

Metropolis Unbound

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Traffic congestion, unaffordable housing, water and air pollution, social segregation -- these are the everyday costs in suburb and city alike of the geographic expansion of cities. But North America also offers alternative models and policies that show us what cities and neighborhoods could become.

A new form of human settlement has emerged in the twentieth century, radically different from the cities of the past. The city has become a city-region. American city-regions' population growth is now dramatically outpaced by their geographic growth. In the two decades from 1970 to 1990, the New York region had a modest population increase of 8 percent, but it had an explosive growth of 65 percent in its built-up urbanized land. While Chicago grew 4 percent in population, its urbanized land increased 46 percent. Even places that were declining in their population were simultaneously growing in their urban area; Cleveland, for example, had a population decline of 8 percent, while it expanded geographically by 33 percent. This urban growth cycle is similar across America. City-regions are exploding into their surrounding countryside at growth rates that are eight to ten times greater than their population increases.

What is new is not the size of cities, but a change in their form. New York City, for example, used to have a concentric form surrounding Manhattan that resembled the growth rings of a tree. That was how it appeared when New York's Regional Plan Association, a civic organization, published its first plan 60 years ago. The Third Regional Plan published in 1996, however, describes a city-region with a population of 20 million people, extending 150 miles across and covering 13,000 square miles; its form now resembles a flower with petals radiating into five subregions in three states.

Ominously titled *A Region at Risk*, the regional plan warns of the dangers from the vast sprawl for New York's economy, environment, social fabric, and quality of everyday life. "Far more suddenly than people realize," write the authors, Robert Yaro and Tony Hiss,

"super-sized metropolitan regions—areas hundreds of miles wide crowded with a dense mixture of aging cities, expanding suburbs, newer edge cities, and older farmlands and wildernesses—are emerging not just as a recognizable place but as humanity's new home base."

The everyday consequences for suburb and city alike are familiar enough: traffic congestion and inefficient transportation, unavailable and unaffordable housing, water and air pollution, social segregation and lack of community. In the decades after World War II, millions of Americans fled the cities to live in the suburbs, but in a sense the city has come after them. Nonetheless, the persistence of old political boundaries prevents the problems they face from being addressed together or even discussed coherently. The problems of transportation, housing, jobs, the environment, and social equity get scattered attention in public policy, but there is hardly any notice of the urban dynamic that lies behind them: the new form that American cities have taken. Nor is there much debate about the alternative paths of development that a few city-regions have taken in North America that could be the basis of a new paradigm for city-regions and neighborhoods in the next century.

THE EVOLVING CITY

The emergence of a new form of human settlement is relatively rare in human history. For thousands of years, human settlements grew slowly and predictably. Generally, they grew outward in concentric rings, each expansion being larger but still recognizably the same as its earlier form. For example, while the European city of Bruges was growing over a period of 500 years, its boundary walls were periodically moved outward, but it kept the same kind of shape. As a pre-industrial city, Bruges faced economic and technological limits on its size, such as everyday walking distances.

The relationships between how things grow and the shapes they take fascinated the biologist D'Arcy Thompson. In his 1917 book, *On Growth and Form*, Thompson analyzed both natural and manmade objects, from marine shells, teeth, fleas, and dinosaurs to soap bubbles and bridges, observing how and when their form accommodated and changed during growth.

If this pattern, as Thompson argued, applies to mechanical constructions like boilers and biological constructions like the marine shell *Foraminifera*, it also applies to social

constructions like cities. Before the industrial revolution, the size of towns and cities was constrained by natural limits, such as the capacity of the surrounding countryside to supply foodstuffs and the ability of people to move about by foot or on animals without mechanized vehicles. Railroads changed city form in two ways. Long-distance rail lines connecting to other cities and distant agricultural areas meant that a city's population size was no longer constrained by the food from its surrounding countryside. And short-distance rail lines extending into the country meant that the city's geographic size was no longer limited by walking distances. The city's form evolved into a star pattern, with new settlements—"railroad suburbs"—concentrated around rail stations, spaced a few miles apart. The legacy of America's dependence on rail lines and depots remains with us: The New York region, for example, has a rail network that is aging and somewhat disconnected but still includes 900 railroad stations.

The railroad suburb was a nineteenth-century invention, but it is also an alternative spatial model for the twenty-first century that retains some notable advantages compared to the sprawl of the more recent automobile suburb. The advantages of the star pattern come from its physical and social compactness, its preservation of the surrounding countryside, and its economy and efficiency of transport.

