Article

Journal of Planning History
1-19

DOI: 10.1177/1538513218755498
journals.sagepub.com/home/jph
SAGE

Utopian Plans for the Modern World: John Nolen, Lewis Mumford, and the Origins of Sustainability

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Abstract

Sustainability, as put forth in the Brutland Commission's landmark report, *Our Common Future*, imposes "limits to growth" to ensure development "meets the needs of the present without compromising the ability of future generations to meet their own needs." Grounded in urban planning, sustainability took root nearly a century ago in a set of regional plans John Nolen and Lewis Mumford put forth to limit growth and strike a balance between ecological relations and consumer demand. If their works were Utopian, they were also culled from the study of nature and history and they left a timeless legacy.

Keywords

John Nolen, Lewis Mumford, sustainability, Portland Oregon, new urbanism, planning eras/approaches

Sustainability is the definitive ethic of our time. Its measure of humanity cuts across the shibboleths of identity politics and corporate citizenship by forcing a moral response to an existential demand. Sustainability, as put forth in the Brutland Commission's landmark report, *Our Common Future* (1987), imposes "limits to growth" to ensure development "meets the needs of the present without compromising the ability of future generations to meet their own needs."[1] A generation later, Pope Francis infused sustainability into the lifeblood of the New Testament. "We need . . . to think of containing growth by setting some reasonable limits and even retracing our steps before it is too late," he declared in *Our Common Home* (2015).[2] Given that over 50 percent of the world's population lives in cities (3.9 billion), a figure expected to grow 60 percent by 2050, sustainability is grounded in urban planning.[3] The concept took root nearly a century ago in a set of regional plans John Nolen and Lewis Mumford put forth to limit growth and strike a balance between ecological relations and consumer demand. If their works were Utopian, they were also culled from the study of nature and history and they left a timeless legacy.

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The Challenge of Modernity

Lewis Mumford ascertained that the ancient Greeks invented Utopia to illustrate the ideal city. "The city," he wrote, "had the advantage of mirroring the complexities of society within a frame that respected the human scale."[4] In the 1920s, the autodidactic intellectual navigated a path through an unmarked modernity to reveal the promise of Aristotle's "good life" in a human-scaled city.[5]By definition, a Utopia seeks to reconnect to lost values, and Mumford's first book, *The Story of Utopia* (1922), offered an Aristotelian template for procuring the human potential by building a virtuous urban republic.

The American city had unmatched possibilities, but Mumford found the good life of artistic pursuit and civic virtue under siege from the "goods life" of consumerism. Moreover, the machine was being venerated; a cultish worship that eviscerated "human patterns" of civilization. Cut off from nature and programmed to consume, urban dwellers were devolving into a robotic people as standardized as their growing proliferation of mechanical devices. *The Story of Utopia* offered the remedy of regional planning: routing urban expansion on natural lines and funneling development into green, human-scaled "Utopias" that "spring out of the realities of our environment."[6]

In April 1923, John Nolen wrote Mumford, declaring, "I am enjoying and profiting by *The Story of Utopia*."[7] Nolen had recently completed Florida's first comprehensive city plan, *St. Petersburg Today, St. Petersburg Tomorrow*. The work set forth, as Mumford noted of all Utopias, "a new set of habits, a fresh scale of values, and different set of relationships and institutions."[8]

Nolen found the nation's fastest-growing state to be "a great laboratory of city and town planning."[9] After garnering the St. Petersburg commission, he confided to consulting partner Frank Backus Williams, the author of *City Planning Law and Zoning* (1922), that "we have the opportunity to do more than we have ever been given the chance to do."[10] A lead proponent of the English Garden City, Nolen integrated its components—greenbelt, pedestrian-scaled neighborhoods, protected farm land, transit system, and urban centers focused on the civic realm—into a prototype plan expected to play to a national audience.[11]

