California the rich agricultural districts of the northern San Joaquin Valley are now being paved over to form bedroom communities for San Francisco's office-park suburbs of Pleasanton, San Ramon, Walnut Creek, and Concord. The environmental insanity of mass suburbanization is evident to eco-radicals. What they fail to realize is that their own philosophies and actions do nothing but encourage it.

The Environmental Catastrophe of Suburbanization

Environmentally, suburbs may be the worst of all possible worlds.⁶ Residential density here is low enough to preclude effective mass transport, yet high enough to exclude all but the most adaptive species of wildlife. Suburban planners and dwellers usually further degrade their environments by building unnecessarily wide streets (often mandated by well-meaning city codes in the name of fire protection), by paving broad areas for driveways, sidewalks, and patios, and by devoting enormous sums of energy, water, and toxic chemicals to maintain a vegetative cover of exceptionally low biological diversity. Most well-to-do suburbs actually embrace a form of landscape totalitarianism in which a person can be fined for erecting a clothesline or for allowing a diverse assemblage of wild plants to grow.

Yet the suburbs spring from exactly the same prejudice against cities that has pervaded the writings of eco-radicals for the past century. The original notion was that in a bucolic environment, where each family could enjoy its own home and garden, the close presence of nature would cure the stress-induced diseases of urban life and in so doing restore humanity to a more blissful state (K. Jackson 1985). If the suburbs have failed in this civilizing mission, the more radical ruralization advocated by today's green extremists would likely have even more devastating consequences.

As environmental historian William Cronon persuasively shows, the rural-urban dichotomy that has infused so many American cultural myths and that has sustained eco-radicalism ultimately hides more than it reveals. Whether praising the city or disparaging it, partisans of both the urban and the rural have incorrectly assumed that the two "are separate and opposing worlds, that their divisions far outweigh their connections" (Cronon 1991:17). But this habit of regarding the city and the country as distinct and separable has "obscured their indispensable connections. Each [has] created the other, so their mutual transformations in fact [express] a single system and a single history" (Cronon 1991:368).

The Fantasies of Decentralization

The eco-radical fear of cities and other large-scale structures seems to be rooted in an underlying belief that there are really only two basic forms of social organization: centralization, which implies totalitarianism, and dispersion of power, leading to social harmony and, ultimately, utopia. Intermediate forms are implicitly considered unstable, tending eventually to yield to centralized control.

This species of dualistic thought is unhelpful for devising a sustainable socioeconomic order. A degree of centralization is essential if we are to avoid economic chaos, internecine strife, and localized political repression. To accept limited central authority, and the attendant necessity for hierarchical organization, does not imply condoning the brutal social hierarchies associated with precapitalist states, certain capitalist economic organizations, or contemporary totalitarian countries. To the contrary, a happy medium between anarchy and centralization is not only possible but highly desirable.

Human organizations appear to run most smoothly when they are characterized by flexibly constituted socio-geographical hierarchies. A local community should enjoy a limited autonomy that is, in crucial areas, superseded by a higher level of authority. Such flexible centralization (or coordinated decentralization), sometimes called federalism, is premised on the notion that local communities, larger regional groupings, still larger "states" or provinces, and finally a "federal" government, should all have their own spheres of power. If a correct balance is struck, there will be no inherent tendency for increasing centralization, although certain political interest groups may well pull for it.

Hierarchy and Globalism

Hierarchy is, in the final analysis, an inescapable principle of organization itself. Arthur Koestler (1978:31) is not alone in noting that, "all complex structures and processes of a relatively stable character display hierarchic organization, regardless of whether we consider galactic systems, living organisms and their activities, or social organizations." Even most tribal societies are generally organized in such a fashion. As a noted Africanist observes: "It has often been remarked by ethnographers . . . that African cultures are suffused with a sense of hierarchy in social, political and ritual relations. . . . This holds true even for those 'segmentary' or 'acephalous' or 'stateless' African societies that are sometimes labelled (or rather mislabelled) as 'egalitarian'" (Kopytoff 1987:35). Social hierarchies of some sort are intrinsic to virtually all forms of social organization, whether capitalist or communist, Western or Eastern, industrial or agricultural.

