Green Cities, Growing Cities, Just Cities?
Urban Planning and the Contradictions of Sustainable Development
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Abstract

Nothing inherent in the discipline steers planners either toward environmental protection or toward economic development -- or toward a third goal of planning: social equity. Instead, planners work within the tension generated among these three fundamental aims, which, collectively, I call the "planner's triangle," with sustainable development located at its center. This center cannot be reached directly, but only approximately and indirectly, through a sustained period of confronting and resolving the triangle's conflicts. To do so, planners have to redefine sustainability, since its current formulation romanticizes our sustainable past and is too vaguely holistic. Planners would benefit both from integrating social theory with environmental thinking and from combining their substantive skills with techniques for community conflict resolution, to confront economic and environmental injustice.

In the coming years planners face tough decisions about where they stand on protecting the green city, promoting the economically growing city, and advocating social justice. Conflicts among these goals are not superficial ones arising simply from personal preferences. Nor are they merely conceptual, among the abstract notions of ecological, economic, and political logic, nor a temporary problem caused by the untimely confluence of environmental awareness and economic recession.

Rather, these conflicts go to the historic core of planning, and are a leitmotif in the contemporary battles in both our cities and rural areas, whether over solid waste incinerators or growth controls, the spotted owls or nuclear power. And though sustainable development aspires to offer an alluring, holistic way of evading these conflicts, they cannot be shaken off so easily.

This paper uses a simple triangular model to understand the divergent priorities of planning. My argument is that the differences are partly due to misunderstandings arising from the disparate languages of environmental, economic, and political thought, but that translating across disciplines alone is not enough to eliminate these genuine clashes of interest. The socially constructed view of nature put forward here challenges the view of these conflicts as a classic battle of "man versus nature" or its current variation, "jobs versus the environment." The triangular model is then used to question whether sustainable development, the current object of planning's fascination, is a useful model to guide planning practice. I argue that the current concept of sustainability, though a laudable holistic vision, is vulnerable to the same criticism of vague idealism made thirty years ago against comprehensive planning. In this case, the idealistic fascination often builds upon a romanticized view of pre-industrial, indigenous, sustainable cultures -- inspiring visions but also of limited modern applicability. Nevertheless, sustainability, if redefined and incorporated into a broader understanding of political conflicts in industrial society, can become a powerful and useful organizing principle for planning. In fact, the idea will be particularly effective if, instead of merely evoking a misty-eyed vision of a peaceful ecotopia, it acts as a lightening rod to focus conflicting economic, environmental, and social interests. The more it stirs up conflict and sharpens the debate, the more effective the idea of sustainability will be in the long run.

The paper concludes by considering the implications of this viewpoint for planning. The triangle shows not only the conflicts, but also the potential complementarity of interests. The former are unavoidable and require planners to act as mediators, but the latter area is where planners can be especially creative in building coalitions between once-separated interest groups, such as labor and environmentalists, or community groups and business. To this end, planners need to combine both their procedural and their substantive skills and thus become central players in the battle over growth, the environment, and social justice.

## The Planner's Triangle: Three Priorities, Three Conflicts

The current environmental enthusiasm among planners and planning schools might suggest their innate predisposition to protect the natural environment. Unfortunately, the opposite is more likely true: our historic tendency has been to promote the development of cities at the cost of natural destruction: to build cities we have cleared forests, fouled rivers and the air, leveled mountains. That is not the complete picture, since planners also have often come to the defense of nature, through the work of conservationists, park planners, open space preservationists, the Regional

Planning Association of America, greenbelt planners, and modern environmental planners. Yet along the economic-ecological spectrum, with Robert Moses and Dave Foreman (of *Earth First!*) standing at either pole, the planner has no natural home, but can slide from one end to the other; moreover, the midpoint has no special claims to legitimacy or fairness.

Similarly, though planners often see themselves as the defenders of the poor and of socio-economic equality, their actions over the profession's history have often belied that self-image (Harvey 1985). Planners' efforts with downtown redevelopment, freeway planning, public-private partnerships, enterprise zones, smokestack-chasing and other economic development strategies don't easily add up to equity planning. At best, the planner has taken an ambivalent stance between the goals of economic growth and economic justice.

In short, the planner must reconcile not two, but at least three conflicting interests: to "grow" the economy, distribute this growth fairly, and in the process not degrade the ecosystem. To classify contemporary battles over environmental racism, pollution-producing jobs, growth control, etc., as simply clashes between economic growth and environmental protection misses the third issue, of social justice. The "jobs versus environment" dichotomy (e.g., the spotted owl versus Pacific Northwest timber jobs) crudely collapses under the "economy" banner the often differing interests of workers, corporations, community members, and the national public. The intent of this paper's title is to focus planning not only for "green cities and growing cities," but also for "just cities."

In an ideal world, planners would strive to achieve a balance of all three goals. In practice, however, professional and fiscal constraints drastically limit the leeway of most planners. Serving the broader public interest by holistically harmonizing growth, preservation, and equality remains the ideal; the reality of practice restricts planners to serving the narrower interests of their clients, authorities and bureaucracies (Marcuse 1976), despite efforts to work outside those limitations (Hoffman 1989). In the end, planners usually represent one particular goal -- planning perhaps for increased property tax revenues, or more open space preservation, or better housing for the poor -- while neglecting the other two. Where each planner stands in the triangle depicted in figure 1 defines such professional bias. One may see illustrated in the figure the gap between the call for integrative, sustainable development planning (the center of the triangle) and the current fragmentation of professional practice (the edges). This point is developed later.
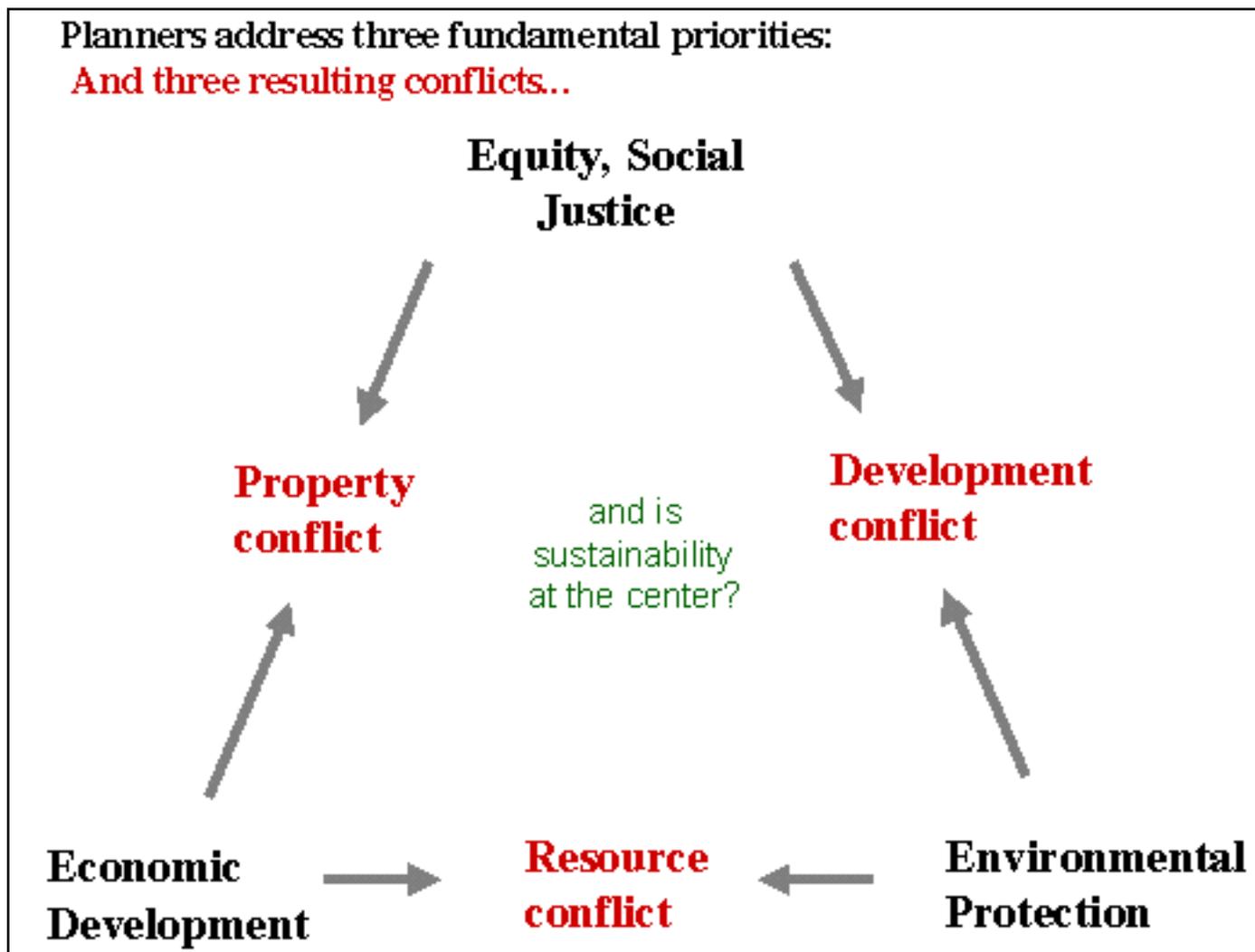
Figure 1. The triangle of conflicting goals for planning, and the three associated conflicts. Planners define themselves, implicitly, by where they stand on the triangle. The elusive ideal of sustainable development leads one to the center.

