Epilogue to *The Humane Metropolis*

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William H. Whyte's 1957 essay on "Urban Sprawl" was indeed prescient: despite the open space movement of the 1960s (which he helped to nurture) and its outgrowths—growth management, smart growth, and new urbanism—metropolitan expansion has continued relentlessly. In 1961, geographer Jean Gottmann defined "Megalopolis" as a region of more or less continuous urbanization extending along the northeastern seaboard from just north of Boston to the Virginia suburbs of Washington, DC. Over the past four decades, "Megalopolis" has sprawled north, west, and south beyond its 1960s geographic size.

"Megalopolis" today would include southeastern New Hampshire and the lower Maine coast, Massachusetts west to the Berkshires, the Hudson River Valley north to Lake George, much of New Jersey and eastern Pennsylvania, most of Maryland, portions of West Virginia, and the I-95 corridor south at least to Richmond, Virginia——a vast mega-region covering parts of thirteen states and containing nearly 50 million people. Just southwest of that, a new complex following I-85 and I-40 connects the North Carolina metro areas of Charlotte, Greensboro, and Raleigh-Durham-Research Triangle. Greater Atlanta now reaches over 110 miles north to south, as compared with 65 miles in 1990 (Bullard et al. 2000, 9). Both coasts of Florida are solidly lined with metropolitan areas. Greater Chicago extends well into northwestern Indiana and southeastern Wisconsin. The Colorado "Front Range Urban Corridor" reaches from Pueblo northward to Fort Collins and Greeley, encompassing metropolitan Denver, Colorado Springs, and Boulder. Greater Los Angeles is spilling eastward across the "Inland Empire" of Riverside and San Bernadino Counties into the Mojave Desert. Irrigated farms of California's Central Valley are disappearing under pavement, and the fringes of Portland and Seattle are flirting with each other along the foothills of the Cascades.

As discussed in Chapter 1, metropolitan areas (central cities plus their suburbs) nearly doubled in population from 118 million in 1960 to 226 million in 2000: *eighty percent* of Americans now live and work in metro areas which themselves have about doubled in total geographic area since the 1960s. Perversely, the fastest population growth has occurred where nature is least welcoming: e.g., the desert settings of metropolitan Las Vegas (1990-2000 population increase of 83.3%), Phoenix (+45.3%), Tucson (+26.5%) and Riverside-San Bernardino (+25.7%).

Furthermore, the rate of land consumption has far outpaced the rate of population growth for most metropolitan areas: metro Los Angeles expanded by 300

percent in urbanized land area between 1970 and 1990 while its population grew by only 45 percent; the Seattle region grew by 38 percent in population but 87 percent in urbanized area (See Table 1-2). Even metropolitan Pittsburgh expanded 43 percent in urbanized land area between 1982 and 1997 despite a regional *population decline* of eight percent during the same period (Sustainable Pittsburgh 2003, 3). However, metropolitan Portland, Oregon experienced only a four percent increase in developed area despite a 31 percent increase in population between 1990 and 2000—due largely to its Urban Growth Boundary which limits sprawl onto surrounding farm and forest land. (Michael Houck, personal communication, May 19, 2005).

Sprawl has been further exacerbated by the trend toward ever-larger single family homes and lots on the suburban fringe. Average floor area per capita in new single-family homes has tripled over the last 50 years and average lot sizes have grown correspondingly (Brewster 1997, 7).

As urban sprawl has enveloped ever more of the nation's population and accessible land area, perception of its harmful impacts—on society, the economy, and the environment—has broadened as well. The early critiques by William H. Whyte, Charles Little, Ann Louise Strong and others in the 1960s focussed primarily on issues of *aesthetics* and *efficient land use* related to urban encroachment on productive farmland and the loss of access to "countryside." To those still valid concerns have been added a variety of further concerns including *air and water pollution, waste of energy and time, traffic congestion and highway accidents, lack of affordable housing, "brownfields," water scarcity, increased flooding, and loss of biodiversity* (Gillham 2002, 75-77).

Beyond such direct consequences are secondary sets of implications, such as the *fiscal burdens* of providing infrastructure and public services to fringe development (Diamond and Noonan 1996 34-40); (2) *emotional stress* on individuals and families due to separation of home, workplace, and other destinations, (3) loss of *sense of community* (Putnam 2000); and (4) *social and environmental justice issues,* e.g., unequal access to housing, jobs, schools, and health services, and exposure to environmental hazards Moreover, sprawl itself with all its social inequity is a product of deliberate public policies concerning taxation, transportation, and local zoning (Bullard et al, 2000; Platt 2004a; 2004b).

