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The open and the enclosed

Shifting paradigms in modern urban design

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Anyone seeking to identify the shifting paradigms of modern urban design needs to look no further than the 92 acres of landfill along the Hudson River in lower Manhattan known as Battery Park City. Formed by the massive excavations for the twin towers of the World Trade Center in the 1960s, this magnificent site between the river and financial district became the perfect *tabula rasa* on which the profound transformations that shook urban design would be inscribed. The first plan from 1963 called for three rows of widely-spaced high-rise towers in an open, landscaped setting, an archetypal realization of the dominant “tower-in-the-park” paradigm dating back to Le Corbusier’s 1925 Plan Voisin for Paris. When the 1963 plan was scrapped in the financial turmoil of the late 1960s, it was replaced in 1969 by a plan for a grandiose, futuristic, mixed-use “megastructure” proposed to run the entire length of Battery Park City, its cavernous interior spaces connected by the then-inevitable monorail (Gordon 1997).

But when the futuristic megastructure plan was in turn scrapped in the financial turmoil of the early 1970s, the next – and ultimately successful – plan took a surprisingly radical turn toward the past. Designed by the firm Alexander Cooper

Associates to reflect the most successful existing neighborhoods in Manhattan, the plan ran a typical Manhattan grid over the landfill. The plan stipulated that a mix of high-rise and low-rise buildings would all be built out to the sidewalks to form solid street walls enclosing pedestrian-friendly narrow streets (some with ground floor retail) and small, enclosed parks. A wide but well-defined pedestrian “Esplanade,” perhaps the most successful single feature of the plan, provided a grand public space along the riverfront. In a significant contrast to the former “megastructure,” which would have been a single vast unified project, the designers provided that Battery Park City would be built out block-by-block over time by a range of developers whose differing designs would provide something like the variety of existing Manhattan streetscapes. Begun in 1979, the Cooper/Eckstut plan is only now reaching completion amid the turmoil of the rebuilding of the neighboring World Trade Towers site (Love 2006).

One can make sense of these vastly different plans by arguing that modern urban design has been dominated by a profound conflict between two very different paradigms regarding the role of the urban designer, each with deep roots in the history of cities and each with important

implications for their future. The first paradigm, embodied in the initial tower-in-the-park plan for Battery Park City, celebrates the capacity of the urban designer to *open up* the too-solid fabric of the traditional city; to use modern design to relieve the inhuman overcrowding of the old city, and to replace it with a green open cityscape that would also provide room for the light-filled towers, great highways, and rapid communication that defined the modern age.

The second paradigm as embodied in the “neo-traditional” plan actually built, sees the primary role of the urban designer to *enclose space* – to create the human-scale “outdoor rooms” that provide the settings for the complex and informal communication, trade, and sociability that are the essence of urbanism. This second paradigm is respectful of the traditional fabric of the city and privileges continuity, walkability, small-scale enterprise, and neighborhoods over modernist innovation, scale, and speed.

The postwar era began with the first paradigm in the ascendant, especially as represented by Le Corbusier’s remarkable synthesis of aesthetics and engineering in the compelling image of the “radiant city” and the “tower-in-the-park.” Whether in downtown skyscrapers or in the “neighborhood units” that replaced the slums, this dream of a city of towers rising above open plazas and great highways embodied for its many champions the power and beauty that the modern city could attain. But history took another route, and the real story of urban design over the last fifty years has been the displacement of the urban design paradigm that sought to open up the city by the paradigm that sought to enclose space and to preserve the older urban fabric. This history begins with the international “citizen’s revolt” against tower-in-the-park and highway urbanism in the 1950s; continues through Jane Jacobs’s devastating critique of high modernist urban design in the 1960s; and concludes

most recently with the trend toward sustainable urbanism. Ironically, the traditional urban fabric is proving more “modern” in its energy efficiencies and social “connectivity” than the more open designs that once seemed destined to shape the urban future (Farr 2008).