The Points (Corners) of the Triangle: the Economy, the Environment, and Equity

The three types of priorities lead to three perspectives on the city: The economic development planner sees the city as a location where production, consumption, distribution, and innovation take place. The city is in competition with other cities for markets and for new industries. Space is the economic space of highways, market areas, and commuter zones.

The environmental planner sees the city as a consumer of resources and a producer of wastes. The city is in competition with nature for scarce resources and land, and always poses a threat to nature. Space is the ecological space of greenways, river basins, ecological niches.

The equity planner sees the city as a location of conflict over the distribution of resources, of services, and of opportunities. The competition is within the city itself, among different social groups. Space is the social space of communities, neighborhood organizations, labor unions: the space of access and segregation.

Certainly there are other important views of the city, including the architectural, the psychological, and the circulatory (transportation); and one could conceivably construct a planner's rectangle, pentagon, or more complex polygons. The triangular shape itself is not propounded here as the underlying geometric structure of the planner's world. Rather, it is useful for its conceptual simplicity. More importantly, it emphasizes the point that a one-dimensional "man versus environment" spectrum misses the social conflicts in contemporary environmental disputes, such as loggers versus the Sierra Club, farmers versus suburban developers, or fishermen versus barge operators (Reisner 1987; Jacobs 1989; McPhee 1989; Tuason 1993).

Triangle Axis 1: The Property Conflict

The three points on the triangle represent divergent interests, and therefore lead to three fundamental conflicts. The first conflict -- between economic growth and equity -- arises from competing claims on and uses of property, such as between management and labor, landlords and tenants, or gentrifying professionals and long-time residents. This growth-equity conflict is further complicated because each side not only resists the other, but also needs the other for its own survival. The contradictory tendency for a capitalist, democratic society to define property (such as housing or land) as a private commodity, but at the same time to rely on government intervention (e. g., zoning, or public housing for the working class) to ensure the beneficial social aspects of the same property, is what Richard Foglesong (1986) calls the "property contradiction." This tension is generated as the private sector simultaneously resists and needs social intervention, given the intrinsically contradictory nature of property. Indeed, the essence of property in our society is the tense pulling between these two forces. The conflict defines the boundary between private interest and the public good.

Triangle Axis 2: The Resource Conflict

Just as the private sector both resists regulation of property, yet needs it to keep the economy flowing, so too is society in conflict about its priorities for natural resources. Business resists the regulation of its exploitation of nature, but at the same time needs regulation to conserve those resources for present and future demands. This can be called the "resource conflict." The conceptual essence of natural resources is therefore the tension between their economic utility in

industrial society and their ecological utility in the natural environment. This conflict defines the boundary between the developed city and the undeveloped wilderness, which is symbolized by the "city limits." The boundary is not fixed; it is a dynamic and contested boundary between mutually dependent forces.

Is there a single, universal economic-ecological conflict underlying all such disputes faced by planners? I searched for this essential, Platonic notion, but the diversity of examples -- water politics in California, timber versus the spotted owl in the Pacific Northwest, tropical deforestation in Brazil, park planning in the Adirondacks, greenbelt planning in Britain, to name a few -- suggests otherwise. Perhaps there is an *Ur-Konflikt*, rooted in the fundamental struggle between human civilization and the threatening wilderness around us, and expressed variously over the centuries. However, the decision must be left to anthropologists as to whether the essence of the spotted owl controversy can be traced back to Neolithic times. A meta-theory tying all these multifarious conflicts to an essential battle of "human versus nature" (and, once tools and weapons were developed and nature was controlled, "human versus human") -- that invites skepticism. In this discussion, the triangle is used simply as a template to recognize and organize the common themes; to examine actual conflicts, individual case studies are used.

The economic-ecological conflict has several instructive parallels with the growth-equity conflict. In the property conflict, industrialists must curb their profit-increasing tendency to reduce wages, so as to provide labor enough wages to feed, house, and otherwise "reproduce" itself -- that is, the subsistence wage. In the resource conflict, the industrialists must curb their profit-increasing tendency to increase timber yields, so as to ensure that enough of the forest remains to "reproduce" itself (Clawson 1975; Beltzer and Kroll 1986; Lee, Field, and Burch 1990). This practice is called "sustained yield," though timber companies and environmentalists disagree about how far the forest can be exploited and still be "sustainable." (Of course, other factors also affect wages, such as supply and demand, skill level, and discrimination, just as lumber demand, labor prices, transportation costs, tariffs, and other factors affect how much timber is harvested.) In both cases, industry must leave enough of the exploited resource, be it labor or nature, so that the resource will continue to deliver in the future. In both cases, how much is "enough" is also contested.

Triangle Axis 3: The Development Conflict

The third axis on the triangle is the most elusive: the "development conflict," lying between the poles of social equity and environmental preservation. If the property conflict is characterized by the economy's ambivalent interest in providing at least a subsistence existence for working people, and the resource conflict by the economy's ambivalent interest in providing sustainable conditions for the natural environment, the development conflict stems from the difficulty of doing both at once. Environment-equity disputes are coming to the fore to join the older dispute about economic growth versus equity (Paehlke 1994, 349-50). This may be the most challenging conundrum of

sustainable development: how to increase social equity and protect the environment simultaneously, whether in a steady-state economy (Daly 1991) or not. How could those at the bottom of society find greater economic opportunity if environmental protection mandates diminished economic growth? On a global scale, efforts to protect the environment might lead to slowed economic growth in many countries, exacerbating the inequalities between rich and poor nations. In effect, the developed nations would be asking the poorer nations to forgo rapid development to save the world from the greenhouse effect and other global emergencies.

This development conflict also happens at the local level, as in resource-dependent communities, which commonly find themselves at the bottom of the economy's hierarchy of labor. Miners, lumberjacks, and mill workers see a grim link between environmental preservation and poverty, and commonly mistrust environmentalists as elitists. Poor urban communities are often forced to make the no-win choice between economic survival and environmental quality, as when the only economic opportunities are offered by incinerators, toxic waste sites, landfills, and other noxious land uses that most neighborhoods can afford to oppose and do without (Bryant and Mohai 1992; Bullard 1990, 1993). If some argue that environmental protection is a luxury of the wealthy, then environmental racism lies at the heart of the development conflict. Economic segregation leads to environmental segregation: the former occurs in the transformation of natural resources into consumer products; the latter occurs as the spoils of production are returned to nature. Inequitable development takes place at all stages of the materials cycle.

Consider this conflict from the vantage of equity planning. Norman Krumholz, as the planning director in Cleveland, faced the choice of either building regional rail lines or improving local bus lines (Krumholz et al. 1982). Regional rail lines would encourage the suburban middle class to switch from cars to mass transit; better local bus service would help the inner-city poor by reducing their travel and waiting time. One implication of this choice was the tension between reducing pollution and making transportation access more equitable, an example of how bias toward social inequity may be embedded in seemingly objective transit proposals.

Implications of the Planner's Triangle Model

Conflict and Complementarity in the Triangle

Though I use the image of the triangle to emphasize the strong conflicts among economic growth, environmental protection, and social justice, no point can exist alone. The nature of the three axial conflicts is mutual dependence based not only on opposition, but also on collaboration.