In the 1920s, Florida was "the desire of the heart and the end of human aspirations," Mumford wrote.[12] Middle-class tourism exemplified the unrivaled leisure fueling the consumer economy, and the "Eden of the South" was a subtropical magnet. It attracted Americans yearning to escape the regimen of industrial life and experience paradise—if only for a brief time—and Miami and St. Petersburg were prime destinations.[13]

St. Petersburg was preordained for tourism. Founded in 1888, the "Sunshine City" lay on a peninsula between the Gulf of Mexico and Tampa Bay. Its population reached 14,000 in 1920, but vast stretches of land remained undeveloped. A land boom was brewing and improvements in the transmission of electricity and the popularity of the automobile had quickened the pace of urbanization. This trend offered an unmatched opportunity for regional planning. It also presented a definitive challenge given that, Nolen wrote, "Man is the only animal that desecrates . . . his own habitation."[14]

Setting limits to growth—the basis of sustainability—keyed *St. Petersburg Today, St. Petersburg Tomorrow*. To secure the tourist industry, Nolen's first priority was preserving the Pinellas Peninsula's natural assets: "Blessed by a benevolent Nature, the enhancement of the beauty that already exists is a work that should be kept continually active, insuring for future generations the glories of today."[15] The Harvard-trained landscape architect analyzed soils, topography, and natural features to craft a plan that would attract tourists and withstand tropical storms. He also planned St. Petersburg as a "regional unit," recasting the ten-square-mile coastal town into a future city encompassing 130 square miles. Marking its outer edge was a greenbelt of coastal marshes, brackish wetlands, and barrier islands, the landforms least suitable for development and most prone to a hurricane's devastation (Figure 1). In 1848, a 14.3-foot storm surge from a massive hurricane carved up barrier islands

Figure 1. St. Petersburg regional plan.

from Captiva (near Naples) to Pinellas. Two-thirds of the Pinellas Peninsula flooded, an apocalyptic event in, at the time, an unpopulated backwater wilderness. In 1921, a minor hurricane swept across Tampa Bay, flooding St. Petersburg's coastal environs and much of the proposed greenbelt.[16]

The highlight of the greenbelt was a mile-long undeveloped barrier island where, Nolen wrote, "the long curve of white sand contrasted strongly with the deep colors of the Gulf of Mexico."[17] The consultant saw the offshore isle as a major tourist draw, but the recent hurricane had destroyed its only bridge. The plan had a new tramline run to the mainland, where it anchored a tourist district modeled on Nice, France. A parkway preserved the unspoiled bayside scenery, while a streetcar line linked the tram terminus to a compact retail and hotel district (Figure 2). This configuration extended across the peninsular city. Mixed-use neighborhood centers were sited at streetcar stops to facilitate social cohesion, optimize land use, and mitigate traffic problems, a scheme that presaged the "transit-oriented development" inherent to sustainable urbanism.[18]