This “paradigm shift,” to use Thomas Kuhn’s famous phrase (Kuhn 1996), reflects a passionate debate *within* urban design but its outcome has ultimately been determined by those larger forces (such as industrialization, mass immigration, and more recently the energy crisis) that have the real power to shape the modern city. The “open” paradigm found its heroic rationale during the era of feverish growth of the Western European and North American city – roughly from 1800 to 1950 when the great metropolitan centers – what H.G. Wells called “the whirlpool cities” (Wells 1902) – drew literally millions from farms and villages into the super-dense vortices of cities like London, Paris, Berlin, Vienna, New York and Chicago. In these whirlpool cities the overwhelming “urban crisis” appeared to be overcrowding and congestion. The mass migration to the metropolis filled up the courtyards and alleyways in the older cores of large cities at the same time that these cities expanded inexorably in dense blocks into the countryside at the edge. The result was cities that were choking on their own traffic (even if this traffic was still horse-drawn); their overcrowded residents drinking polluted water and breathing polluted air; cities where providing even the minimum of light, space, and air for most residents seemed a utopian dream. (Mumford 1961; Hall 1998).

In response to this urban crisis of overcrowding and congestion, the great task of urban design appeared to be to *open up* the city, and designing paradigms for such openness pre-occupied the most brilliant efforts of urban designers of that era. But by the mid-twentieth century the very

technologies – the railroad, electric tram, and subway – that had concentrated people in the whirlpool cities now permitted the urban population to spread out inexorably from their crowded cores. The mass ownership of automobiles in the United States and its eventual spread to Europe permitted a radical decentralization to low-density suburbs. In this new context, low-density automobile-dependent development became the norm – the “default setting” for urbanism – while the older urban values of density, walkability, and enclosure became goals that required the intense efforts and creativity of urban designers. In Battery Park City, for example, density and enclosure were no longer associated with the former slum districts of the nearby Lower East Side but with the ideal – at once new and old – of walkable urbanity. Hence the emergence of the enclosure paradigm as the preferred format for urban design, at least in those regions of Europe and North America where urban overcrowding was no longer a problem. By contrast, for those regions of Asia, Africa, and Latin America that are still in the “whirlpool” phase of urban development, the “open” paradigm with its towers-in-the-park design framework retains much of its importance and credibility (Campanella 2008).

Even in Western Europe and North America, the open paradigm still plays a vital, if limited, role in urban design, but its twenty-first-century incarnations tend to be drawn not from twentieth-century modernism but from the best work of the nineteenth century. In that era, the sheer difficulty of breaking through the dense urban fabric of existing cities required designers to adopt an admirable complexity and discipline in their attempts to realize the open paradigm. By contrast, twentieth-century modernist urbanism with its far greater technological resources often fell victim to inhuman scale and megalomaniacal ambitions. The earlier

nineteenth-century open paradigm might best be defined by the interconnection of three major forms: (1) the multi-lane, tree-shaded boulevard, terminating in a grand public space and monument; (2) the parkway, a specialized boulevard at the urban periphery designed to connect the city to parks or rural open spaces; and (3) the “monumental” urban park, carefully planned as an alternative “green” environment while surrounded by dense building. As we shall see, these forms continue to inspire urban designers today.

This nineteenth-century design language of openness and movement will always be associated with its greatest achievement, the most successful “urban renewal” project of all time: the re-building of Paris undertaken by Emperor Napoleon III and his deputy Baron Eugene Haussmann in the mid-nineteenth century (Van Zanten 1994). From Paris, the form spread over the world under such rubrics as Beaux-Arts (named for the school of fine arts and architecture in Paris where it was best taught) or “City Beautiful,” as it was called in the United States (Peterson 2003), and reached its most elaborate (but mostly unrealized) expression in Daniel Burnham and Edward Bennett’s 1909 Plan of Chicago (Smith 2006). At the heart of this achievement was the network of Parisian boulevards and public spaces that Napoleon III and Haussmann cut through the dense fabric of Paris to open communications in a city where rapid movement from district to district was becoming impossible.