The automobile radically changed city form. The private car provided extraordinary flexibility, adaptability, and choice. Space and time were reconfigured. The city's edges—so clear in the old pre-industrial city and still evident along the finger-like corridors of the industrial city—melted away. Urban centers struggled to accommodate their new inhabitants—moving and parked vehicles. Centers kept their appeal—shopping centers, research centers, sports centers, health centers, to name a few—but each became a separate center. The city became a city-region of disjointed centers. Today, at its best, it is a galaxy; at its worst, it is chaos.

THE LOS ANGELES PARADIGM

Historically, two massive shifts of population have formed American city-regions. The farm-to-city shift after the Civil War is comparable to the massive city-to-suburb shift after World War II. Now more than half the nation's population lives in the suburbs. Although still separate legal jurisdictions, it no longer makes sense to talk of suburbs and cities as if they were separate; they are economically and ecologically joined in a new kind of human settlement, the city-region.

Periodically, a city seems to be the embodiment and image of the new. Historians call it the "shock city" of its time. Los Angeles has been the "shock city" of our time, as Manchester, England, was in the nineteenth century and New York was in this century's first half. Los Angeles is now seen as the first American city to remove itself from the European models of growth and form. Architect and urbanist Richard Weinstein argues that "the structure of the built-environment as it exists in Los Angeles now represents a paradigm of growth that already houses more than half of the [United States] population and is, with variations, the pattern of growth for most new settlements in the developed world."

The Los Angeles paradigm is an extended, open, unbounded matrix laced with linear corridors, from boulevards to commercial strips, and overlaid by freeways. Its keywords are *fragmented, incomplete, ad hoc, uncentered*. Concerning the Los Angeles environment, Weinstein argues that the open extended matrix, with all its in-between spaces, is more supportive of environmental health than denser, more continuous urban structures. There is more green, in-between.

But the Los Angeles urban form has had inequitable social consequences. Ethnic colonies have become isolated, the city fragmented. If the goal is to balance the economy, the environment, and social equity, is the open extended matrix of Los Angeles the inevitable model for American cities?

NORTHERN LIGHTS

On the North American continent, Toronto represents an alternative model of urban growth and form. In contrast to Los Angeles, Toronto generates vitality in its centers. Toronto's downtown is vibrant and pedestrian-friendly, and its neighborhoods retain their strength as places of sociability. By developing mass transit, Toronto succeeded, at least until the mid-1970s, in linking its centers and retarding the land-consuming and smog-producing dependence on the automobile. A key element in this achievement was that Toronto managed its postwar boom with a system of governance called Metro-Toronto that integrated urban and suburban decisionmaking. Metro-Toronto had jurisdiction over planning not only for five municipalities in the core metropolitan area, but also for the surrounding communities. Among its achievements was a light-rail

transportation network financed by the core city.

Toronto has thus become a more equitable city than Los Angeles not only because of Canada's generous social programs, but also because the city has not isolated its less affluent residents. Ethnic minorities, the poor, and the elderly—thanks to public policy—are less segregated in Toronto than in other North American city-regions. Not only did Toronto build the transportation connections; it has also created the continent's largest stock of dispersed mixed-income social housing.

In recent decades, however, the Toronto pattern of development has drifted away from this tradition. In 1972, the Ontario provincial government combined the surrounding communities into four mini-metro governments (Halton, Peel, York, and Durham), each having strong powers over their own region. According to Gardner Church, a political scientist at York University, the province failed to create any comprehensive planning authority or to sustain the earlier commitments to contain growth and coordinate transportation. Sprawl set in and the region stood in danger of becoming, as observers put it at the time, "Vienna surrounded by Phoenix." But recently, in an effort to reverse this backsliding, the province has made Metro-Toronto the unified government of the core metropolitan area and created a new super-regional authority, called Greater-Toronto, for transportation, social services, and economic development. The surrounding areas will share the costs of social services with Toronto. Church believes this new system "offers the potential for a return to comprehensive, progressive planning."

Another model for the future comes from the Pacific Northwest, where a chain of cities—including Portland, Seattle, and Vancouver—form a city-region now often called "Cascadia" (from the Cascade Mountains that parallel the Pacific coastline). Although this new city-region crosses state and international boundaries, the emerging idea of Cascadia provides an economically integrated vision of the settlements along a regional corridor, a "Main Street" called Interstate Highway 5. What is especially notable is that it also includes an ecologically integrated vision of the geology, vegetation, natural species, climate, and movement of water throughout the region.

Cascadia shows that an equilibrium of nature, society, and culture can still be the basis of city building. Think of Cascadia as a candidate for the historians' next "shock city." Its predecessors, Manchester, New York, and Los Angeles, all drew their image from their built landscape. Cascadia draws its power as a new paradigm from its natural landscape.