Political and economic hierarchies, to be sure, do entail inequality. A supreme court justice presides over a circuit court judge, and a corporate division manager must have greater authority than a local manager. But variations in the scope of individual power do not necessarily imply relations of domination, as many radical environmentalists seem to

believe. Domination is a symptom of system pathology, not a standard mode of hierarchic structure.

This antipathy to hierarchy is not unique to eco-radicalism but rather endemic to the entire far left, and as such it is deeply ingrained within American academia. Although the antihierarchic turn, motivated by an admirable commitment to equality, is probably just naively idealistic, some writers argue that it is actually threatening to democracy. As David Lehman (1991:100) explains: "The demolition of hierarchies is pursued as an end in itself, leaving us nothing to hold onto, nothing with which to resist the imposition of a new hierarchical order. The twentieth century's dismal chronicle of new hierarchies, established upon revolutionary new theories, does not make one welcome the prospect."

The world's greatest political failing, I would argue, lies not in the existence of spatial hierarchies, but rather in their lack of depth. Our prevailing hierarchical structures are severely truncated at the top, and, in many parts of the world, at the bottom as well. The main provision for global power, the United Nations, is an anemic body based on the questionable assumption of equivalence among all sovereign polities, where a country of 100,000 inhabitants is awarded the same weight as one of 1 billion (with the notable exception of those few selected for the security council). Of course, the UN does offer an important forum in which the first steps toward coordinated global environmental protection may be devised (MacNeill et al. 1991). But in the end, a more efficacious form of planetary power may be necessary if we are to institute appropriate remedies. Fortunately, the governments of several European countries are now beginning to think along these lines (Porter and Brown 1991:153).

Membership in a strengthened UN or some other variety of global federation need not entail the surrender of independence. Only when states are violating essential human rights or natural protection laws (for example, allowing trade in endangered species) should global authority be invoked. But even conventional pollutants often transcend national boundaries, while others, such as carbon dioxide and chlorofluorocarbons (CFCs), threaten the entire planet. While patchwork agreements can generate band-aid responses to the most serious threats, they are ineffective in devising long-term solutions. Systematic global cooperation, requiring a political body much more powerful than the current United Nations, may well be necessary if we are to begin addressing the most serious planetary dilemmas.

A first step for a newly constituted global body might be the suppression of the multitude of small-scale but vicious wars that currently

plague several of the most impoverished regions of the world. As long as Sudan is engaged in a brutal civil war, both its people and its environment will continue to suffer horribly. The world over, war marches hand in hand with ecological destruction and economic privation. Just as the emergent states of late medieval and early modern Europe outlawed private warfare and in so doing vastly enhanced their own potential for economic growth, so too a global confederation could achieve the same result at the planetary level.

One of the major challenges to instituting world peace is the fact that most contemporary wars are fought not between independent countries but rather between competing ethnic groups located within the same national boundaries. Here overcentralization is indeed the most common problem. Regardless of what we may call them, few Third World countries are nation-states. They are rather melanges of culturally distinct peoples forced into single polities by their former colonial rulers (a nation, in contrast, is by definition a people self-consciously united). While Western scholars and governments have long urged newly independent countries to "build their nations," this has usually entailed the mass assault by central governments on nonconforming local traditions and institutions. In this struggle, the United Nations has actually proved to be a bulwark of state repression against nonstate, nonconforming nations (van den Berghe 1981:3; Knight 1983:128). Threatened with cultural extinction, minority groups not uncommonly take up arms to try to maintain a measure of self-determination. Encompassing states generally respond with quick brutality (Nietschmann 1987).

Examples of attempted ethnic centralization in postcolonial regimes, followed by mass repression and desperate rebellion, are legion. The process is perhaps most clearly evident, however, in the Buddhist-socialist state of Burma, which now styles itself as the Union of Myanmar. Over the past twenty years the Burmese army has engaged in a campaign of genocidal brutality against the Karen, the Chin, the Naga, the Shan, the Katchin, the Rohingya, and the Mon peoples (see the various articles in *Cultural Survival Quarterly* 13, no. 4, 1989). Partly as a result, the Burmese economy has stagnated for decades. Moreover, in order to maintain its grip over this crumbling state, the Burmese military has carried out extraordinary repression even against members of the dominant Burman nationality.