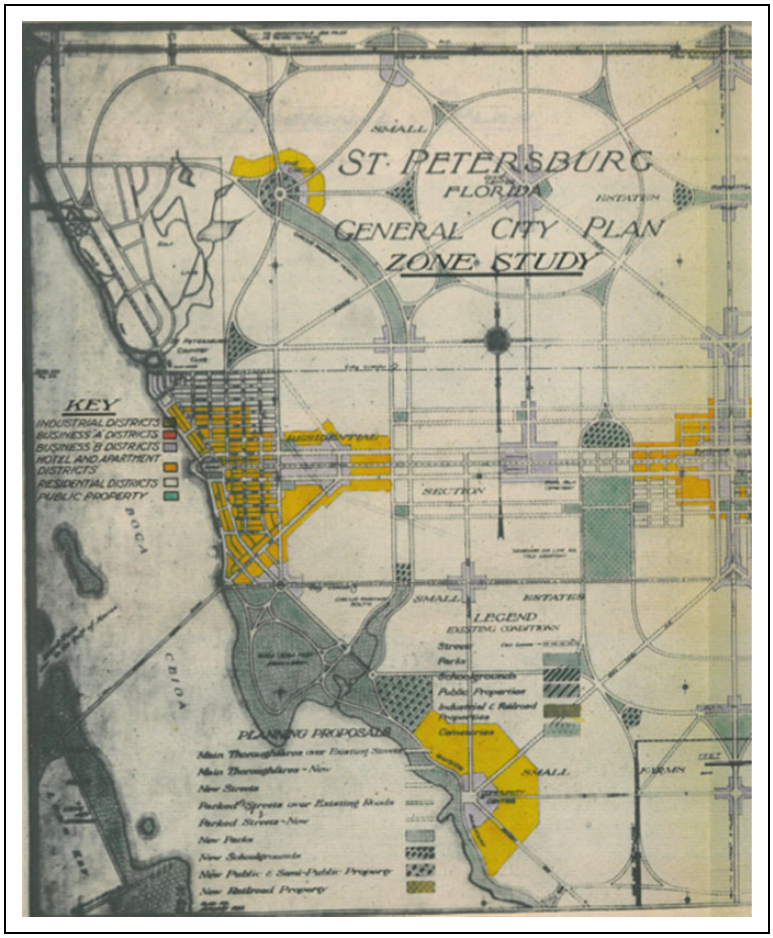

Figure 2. Boca Ciega bay tourist district plan.

The urban, rural, and natural landscapes also meshed in synergistic fashion. Small farms bordered outlying subdivisions, while parkways linked a system of parks and preserves connecting tourist districts on Boca Ciega and Tampa Bay. The blend of low-lying wetlands and uplands would not only capture floodwaters, it placed parks within walking distance of residents. By "echoing the patterns of nature," the city's suburbs would be, Nolen contended, "among the most unique and attractive in the nation."[19]

He also wanted to set a precedent by codifying the plan on the English Garden City. For the plan to have legal standing, St. Petersburg officials had to obtain a special act from the Florida Legislature, and Nolen urged Williams to draft legislation based on the British Housing and Town Planning Act of 1909. In England, the Ministry of Health ratified general plans, and local governments completed the more detailed town plans. Williams cautioned that without a similar government authority in Florida, the initiative would probably fail. The two men decided to employ the Department of Commerce's *Standard State Zoning Enabling Act* (1922) to draw the requisite legislation, which the State Legislature passed and went to referendum in St. Petersburg.[20]

"The city planning election was as abusive as any ever held in St. Petersburg, and that is saying a great deal," a local editor wrote.[21] Fear that the new initiative would inhibit real estate speculation fueled a backlash, and the Planning Law received only 13 percent of the vote. After Nolen's

plan for West Palm Beach was rejected on similar grounds, he focused his energies on private commissions.[22]

Largely free from intrusive politics, his firm produced a series of model new towns in Florida.[23] Venice was the most significant. Set on 88,000 acres south of Sarasota, it was set to the St. Petersburg model. An agricultural greenbelt circled a compact urban core linked by parkways to nature preserves encasing the Myakka River. Nolen's client, the Brotherhood of Locomotive Engineers, spent US$15 million on infrastructure before the real estate market collapsed in 1927. Venice was the most complete example of the Garden City in Florida and Nolen's most important new town besides Mariemont, OH.

It was also Nolen's last major project in Florida. The implosion of the real estate market in 1927 sent the state's economy into a tailspin. After a dozen clients defaulted, Nolen closed his Florida office. He also relinquished the hope that the state would model a network of garden cities. Rather than previewing a new urban civilization, corruption, racism, and speculative greed turned Florida into a harbinger of the Great Depression.