This “Haussmannization” used the power and resources of an absolutist regime to push through the massive demolitions that the imposition of the open paradigm on a dense city necessarily required. Nevertheless, the grand boulevards that resulted did more to justify the human costs than any subsequent “urban renewal” project (Jordan 1995). The boulevards were brilliantly designed to achieve a genuine urban complexity that complemented the

finer-grained traditional urban fabric through which they ran. A Parisian boulevard is at once a high-capacity transportation system, with multiple lanes for both fast and slow moving traffic (then horse-drawn carriages and buggies, but now cars, bicycles, and buses); a “linear park” formed by carefully-arrayed rows of street-trees; a vital public commercial space including wide sidewalks and ground-floor cafés and retail establishments; and even a below-grade “sanitation system” formed by the water-pipes and sewers that run underground. The boulevards were designed to be lined by solid walls of apartment houses built to a uniform cornice height, whose bulk complemented and “framed” the width of the streets, and whose many windows and narrow balconies opening on the boulevard gave it a continuing life and animation. And the boulevards generally terminated in a monumental structure (e.g. the Paris Opera or the Arc de Triomphe) carefully placed in an expanse of open space that provided a monumental emphasis to the commercial/residential bustle of Parisian street life. Compared to the single-use automobile expressways of our time that leave a permanent scar on the city, the boulevard is a model of multifaceted urbanity, and for that reason is again becoming a model for designers wishing to maximize both traffic and urban vitality (Jacobs *et al.* 2002).

One special Parisian boulevard, the Avenue de l’Imperatrice (now Avenue Foch), attracted particular attention from an American visitor, Frederick Law Olmsted, when he visited Paris in 1869 (Rybczynski 1999). Olmsted and his partner Calvert Vaux had designed New York’s Central Park in 1858, their first park and the masterpiece of the nineteenth-century parks movement. Olmsted believed that the dense modern city was so destructive to both physical and mental health that the survival of its people required the creation of an alternative within it: an open, green

world carefully designed as the “lungs of the city” to restore both body and mind. Along with the boulevard, the large urban park became the showpiece of the open paradigm. What intrigued Olmsted about the Avenue de l’Imperatrice was that it was a kind of linear park lined with tree-shaded villas that connected Paris to its largest park to the west, the Bois de Boulogne. Not only was this “parkway” an excellent model for a new kind of boulevard that could run through the periphery of the city (and indeed helped guide its development); but a unified network of parks and parkways could provide what Olmsted later called an “Emerald Necklace” at the urban edge to ensure a healthy balance of urban fabric and open space. In his great park/parkway projects for Brooklyn, Buffalo, Chicago, Boston (the site of the “Emerald Necklace”), and other American cities, Olmsted thus took the open paradigm to a regional scale (Zaitzevsky 1982). That regional scale was picked up and magnified by Daniel Burnham and Edward Bennett in their grand and grandiose 1909 Plan of Chicago, most productively in the designs for a great line of parks and parkways along the city’s lakefront. “The lakefront belongs to the people,” Burnham proclaimed at a time when the lakefront in fact belonged to the railroads and other polluting uses (Smith 2006, 22). But the Plan inspired another great achievement of the open paradigm, the network of Chicago parks along Lake Michigan, a network recently completed in 2004 with the opening of Millennium Park in the heart of Chicago’s Loop, perhaps the most impressive recent achievement of American urban design (Gilfoyle 2006).

If the open paradigm reached its most ambitious scale in the 1909 Plan of Chicago, that Plan also showed, especially in the megalomaniacally-scaled “Civic Center,” the dangers of that paradigm when Burnham and Bennett were not

restrained (as they were in the parks) by a sense of human scale. Perhaps even more damagingly, the grand open spaces conceived by this and other Beaux-Arts and “City Beautiful” plans in the early twentieth century were soon overwhelmed by a tidal wave of automobiles, which brought a new level of congestion to the urban core and turned the most expansive open spaces into motorized maelstroms. Suddenly the neo-classical design language of the open paradigm seemed as obsolete as the elaborate carriages that once paraded along its boulevards. But the open paradigm found a new life and importance through its radical re-imagining in the 1920s and 1930s by the Swiss-French modernist architect and urbanist Le Corbusier. It was Le Corbusier’s great achievement to bring the open paradigm into the age of the automobile and the skyscraper and to envision a totally re-formed modernist city that very quickly dominated first the imaginations and then the practice of urban designers (Fishman 1977).