It is highly revealing that Burma was E. F. Schumacher's model for a benign system of Buddhist economics in *Small Is Beautiful*. While Schumacher's book was written before the Burmese debacle had fully come to light, such an excuse cannot be granted to eco-radical John Young, who

evidently continues to regard Burma as a virtuous LDC (lesser developed country) that has "some useful lessons for the rest of us" (1990:115). The lessons of Burma, I would retort, may be powerful, but they are all negative.

A potential solution to such national struggles would be the creation of spatial hierarchies of greater flexibility. Local communities of distinct cultures must possess a substantial degree of local autonomy. But such units need not be politically independent; instead, they might be federated with other similar units. Such encompassing federations, in turn, could join with similarly constituted neighboring organizations. Ultimately, in many areas of the world, the independent state itself may cease to be the foundational entity of political affiliation.

While the demise of the nation-state may seem a hopelessly utopian dream (or a terrifying nightmare, depending on one's perspective), some evidence suggests that precisely such a process is beginning to occur in the very heartland of that geopolitical form. Contemporary Western Europe is experiencing pressure for political devolution (the Scots may yet opt out of Britain; the Basques and Catalans may well quit Spain) at the same time that much of the subcontinent is moving toward flexible unity through the European Community (EC). Moreover, economic networks are arising in Western Europe that unite regions located in different countries; most notable here is the "four motors agreement" linking Lombardy, Catalonia, Rhône-Alpes, and Baden-Württemberg (Murphy 1991:11). Even the staid journal *The Economist* has recently wondered whether we may soon be saying "goodbye to the nation-state" (June 23, 1990). As geographers John Agnew and Stuart Corbridge (1989: 273) see it, the contemporary nation-state is, in many instances, both too large for purposes of social identity and too small for effective economic integration. Whatever shape the planet's future political geography may take, we can expect that it will involve some striking departures from the contemporary jigsaw map of two-dimensional, theoretically equivalent, sovereign states.

Geographical Advantage and Autarky

Contrary to the eco-radical vision, economic integration through extensive trade networks is not only beneficial for economic development but is also essential for future ecological health. Without the specialization made possible by transregional economic connections, and without the ability to transport essential resources over long distances, our entire economic and technological edifice would collapse. While most radical environmentalists claim that they would welcome the resulting global

economic chaos, its consequences would both impoverish the surviving communities and wreak ecological devastation. The local autarky envisaged by the greens would force us back to something very similar to the early medieval economy, one in which the vast majority of people lived in dire poverty. In fact, even in early medieval times, more long-distance trade was conducted than eco-radicals would care to allow. As Fernand Braudel (1990:121) writes in regard to Carolingian France: "It must be understood once and for all that no economy of any size could have survived under the mortal regime of autarky."

Nutrition standards would also decline sharply in a fully decentralized world. According to the eco-radical vision, every community, or at least every bioregion, would have to produce its own food. For instance, the inhabitants of coastal Oregon would need to cultivate wheat or rye in order to eat bread, a challenging endeavor along that fog-drenched coast. Although they could subsist on a more climatically appropriate staple such as the potato, a true deep ecologist might object that this tuber, as an Andean crop, is not native to the bioregion. In fact, no high-yielding food crops are native to this area, and it is doubtful whether salmon, the one-time staple of the region, could ever return in adequate numbers. Perhaps coastal Oregonians could subsist on bracken fern roots, as once did the Maori of South Island, New Zealand; I invite them to try.

One might also wonder how a future bio-regional coastal Oregon would harvest solar power, considering how little sunshine actually falls on its fog-shrouded shores. It certainly would not want to import solar-generated electricity from sunnier climes, since this would undercut the self-sufficiency that eco-radicals prize above all else. Obviously, with a cessation of transregional economic connections, ecologically benign technologies would be damaged just as severely as destructive ones.