Nolen's practice struggled before he passed in 1937.[24] Yet he never despaired and continued to direct his energy to building on the concept of the regional city he designed for St. Petersburg. By the early 1930s, he had crafted an urban vision that centered on the components of sustainability—equity, economic balance, and environmental protection.[25] He articulated the concept at the Harvard School of City Planning, the first institution of its kind in American higher education. It opened in October 1929 and became a consuming interest for Nolen, who was on the original faculty.[26]

In his Town Planning course, the "Great Idea" imparted to students was that cities were organisms, biological forms to be designed to reproduce life. "Men, after all," he reasoned, "are biological organisms, and not machines."[27] Yet machines were making inroads on humanity. Modernist architecture idealized the machine, not the biological form. At the same time, the popularity of the automobile was supplanting basic assumptions of city planning. To move the profession forward, Nolen advocated constructing regional cities that reconciled "the struggle between men and machines, between natural and artificial tendencies, between biology and technology."[28]

For Nolen, the mixed-use, pedestrian-scaled neighborhood remained the essential element of a city plan. He deemed walking to be the most ecological form of movement, the lifeblood of social capital and public health. In 1930, public transit and walking were staples of daily life, and Nolen strolled from his Cambridge home to his Harvard Square office. With its well-defined street grid and intimate greens, Cambridge was a focus of study in his classes, along with classical Athens and the Garden City.[29]

Nolen taught city planning as an art that played to human movement and celebrated the good life. Students learned to design plans that lent balance and symmetry to the alignment of roadways, sidewalks, and street trees. Accommodating the automobile was important, but not, Nolen warned, at the expense of human potential:

> In this new era of cities we shall not use our power over machinery to produce more and more elaborate machinery. We shall use our new powers to secure leisure and to enjoy life itself and its arts. All of these changes will bring economic benefits, reduce unemployment, and lead to a more equitable distribution of wealth.[30]

When Nolen died in 1937, his concept of city planning passed as well. Despite the protests that he and Henry Hubbard (chair of the School of City Planning) lodged with the Harvard administration, the School closed in 1936.[31] The next year, city planning returned as a department in the new Graduate School of Design, but it had a different mooring. For a generation, city planning had been under the purview of landscape architecture, but modernist architect Walter Gropius, who arrived at

Harvard in 1936, came to define the discipline.[32] According to architectural historian Vincent Scully, Gropius eviscerated "the fine American planning profession . . . at its heart."[33]

The Organic Nexus: John Nolen and Lewis Mumford

For half a century, Nolen was all but forgotten save for a lone champion, Lewis Mumford. A founding member of the Regional Planning Association of America (RPAA), Mumford, a noted urbanist became disheartened when the Tennessee Valley Authority's "sporadic patchwork" of plans ignored the RPAA's principles and prototypes.[34] In his magnum opus, *The City in History* (1961), Mumford claimed that if the New Deal agency had "paid more attention to the success of the small industrial town of Kingsport, Tennessee planned in 1915 by John Nolen under the direction of private enterprise, they would have coordinated their superb regional improvements with the renewal and extension of the existing small communities, and the building of new ones."[35]

Mumford and Nolen met through Patrick Geddes, the Scottish polymath who sought to unify biology and sociology in the practice of city planning.[36] Geddes was Mumford's mentor, while Nolen and Geddes corresponded regularly after serving together as judges for an international planning competition. Geddes highlighted the American's work in his definitive text, *Cities in Evolution* (1915), while Nolen featured Geddes's concept of regional planning in *New Ideals in the Planning of Cities, Towns, and Villages* (1919).

In April 1923, Nolen shared his enthusiasm over his recently completed plan for St. Petersburg with Geddes. Disheartened by the federal government's disavowal of city planning after World War I, Nolen saw his work in Florida as "the beginning of a much more hopeful character in the planning of new communities."[37] The next day, he sent a letter to Geddes's acclaimed protégé Mumford, complimenting him on *The Story of Utopia*. After this initial correspondence, the two men's interchange of ideas over the next decade set the constructs for sustainability.