Historically, it has been an American tradition to leave place-based problems behind and seek "greener pastures" through relocation—to the frontier, to the suburbs, to the Sunbelt, and to the coasts, mountains, and deserts. In the process, however, the metropolis has often been an unwelcome hitchhiker. Metropolitan conditions have spread to such traditional vacation and retirement meccas as Cape Cod, the Maryland

Eastern Shore, the Outer Banks of North Carolina, the Sierra and Rocky Mountain foothills, and the golf course utopias of the Southwest. As the urban fringe recedes indefinitely in travel time and distance, once treasured destinations increasingly resemble what people are trying to escape: traffic congestion, billboards, shopping malls, and general roadside schlock—"The Exploding Metropolis" writ large. Meanwhile, the less fortunate, the unemployed, the infirm, the elderly are sentenced to live and die in the metropolitan environment, come what may. As Lewis Mumford wryly observed in 1961: "The ultimate effect of the suburban escape in our time is, ironically, a low-grade uniform environment from which escape is impossible." (Mumford 1961, 486).

This book and the conference from which it arose take a more upbeat look at the evolving form and substance of 21st-century metropolitan America. The term "Humane Metropolis" was chosen deliberately as a counterpoint to Whyte's "Exploding Metropolis" of the 1950s. The metropolis has indeed "exploded," most of us live in it, and so what are we going to do to make it more habitable? The "Humane Metropolis" was defined in Chapter I as an urban region that is *more green, safer and healthier, more people friendly, and more socially equitable.* In the spirit of Holly Whyte, Jane Jacobs, and other "people who like cities," including the editor and authors of this book, we have explored diverse pathways to more humane urban places.

The primary "pathways" to more humane metropolitan regions are reflected in major sections of this book: Part II: *From City Parks to Regional Green Infrastructure*; Part III: *Restoring Urban Nature: Projects and Process;* Part IV: *A More Humane Metropolis for Whom?;* and Part V: *Designing A More Humane Metropolis*. Certain papers directly relate to Whyte's own interests, e.g., the design of city and regional open space systems (Harnik, Houck), public attachment to city parks (Ryan), "The Smile Index" (Wiley-Schwartz) and the use of zoning incentives to create public spaces (Kayden). Other chapters, however, discuss 21st-century dimensions of the Humane Metropolis that we assume Whyte would embrace today, including social and environmental equity (Blakely, Anthony, Parilla, the Poppers), regreening of brownfields (DeSousa) and ecological rehabilitation of closed landfills (Clemants/Handel), green building design (Pelletier, Cathcart), urban watershed management (Sievert) and the idea of "ecological citizenship" (Light).

Several premises underlie and connect the various topics discussed in this book, namely:

1. Most Americans now live and work in metropolitan regions;
2. Contact with, and awareness of, "Nature" is a fundamental human need;
3. Access to unspoiled "nature" beyond metro areas is increasingly limited by distance, cost, traffic congestion, and tourist/resort development;

4. But “urban ecology” is not an oxymoron—nature abounds in urban places, if you know where and how to find it;
5. Therefore, opportunities to experience nature *within* urban places must be protected and enhanced;
6. Furthermore, protecting and restoring “ecological services” is often preferable to using technological substitutes; and
7. Environmental education for all ages is critical to build support for such programs and to nurture a sense of “ecological citizenship” (in Andrew Light’s phrase).

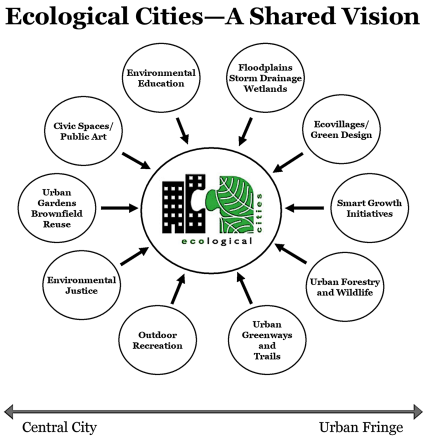
The last three of those premises are critical to adapting to the 21st century metropolis (Platt 2004b). Even as urban design professionals continue to manipulate the physical form and appearance of the *built* environment, new approaches, including some described in this book, focus on the *unbuilt* elements of the urban environment. Such adjustments are concerned less with the way urban places “look” and more with the way they “work,” ecologically and socially.

The recognition that cities and nature are symbiotic rather than oxymoronic was long retarded by the professional disdain of natural scientists for cities. For instance, an influential Conservation Foundation book of the mid-1960s, Future Environments of North America (Darling and Milton, eds. 1965) virtually ignored urban places although they were the “future environments” of most North Americans. As recently as 1988, a prominent National Academy of Sciences book on Biodiversity (Wilson, ed., 1988) devoted a mere seven out of 520 pages to “urban biodiversity.” The view of nature as “out there” beyond the urban fringe or in exotic and distant places accessible only to scientists and the affluent ecotourist has often been reinforced by well-meaning natural history museums, zoos, aquaria, and television nature documentaries.