Le Corbusier’s *Contemporary City* (as he called it in the 1920s) or *Radiant City* (the name he introduced in the 1930s) was not the first to portray the modern city as a *City of Towers*, but it was the first to grasp the radical possibilities of high-rise building for urbanism. For Le Corbusier, the skyscraper was essentially a whole neighborhood extending upward instead of spreading out on the ground, its elevator system a “street in the air” (Le Corbusier 1924). It was therefore irrational to crowd skyscrapers together, as in New York City. Instead, each tower should stand free on its own landscaped “superblock,” covering no more than 15 percent of the land. In such a “city of towers” one could for the first time encounter unprecedented density with unprecedented openness. The towers would free up space at ground level not only for beautiful parks and gardens but they would open up wide spaces between the superblocks for massive superhighways

that would speed the new multitude of motorists around the city. Within each superblock a specialized system of roads would eliminate the multi-function “corridor street” with its (for Le Corbusier, irrational) mix of functions in favor of a hierarchy of single-function pathways ranging from pedestrian walkways to shopping streets. Whether in the now-functionally zoned and separated business center, residential areas, or industrial parks, each worker or resident would enjoy unlimited light, air, views, and mobility, in a truly radiant city (Le Corbusier 1935). As John Summerson put it, the park is not in the city (Olmsted’s model); the city is in the park (Summerson 1963: 81).

Le Corbusier demonstrated, moreover, that he did not shy away from the massive demolitions that his version of the open paradigm would require for existing cities. In his *Plan Voisin* for Paris, he surpassed Haussmann (at least in his imagination), proposing to knock down 600 acres of traditional urban fabric in the historic core of central Paris and to replace them with eighteen 60-story cruciform-shaped glass-and-steel towers looming above highways and landscaped superblocks (Le Corbusier 1924). The project, which was never built, nevertheless demonstrated Le Corbusier’s resolve that to be truly modern, one must be ruthless with the “obsolete” urban past. And, as he had hoped, the very daring and beauty of his designs gave an aura of inevitability to his designs. Here finally was a city that appeared to embody the full logic of modernity: the scale and speed; the standardization and separation of functions; the industrial materials and mass-production methods. From the utopian dream of an obscure outsider, Le Corbusier’s radical modernist version of the open paradigm became the architectural avant-garde’s accepted model for the modern city in the “Athens Charter” of the International Congress of Modern Architecture (CIAM 1933). After the (unplanned)

urban destruction of the Second World War, the tower-in-the-park model became the shared ideal of architects and planners, government bureaucrats, and even capitalist developers (Mumford 2000).

But despite the aesthetic grandeur and functional logic of Le Corbusier's re-imagining of the open paradigm, the great new age of modernist urbanism and the open paradigm somehow never dawned. Le Corbusier may have disdained the confusions and the inefficiencies of the enclosed "corridor street," but we have learned that the complex, pedestrian-oriented life of these bustling streets nevertheless provided the essence of the urban experience, what Jane Jacobs would famously call "close-grained diversity" (Jacobs 1961, 5). Even when the "towers-in-the-park" did not degenerate into "towers-in-the-parking-lot," the pedestrian's experience at street level in these districts was a dispiriting combination of meaningless open space and inhumanly-scaled towers. During the 1950s and 1960s, the towers tended to inflate in scale as they became the favored design form for housing bureaucracies seeking to mitigate the postwar shelter crisis by constructing the maximum number of units on a given site. The results justified architect Rem Koolhaas's critique of the Bijlmermeer housing project outside Amsterdam as "boredom on a heroic scale" (Koolhaas 1995, 871). At worst, the towers degenerated into a new form of high-rise slum; the massive Pruitt-Igoe housing development in St. Louis, completed in 1958, deteriorated so quickly that many of its towers had to be demolished by 1972 (Fishman 2004).

The failure of the towers-in-the-park paradigm highlighted the continuing vitality of the older "obsolete" urban fabric the towers were supposed to replace. Despite decades of neglect, this fabric often had a wonderful human scale; a lively mix of functions, especially ground-floor retail.