In 1927, Nolen and Mumford shared the spotlight at the National City Planning Conference (NCCP). Nolen chaired the event while Mumford delivered the keynote address. Returning to Washington, DC, the site of the first NCCP, speakers recounted the progress made since 1909, but the profession remained a paradox. In a society where property rights and free enterprise were sacred, planners were charged with controlling land development for the common welfare. Conflict inevitably ensued and self-interest often prevailed. "Fortunately, at least one planner realizes where the path of intelligent and human achievement will lead during the next generation," Mumford noted.[38]

John Nolen headed the nation's most innovative planning firm, but it was his recent book, *New Towns for Old* (1927), Mumford had referenced. Its call to build regional cities that reflected "topographical and climatic conditions" had earned critical praise.[39] The author, however, had been shaken by his experience in Florida. "The uncontrolled growth of cities," he concluded, "is the problem that gives the greatest concern today."[40]

Mumford expanded on this point in his speech, "The Next Twenty Years in City Planning." He noted that the history of failed civilizations had a common thread: once cities surpassed "the limits of functional size and use," a pattern of deterioration followed. Excessive growth led to ecological degradation, water shortages, crop failures, and indices of disease. Political and economic chaos ensued, resulting in societal breakdown and the collapse of urban life. With planners envisioning cities as machines suited for production rather than organisms capable of reproduction, history, Mumford put forth, was being replayed. It was folly "to think that the ingenuities of engineering can avert this fate."[41] Cities emulating machines would become parasitic blights, he warned, "peopled by office workers who perform elaborate tasks with red tape and by a growing well-to-do class, divorced from practical responsibilities, whose chief economic function is what Veblen called the performance of leisure. Social parasitism and economic waste in turn lead to a lapse of function, with a growing amount of vice and crime and physical debilitation, if not disease."[42]

Fortunately, history was not just a tale of decay and decline. Mumford had found a treasure drove of "organic cities" built on the lines of nature, and he lauded Letchworth, England, for incorporating the vernacular attributes of the medieval English village. The human-scaled Garden City also respected natural limitations and secured "essential civic functions," providing the antidote "to the speculative subdivisions that prematurely turn good truck gardens into a confused mass of small individual ownerships." Mumford concluded that mastery of the Garden City was essential, "If we are to escape the regimentation and the paralysis that now threatens us."[43]

After the NCCP, Nolen and Mumford enjoyed a productive reciprocity. The public intellectual's biological impetus energized the concept of the regional city Nolen would champion at Harvard. In return, Mumford followed the veteran practitioner's lead and continued to fashion an Americanized version of the English Garden City.

Nature's God in the Modern City

The Story of Utopia opened a new avenue in American letters. Interlacing the Garden City with America's reverence for nature, Mumford cast a transcendental arc across a range of disciplines. The author modeled himself on Ralph Waldo Emerson, and, in *The Golden Years* (1926), he instilled an ecological verve into the transcendental thoughts of the Concord sage. Like Emerson, Mumford rhapsodized over nature's divine cast and the "vast designs and expectations" his country stirred. Modern society demanded new laws and institutions, but they must follow Emerson's adage and, he wrote, "exist in some proportions to the majesty of Nature."[44]

Belief in nature's primacy was entwined in the culture of a nation founded on "Nature's God." For Thomas Jefferson, nature *was* God, and the scientific study of nature guided the "pursuit of happiness." Virtue—the sacrifice of private interests for the public good that centered the good life—was the "foundation of happiness" and "utility the test of virtue."[45] From the founding of the republic, happiness was associated with property and its rights, and utility measured the ability to hew a new Eden out of a vast wilderness.