Consider the argument that the best way to distribute wealth more fairly (i.e., to resolve the property conflict) is to increase the size of the economy, so that society will have more to redistribute. Similarly, we can argue that the best way to improve environmental quality (i.e., to resolve the resource conflict) is to expand the economy, thereby having more money with which to buy environmental protection. The former is trickle-down economics; can we call the latter "trickle-down environmentalism"? One sees this logic in the conclusion of the Brundtland Report: "If large parts of the developing world are to avert economic, social, and environmental catastrophes, it is essential that global economic growth be revitalized." (World Commission on Environment and Development 1987). However, only if such economic growth is more fairly distributed will the poor be able to restore and protect their environment, whose devastation so immediately degrades their quality of life. In other words, the development conflict can be resolved only if the property conflict is resolved as well. Therefore, the challenge for planners is to deal with the conflicts between competing interests by discovering and implementing complementary uses.

The Triangle's Origins in a Social View of Nature

One of the more fruitful aspects of recent interdisciplinary thought may be its linking the traditionally separate intellectual traditions of critical social theory and environmental science/policy (e.g., Smith 1990; Wilson, 1992; Ross 1994). This is also the purpose of the triangle figure presented here: to integrate the environmentalist's and social theorist's world views. On one side, an essentialist view of environmental conflicts ("man versus nature") emphasizes the resource conflict. On another side, a historical materialist view of social conflicts (e.g., capital versus labor) emphasizes the property conflict. By simultaneously considering both perspectives, one can see more clearly the social dimension of environmental conflicts, that is, the development conflict. Such a synthesis is not easy: it requires accepting the social construction of nature but avoiding the materialistic pitfall of arrogantly denying any aspects of nature beyond the labor theory of value.

Environmental conflict should not, therefore, be seen as simply one group representing the interests of nature and another group attacking nature (though it often appears that way). Who is to say that the lumberjack, who spends all his or her days among trees (and whose livelihood depends on those trees), is any less close to nature than the environmentalist taking a weekend walk through the woods? Is the lumberjack able to cut down trees only because s/he is "alienated" from the "true" spirit of nature -- the spirit that the hiker enjoys? In the absence of a forest mythology, neither the tree cutter nor the tree hugger -- nor the third party, the owner/lessee of the forest -- can claim an innate kinship to a tree. This is not to be an apologist for clear-cutting, but rather to say that the merits of cutting vs. preserving trees cannot be decided according to which persons or groups have the "truest" relationship to nature.

The crucial point is that all three groups have an interactive relationship with nature: the differences

lie in their conflicting *conceptions* of nature, their conflicting *uses* of nature, and how they incorporate nature into their systems of values (be they community, economic or spiritual values). This clash of human values reveals how much the ostensibly separate domains of community development and environmental protection overlap, and suggests that planners should do better in combining social and environmental models. One sees this clash of values in many environmental battles: between the interests of urban residents and those of subsidized irrigation farmers in California water politics; between beach homeowners and coastal managers trying to control erosion; between rich and poor neighborhoods, in the siting of incinerators; between farmers and environmentalists, in restrictions by open space zoning. Even then-President George Bush weighed into such disputes during his 1992 campaign when he commented to a group of loggers that finally people should be valued more than spotted owls (his own take on the interspecies equity issue). Inequity and the imbalance of political power are often issues at the heart of economic-environmental conflicts.

Recognition that the terrain of nature is contested need not, however, cast us adrift on a sea of socially-constructed relativism where "nature" appears as an arbitrary idea of no substance (Bird 1987; Soja 1989). Rather, we are made to rethink the idea and to see the appreciation of nature as an historically evolved sensibility. I suspect that radical environmentalists would criticize this perspective as anthropocentric environmentalism, and argue instead for an ecocentric world view that puts the Earth first (Sessions 1992; Parton 1993). It is true that an anthropocentric view, if distorted, can lead to an arrogant optimism about civilization's ability to reprogram nature through technologies ranging from huge hydroelectric and nuclear plants down to genetic engineering. A rigid belief in the anthropocentric labor theory of value, Marxist or otherwise, can produce a modern-day Narcissus as a social-constructionist who sees nature as merely reflecting the beauty of the human aesthetic, and the value of human labor. In this light, a tree is devoid of value until it either becomes part of a scenic area or is transformed into lumber. On the other hand, even as radical, ecocentric environmentalists claim to see "true nature" beyond the city limits, they are blind to how their own world view and their definition of nature itself are shaped by their socialization. The choice between an anthropocentric or an ecocentric world view is a false one. We are all unavoidably anthropocentric; the question is which anthropomorphic values and priorities we will apply to the natural and the social world around us.

Sustainable Development: Reaching the Elusive Center of the Triangle

If the three corners of the triangle represent key goals in planning, and the three axes represent the three resulting conflicts, then I will define the center of the triangle as representing sustainable development: the balance of these three goals. Getting to the center, however, will not be so easy. It is one thing to locate sustainability in the abstract, but quite another to reorganize society to get

there.

At first glance, the widespread advocacy of sustainable development is astonishing, given its revolutionary implications for daily life (World Commission 1987; Daly and Cobb 1989; Rees 1989; World Bank, 1989; Goodland 1990; Barrett and Bohlen 1991; Korten 1991; Van der Ryn and Calthorpe 1991). It is getting hard to refrain from sustainable development; arguments against it are inevitably attached to the strawman image of a greedy, myopic industrialist. Who would now dare to speak up in opposition? Two interpretations of the bandwagon for sustainable development suggest themselves. The pessimistic thought is that sustainable development has been stripped of its transformative power and reduced to its lowest common denominator. After all, if both the World Bank and radical ecologists now believe in sustainability, the concept can have no teeth: it is so malleable as to mean many things to many people without requiring commitment to any specific policies. Actions speak louder than words, and though all endorse sustainability, few will actually practice it. Furthermore, any concept fully endorsed by all parties must surely be bypassing the heart of the conflict. Set a goal far enough into the future, and even conflicting interests will seem to converge along parallel lines. The concept certainly appears to violate the Karl Popper's requirement that propositions be falsifiable, for to reject sustainability is to embrace nonsustainability -- and who dares to sketch that future? (Ironically, the nonsustainable scenario is the easiest to define: merely the extrapolation of our current way of life.)

Yet there is also an optimistic interpretation of the broad embrace given sustainability: the idea has become hegemonic, an accepted meta-narrative, a given. It has shifted from being a variable to being the parameter of the debate, almost certain to be integrated into any future scenario of development. We should therefore neither be surprised that no definition has been agreed upon, nor fear that this reveals a fundamental flaw in the concept. In the battle of big public ideas, sustainability has won: the task of the coming years is simply to work out the details, and to narrow the gap between its theory and practice.

Is Sustainable Development a Useful Concept?

Some environmentalists argue that if sustainable development is necessary, it therefore must be possible. Perhaps so, but if you are stranded at the bottom of a deep well, a ladder may be impossible even though necessary. The answer espoused may be as much an ideological as a scientific choice, depending on whether ones loyalty is to Malthus or Daly. The more practical question is whether sustainability is a useful concept for planners. The answer here is mixed. The goal may be too far away and holistic to be operational: that is, it may not easily break down into concrete, short-term steps. We also might be able to *define* sustainability yet unable to ever actually measure it or even know, one day in the future, that we had achieved it. An old eastern proverb identifies the western confusion of believing that to name something is to know it. That may be the danger in automatically embracing sustainable development: a facile confidence that by adding the

term "sustainable" to all our existing planning documents and tools (sustainable zoning, sustainable economic development, sustainable transportation planning), we are *doing* sustainable planning. Conversely, one can do much beneficial environmental work without ever requiring attention to the concept of sustainability.

Yet sustainability can be a helpful concept in that it posits the long-term planning goal of a social-environmental system in balance. It is a unifying concept, enormously appealing to the imagination, that brings together many different environmental concerns under one overarching value. It defines a set of social priorities and articulates how society values the economy, the environment, and equity (Paehlke 1994, 360). In theory, it allows us not only to calculate whether we have attained sustainability, but also to determine how far away we are (actual measurement, though, is another, harder task). Clearly it can be argued that, though initially flawed and vague, the concept can be transformed and refined to be of use to planners.

History, Equity and Sustainable Development

One obstacle to an accurate, working definition of sustainability may well be the historical perspective that sees the practice as pre-existing, either in our past or as a Platonic concept. I believe instead that our sustainable future does not yet exist, either in reality or even in strategy. We do not yet know what it will look like; it is being socially constructed through a sustained period of conflict negotiation and resolution. This is a process of innovation, not of discovery and converting the nonbelievers.

This point brings us to the practice of looking for sustainable development in preindustrial and nonwestern cultures (a common though not universal practice). Searching for our future in our indigenous past is instructive at both the philosophical and the practical level (Turner 1983; Duerr 1985). Yet it is also problematical, tapping into a myth that our salvation lies in the preindustrial sustainable culture. The international division of labor and trade, the movement of most people away from agriculture into cities, and exponential population growth lead us irrevocably down a unidirectional, not a circular path: the transformation of preindustrial, indigenous settlements into mass urban society is irreversible. Our modern path to sustainability lies forward, not behind us.