Portland, Seattle, and Vancouver have each pioneered in planning for environmental protection and the provision of greenspace (parks, riparian corridors, natural habitats) as parts of the urban fabric. Today, however, greenspace is at risk. The greatest challenge comes from rapid population growth and a pattern of human settlement that, like other American city-regions, is consuming land at an even faster rate. Sprawl development has led to inefficient use of land, energy, and other resources and has had profound impacts on air quality, the hydrology of watersheds, and the environmental health of the inhabitants. The question is whether Cascadia will go the way of Los Angeles. Or as Cascadian urbanists Ethan Seltzer, Ann Vernez Moudon, and Alan Artibise put it, "Will the legacy of our times result in the stewardship of the environment, or the destructive consumption of one of the most striking and abundant landscapes on the continent?"

Cascadia has also tried to meet the needs of socially diverse residents by regulating the form of urban development. Unlike most other city-regions, it has tried to define "urban growth boundaries" to promote compact development and "urban villages" with a mix of living, working, and leisure activities. Portland, for example, has set a growth boundary that is the most concrete commitment in North America to reversing trends toward racial and class segregation and the flight from inner cities. But Portland would never have been able to undertake this process if it had not been for action by its state.

LEADERSHIP IN THE STATES

In the American political system, cities have little autonomy. The authority to enact policies and programs that might effectively shape the development of cities lies with their state governments. Two states, Oregon and New Jersey, stand out as leaders.

Since 1973, Oregon has required each city to draw a growth boundary based on its assessment of economic development and community needs in the next 20 years. In turn, the city develops a comprehensive plan, including the steps it will take to create needed infrastructure for water and sewers, roads and transit, and other public facilities within the growth boundary. The growth boundary also influences state expenditures for highways and other roads. By 1986, to meet the state standards, all communities in Oregon had drawn up growth plans to limit their expansion.

Ethan Seltzer, who runs the Institute of Portland Metropolitan Studies at Portland State

University, explains that the state expects land inside urban growth boundaries to be developed at urban densities and, in fact, allows developers to go to court for immediate approval if local jurisdictions fail to process permit applications for approved purposes within 120 days. "This means that multifamily development occurs by right and according to plan even in the suburbs!" Seltzer says. But outside the boundaries, he continues, "you cannot develop at urban densities, cannot get urban services, and face strict restrictions on what can be built in farm and forest zones. Even road widening for nonfarm uses is closely regulated outside of urban growth boundaries."

Seltzer notes,

Creativity comes into play because, especially in recent years, the state is committed to accommodating growth through infill and redevelopment, and not just on vacant land at the edge. Today, the market is responding. In the last six months, 30 percent of our residential growth has been infill development in the region, 15 percent has been in attached housing/townhouses. . . . There is active development of housing in downtown Portland, and we will probably see a new public elementary school in downtown in the next few years.

The Oregon program directs cities and investors to steward land committed to urban use much the way a farmer stewards his or her fields. Rather than [allowing] disinvestment, we pursue reinvestment. It comes at a cost. Currently we are struggling with our popularity, and what it means to live not in a cheap region but a desirable, valuable one.

I guess what we've proven is that pursuing an end to sprawl is possible and desirable, but it won't by itself solve the problems of poverty or provide needed affordable housing.

He adds that while urban growth boundaries are not a "silver bullet," they "are great at what they do: stopping sprawl on farmland, directing attention back onto lands already committed to urban use, and in the metropolitan region here, suggesting to local elected officials that their future is a shared one best approached through a partnership with their brother and sister jurisdictions living within the same economy."

The growth and form of cities are critical issues for New Jersey, the only state to be entirely occupied by "metropolitan areas," according to the U.S. Census. In 1992, New

Jersey produced its first state plan to "coordinate public and private actions to guide future growth into compact forms of development and redevelopment." Its policies are like Oregon's: "encourage development, redevelopment, and economic growth in locations that are well situated with respect to present or anticipated public services and facilities, and to discourage development where it may impair or destroy natural resources or environmental qualities."

In New Jersey's search for a new model of urban growth and form, the keyword is *compact*. Comparing the traditional trends with the new policies proposed by the state plan, James Hughes and his colleagues at Rutgers University found that compact development would generate more jobs in accessible centers throughout the region, thereby reducing the jobless rates in inner cities. There would also be less destruction of the natural environment because forests, watersheds, and farmlands would be preserved. Local and state governments would save money because there would be less need for new infrastructure. For example, to accommodate growth until the year 2010, the traditional pattern would need 5,500 lane-miles of new local roads. For the same population and economy, the state plan would require only 1,600 new lane-miles. But the greatest benefit would be in the revitalization of neighborhoods.