The Industrial Revolution curtailed Jefferson's vision of an agrarian republic, and Emerson and Thoreau initiated a literary tradition that envisioned the "Machine in the Garden."[46] Mumford brought the tradition to a climax. Since the days of Aristotle, cities in a republic were exemplars for attaining happiness and approaching nature's God. In the 1920s, however, there was little of the divine in the machine-driven urban expansion. Trading natural processes for urban infrastructure measured progress, but in return "Traffic and Commerce are the names of the presiding deities," Mumford wrote, "human beings . . . merely units, designed to run or use elaborate mechanical devices."[47]

Mumford was hardly a Luddite. Science and technology offered untold possibilities, but these Promethean forces required a vision that charted limits as well as desires. This was the RPAA's mission, and Mumford's collaboration with forester Benton MacKaye convinced the talented group of architects, housing experts, and planners to adopt the environmental principles inherent in regionalism.[48]

In 1928, MacKaye, best known as the founder of the Appalachian Trail, wrote a definitive text, *The New Exploration: A Philosophy of Regional Planning*. Mumford edited and wrote the introduction for the book, which grew out of the two men's study of Henry David Thoreau. To "realize Thoreau's dream and prophecy," MacKaye depicted compact cites set within an ecological region, bordered by farmland, and linked by "townless" highways and interconnected systems of parks and preserves.[49] Assimilating the "urban, rural, and primeval landscape" into daily life would counter "the new barbarism" seeding an "industrial wilderness," Mumford wrote in the book's introduction: "a machine-made fabric increasingly standardized, regimented, characterless, spreading outward from the metropolis by a process seemingly as automatic as the spread of grassland, forests, and jungles in nature."[50]

Drawn together in common cause, Mumford and MacKaye personified the mindset camaraderie, and vision that instilled the RPAA.[51] Its first project, Sunnyside Gardens, gave the philosophic writer a pragmatic insight into town planning. Henry Wright and Clarence Stein headed the effort. The two veterans of the World War I federal initiative to house war industry workers in communities modeled on the English Garden City had produced a series of still-viable neighborhoods. This template set the pattern for Sunnyside Gardens and, in addition to participating in the planning process, Mumford experienced the principles he had touted. In 1925, he moved into Sunnyside Gardens, where he lived for eleven years with his wife and two children.[52]

Set on seventy-seven acres in Queens in New York City, the brick row houses and three- to four-story apartments were laid out in linear fashion on the perimeter of blocks and priced for moderate-income working families. Residents lived in close proximity, but a continuum of parks, lawns, gardens, and greens ensured nature was close at hand. The open-space network was designed to blur public and private space, the idea being that an informal natural setting would enliven thought and spark social interaction. The interconnected pedestrian paths running through the verdant areas also ensured easy movement and lessened the sense of crowding in the relatively dense surroundings. Built at twenty-five units per acre, this model of "suburban" development limited buildings coverage to 28 percent of the site, an innovation that gave real meaning to the neighborhood's "gardens" moniker.[53]

The residents of Sunnyside Gardens were diverse: laborers, professionals, intellectuals, and artists. Almost half of the residents were immigrants from Manhattan's Lower East Side, and political activism was rife. Members of the Communist Party engaged moderates like Wright and Mumford in lively group discussions in settings designed for such activity. Parks, greens, gardens, and community rooms prompted "political discussions, literary evenings, dancing and other group activities where two or three score could gather," Mumford wrote. He reveled in the "pure joy of being" these interactions elicited. While he would live in idyllic college towns, he never "found better intellectual companionship, or more vivid, enlivening discussions" than in Sunnyside Gardens.[54] This experience convinced him that humans were more than creatures of consumption; they aspired for beauty, meaning, and a hint of the transcendent. Versed in the good life, Mumford was the most productive period of his career.

At Sunnyside Gardens, he wrote four books and penned a stream of articles and book reviews for leading periodicals including *The New Republic*, *Harper's Weekly*, *Survey*, *Dial*, and the *Journal of the American Institute of Architects.* The breadth of analysis was striking. In addition to his evolving study of urban planning, Mumford reviewed works in the fields of art, literature, biology, architecture, history, politics, sociology, and philosophy. When he left Sunnyside Gardens in 1936, he had the standing to take on a definitive task: illustrating how modern Americans could live in cities and, as Aristotle set forth, "remain together in order to live the good life."[55]

Mumford Unveils Sustainability

Mumford spent two years writing *The Culture of Cities* (1938). It was both a blueprint for the future and a rich inquiry that shed light on the origins of European urbanism and the uneven progression of the American city. Mixing philosophic insight with history, biology, and social science, Mumford's penetrating analysis laid bare the prospects and pitfalls of American culture as no writer had done before.