The key difference between those indigenous, sustainable communities and ours is that they had no choice but to be sustainable. Bluntly stated, if they cut down too many trees or ruined the soil, they would die out. Modern society has the options presented by trade, long-term storage, and synthetic replacements; if we clear-cut a field, we have subsequent options that our ancestors didn't. In this situation, we must *voluntarily choose* sustainable practices, since there is no immediate survival or market imperative to do so. Although the long-term effects of a nonsustainable economy are certainly dangerous, the feedback mechanisms are too long-term to prod us in the right direction.

Why do we often romanticize the sustainable past? Some are attracted to the powerful spiritual link between humans and nature that has since been lost. Such romanticists tend however, to overlook the more harsh and unforgiving aspects of being so dependent on the land. Two hundred years ago, Friedrich Schiller (1965, 28) noted the tendency of utopian thinkers to take their dream for the future and posit it as their past, thus giving it legitimacy as a cyclical return to the past. This habit is not unique to ecotopians (Kumar 1991); some religious fundamentalists also justify their utopian urgency by drawing on the myth of a paradise lost. Though Marxists don't glorify the past in the same way, they, too, manage to anticipate a *static* system of balance and harmony that nonetheless will require a cataclysmic, revolutionary social transformation to reach. All three ideologies posit some basic flaw in society -- be it western materialism, original sin, or capitalism -- whose identification and cure will free us from conflict. Each ideology sees a fundamental alienation as the danger to overcome: alienation from nature, from god, or from work. Each group is so critical of existing society that it would seem a wonder we have made it this far; but this persistence of human society despite the dire prognoses of utopians tells us something.

What is the fall-out from such historical thinking? By neglecting the powerful momentum of modern industrial and postindustrial society, it both points us in the wrong direction and makes it easier to marginalize the proponents of sustainable development. It also carries an anti-urban sentiment that tends to neglect both the centrality and the plight of megacities. Modern humans are unique among species in their propensity to deal with nature's threats, not only through flight and burrowing and biological adaptation, nor simply through spiritual understanding, but also through massive population growth, complex social division of labor, and the fundamental, external transformation of their once-natural environment (the building of cities). Certainly the fixation on growth, industry, and competition has degraded the environment. Yet one cannot undo urban-industrial society. Rather, one must continue to innovate through to the other side of industrialization, to reach a more sustainable economy.

The cyclical historical view of some environmentalists also hinders a critical understanding of equity, since that view attributes to the environment a natural state of equality rudely upset by modern society. Yet nature is inherently neither equal nor unequal, and at times can be downright brutal. The human observer projects a sense of social equity onto nature, through a confusion, noted by Schiller, of the idealized future with myths about our natural past. To gain a sense of historical legitimacy, we project our socially constructed sense of equality onto the past, creating revisionist history in which nature is fair and compassionate. Society's path to equality is perceived not as an uncertain progress from barbarism to justice, but rather as a return to an original state of harmony as laid out in nature. In this thinking, belief in an ecological balance and a social balance, entwined in the pre-industrial world, conjures up an eco-Garden of Eden "lost" by modern society.

It will be more useful to let go of this mythic belief in our involuntary diaspora from a pre-industrial, ecotopian Eden. The conflation of ecological diasporas and utopias constrains our search for creative, urban solutions to social-environmental conflict. By relinquishing it, we will

understand that notions of equity were not lying patiently in wait in nature, to be first discovered by indigenous peoples, then lost by colonialists, and finally rediscovered by modern society in the late twentieth century. This is certainly not to say that nature can teach us nothing. The laws of nature are not the same thing, however, as natural law, nor does ecological equilibrium necessarily generate normative principles of equity. Though we turn to nature to understand the context, dynamics, and effects of the economic-environmental conflict, we must turn to social norms to decide what balance is fair and just.

How, then, do we define what is fair? I propose viewing social justice as the striving towards a more equal distribution of resources among social groups across the space of cities and of nations -- a definition of "fair" distribution. It should be noted that societies view themselves "fair" if the *procedures* of allocation treat people equally, even if the *substantive* outcome is unbalanced. (One would hope that equal treatment is but the first step towards narrowing material inequality.) The environmental movement expands the space for this "equity" in two ways: (1) intergenerationally (present versus future generations) and (2) across species (as in animal rights, deep ecology, and legal "standing" for trees). The two added dimensions of equity remain essentially abstractions, however, since no one from the future or from other species can speak up for their "fair share" of resources. Selfless advocates (or selfish ventriloquists) "speak for them."

This expansion of socio-spatial "equity" to include future generations and other species not only makes the concept more complex; it also creates the possibility for contradictions among the different calls for "fairness." Slowing worldwide industrial expansion may preserve more of the world's resources for the future (thereby increasing intergenerational equity), but it may also undermine the efforts of the underdeveloped world to approach the living standards of the west (thereby lowering international equity). Battles over Native American fishing practices, the spotted owl, and restrictive farmland preservation each thrust together several divergent notions of "fairness." It is through resolving the three sorts of conflicts on the planner's triangle that society iteratively forms its definition of what is fair.

The Path Towards Sustainable Development

There are two final aspects of the fuzzy definition of sustainability: its path and its outcome. The basic premise of sustainable development is one that, like the long-term goal of a balanced U.S. budget, is hard not to like. As with eliminating the national debt, however, two troubling questions about sustainable development remain: How are you going to get there? Once you get there, what are the negative consequences? Planners don't yet have adequate answers to these two questions, that is, as yet they have no concrete strategies to achieve sustainable development, nor do they know how to counter the political resistance to it.

On the *path* towards a sustainable future, the steps are often too vague, as with sweeping calls for a "spiritual transformation" as the prerequisite for environmental transformation. Sometimes the call for sustainable development seems to serve as a vehicle for sermonizing about the moral and spiritual corruption of the industrial world (undeniable). Who would not want to believe in a holistic blending of economic and ecological values in each of our planners, who would then go out into the world and, on each project, internally and seamlessly merge the interests of jobs and nature, as well as of social justice? That is, the call to planners would be to stand at every moment at the center of the triangle.

But this aim is too reminiscent of our naive belief during the 1950s and 1960s in comprehensive planning for a single "public interest," before the incrementalists and advocacy planners pulled the rug out from under us (Lindblom 1959; Altshuler 1965; Davidoff 1965; Fainstein and Fainstein 1971). I suspect that planners' criticisms of the sustainable development movement in the coming years will parallel the critique of comprehensive planning 30 years ago: The incrementalists will argue that one cannot achieve a sustainable society in a single grand leap, for it requires too much social and ecological information and is too risky. The advocacy planners will argue that no common social interest in sustainable development exists, and that bureaucratic planners will invariably create a sustainable development scheme that neglects the interests both of the poor and of nature. To both groups of critics, the prospect of integrating economic, environmental and equity interests will seem forced and artificial. States will require communities to prepare "Sustainable Development Master Plans," which will prove to be glib wish lists of goals and suspiciously vague implementation steps. To achieve consensus for the plan, language will be reduced to the lowest common denominator, and the pleasing plans will gather dust.

An alternative is to let holistic sustainable development be a long-range goal; it is a worthy one, for planners do need a vision of a more sustainable urban society. But during the coming years, planners will confront deep-seated conflicts among economic, social and environmental interests that cannot be wished away through admittedly appealing images of a community in harmony with nature. One is no more likely to abolish the economic-environmental conflict completely by achieving sustainable bliss than one is to eliminate completely the boundaries between the city and the wilderness, between the public and private spheres, between the haves and have-nots. Nevertheless, one can diffuse the conflict, and find ways to avert its more destructive fall-out.

My concern about the *ramifications* of a sustainable future is one that is often expressed: steady-state, no-growth economics would be likely to relegate much of the developing world -- and the poor within the industrialized world -- to a state of persistent poverty. The advocates of sustainable development rightly reject as flawed the premise of conventional economics that only a growth economy can achieve social redistribution. And growth economics has, indeed, also exacerbated the environment's degradation. However, it is wishful thinking to assume that a sustainable economy will automatically ensure a socially just distribution of resources. The vision of no-growth (commonly though not universally assumed to characterize sustainable development) raises powerful fears, and planners should be savvy to such fears. Otherwise, they will understand neither

the potential dangers of steady-state economics nor the nature of the opposition to sustainable development.

