Editors’ Introduction

Although landscape architects and park designers have long sought to bring nature into cities, this need was often ignored by developers and the nascent city planning profession in the nineteenth and twentieth centuries. Engineers and developers filled in or paved over streams, wetlands, and shorelines to make way for urban expansion. Highways or railroad lines cut many cities off from their waterfronts. Hills were leveled and native vegetation removed. Landowners platted lots and built roads without considering the implications for wildlife, native plant species, or human recreation. With the advent of central heating, electric lighting, air-conditioning, long-distance food transport, and huge dams and pipelines bringing water from hundreds of miles away, urban residents became well insulated from nature in all its forms, and even from the limitations of climate and local geography.

To be sure, historically urban elites have at times created parks for the benefit of city residents. Central Park in New York City is one of the most famous examples. Often these bits of urban nature have been designed in a pastoral English landscape tradition or more manicured continental style. In European cities, estates belonging to royalty or the nobility have sometimes been turned into public green spaces, as well as lands once occupied by city walls or defensive fortifications, while city squares, cemeteries, the occasional botanical garden, and the remnant “commons” of former grazing land at the center of many New England towns provided green oases within American metropolises. On the suburban fringe twentieth-century developers at times sought to create garden suburbs emulating English country estates. But these amenities did not fundamentally alter the fact that as cities and suburbs grew, their residents were increasingly living in a manufactured world with very little connection to natural ecosystems.

Only with the environmental revolution of the 1960s did activists and policy-makers come to think more systematically about integrating urban development with the natural world, as well as protecting human beings from some of the worst abuses of urban environments. Efforts to restore damaged natural systems within cities gained speed in the 1980s and 1990s, and new fields such as landscape ecology provided conceptual tools for thinking about how reconstructed ecosystems might function. Communities experimented with watershed planning, citizens groups worked to restore creeks and rivers, and use of native, climate-appropriate species soared within landscape architecture.

One of the classic pieces first calling attention to systematic relationships between nature and cities was Anne Whiston Spirn’s book The Granite Garden (New York: Basic Books, 1984). While McHarg had focused on the interaction of new suburban or regional development with natural landscapes, Spirn looked at nature within densely built cities themselves. A professor of architecture at the University of Pennsylvania, she analyzed the role of different natural entities such as soil, water, wind, and light within urban landscapes,
and argued that the city should be seen as part of nature, not as something existing outside of it. If nature is welcomed into the city, in her view, a delightful urban environment can be created; if nature is ignored, disaster may result. Michael Hough, a landscape architect at the University of Toronto, took a very similar approach in his books City Form and Natural Processes: Toward an Urban Vernacular (New York: Van Nostrand Reinhold, 1984) and Cities and Natural Processes (New York: Routledge, 1995). As with McHarg's writings, Spiri's eloquent, passionate style inspired many in environmental planning and landscape architecture professions who have since worked out specific ways to implement her philosophy.

Nature pervades the city, forging bonds between the city and the air, earth, water, and living organisms within and around it. In themselves, the forces of nature are neither benign nor hostile to humankind. Acknowledged and harnessed, they represent a powerful resource for shaping a beneficial urban habitat; ignored or subverted, they magnify problems that have plagued cities for centuries, such as floods and landslides, poisoned air and water. Unfortunately, cities have mostly neglected and rarely exploited the natural forces within them.

More is known about urban nature today than ever before; over the past two decades, natural scientists have amassed an impressive body of knowledge about nature in the city. Yet little of this information has been applied directly to molding the form of the city—the shape of its buildings and parks, the course of its roads, and the pattern of the whole. A small fraction of that knowledge has been employed in establishing regulations to improve environmental quality, but these have commonly been perceived as restrictive and punitive, rather than as posing opportunities for new urban forms. Regulations have also proven vulnerable to shifts in public policy, at the mercy of the political concerns of the moment, whereas the physical form of the city endures through generation after generation of politicians.

[...]

The city is a granite garden, composed of many smaller gardens, set in a garden world. Parts of the granite garden are cultivated intensively, but the greater part is unrecognized and neglected. To the idle eye, trees and parks are the sole remnants of nature in the city. But nature in the city is far more than trees and gardens, and weeds in sidewalk cracks and vacant lots. It is the air we breathe, the earth we stand on, the water we drink and excrete, and the organisms with which we share our habitat. Nature in the city is the powerful force that can shake the earth and cause it to slide, heave, or crumble. It is a broad flash of exposed rock strata on a hillside, the overgrown outcrops in an abandoned quarry, the millions of organisms cemented in fossiliferous limestone of a downtown building. It is rain and the rushing sound of underground rivers buried in storm sewers. It is water from a faucet, delivered by pipes from some outlying river or reservoir, then used and washed away into the sewer, returned to the waters of river and sea. Nature in the city is an evening breeze, a corkscrew eddy swirling down the face of a building, the sun and the sky. Nature in the city is dogs and cats, rats in the basement, pigeons on the sidewalks, raccoons in culverts, and falcons crouched on skyscrapers. It is the consequence of a complex interaction between the multiple purposes and activities of human beings and other living creatures and of the natural processes that govern the transfer of energy, the movement of air, the erosion of the earth, and the hydrologic cycle. The city is part of nature.

Nature is a continuum, with wilderness at one pole and the city at the other. The same natural processes operate in the wilderness in and the city. Air, however contaminated, is always a mixture of gases and suspended particles. Paving and building stone are composed of rock, and they affect heat gain and water runoff just as exposed rock surfaces do anywhere. Plants, whether exotic or native, invariably seek a combination of light, water, and air to survive. The city is neither wholly natural nor wholly contrived. It is not "unnatural" but, rather, a transformation of "wild" nature by humankind to serve its own needs, just as agricultural fields are managed for food production and forests for timber. Scarcely a spot on the earth, however remote, is free from the impact of
If nature is treated as a natural entity, disaster is approachable. Reinhold, Spirm's professions are as natural as the power of nature to cause it to flash of overgrown millions of nestone of the rushing in storm delivered by reservoir, then returned to the city is an rling down sky. Nature basement, culverts, is the connection between the nan beings of the earth, and the nature. Less at one less at one me natural and in the ays a mix-Paving and , and they is exposed their exotic on of light, their wholly "unnatural" nature by at as agri-production not on the fimal phenomena arising from common human activities, exacerbated by a disregard for the processes of nature. Nature has been seen as a superficial embellishment, as a luxury, rather than as an essential force that permeates the city. Even those who have sought to introduce nature to the city in the form of parks and gardens have frequently viewed the city as something foreign to nature, have seen themselves as bringing a piece of nature to the city.

To seize the opportunities inherent in the city's natural environment, to see beyond short-term costs and benefits, to perceive the consequences of the myriad, seemingly unrelated actions that make up daily city life, and to coordinate thousands of incremental improvements, a fresh attitude to the city and the molding of its form is necessary. The city must be recognized as part of nature and designed accordingly. The city, the suburbs, and the countryside must be viewed as a single, evolving system within nature, as must every individual park and building within that larger whole. The social value of nature must be recognized and its power harnessed, rather than resisted. Nature in the city must be cultivated, like a garden, rather than ignored or subdued.