Even when these districts lost their manufacturing base, the loft spaces that became available were surprisingly adaptable to the "new urban economy" that appreciated small-scale flexible spaces. Unfortunately, urban design theory was so wedded to the open paradigm, that it long ignored the manifest evidence of failure. The traditional fabric was preserved by a grass-roots mixture of individual renovators – the so-called "gentrifiers"; by small property managers and speculators who operated at the fringe of the profession; and even by anarchists and artists who, as in Amsterdam and London, stubbornly "squatted" in abandoned buildings to save them from demolition (Tung 2001, 211–247). When, for example, artists began moving into the semi-derelict nineteenth-century industrial lofts in the newly-named "Soho" neighborhood in New York, they often had to hide their occupancy from building inspectors seeking to enforce codes prohibiting the conversion of factory buildings to residential use. Today Soho ranks as among the most desirable neighborhoods in the world, and the conversion of factories to residential "lofts" ranks as one of the most successful overall strategies for urban regeneration (Zukin 1982).

By the mid-twentieth century the strongest of these districts were able to challenge successfully those who threatened them with urban renewal, most famously in the neighborhood coalition that saved Washington Square Park in New York from Robert Moses's plan to run a highway through it (Fishman 2007), and a similar anti-freeway coalition which stopped the ugly Embarcadero Freeway in San Francisco literally in mid-air from cutting the city off from its waterfront. The great manifesto of this movement appeared in 1961, written by a hitherto-obscure architectural journalist named Jane Jacobs, who had been a leader of the Greenwich Village group opposing Moses. In *Death and Life of Great American Cities*, Jacobs provided a

stunning critique of the open paradigm, especially in its radical “demolitionist” form. Jacobs identified the life of cities with their *street life*, what she called “the ballet of the city street” that continuously brought together a diverse mixture of people, who not only supported the diverse enterprises that were the heart of the urban economy but gave a city its twenty-four-hour vitality. For this “close-grained diversity” to prosper, Jacobs argued, one needed density, mixed-use, and the enclosure provided by well-defined streets and public spaces, precisely what the “open paradigm” sought to overcome with its widely-spaced towers and functional zoning (Jacobs 1961).

Jacobs called for an urban design that would express the “intricate order” of cities, their “manifestation of the freedom of countless people to make and carry out countless plans,” (Jacobs 1961) but she offered no detailed designs embodying that “great wonder,” only the general principles that would indeed inform urban design in the four decades since the publication of her book. But as designers struggled to adapt her ideas, they discovered that an alternative paradigm did exist within urban design that stretched back to such nineteenth-century figures as the Viennese architect Camilo Sitte and the early twentieth-century English town planner Raymond Unwin. This paradigm was given new vitality by the English “townscape” movement of the 1950s and 1960s and most recently by the Congress for the New Urbanism. I have called this the “enclosure” paradigm, with Sitte as its first and in many ways archetypal exponent.

Sitte’s book *City Planning According to Artistic Principles* was written in 1889 as a passionate critique of one of the greatest “open” designs of the nineteenth century, the Vienna Ringstrasse [Ring Street] (see Collins and Collins 2006). In the 1850s Viennese authorities began demolishing the massive but obsolete defensive walls,

which had surrounded the core of the city, thus opening a vast area for the monumental structures – the Opera, the Parliament, the National Museums, the National Theatre, the City Hall and the University – that represented liberal culture and enlightened government in the Austro-Hungarian Empire. Set back from the roadway in ornamental parks and gardens, these widely-spaced, lavishly-ornamented structures in various historicist styles gave the Ringstrasse a scale and grandeur to rival anything in Paris or the rest of the world, and “Ringstrasse Vienna” was hailed as the embodiment of the new, open city (Schorske 1980). Surprisingly, one prominent Austrian urbanist protested: Camilo Sitte, who critiqued the disorienting vastness of the Ringstrasse spaces, the tendency of the buildings to “float” in the huge spaces, and the privileging of rapid movement over enclosure. By contrast, he found the true “artistic principles” of urban design in the narrow streets and especially the many tiny plazas of the old city. These irregular but carefully-formed spaces, often fronting churches, “humanized” the city, in Sitte’s view, and gave a far better setting for a wide range of urban activities than the open spaces and constant movement of the Ringstrasse. “The ideal street,” he argued, and even more the ideal square, “must form a completely enclosed unit” (Collins and Collins 2006, 117).