Rethinking/Redefining Sustainable Development

Despite the shortcomings in the current formulation of sustainable development, the concept retains integrity and enormous potential. It simply needs to be redefined and made more precise. First, one should avoid a dichotomous, black-and-white view of sustainability. We should think of American society not as a corrupt, wholly unsustainable one that has to be made pure and wholly sustainable, but rather as a hybrid of both sorts of practices. Our purpose, then, should be to move further towards sustainable practices in an evolutionary progression.

Second, we should broaden the idea of "sustainability." If "crisis" is defined as the inability of a system to reproduce itself, then sustainability is the opposite: the long-term ability of a system to reproduce. This criterion applies not only to natural ecosystems, but to economic and political systems as well. By this definition, western society already does much to sustain itself: economic policy and corporate strategies (e.g., investment, training, monetary policy) strive to reproduce the macro- and micro-economies. Similarly, governments, parties, labor unions, and other political agents strive to reproduce their institutions and interests. Society's shortcoming is that as it strives to sustain its political and economic systems, it often neglects to sustain the ecological system. The goal for planning is therefore a broader agenda: to sustain, simultaneously and in balance, these three sometimes competing, sometimes complementary systems.

Third, it will be helpful to distinguish initially between two levels of sustainability: specific versus general (or local versus global). One might fairly easily imagine and achieve sustainability in a single sector and/or locality, for example, converting a Pacific Northwest community to sustained-yield timber practices. Recycling, solar power, cogeneration, and conservation can lower consumption of nonsustainable resources. To achieve complete sustainability across all sectors and/or all places, however, requires such complex restructuring and redistribution that the only feasible path to global sustainability is likely to be a long, incremental accumulation of local and industry-specific advances.

What this incremental, iterative approach means is that planners will find their vision of a sustainable city developed best at the conclusion of contested negotiations over land use, transportation, housing, and economic development policies, not as the premise for beginning the effort. To first spend years in the hermetic isolation of universities and environmental groups, perfecting the theory of sustainable development, before testing it in community development is backwards. That approach sees sustainable development as an ideal society outside the conflicts of the planner's triangle, or as the tranquil "eye of the hurricane" at the triangle's center. As with the

ideal comprehensive plan, it is presumed that the objective, technocratic merits of a perfected sustainable development scheme will ensure society's acceptance. But one cannot reach the sustainable center of the planner's triangle in a single, holistic leap to a pre-ordained balance.

The Task Ahead for Planners: Seeking Sustainable Development within the Triangle of Planning Conflicts

The role of planners is therefore to engage the current challenge of sustainable development with a dual, interactive strategy: (1) to manage and resolve conflict; and (2) to promote creative technical, architectural, and institutional solutions. Planners must both negotiate the procedures of the conflict and promote a substantive vision of sustainable development.

Procedural Paths to Sustainable Development: Conflict Negotiation

In negotiation and conflict resolution (Bingham 1986; Susskind and Cruikshank 1987; Crowfoot and Wondolleck 1990), rather than pricing externalities, common ground is established at the negotiation table, where the conflicting economic, social, and environmental interests can be brought together. The potential rewards are numerous: not only an outcome that balances all parties, but avoidance of heavy legal costs and long-lasting animosity. Negotiated conflict resolution can also lead to a better understanding of one's opponent's interests and values, and even of one's own interests. The very process of lengthy negotiation can be a powerful tool to mobilize community involvement around social and environmental issues. The greatest promise, of course, is a win-win outcome: finding innovative solutions that would not have come out of traditional, adversarial confrontation. Through skillfully led back-and-forth discussion, the parties can separate their initial, clashing substantive demands from their underlying interests, which may be more compatible. For example, environmentalists and the timber industry could solve their initial dispute over building a logging road, through alternative road design and other mitigation measures (Crowfoot and Wondolleck 1990, 32-52).

However, conflict resolution is no panacea. Sometimes conflicting demands express fundamental conflicts of interest. The either-or nature of the technology or ecology may preclude a win-win outcome, as in an all-or-nothing dispute over a proposed hydroelectric project (Reisner 1987) -- you either build it or you don't. An overwhelming imbalance of power between the opposing groups also can thwart resolution (Crowfoot and Wondolleck 1990, 4). A powerful party can simply refuse to participate. It is also hard to negotiate a comprehensive resolution for a large number of parties.

Planners are likely to have the best success in using conflict resolution when there is a specific,

concise dispute (rather than an amorphous ideological clash); all interested parties agree to participate (and don't bypass the process through the courts); each party feels on equal ground; there are a variety of possible compromises and innovative solutions; both parties prefer a solution to an impasse; and a skilled third-party negotiator facilitates. The best resolution strategies seem to include two areas of compromise and balance: the procedural (each party is represented and willing to compromise); and the substantive (the solution is a compromise, such as multiple land uses or a reduced development density).

Procedural Paths to Sustainable Development: Redefining the Language of the Conflict

A second strategy is to bridge the chasms between the languages of economics, environmentalism, and social justice. Linguistic differences, which reflect separate value hierarchies, are a major obstacle to common solutions. All too often, the economists speak of incentives and marginal rates, the ecologists speak of carrying capacity and biodiversity, the advocate planners speak of housing rights, empowerment, and discrimination, and each side accuses the others of being "out of touch" (Campbell 1992).

The planner therefore needs to act as a translator, assisting each group to understand the priorities and reasoning of the others. Economic, ecological and social thought may at a certain level be incommensurable, yet a level may still be found where all three may be brought together. To offer an analogy, a Kenyan Gikuyu text cannot be fully converted into English without losing something in translation; a good translation, nevertheless, is the best possible way to bridge two systems of expression that will never be one, and it is preferable to incomprehension.

The danger of translation is that one language will dominate the debate and thus define the terms of the solution. It is essential to exert equal effort to translate in each direction, to prevent one linguistic culture from dominating the other (as English has done in neo-colonial Africa). Another lesson from the neocolonial linguistic experience is that it is crucial for each social group to express itself in its own language before any translation. The challenge for planners is to write the best translations among the languages of the economic, the ecological, and the social views, and to avoid a quasi-colonial dominance by the economic *lingua franca*, by creating equal two-way translations.

For example, planners need better tools to understand their cities and regions not just as economic systems, or static inventories of natural resources, but also as *environmental systems* that are part of regional and global networks trading goods, information, resources and pollution. At the conceptual level, translating the economic vocabulary of global cities, the spatial division of labor, regional restructuring, and technoburbs/edge cities into environmental language would be a worthy start; at the same time, of course, the vocabulary of biodiversity, landscape linkages, and carrying capacity

should be translated to be understandable by economic interests.

This bilingual translation should extend to the empirical level. I envision extending the concept of the "trade balance" to include an "environmental balance," which covers not just commodities, but also natural resources and pollution. Planners should improve their data collection and integration to support the environmental trade balance. They should apply economic-ecological bilingualism not only to the content of data, but also to the spatial framework of the data, by rethinking the geographic boundaries of planning and analysis. Bioregionalists advocate having the spatial scale for planning reflect the scale of *natural* phenomena (e.g., the extent of a river basin, vegetation zones, or the dispersion range of metropolitan air pollution); economic planners call for a spatial scale to match the *social* phenomena (e.g., highway networks, municipal boundaries, labor market areas, new industrial districts). The solution is to integrate these two scales and overlay the economic and ecological geographies of planning. The current merging of environmental Raster (grid-based) and infrastructural vector-based data in Geographic Information Systems (GIS) recognizes the need for multiple layers of planning boundaries (Wiggins 1993).

Translation can thus be a powerful planner's skill, and interdisciplinary planning education already provides some multilingualism. Moreover, the idea of sustainability lends itself nicely to the meeting on common ground of competing value systems. Yet translation has its limits. Linguistic differences often represent real, intractable differences in values. An environmental dispute may arise not from a misunderstanding alone; both sides may clearly understand that their vested interests fundamentally clash, no matter how expressed. At this point, translation must give way to other strategies. The difficulties are exacerbated when one party has greater power, and so shapes the language of the debate as well as prevailing in its outcome. In short, translation, like conflict negotiation, reveals both the promises and the limitations of communication-based conflict resolution.

Other Procedural Paths

Two other, more traditional approaches deserve mention. One is political pluralism: let the political arena decide conflicts, either directly (e.g., a referendum on an open space bond act, or a California state proposition on nuclear power), or indirectly (e.g., elections decided on the basis of candidates' environmental records and promised legislation). The key elements here, political debate and ultimately the vote, allow much wider participation in the decision than negotiation does. However, a binary vote cannot as easily handle complex issues, address specific land-use conflicts, or develop subtle, creative solutions. Choosing the general political process as a strategy for deciding conflict also takes the process largely out of the hands of planners.