HERE COMES THE NEIGHBORHOOD

For revitalizing our cities, the "neighborhood" is almost always cited as the basic building block. Today in America there are two different concepts. The first is the idea of a "neighborhood" with a core and boundary. Spatially and socially, this "neighborhood" focuses on its core: local shops, a neighborhood school, perhaps a library and other community facilities for education, health care, and recreation. The neighborhood's population size and density, its network of roads and paths, even its image and character are linked to the neighborhood's core. At its boundary, the neighborhood's edges are marked by landscapes—generally, roads or parkways, or in cities, arterial streets. Neighborhoods, in this concept, are given names and generate loyalty; they are also inward-looking and intentionally static.

The city-building implications of this neighborhood concept are clear: Clusters of neighborhoods can create a district, and clusters of districts create the city. This "cluster" concept of the neighborhood, district, and city is the American vernacular. It is embodied in the postwar comprehensive plans for restructuring such old cities as Philadelphia and

for the construction of such new cities as Columbia, Maryland. It is manifest in the power of "community boards" in large cities. And it is given lip-service by developers and their advertising agencies for suburban tracts.

The second concept, a "street-neighborhood," is radically different. It does not have the spatial and social clarity of the "core-and-boundary neighborhood." Instead, it idealizes the natural cohesion that comes from "neighboring" on the street and sidewalk. This sense of neighborhood is the consequence of face-to-face, casual, informal contacts in everyday city life. For the spatial setting of this concept of neighborhood, the gridiron street plan of such cities as Manhattan is especially useful. Paradoxically, the static, predictable, public structural form can support and stimulate the dynamic, small-scale, ad hoc, spontaneous life of everyone—residents and visitors, workers and walkers, insiders and outsiders.

The key to this concept of neighborhood is the street and sidewalk. The street is the armature, the skeleton, the structure of the street-neighborhood. To the streets are attached the social institutions that characterize a neighborhood: the schools, food stores, coffee shops, library and bookstores, movie theaters, local service stores, health clubs, parks and playgrounds, and of course, the workplaces and homes of the neighbors. The street-neighborhood is immensely popular. Throughout the United States, for example, old loft districts are being used for new living-working places; shopping malls are trying to simulate the life of a downtown street and sidewalk; and cities are recognizing that the key to the neighborhood is the street and its quality of life.

CITY PROSPECTS

How can these concepts of neighborhoods serve an emerging new society profoundly affected by changes in communication and information technologies? They offer both positive and negative possibilities.

The core-and-boundary neighborhood can create a human-scale community and sense of place within a large city-region. Because it is a development unit that itself has edges, it can help establish an urban growth boundary. But the core-and-boundary neighborhood can turn pathological if the territorial boundary becomes hard-edged and gated, excluding outsiders from a segregated community.

The street-neighborhood has the advantage that it does not intentionally create physical boundaries that exclude people. At its best, it is open, welcoming, and place-making. Diverse street-sidewalk places would be welcome insertions into conventional core-and-boundary neighborhoods, or even more, into the fabric of suburban sprawl. But the street-neighborhood also has pathological possibilities: The streets can be the territorial setting for intimidation and crime and, at their worst, these threats can destroy our cities.

Increasingly, "Main Street" is once again valued as a lively center of a surrounding neighborhood. In Toronto, for example, the ethnic diversity of the city-region is expressed by its many neighborhoods—Greektown, Chinatown, Portuguese Village—each with its own "Main Street." What had been St. Claire Avenue is now Corso Italia. Similarly, in northern Manhattan, Harlem's neighborhoods are anchored by their crosstown streets. The most famous is 125th Street, but others such as 116th and 135th Streets are each a string of lively places, central arteries for economic and cultural activity.

If, as Peter Drucker predicts, our future organization of work will be more akin to that in pre-industrial cities, with an intimate mixture rather than separation of living and working places, then the neighborhood street will once again be the vibrant setting for everyday life. More than ever, we will value places to meet, to see and be seen, to drink coffee together, and maybe, **to bowl together**.

But this will not happen automatically; the form of a city is a consequence of public policies. Four kinds of policies are needed: regional compacts to build and maintain infrastructure for transportation, water, and waste systems; community growth boundaries to contain the urban built-up land uses; regional compacts to preserve greenspaces and natural ecological systems; and public initiatives to support the centers of cities and neighborhoods.

Streets and sidewalks, buildings and plazas, gardens and parks profoundly affect our everyday lives and ought to be the subject of public debate. "By its form, as by the manner of its birth," wrote the French anthropologist Claude Levi-Strauss, "the city has elements at once of biological procreation, organic evolution and aesthetic creation. It is both a natural object and a thing to be cultivated; something lived and something dreamed. It is the human invention par excellence." We need the courage to create our cities again.