The Promethean environmental viewpoint, in contrast, holds that it is both economically and ecologically sensible to generate solar electricity where the sun shines and to gather wind energy where breezes blow. The simple principle of geographical advantage, I would argue, should be exploited both to minimize energy and resource waste and to make human life more pleasant. Yet all notions of geographical advantage, comparative or absolute, are disparaged by radical environmentalists, individuals who hold an unreasonable prejudice against trade in all forms.

Global Enterprise and Local Cultures

The eco-radicals' fear that global enterprises will demolish local traditions, replacing them with a Disneyesque mockery of true culture, is not only misguided but deeply arrogant as well. Who is to be the global

cultural arbiter, deciding which American films or records are unsuitable for foreign eyes and ears? Eco-radicals, many of whom would evidently endorse worldwide censorship on a massive scale, entertain severely misplaced fears. Indigenous societies the world over *are* gravely endangered, but such threats stem from nation-building central regimes, wealthy land-grabbers and forest clearers, and, in places like Bangladesh's Chittagong Hills, hungry, landless peasants from adjacent areas of high population density. Neither Madonna nor Sylvester Stallone has ever destroyed a culture.

In fact, throughout the world, local peoples are able to incorporate Western trappings without compromising their own cultural systems. The largest traditional, prestige feast I witnessed in highland Luzon, one that entailed feasting some 5,000 persons at the cost some \$15,000, was celebrated by a family holding the local Coca Cola distributorship. Moreover, the majority of guests in attendance were reasonably conversant with the latest products of the global entertainment industry. Nor are such interests anything new. Since the early years of this century, even casual travelers have discovered that the Kankana-ey people enjoy country music, western films, and cowboy boots; in local parlance calling someone a cowboy is a great compliment. But there is no evidence that such superficial borrowings have had any deleterious effects on their core cultural values and social institutions.

I would further suggest that the excoriation of multinational corporations is misguided and potentially dangerous. Damning firms whose productive operations span national boundaries is not only parochial but may also feed reactionary forms of nationalism. To forbid economic endeavors to cross political divides, whether by discouraging trade or by disallowing the establishment of foreign subsidiaries, would only strengthen the division of humankind into contending national blocks. Such nationalism has proved itself many times over a potent force for both war and repression.

The current direction of corporate evolution appears, in any event, to be headed away from classical *multinational* organization toward truly *transnational* structures. A prime example is the electrical engineering giant Asea Brown Boveri, which is at once Swiss and Swedish, tempered by a strong North American component (the latter acquired with the purchase of Combustion Engineering). Of special significance for the present discussion, 15 percent of ABB's sales now come from pollution control equipment, and the company is poised to make the greatest corporate contribution to the cleanup of Eastern Europe (*Business Week*, July 23, 1990). Strategic link-ups between companies based on different

continents also indicate a growing internationalization of capitalism. Ford and Mazda, for example, are now complexly intertwined at every level, from engineering and production to finance and marketing.

As liberal political economist Robert Reich (1991) argues, we may be entering an era in which major corporations will cease to have any national affiliation whatsoever. In Reich's controversial vision, corporations are seen as becoming flexible, cosmopolitan networks composed of semiautonomous deal-makers ("strategic brokers") whose various operations can leap about the globe in a restless search for greater efficiency. Not only do national ties lose their importance in such a world, but hierarchical centralization begins to diminish as well: "Instead of a pyramid, then, the high-value enterprise looks more like a spider's web" (Reich 1991:89). Ownership and control likewise grow ever more diffuse, as value is increasingly controlled not by investors but rather by the symbolic analysts who possess the skills and ideas necessary for creating and marketing products and services.