The other traditional strategy is to develop market mechanisms to link economic and environmental

priorities. Prices are made the commonality that bridges the gap between the otherwise noncommensurables of trees and timber, open space and real estate. The market place is chosen as the arena where society balances its competing values. This economistic approach to the environment reduces pollution to what the economist Edwin Mills (1978, 15) called "a problem in resource allocation." This approach can decide conflicts along the economic-environmental axis (the resource conflict), but often neglects equity. However, the market does seem to be dealing better with environmental externalities than it did ten or twenty years ago. Internalizing externalities, at the least, raises the issues of social justice and equity: e.g., who will pay for cleaning up abandoned industrial sites or compensate for the loss of fishing revenues due to oil spills. The recent establishment of a pollution credit market in the South Coast Air Quality Management District, for example, is a step in the right direction -- despite criticism that the pollution credits were initially given away for free (Robinson, 1993).

The role of the planner in all four of these approaches is to arrange the procedures for making decisions, not to set the substance of the actual outcomes. In some cases, the overall structure for decision-making already exists (the market and the political system). In other cases, however, the planner must help shape that structure (a mediation forum; a common language), which, done successfully, gives the process credibility. The actual environmental outcomes nevertheless remain unknowable: you don't know in advance if the environment will actually be improved. For example, environmentalists and developers heralded the Coachella Valley Fringe-Toed Lizard Habitat Conservation Plan as a model process to balance the interests of development and conservation; yet the actual outcome may not adequately protect the endangered lizard (Beatley 1992, 15-16). Similarly, although the New Jersey State Development Plan was praised for its innovative cross-acceptance procedure, the plan itself arguably has not altered the state's urban sprawl.

The final issue that arises is whether the planner should play the role of neutral moderator, or of advocate representing a single party; this has been a long-standing debate in the field. Each strategy has its virtues.

Substantive Paths to Sustainable Development: Land Use and Design

Planners have substantive knowledge of how cities, economies, and ecologies interact, and they should put forth specific, farsighted designs that promote the sustainable city. The first area is traditional planning tools of land-use design and control. The potential for balance between economic and environmental interests exists in design itself, as in a greenbelt community (Elson 1986). Sometimes the land-use solution is simply to divide a contested parcel into two parcels: a developed and a preserved. This solution can take crude forms at times, such as the "no-net-loss"

policy that endorses the dubious practice of creating wetlands. A different example, Howard's turn-of-the century Garden City (1965), can be seen as a territorially symbolic design for balance between the economy and the environment, though its explicit language was that of town-country balance. It is a design's articulated balance between the built development and the unbuilt wilderness that promises the economic-environmental balance. Designs for clustered developments, higher densities, and live-work communities move toward such a balance (Rickaby 1987; Commission of the European Communities 1990; Hudson 1991; Van der Rys and Calthorpe 1991). Some dispute the inherent benefits of the compact city (Breheny 1992). A further complication is that not all economic-environmental conflicts have their roots in spatial or architectural problems. As a result, ostensible solutions may be merely symbols of ecological-economic balance, without actually solving the conflict.

Nevertheless, land-use planning arguably remains the most powerful tool available to planners, who should not worry too much if it does not manage all problems. The trick in resolving environmental conflicts through land-use planning is to reconcile the conflicting territorial logics of human and of natural habitats. Standard real estate development reduces open space to fragmented, static, green islands -- exactly what the landscape ecologists deplore as unable to preserve biodiversity. Wildlife roam and migrate, and require large expanses of connected landscape (Hudson 1991). So both the ecological and the economic systems require the interconnectivity of a critical mass of land to be sustainable. Though we live in a three-dimensional world, land is a limited resource with essentially two dimensions (always excepting air and burrowing/mining spaces). The requirement of land's spatial interconnectivity is thus hard to achieve for both systems in one region: the continuity of one system invariably fragments continuity of the other. So the guiding challenge for land-use planning is to achieve simultaneously spatial/territorial integrity for both systems. Furthermore, a sustainable development that aspires to social justice must also find ways to avoid the land-use manifestations of uneven development: housing segregation, unequal property-tax funding of public schools, jobs-housing imbalance, the spatial imbalance of economic opportunity, and unequal access to open space and recreation.

Substantive Paths to Sustainable Development: Bioregionalism

A comprehensive vision of sustainable land use is bioregionalism, both in its 1920s articulation by the Regional Planning Association of America (Sussman 1976) and its contemporary variation (Sale 1985; Andrus et al. 1990; Campbell 1992). The movement's essential belief is that rescaling communities and the economy according to the ecological boundaries of a physical region will encourage sustainability. The regional scale presumably stimulates greater environmental awareness: it is believed that residents of small-scale, self-sufficient regions will be aware of the causes and effects of their environmental actions, thereby reducing externalities. Regions will live within their means, and bypass the environmental problems caused by international trade and exporting pollution.

The bioregional vision certainly has its shortcomings, including the same fuzzy, utopian thinking found in other writing about sustainable development. Its ecological determinism also puts too much faith in the regional "spatial fix": no geographic scale can, in itself, eliminate all conflict, for not all conflict is geographic. Finally, the call for regional self-reliance -- a common feature of sustainable development concepts (Korten 1991, 184) -- might relegate the regional economy to underdevelopment in an otherwise nationally and internationally interdependent world. Yet it can be effective to visualize sustainable regions within an interdependent world full of trade, migration, information flows and capital flows, and to know the difference between *healthy interdependence* and *parasitic dependence*, that is, dependence on other regions' resources that is equivalent to depletion. Interdependence does not always imply an imbalance of power, nor does self-sufficiency guarantee equality. Finally, the bioregional perspective can provide a foundation for understanding conflicts among a region's interconnected economic, social and ecological networks.

Other Substantive Paths

One other approach is technological improvement, such as alternative fuels, conservation mechanisms, recycling, alternative materials, and new mass transit design. Stimulated by competition, regulation or government subsidies, such advances reduce the consumption of natural resources per unit of production and thereby promise to ameliorate conflict over their competing uses, creating a win-win solution. However, this method is not guaranteed to serve those purposes, for gains in conservation are often cancelled out by rising demand for the final products. The overall increase in demand for gasoline despite improvements in automobile fuel efficiency is one example of how market forces can undermine technologically-achieved environmental improvements. Nor, importantly, do technological improvements guarantee fairer distribution.

The role of the planner in all these substantive strategies (land use, bioregionalism, technological improvement) is to design outcomes, with less emphasis on the means of achieving them. The environmental ramifications of the solutions are known or at least estimated, but the political means to achieve legitimacy are not. There also is a trade-off between comprehensiveness (bioregions) and short-term achievability (individual technological improvements).

Merging the Substantive and Procedural

The individual shortcomings of the approaches described above suggest that combining them can achieve both political and substantive progress in the environmental-economic crisis. The most successful solutions seem to undertake several different resolution strategies at once. For example,

negotiation among developers, city planners, and land-use preservationists can produce an innovative, clustered design for a housing development, plus a per-unit fee for preserving open space. Substantive vision combined with negotiating skills thus allows planners to create win-win solutions, rather than either negotiating in a zero-sum game or preparing inert, ecotopian plans. This approach is not a distant ideal for planners: they already have, from their education and experience, both this substantive knowledge and this political savvy.

In the end, however, the planner must also deal with conflicts where one or more parties have no interest in resolution. One nonresolution tactic is the NIMBY, Not In My Back Yard, response: a crude marriage of local initiative and the age-old externalizing of pollution. This "take it elsewhere" strategy makes no overall claim to resolve conflict, though it can be a productive form of resistance rather than just irrational parochialism (Lake 1993). Nor does eco-terrorism consider balance. Instead, it replaces the defensive stance of NIMBY with offensive, confrontational, symbolic action. Resolution is also avoided out of cavalier confidence that one's own side can manage the opposition through victory, not compromise ("My side will win, so why compromise?"). Finally, an "I don't care" stance avoids the conflict altogether. Unfortunately, this ostensible escapism often masks a more pernicious NIMBY or "my side will win" hostility, just below the surface.

Planners: Leaders or Followers in Resolving Economic-Environmental Conflicts?