In 1920, for the first time, a majority of Americans lived in cities and modern urbanity defined the turbulent decade. The new mass consumer economy had no bounds, generating prosperity and ruin in unparalleled measure. The fervor for profit turned pathologic, metastasizing into a speculative cancer that was fatal to both Wall Street and real estate markets. The risky schemes that displaced the public good revealed an inherent inability to build stable communities, which

Mumford traced to a pioneer heritage predicated on exploitation. City planners had exacerbated the problem by zoning cities to function like factories. Breaking the urban environment into a series of functional zones, they were mobilizing and assembling consumers just as the factory mobilized and assembled workers.

From his first book, Mumford had written of urbanites devolving into automatons removed from nature, overly dependent upon mechanical devices, and encoded to consume. In *The Culture of Cities*, the American city was no longer a place to live but a place to buy: "A rootless world removed from the sources of life, a Plutonian world, in which living forms become frozen in metal; cities defiling their own nest, reaching into the sky after the moon, more paper profits, more vicarious substitutes for life."[56]

To still the city's disorder and "dehumanized purposes," Mumford advocated planning "the region to . . . sustain the richest types of human culture and the fullest span of human life."[57] The Olmsteds, John Nolen, and the RPAA had set precedents, and *The Culture of Cities* extended them on new lines to initiate a cultural renaissance that recalled the golden days of Ralph Waldo Emerson and Henry David Thoreau.

Mumford declared that in contrast to the standardized modern equal access to land gave antebellum citizens a more "varied and vital character." He believed these traits would reemerge once nature was an active component of culture, and culture, in turn, revolved around nature. In a regional city, leisure would gain new meaning as hiking, gardening, and outdoor sports "recreated" citizens harried by incessant messages to buy and consume. Appreciating the lay of the land, the variations of local food, and art that celebrated a sense of place would give rise to a regional consciousness. Building on the Sunnyside Gardens model, the "acquisitive pattern of life" would pass as civic agencies, literary groups, and art classes forged new bonds and informed the governing process. City museums would celebrate civic history, while community museums of "natural history and human culture" would commemorate "people in all their ecological relations" inhabiting "the compact and coherent form of the actual environment."[58]

Envisioning the next step in human evolution, *The Culture of Cities* depicted a sustainable society where ecological relations balanced consumer desires.[59] In a secular age, Mumford plotted a path to the good life that celebrated humanity within the limits of nature. If Christianity no longer centered Western civilization, Christian love or *agape*—the overflowing care for every human to the point of personal sacrifice—gained new footing with Mumford's prescription to secure the health and well-being of future generations. "So sweeping and insightful was Mumford's analysis that thereafter he was acknowledged as an authority on urbanism in its multitudinous aspects: historical, formal, social, economic, and political," historian Robert Wojtowicz writes.[60]

The Culture of Cities secured Mumford's appearance on the cover of *Time* magazine (Figure 3). The accolade not only attested to his skill as a writer, it recognized a unique voice in the ongoing experiments to resurrect the economy. In contrast to the intellectual left, Mumford's politics were tinted green rather than red. His desire to transcend the machine and forge sustainable cities had a revolutionary edge. Yet, he abjured radical change for an orderly transformation into an organic pattern of urban life.[61]

In the late 1930s, his theories were put to the test in the greenbelt towns built outside Cincinnati, Milwaukee, and Washington. He narrated "The City," a documentary replete with an Aaron Copeland score that championed the new towns taking root in New Deal soil. Premiering at the 1939 New York World's Fair as part of the City of Tomorrow exhibit, the film strengthened Mumford's standing as the nation's leading urbanist.