The seed of a different perspective on cities and nature was planted by landscape architect Ian McHarg in his seminal 1968 book Design with Nature. McHarg urged urban designers to evaluate and incorporate natural factors such as topography, drainage, natural hazards, and microclimate into their plans, rather than overcoming such constraints through technology—often at great cost and with uneven success. McHarg’s advice was directed primarily to the planning of new and often upscale suburban development. However, the proposition would be significantly expanded by Anne Whiston Spirn in her 1985 book The Granite Garden: “The city, suburbs, and the countryside must be viewed as a single, evolving system within nature, as must every individual park and bulding within that larger whole. . . Nature in the city must be cultivated, like a garden, rather than ignored or subdued.”[i] In 1987, The Greening of the Cities (Nicholson-Lord 1987, 115) examined British experience with “cultivating nature in

cities," proposing that ecology offers "a way out of manmade aesthetics and proprietorial landscapes" (Nicholson-Lord 1987, 115). In a more emotional voice, evolutionary biologist Lynn Margulis and her son Dorion Sagan put it this way: "The arrogant habitat-holocaust of today may cease; in its wake may evolve technologically nurtured habitats that re-bind, re-integrate, and re-merge us with nature."

Various terms today encompass efforts to regreen cities, e.g. *green urbanism,*[ii] (Beatley 2000), *green infrastructure* (www.greeninfrastructure.net), *natural cities,* (Lord, Strauss, and Toffler 2003), variations of *urban sustainability,* and the author's own preference: *ecological cities* (Platt, Rowntree, and Muick, eds. 1994). Whatever the term, such approaches are typically localized, practical, and diverse. According to planner Timothy Beatley, "green urbanism" in European cities includes such elements as green roofs, community gardens, car-free neighborhoods, pavement removal, passive solar heating, and cohousing. Many of these are beginning to appear in American cities at various scales and encompassing a broad spectrum of goals and means as depicted in Fig. XXX.



Some strategies that have been identified by the Ecological Cities Project (www.ecologicalcities.org), based at the University of Massachusetts Amherst, include:

- Rehabilitation and adaptation of older parks and urban green spaces
- Protection and restoration of urban wetlands and other sensitive habitat
- Preservation of old growth trees and forest tracts
- Development of greenways and rail trails
- Urban gardening and farm markets
- Green design of buildings, including green roofs and green schools
- Brownfield remediation and reuse

- Urban watershed management
- Riverine and coastal floodplain management
- Endangered species habitat conservation plans
- Urban environmental education sites and programs
- Environmental justice programs

Such efforts are typically initiated by nongovernmental organizations (NGO's) such as museums and botanic gardens, schools and colleges, watershed alliances, and regional chapters of national organizations like The Nature Conservancy, Trust for Public Land, Sierra Club, and National Audubon Society. NGOs provide vision, persistence, and sometimes volunteers to work in the field. Public sector agencies hopefully play supporting roles: funding, staff resources, technical know-how, and (when applicable) regulatory muscle. Funds also may be contributed by businesses, foundations, and individuals, especially for projects in localities of particular interest to the donor (as with the Heinz and Mellon foundations in the Pittsburgh area and the Rockefeller Brothers Fund in New York), Researchers in universities, public agencies, and NGOs help to define the scientific and social goals and means.

Urban regreening efforts are often scattered, uneven, and underfunded. But like ecological organisms, they thrive on diversity—of goals, of means, of participants, of disciplines, and (one hopes) of viewpoints. Some are closely related to larger national movements, e.g., social and environmental justice, affordable housing, physical fitness, public health, natural disaster mitigation, animal rights, and environmentalism. They depend on spontaneous and often voluntary local leadership. They are pragmatic and creative in stitching together existing program resources, available funding, and donations of money, time, and office space. Most involve public-private partnerships, some of which are local alliances to save a particular site, to restore a stream, wetland, or watershed, or pursue a particular mission, e.g. environmental education or urban gardening. Others have evolved into influential regional networks such as Chicago Wilderness (www.chicagowilderness.org). Many also foster social interaction among diverse populations sharing a common resource like a watershed, thus promoting "ecological citizenship" (See Light Chapter __ above)/

The half-century between the Exploding Metropolis and the Humane Metropolis thus spanned a period of vast change in the size, distribution, and habitability of urban places and regions. While the negative implications of rampant urban growth have been widely deplored, efforts to curb the outward expansion of metropolitan areas have been

largely futile. In the decades ahead, the emphasis must shift from limiting “urban sprawl,” to making the resulting metropolitan fabric as green, habitable, and *humane* as humanly possible.

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