Reich's thesis is no doubt overstated, but the internationalization of capitalism is an unmistakable phenomenon. The transcendence of national boundaries by corporations is clearly a two-edged sword. On the positive side, we might expect international animosities to be quelled as economic integration proceeds. The problem, however, is that social control is not easily applied to a corporation with dispersed production centers, much less to one without a single administrative core. If too much pressure for environmental cleansing is placed in one region, a firm may simply relocate its operations to more congenial political environments. There are also social hazards; "the darker side of cosmopolitanism," Reich (1991:309) informs us, is that elite "world citizens" may never "develop the habits and attitudes of social responsibility." To my mind, such potential problems only strengthen the argument made above in favor of stronger global authority.⁷

Corporate Centralization

As Reich's analysis suggests, there is little evidence available to support the allegation that capitalist firms are growing ever more centralized. As many business theorists have noted, hyper-centralization is not conducive to efficient production. True, in the late nineteenth century and early twentieth century, increasing central power was a necessary strategy in new, technologically oriented industries. Firms in countries such as Great Britain that resisted the trend began to stagnate as a consequence (Chandler 1990). But the period of agglomeration in business seems to be ending. Indeed, the most savvy marxist analysts typically

label the present era as one of "disorganized capitalism" or "flexible accumulation" (Scott and Storper 1986; Harvey 1989).

To regard large corporations today as massive, undifferentiated economic leviathans is highly inaccurate. Overly centralized corporations tend to ossify and become unresponsive. The more successful multinationals usually delegate a good deal of authority to their subsidiaries and branch operations. Another current trend is that of the subsidiary spin-off, as companies learn that it is often more profitable to concentrate on their areas of core competence. America's high-tech industries, in particular, continue to generate numerous new corporations, not all of which are destined to be swallowed up by larger firms. Other business trends also point away from increasing centralization. The average size of new plants opened in the United States, for example, has been shrinking for many years (Knox and Agnew 1989:369). Moreover, through the 1980s small firms accounted for most of this country's employment growth, while large companies actually shed employees in great numbers (Knox and Agnew 1989).

None of this means, however, that the United States has entered an era of rampant economic decentralization. Centripetal and centrifugal forces exist side by side in unstable tension. Capitalism perpetually seeks out the most efficient modes of operation, and while these vary greatly from place to place and era to era, they certainly will never entail either total centralization or complete decentralization.

The same processes are also at work in other countries. Americans often think of the Japanese economy as dominated by a handful of technologically adept giants. While this view is accurate in important respects, Japanese capitalism equally depends on a multitude of small subcontracting firms. Moreover, due to small-batch technology, worker shortages, and the much-vaunted "just-in-time" delivery system, small Japanese corporations are increasingly able to graduate from subcontracting and begin competing with their large-scale patrons (see *The Economist*, October 27, 1990). And even at the large end of the Japanese industrial scale, conglomerates such as Mitsubishi owe their vast power less to central control than to complex networks of horizontal affiliation. The *keiretsu* system of allied but competing firms united through interlocking directorates—exemplified by the Mitsubishi group—may well represent capitalism's next wave (*Business Week*, September 24, 1990; Eccleston 1989). There is even some evidence that a modified American *keiretsu* system is developing, exemplified at present by IBM and Ford, both of which are linked increasingly closely to their many suppliers (*Business Week*, "Learning from Japan," January 27, 1992).

A different permutation of decentralized production may be found in another thriving capitalist region, north central Italy's Emilio-Romagna. Here medium and small firms relying extensively on subcontracting have proved a formidable force in global competition (Porter 1990). Interestingly, many of the area's postwar entrepreneurs had been socialist artisans who set up their own shops after a series of prolonged strikes in the 1950s (Holmes 1986:88). Given the dynamism of such variant forms, the specter of a few gargantuan companies someday exercising a stranglehold on the world economy increasingly appears to be little more than an figment of eco-radical paranoia.

Many contemporary technological innovations also lend themselves to increased decentralization. This tendency is pronounced in the realm of electricity generation, a focal point of eco-radical concerns. As Ged Davis (1990:60) explains: "Technology is also mediating a shift away from large, centralized power plants to smaller decentralized ones. Improvements in electronic communications, control and computing technology have made it easier to monitor and regulate complex grids remotely. With the arrival of new gas turbines, small engines, solar cells and other technologies, the economies of scale . . . are diminishing." Similarly, in steel production, the "mini-mill" revolution of the past decade has also led to increased decentralization (Dertouzos et al. 1989: 286).