Sitte’s re-discovery of the art of enclosure at the urban core found an unexpected but powerful echo at the urban periphery in the work of Raymond Unwin, a leader of the English “Garden City movement” and designer of what he called “the garden suburb” (Swenarton 2008). The Garden City movement might appear to belong to the “open” school of urban design, for its founder, Ebenezer Howard, wished to decentralize the metropolises of Europe and the United States and to move most of their population out to a regional network of planned “garden cities” of about

30,000 people, which would supplant the overgrown and overcrowded central cities. But Howard understood that it was important that this decentralization not sprawl out over the countryside but be concentrated in carefully-planned, mixed-income and mixed-use “garden cities” which would achieve a small-scale urbanity, walkability, and economic vitality along with close contact with nature (Fishman 1977). Howard chose Raymond Unwin and his partner Barry Parker to design the first English garden city, Letchworth, in 1903. And, in 1907, Unwin accepted the more difficult challenge of applying garden city principles to a new suburban development just north of London, Hampstead Garden Suburb (Unwin 1920).

Unwin had long been concerned with reforming the conventional English suburb of the time which (especially at the edge of London) stretched out along endless straight streets lined with row-houses, which formed an interminable and perpetually expanding gray edge to the city. By contrast, he conceived Hampstead Garden Suburb as tied to central London by rapid transit but as a distinct place of its own, with a pedestrian scale and a clear center and edge. Like Sitte, Unwin was an admirer of medieval urbanism, and he brilliantly utilized the courtyards and cul-de-sacs of traditional English cities to create a “landscape of cooperation,” where small, enclosed open spaces lined with picturesque houses defined a neighborly common ground. Hampstead Garden Suburb was “mixed-use” with institutions at its core and shops at the edge; explicitly mixed-income with “artisans’ cottages” mixed among substantial middle-class dwellings; green enough to distinguish itself from the gray suburbs that surrounded it, but dense enough to maintain a sense of enclosure, to ensure walkability, and preserve the bulk of Hampstead Heath (the parkland it bordered) from development (Miller and Gray 1992).

Hampstead Garden Suburb represented an ideal-type for a suburb designed within the “enclosure” paradigm, but even within the Garden City movement its careful balance of enclosure and greenery was rarely attempted. By the 1920s the movement was distracted by the coming of the automobile, and the many subsequent “garden suburbs” and “New Towns” such as Radburn, New Jersey (built in 1928 and coined the “town for the motor age”) now tended to sprawl out almost like conventional suburbs. Only in the 1950s was Unwin’s ideal of enclosure revived in the English “townscape” movement led by Frederick Gibberd, Gordon Cullen and Ian Nairn. They believed that the ideal “townscape” should consist of the pedestrian’s “serial vision” of a series of dense, intricate, and enclosed spaces (Cullen 1961). This message was strongly reinforced from the perspective of sustainability by the landscape architect Ian McHarg, whose 1969 book *Design With Nature* emphasized the importance of “clustering” development to preserve farmland and unique and fragile eco-systems (McHarg 1969).

By the 1980s, this suburban wing of the enclosure movement was mature enough to link up with the urban wing coming out of Sitte and Jane Jacobs to create a truly regional enclosure paradigm that could run from such projects as Battery Park City at the core to “New Urbanist” garden suburbs at the edge. Within the central city, the principal emphasis has been on preservation of the existing built fabric and the transportation network that supports it, including adaptive re-use of older structures. When new buildings are required, they should be “contextual,” reflecting the traditional typologies of the neighborhood, and organized into solid perimeter blocks fronting pedestrian-scale streets lined with ground-floor retail establishments. In addition to this mixed-use, the new residential stock should be mixed-income

to promote true neighborhoods instead of single-class enclaves. The solid blocks and narrow streets that form the bulk of the neighborhood should be varied and relieved by carefully-enclosed small open spaces to serve as the defining public spaces of the neighborhood. More extensive open space for sociability and exercise might best be found in the spaces left behind by deindustrialization, most notably derelict waterfront sites that could be converted to scenic parks. For transportation, the enclosure paradigm favors a new incarnation of the nineteenth-century boulevards, multi-laned, multi-use streets for buses and trolleys as well as automobiles, tree-shaded and lined with housing to tie the boulevard back into the city.