I turn finally to the question of whether planners are likely to be leaders or followers in resolving economic-environmental conflicts. One would think that it would be natural for planners, being interdisciplinary and familiar with the three goals of balancing social equity, jobs, and environmental protection, to take the lead in resolving such conflicts. Of the conflict resolution scenarios mentioned above, those most open to planners' contributions involve the built environment and local resources: land use, soil conservation, design issues, recycling, solid waste, water treatment. Even solutions using the other approaches -- environmental economic incentives, political compromise, and environmental technology innovations -- that are normally undertaken at the state and federal levels could also involve planners if moved to the local or regional level.

But the planners' position at the forefront of change is not assured, especially if the lead is taken up by other professions or at the federal, not the local, level. The lively debate on whether gasoline consumption can best be reduced through higher-density land uses (Newman and Kenworthy 1989) or through energy taxes (Gordon and Richardson 1990) not only reflected an ideological battle over interpreting research results and the merits of planning intervention, but also demonstrated how local planning can be made either central or marginal to resolving environmental-economic conflicts. To hold a central place in the debate about sustainable development, planners must exploit those areas of conflict where they have the greatest leverage and expertise.

Certainly planners already have experience with both the dispute over economic growth versus equity and that over economic growth versus environmental protection. Yet it is the development conflict is where the real action for planners will be: seeking to resolve both environmental and economic equity issues at once. Here is where the profession can best make its unique contribution. An obvious start would be for community development planners and environmental planners to collaborate more (an alliance that an internal Environmental Protection Agency memo found explosive enough for the agency to consider defusing it) (Higgins 1994). One possible joint task is to expand current public-private partnership efforts to improve environmental health in the inner city. This urban-based effort would help planners bypass the danger of environmental elitism that besets many suburban, white-oriented environmental organizations.

If planners move in this direction, they will join the growing environmental justice movement, which emerged in the early 1980s and combined minority community organizing with environmental concerns (Higgins 1994). The movement tries to reduce environmental hazards that directly affect poor residents, who are the least able to fight pollution, be it the direct result of discriminatory siting decisions or the indirect result of housing and employment discrimination. The poor, being the least able to move away, are especially tied to place and therefore to the assistance or neglect of local planners. Understandably, local civil rights leaders have been preoccupied for so long with seeking economic opportunity and social justice that they have paid less attention to inequities in the local environment. The challenge for poor communities is now to expand their work on the property conflict to address the development conflict as well, that is, to challenge the false choice of jobs over the environment. An urban vision of sustainable development, infused with a belief in social and environmental justice, can guide these efforts.

Yet even with the rising acceptance of sustainable development, planners will not always be able, on their own, to represent and balance social, economic and environmental interests simultaneously. The professional allegiances, skills, and bureaucracies of the profession are too constraining to allow that. Pretending at all times to be at the center of the planner's triangle will only make sustainability a hollow term. Instead, the trick will be for individual planners to identify their specific loyalties and roles in these conflicts accurately: that is, to orient themselves in the triangle. Planners will have to decide whether they want to remain outside the conflict and act as mediators, or jump into the fray and promote their own visions of ecological-economic development, sustainable or otherwise. Both planning behaviors are needed.

AUTHOR'S NOTE

and Industrial Economics (PRIE) Seminar, and three anonymous reviewers for their comments.

NOTES

1. A curious comparison to this equity-environment-economy triangle is the view of Arne Naess (1993), the radical environmentalist who gave Deep Ecology its name in the 1970s, that the three crucial postwar political movements were the social justice, radical environmental, and peace movements, whose goals might overlap but could be made identical.

2. Perhaps one can explain the lack of a universal conflict in the following way: if our ideas of the economy, equity, and the environment are socially/culturally constructed, and if cultural society is local as well as global, then our ideas are locally distinct rather than universally uniform.

3. For planners, if one is simply "planning for place," then the dispute about suburban housing versus wetlands does indeed reflect a conflict between an economic and an environmental use of a specific piece of land. But if one sees this conflict in light of "planning for people," then the decision lies between differing social groups (e.g., environmentalists, fishermen, developers) and between their competing attempts to incorporate the piece of land into their system and worldview. (This classic planning distinction between planning for people or for place begs the question: is there a third option, "planning for nonpeople, i.e., nature?")

4. Schiller, using Kant's logic, recognized 200 years ago this human habit of positing the future on the past: "He thus artificially retraces his childhood in his maturity, forms for himself a state of Nature in idea, which is not indeed given him by experience but is the necessary result of his rationality, borrows in this ideal state an ultimate aim which he never knew in his actual state of Nature, and a choice of which he was capable, and proceeds now exactly as though he were starting afresh. . . ."

5. Some radical ecologists take this lost world a step further and see it not as a garden, but as wilderness (e.g., Parton 1993).

6. I use the term diaspora to mean the involuntary dispersal of a people from their native home, driven out by a greater power (Hall 1992). The curious nature of the diaspora implied by the environmental worldview is that it is ambiguously voluntary: western positivistic thinking is the villain that we developed, but that eventually enslaved us. Then, too, diasporas invariably combine dislocations across both time and space, but the mythic "homeland" of this environmental diaspora is only from an historical era, but no specific place.

7. The reverse may also not be automatic. David Johns (1992, 63), in advocating a broad interspecies equity, reminds us that not all forms of equity go hand-in-hand: "The nature of the linkages between various forms of domination is certainly not settled, but deep ecology may be distinct in believing that the resolution of equity issues among humans will not automatically result

in an end to human destruction of the biosphere. One can envision a society without class distinctions, without patriarchy, and with cultural autonomy, that still attempts to manage the rest of nature in utilitarian fashion with resulting deterioration of the biosphere. . . . But the end of domination in human relations is not enough to protect the larger biotic community. Only behavior shaped by a biocentric view can do that."

8. The ambiguity of the term sustainable development is therefore not coincidental, given that reasonable people differ on which corner of the triangle is to be "sustained": a fixed level of natural resources? current environmental quality? current ecosystems? a hypothetical pre-industrial environmental state?   the current material standards of living? long-term economic growth? political democracy?

9. These issues of language and translation were raised by Ngûgi wa Thiong-o and Stuart Hall in separate distinguished lectures at the Center for the Critical Analysis of Contemporary Cultures, Rutgers University (March 31 and April 15, 1993).

10. Conservationists have in fact installed underpasses and overpasses so that vulnerable migrating species can get around highways.

REFERENCES

Altshuler, Alan. 1965. The Goals of Comprehensive Planning, *Journal of the American Institute of Planning* 31 (August): 186-94.

Andrus, Van et al., eds. 1990. *Home: A Bioregional Reader.* Philadelphia and Santa Cruz: New Catalyst/New Society.

Barrett, Gary W., and Patrick J. Bohlen. 1991. Landscape Ecology, In *Landscape Linkages and Biodiversity,* edited by Wendy E. Hudson. Washington, DC and Covelo, CA: Island Press.

Beatley, Timothy. 1992. Balancing Urban Development and Endangered Species: The Coachella Valley Habitat Conservation Plan. *Environmental Management* 16, 1: 7-19.

Beatley, Timothy, and David J. Brower. 1993. Sustainability Comes to Main Street. *Planning* 59, 5: 16-9.

Beltzer, Dena, and Cynthia Kroll. 1986. *New Jobs for the Timber Region: Economic Diversification for Northern California.* Berkeley: Institute of Governmental Studies, University of California.

Bingham, Gail. 1986. *Resolving Environmental Disputes: A Decade of Experience.* Washington, DC: The Conservation Foundation.

Bird, Elizabeth Ann R. 1987. The Social Construction of Nature: Theoretical Approaches to the History of Environmental Problems, *Environmental Review* 11, 4: 255-64.

Bramwell, Anna. 1989. *Ecology in the Twentieth Century, A History.* New Haven: Yale University Press.

Breheny, M. J., ed. 1992. *Sustainable Development and Urban Form.* London: Pion.

Bryant, Bunyan, and Paul Mohai, eds. 1992. *Race and the Incidence of Environmental Hazards.* Boulder, CO: Westview Press.

Bullard, Robert D. 1990. *Dumping in Dixie: Race, Class, and Environmental Quality.* Boulder, CO: Westview Press.

Bullard, Robert D., ed. 1993. *Confronting Environmental Racism: Voices from the Grassroots.* Boston: South End Press.

Callenbach, Ernest. 1975. *Ecotopia: The Notebooks and Reports of William Weston.* Berkeley, CA: Banyan Tree Books.

Campbell, Scott. 1992. Integrating Economic and Environmental Planning: The Regional Perspective. Working Paper No. 43, Center for Urban Policy Research, Rutgers University.

Clawson, Marion. 1975. *Forests: For Whom and For What?* Washington, DC: Resources for the Future.