In the critical field of telecommunications, the tension between centralizing and decentralizing functions is more complex, giving rise to a heated debate among scholars (Moss 1988). But if we look at the conjunction of governmental policy and technological change, it becomes clear that the American industry as a whole has experienced substantial decentralization. Not long ago there was no option but to communicate over the lines of a single leviathan. The break-up of AT&T and the rise of new long-distance carriers brought increased competition, but only with the more recent emergence of alternative access networks have local options emerged. Using a combination of dedicated lines, leased channels, and microwave facilities, such alternative systems may well become formidable competitors to the baby Bells. The idea of a telecom monopoly is now "as outdated as the copper-wire technology that [once] prevailed" (*Business Week*, March 25, 1991, p. 96). Cellular telephones, as well as personal communications networks, offer another new communication route, and with the recent FCC approval of public service by SMR (specialized mobile radio) firms, mobile telecom is also growing less centralized and more competitive.

Contrary to eco-radical theory, the rise of telecom alternatives and the

development of increasingly sophisticated technologies is making surveillance *more* difficult, not less. Indeed, cellular telephony in its early days acquired an unsavory reputation as the favored communication channel for drug dealers wary of tapped phone lines. While airwave transmissions can be monitored, improved signal scramblers make this ever more challenging. Legislation has also offered protection against surveillance, whether by private or governmental parties. The 1988 Electronic Communications Privacy Act, in particular, has helped safeguard the citizens' right to conduct unmonitored conversations. Certainly our rights to privacy are never secure, but such threats as do exist are located in the political, not the technological, sphere.

Firms Large and Small

Just as hyper-centralization has proved destructive, so too unmitigated decentralization is not without its hazards. While the development of monopolies must be continually guarded against, the parcelization of the economy into a multitude of tiny firms is potentially just as worrisome. Dertouzos and the other members of the MIT Commission on American Productivity (1989:55), to cite but one example, argue that the continuing spinning-off of high-tech firms may actually prove debilitating if carried to an extreme. Whatever the direction of corporate evolutionary trends, the time has come to reassess the eco-radical—and indeed, the traditional American liberal—preference for small firms.

Much empirical evidence suggests that the eco-radical picture of large companies as intrinsically more exploitative and dehumanizing than small ones is simply groundless. Brown, Hamilton, and Medoff (1990) demonstrate in unambiguous terms that small companies on aggregate offer their employees lower wages, fewer benefits, and weaker safety standards than do large firms operating in the same sector. More significant for the present discussion, small businesses much more easily avoid compliance with environmental regulations than do their larger competitors. The implications are clear. If large organizations are consistently penalized and small firms abetted, as radical greens urge, we could expect more workplace accidents and far greater emissions of industrial pollutants.

The Bioregional Fallacy

The eco-radical critique of scale in modern industrial society is deeply flawed, based as it is on a misunderstanding of hierarchic organization and on an outdated view of corporate structure. Its theoretical basis for

small-scale social reconstruction is, on the other hand, hopeless. The bioregion is, to put it most bluntly, little more than a construct of bad, outdated geography, one in which the region itself is consistently mystified (Alexander 1990). Geographers labored for decades attempting to find nonarbitrary, uniform regions based on a correspondence of human and natural features, but eventually they abandoned the quest as pointless (Hartshorne 1939; Minshull 1967). Instead, most now concur that the various attributes of a given region all have their own stubbornly individual geographies, usually exhibiting little spatial correspondence (M. Lewis 1991). Ecologists have similarly discovered that one can never isolate a coherent ecosystem or even a plant community, since ecosystemic exchanges are typically continuous over geographical space and since each individual plant species exhibits a unique distributional pattern. What may appear as a firm linkage, as for example between the piñon pine and the juniper in a large portion of America's southwest, is merely a reflection of the fact that the two species' ranges have a considerable zone of overlap.