At the periphery, the Unwin tradition of the “garden suburb” has been most strongly taken up in the United States by the Congress for the New Urbanism (CNU), a design and social advocacy movement founded in 1993. Reacting against the total automobile dependency of the typical cul-de-sac subdivision of the 1980s, the CNU had advocated in true Unwin fashion what two of its founders, Andres Duany and Elizabeth Plater-Zyberk, have called “traditional neighborhood design” (Duany and Plater-Zyberk 1992). First demonstrated in the Florida resort town of Seaside (1982), such neighborhoods achieve walkability and their own form of “urbanity” by adhering to the Unwin garden suburb principles of a clear center and edge; sufficient density to encourage walkability with houses on relatively small lots oriented toward the narrow streets; mixed-use and mixed-income, and well-defined and enclosed public spaces. Another CNU leader, Peter Calthorpe, has taken up Unwin’s concern with transit, and his ideal of “Transit Oriented Development” (TOD) means building new suburbs around light-rail transit stops, both to give a walkable center to the development and limit sprawl, but also to provide rapid

access to the regional downtown. The surprising re-birth of light-rail systems in the United States has given a renewed plausibility to the TOD (see also chapter by Polyzoides). Calthorpe himself has worked extensively in the metropolitan area that best embodies the ideal, Portland, Oregon (Calthorpe and Fulton 2001).

If the enclosure paradigm has the intellectual resources to design whole regions, the reality is that this paradigm (or anything like it) now accounts for only a small part of the built environment that has been created either in the United States or world-wide since 1945. The intentional and inadvertent destruction of traditional urban fabric continues unabated; Anthony Tung estimates that 50 percent of that fabric was destroyed in the course of the twentieth century (Tung 2001, 414). In the United States and Western Europe, the frantic over-production of low-density sprawl that resulted from the great international real estate “bubble” of the 2000s was perhaps the “last hurrah” of conventional sprawl development. Nevertheless, it added to the vast areas in our urban peripheries that (despite the efforts of New Urbanists and other reformers) are completely automobile-dependent. Even more disturbingly, the avid consumption of personal automobiles in the developing world has given rise to low-density, automobile-dependent “global suburbs” throughout the world.

Nevertheless, there has been a clear global trend, especially among younger people, to seek out dense, transit-oriented cities as the environment most congenial to contemporary life (Fishman 2005). Perhaps most importantly, the enclosure paradigm has been shown to have the best potential to produce energy efficient and sustainable cities just when we need them most. Where the dense, pedestrian-centered city was once a symbol of ecological and social crisis, the situation is now exactly reversed. It is the sprawling open paradigm

that stands for unsustainable energy use, whereas the largest, densest cities like New York, Toronto, and Tokyo all exhibit energy consumption per capita at only a third of the average for their societies. As early as the 1960s, Lewis Mumford provocatively labeled the open paradigm with its towers and highways as “yesterday’s city of tomorrow” (Mumford 1968, 116). The true twenty-first-century “city of tomorrow” is likely to be a complex blend of old and new, a synthesis of the open and enclosed paradigms into new forms never envisioned by their creators. But this new city which we are striving to design today will surely be a place where the human-scaled, traditional design-language of the street and the square will remain vital and enduring.

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Further reading

- Norma Evenson. (1979). *Paris: A Century of Change, 1878–1978*. New Haven, CT: Yale University Press. The best account of the meaning and impact of “Haussmannization” (and later modernization) on Paris.
- Le Corbusier. (1925). *The City of To-morrow and its Planning*. Translation from 1929 of his *Urbanisme*, (original edition Paris: G. Cres et cie, 1925). The brilliant and stunningly influential manifesto of the modernist version of the open paradigm.
- Jane Jacobs. (1961). *The Death and Life of Great American Cities*. New York: Vintage Books. The key document for the mid-century transition from the open to the enclosed paradigm, still surprisingly rich and challenging especially for readers who get beyond the familiar opening chapters.
- Raymond Unwin. (1994). *Town Planning in Practice: An Introduction to the Art of Designing Cities and Suburbs* (original edition London: T.F. Unwin, 1909; reprint with a new preface by Andres Duany and a new introduction by Walter Creese, New York: Princeton Architectural Press, 1994). The best embodiment of the enclosure paradigm in its classic “Garden City” phase and perhaps the most humane statement in twentieth-century urban design.