Commission of the European Communities. 1990. *Green Paper on the Urban Environment.* Brussels: EEC.

Crowfoot, James E., and Julia M. Wondolleck. 1990. *Environmental Disputes: Community Involvement in Conflict Resolution.* Washington, DC and Covelo, CA: Island Press.

Daly, Herman E. 1991. *Steady State Economics.* 2nd edition with new essays. Washington, DC and Covelo, CA: Island Press.

Daly, Herman E., and John B. Cobb, Jr. 1989. *For the Common Good: Redirecting the Economy toward Community, the Environment, and a Sustainable Future.* Boston: Beacon

Press.

Davidoff, Paul. 1965. Advocacy and Pluralism in Planning. *Journal of the American Institute of Planners* 31, 4: 544-55.

Duerr, Hans Peter. 1985. *Dreamtime: Concerning the Boundary Between Wilderness and Civilization.* Oxford: Basil Blackwell.

Elson, Martin J. 1986. *Green Belts : Conflict Mediation in the Urban Fringe.* London: Heinemann.

Fainstein, Susan S., and Norman I. Fainstein. 1971. City Planning and Political Values. *Urban Affairs Quarterly* 6,3: 341-62.

Findhorn Community, The. 1975. *The Findhorn Garden: Pioneering a New Vision of Man and Nature in Cooperation.* New York: Harper and Row.

Foglesong, Richard E. 1986. *Planning the Capitalist City.* Princeton: Princeton University Press.

Friedmann, John, and Clyde Weaver. 1979. *Territory and Function: The Evolution of Regional Planning.* Berkeley and Los Angeles: University of California Press.

Goldstein, Eric A., and Mark A. Izeman. 1990. *The New York Environment Book.* Washington, DC and Covelo, CA: Island Press.

Goodland, Robert. 1990. Environmental Sustainability in Economic Development -- with Emphasis on Amazonia, In *Race to Save the Tropics: Ecology and Economics for a Sustainable Future,* edited by Robert Goodland. Washington, DC and Covelo, CA: Island Press.

Gordon, Peter, and Harry Richardson. 1990. Gasoline Consumption and Cities - A Reply. *Journal of the American Planning Association*, 55, 3: 342-5.

Hall, Stuart. 1992. Cultural Identity and Diaspora. *Framework* 36.

Harvey, David. 1985. *The Urbanization of Capital.* Baltimore: Johns Hopkins University Press.

Higgins, Robert R. 1994a. Race and Environmental Equity: An Overview of the

Environmental Justice Issue in the Policy Process. *Polity*, forthcoming.

Higgins, Robert R. 1994b. Race, Pollution, and the Mastery of Nature. *Environmental Ethics,* forthcoming.

Hoffman, Lily. 1989. *The Politics of Knowledge: Activist Movements in Medicine and Planning.* Albany: SUNY Press.

Howard, Ebenezer. 1965. *Garden Cities of To-Morrow* (first published in 1898 as *To-Morrow: A Peaceful Path to Real Reform).* Cambridge, MA: MIT Press.

Hudson, Wendy E., ed. 1991. *Landscape Linkages and Biodiversity*. Washington, DC and Covelo, CA: Island Press.

Jacobs, Harvey. 1989. Social Equity in Agricultural Land Protection, *Landscape and Urban Planning* 17, 1: 21-33.

Johns, David. 1992. The Practical Relevance of Deep Ecology, *Wild Earth* 2, 2.

Korten, David C. 1991. Sustainable Development. *World Policy Journal* 9, 1: 157-90.

Krumholz, Norman, et al. 1982. A Retrospective View of Equity Planning: Cleveland, 1969-1979, and Comments, *Journal of the American Planning Association* 48, 2: 163-83.

Kumar, Krishan. 1991. *Utopia and Anti-Utopia in Modern Times.* Oxford and Cambridge, MA: Basil Blackwell.

Lake, Robert, ed. 1987. *Resolving Locational Conflict.* New Brunswick, NJ: Center for Urban Policy Research.

Lake, Robert. 1993. Rethinking NIMBY. *Journal of the American Planning Association* 59,1: 87-93.

Lee, Robert G., Donald R. Field, and William R. Burch, Jr., eds. 1990. *Community and Forestry: Continuities in the Sociology of Natural Resources.* Boulder, CO: Westview Press.

Lindblom, C. E. 1959. The Science of Muddling Through. *Public Administration Review* 19 (Spring): 79-88.

MacKaye, Benton. 1962. (first published in 1928 by Harcourt, Brace and Co.) *The New*

Exploration: A Philosophy of Regional Planning. Urbana: University of Illinois Press.

Marcuse, Peter. 1976. Professional Ethics and Beyond: Values in Planning. *Journal of the American Institute of Planning* 42, 3: 264-74.

McPhee, John. 1989. *The Control of Nature.* New York: Farrar, Straus, Giroux.

Mills, Edwin S. 1978. *The Economics of Environmental Quality.* New York: Norton.

Naess, Arne. 1993. The Breadth and the Limits of the Deep Ecology Movement. *Wild Earth* 3, 1: 74-5.

Newman, P. and J. Kenworthy. 1989. Gasoline Consumption and Cities ? A Comparison of U.S. Cities with a Global Survey. *Journal of the American Planning Association* 55, 1: 24-37.

Paehlke, Robert C. 1994. Environmental Values and Public Policy. In *Environmental Policy in the 1990s.* 2nd edition, edited by Norman J. Vig and Michael E. Kraft. Washington, DC: Congressional Quarterly Press.

Parton, Glenn. 1993. Why I am a Primitivist. *Wild Earth* 3, 1: 12-4.

Rees, William. 1989. *Planning for Sustainable Development .* Vancouver, B.C.: UBC Centre for Human Settlements.

Reisner, Marc. 1987. *Cadillac Desert: The American West and its Disappearing Water.* New York: Penguin Books.

Rickaby, P A. 1987. Six Settlement Patterns Compared. *Environment and Planning B: Planning and Design* 14: 193-223.

Robinson, Kelly. 1993. The Regional Economic Impacts of Marketable Permit Programs: The Case of Los Angeles, In *Cost Effective Control of Urban Smog*, Federal Reserve Bank of Chicago (November): 166-88.

Ross, Andrew. 1994. *The Chicago Gangster Theory of Life: Ecology, Culture, and Society.* London and New York: Verso.

Sale, Kirkpatrick. 1985. *Dwellers in the Land: The Bioregional Vision.* San Francisco: Sierra Club Books.

Schiller, Friedrich. 1965. *On the Aesthetic Education of Man.* [translated by Reginald Snell]. Originally published in 1795 as *Über die Äesthetische Erziehung des Menschen in einer Reihe von Briefen.* New York: Friedrich Unger.

Sessions, George. 1992. Radical Environmentalism in the 90s. *Wild Earth* 2, 3: 64-7.

Smith, Neil. 1990. *Uneven Development: Nature, Capital and the Production of Space.* Oxford, U.K.: Blackwell.

Soja, Edward. 1989. *Postmodern Geographies: The Resurrection of Space in Critical Social Theory.* London and New York: Verso.

Susskind, Lawrence, and Jeffrey Cruikshank. 1987. Mediated Negotiation in the Public Sector: The Planner as Mediator. *Journal of Planning Education and Research* 4: 5-15.

Sussman, Carl, ed. 1976. *Planning the Fourth Migration: The Neglected Vision of the Regional Planning Association of America.* Cambridge, MA: MIT Press.

Tuason, Julie A. 1993. Economic/Environmental Conflicts in 19th-Century New York: Central Park, Adirondack State Park, and the Social Construction of Nature. Unpublished manuscript, Dept. of Geography, Rutgers University.

Turner, Frederick W. 1983. *Beyond Geography: The Western Spirit Against the Wilderness.* New Brunswick, NJ: Rutgers University Press.

Van der Ryn, Sim, and Peter Calthorpe. 1991. *Sustainable Communities: A New Design Synthesis for Cities, Suburbs and Towns.* San Francisco: Sierra Club Books.

Wiggins, Lyna. 1993. Geographic Information Systems. Lecture at the Center for Urban Policy Research, Rutgers University, April 5.

Wilson, Alexander. 1992. *The Culture of Nature: North American Landscape from Disney to the Exxon Valdez.* Cambridge, MA and Oxford, UK: Blackwell.

World Bank. 1989. *Striking a Balance: The Environmental Challenge of Development.* Washington, DC

World Commission on Environment and Development (the Brundtland Commission). 1987. *Our Common Future.* Oxford: Oxford University Press.