A geographer or ecologist can still delineate regions or ecosystems, but the careful scholar will remember that they are always to a large extent arbitrary. Some geographers have gone so far as to call all regions "artistic creations" (Whittlesey 1954), while Brennan (1988:121) reminds us that ecologists "split up the world" in a "rough and ready way." Such rough creations are not without utility; the International Union for the Conservation of Nature's (IUCN) division of the earth into 193 "biogeographical provinces," for example, has proven useful for devising conservation strategies. But each is certainly not a given in the sense implied by most bioregional advocates.

Admittedly, some bioregionalists have also recognized the difficulty of delineating nonarbitrary regions. Sale (1985:55), for instance, argues that the ecologically attuned practitioner must feel or sense the contours used in constructing natural boundaries. Since they prefer intuition to scientific precision, few eco-radicals would regard such difficulties as in any way threatening to the bioregional project. But if bioregionalism were ever to move from the realm of utopian dreaming to that of actual implementation, one could expect that serious dilemmas would emerge in the allocation of "sensed" bioregional space.

Even if we accept the utility of delineating more or less arbitrary natural regions, the question of whether human communities should, and indeed can, be organized around them raises a separate set of issues. Most eco-radicals argue strongly in the affirmative. Believing that a correspondence of biological and cultural regions was the norm among

preindustrial societies, proponents contend that a bioregional mode of existence is both feasible and highly desirable.

Careful geographical analysis reveals the inadequacy of this formulation. Sale's (1985:60) own example of the "tribal conglomeration of Algonkian-speaking peoples" corresponding to the "ecoregion" of the "Northeast hardwoods" is meaningless. First, the name northeast hardwoods is not a recognized ecological region. Even if one were to accept a climactic vegetational model, one would still have to differentiate a beech-maple community from an oak-hickory community in this area. Moreover, both of these vegetational associations extended much farther westward than the traditional Northeast. Finally, many of the indigenous residents of this region were Iroquoian—rather than Algonkian-speaking, while Algonkian speakers were by no means confined to this environment (many lived in the subarctic, while others, such as the Cheyenne, eventually inhabited the Great Plains). A similar critique could be made of Young's assertion that medieval European kingdoms often corresponded to biologically defined regions. One has only to examine the shifting boundaries and vague definitions of such polities (for example, McEvedy 1961) to discover how nonsensical this notion is.

It is true that in pre-Columbian North America, and other parts of the world as well, broad cultural complexes were associated with broad natural environments. The various peoples of the Pacific Northwest, an area characterized by a mild, rainy climate, supporting dense coniferous forests, and blessed with abundant salmon runs, shared a wide variety of institutions and cultural traits (although such commonalities did not include such essential aspects of culture as language). But a sharing of lifeways did not provide these people any sense of bioregional solidarity; Northwestern communities frequently engaged each other in vigorous battle.

Kirkpatrick Sale, the most noted advocate of bioregionalism, acknowledges that tribal groups often engaged in war, but he stresses that this usually stemmed from resource pressures—pressures that he believes would not obtain in an ecologically balanced bioregional community (1985:123). Sale (1985:131) further claims that if the population of any one bioregion grows too large for its own resource base, it could either send out colonists to new areas or subdivide into smaller communities occupying ever smaller territories. Given general demographic expansion, the former strategy would work only for limited periods, while the latter would fail at the very start (subdividing resources would not make them any more abundant). Ultimately, the bioregionalists must fall back on the unsupportable proposition that by conforming to nature's ways,

human communities will automatically achieve population stability and discover social harmony.

To attempt to force human communities at any scale into the confines of naturally constituted regions would require the fortitude of Procrustes. Rather than coinciding with either vegetational or physiographic units, human polities have typically transcended all manner of natural divisions. In so doing they may derive a kind of ecological integrity, but one based on complementarity rather than uniformity. A French geographic tradition, stemming ultimately from the work of Paul Vidal de la Blache, has long held that a political community is strengthened by its ability to draw on the diverse products of disparate environments (see, most recently, Braudel 1988). This notion, I would suggest, has far more to recommend it than does bioregionalism.

The environmental determinism that lurks behind radical environmentalism is nowhere more evident than in the murky philosophy of bioregionalism. According to environmental determinists, human cultures are ultimately shaped by the lands and climates in which they evolve. People living in cold climes are supposed to be more vigorous than those suffering oppressive heat, for instance, while desert landscapes, with their vast vistas, have been said to lead human minds inexorably toward monotheism (Huntington 1915; Semple 1911). Such simplistic thinking was enthusiastically embraced by early twentieth-century American geographers—an intellectual disaster from which the discipline has never fully recovered. When careful studies demolished its empirical basis and critical reflection revealed its close association with racism, environmental determinism was renounced by virtually every member of the academic community.

Yet bioregionalists would have to go back to this repudiated philosophy, albeit in a novel, *normative* form. While denying that human cultures are presently molded by their landscapes, bioregional advocates argue that they *should* be. In fact, they come very close to implying that it is our very escape from environmental conditioning that has led to the current ecological crisis. Geographer Stephen Frenkel (n.d.) has convincingly drawn out the parallels between modern bioregionalism and early twentieth-century environmental determinism, showing that adherents of both schools envisage the same fundamental associations between culture, human character, and politics on the one hand, and the natural environment on the other. As was true of the earlier movement, so with the present one; determinism leads in the end only to parochial and distorted views of both nature and culture. Moreover, notions of human freedom seldom flourish once deterministic philosophies are embraced.

Freedom and Centralization

Yet radical environmentalists' ultimate fear of large-scale organization lies precisely in its supposed incompatibility with local autonomy and individual freedom. To the eco-extremist, as scale increases so does central control, leading inevitably to the brutal efficiency of totalitarianism. But as with so many other green doctrines, supporting evidence is scarce indeed.

No one familiar with American legal history can seriously argue that our freedoms have diminished over the past several hundred years. The long-term trend has rather been one of a great expansion of personal choices. Freedom of ideas, freedom from gender and racial discrimination, freedom to challenge the government in the courts, and freedom to obtain state information have all been significantly enlarged. The 1980s clearly showed that countervailing tendencies exist, and continued struggle will certainly be necessary if we are to expand and even maintain our present scope of liberty. But it is undeniable that within the industrial democracies human freedoms have grown as economic and political scale has expanded. Eco-radicals may detect big brother peering over every technical innovation, but the capacity for resistance to state repression has been greatly enhanced as computers and copiers have spread and as telecommunications have grown more sophisticated. True, a totalitarian state can use technology against its citizens, but the people can also turn the tables. As Gary Miles (1990:648) demonstrates, "The ancient means of mass communication . . . served the interest of traditional hierarchical authority"; the modern means, in contrast, often subvert tyranny. It was for good reason that the Soviet Union under Brezhnev strictly limited the availability of copiers and microcomputers, and that fax machines are still illegal on the Gaza Strip.

Conclusion

The eco-radical vision of a small-scale social order in which personal ties prevail over bureaucratic structures provides a comforting antidote to the stresses of modern life. Virtually everyone longs, at some time, to escape the cold anonymity of the big city or the large firm. The problems identified here by eco-radicals are not all imaginary, and it would be foolish to embrace without reservation the impersonal and machine-like norms so often associated with large-scale social and economic formations.

But the best alternative, I would argue, is to struggle continually to *humanize* existing and emerging institutions. We can no more invent a small-scale, ecologically benign, bioregional future than we can return to

an equally idealized primal past. Working within the imperfect forms of modern-day society is, admittedly, an anti-utopian gesture. We might improve society, but we will surely never perfect it. Those who are satisfied only with a vision that offers ultimate perfection will find little comfort in the liberal-moderate agenda advocated in this work.

The bioregional future imagined by eco-radicals would never provide them with the utopia they crave, even if it could be constructed exactly as envisaged. But that is the least of their problems. More pressing is the question of how we could *begin* to make the transformations necessary for the creation of the desired small-scale social world. As I have attempted to show, virtually any step taken in that direction would lead only to increased environmental degradation. It is one thing to dream of a pastoral America without cities, but quite another to imagine the process of deurbanizing the United States. Almost everywhere one looks, the eco-radical prescriptions are in the end just as harmful as the disease originally diagnosed.