The success of *The Culture of Cities* afforded Mumford the luxury to travel and to work as a consultant for the first time. His commission with the Northwest Regional Council (NRC) was the most promising, as the opening of the Bonneville Dam demanded an expert to direct "the power, beauty, and greatness" of the Columbia River into a productive mold, an official wrote

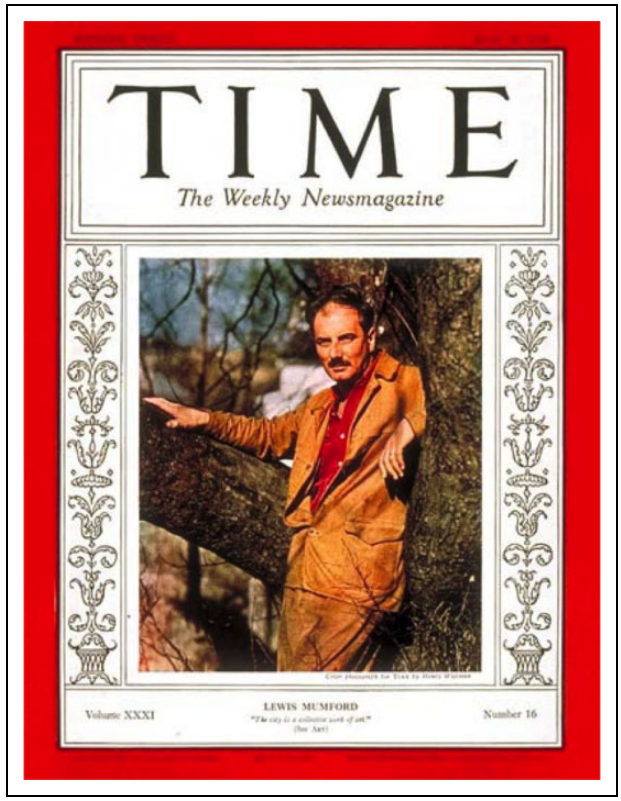

Figure 3. Lewis Mumford time magazine.

Mumford.[62] The task appealed to the writer's "energy Utopianism," a belief that once a region shifted energy sources the potential for change dramatically accelerated.[63] Depicting this scenario in *The Culture of Cities*, he was hailed as a prophet among New Deal planners in the Pacific Northwest.[64]

The Portland region enthralled Mumford. An apt student of Patrick Geddes's surveying technique, he found abundant opportunities to apply this skill in two weeks of study. The author found the picturesque Columbia River Gorge especially intriguing. At the meeting of majestic mountains and the mile-wide river abrupt rocks and waterfalls mingled, like the "great Chinese paintings of the classic era," he wrote. "Esthetically, perhaps, the greatest landscape I have ever seen."[65] The encroachment of industry, however, marred the sublime scene. After pulling his notes together, Mumford spared no niceties in the first in a series of lectures. Delivered to Portland's City Club, "it set the narrow-minded business community on their ear."[66]

Given the Willamette Valley's fertility and the expanse of surrounding forest, the opportunity existed to "do a job of city planning like nowhere else in the world," Mumford announced. But after seeing "the neglect in letting this . . . wonderful scenic land get away from you," he had doubts. "It made me wonder if you are good enough to have it in your possession? Have you enough intelligence, imagination, and cooperation among you to make the best use of these opportunities!" It was time to "control more vigorously" the land along the Columbia River and site future factories and extractive operations to secure both efficiency and the landscape's priceless beauty. If regional planning proceeded on this basis, Portland could become "not just a good city, but a great city."[67]

After this engagement, the trip devolved into a perfunctory exercise. "God save me," Mumford wrote, after a speech to a morose Seattle Chamber of Commerce. He remained hopeful but realized the role of "honored authority" did not fit his persona.[68]

Writing *Regional Planning in the Pacific Northwest* (1939) revived the author's organic stirrings. The twenty-page memorandum decried the "false ambitions and stultifying slogans" that filled Portland's "melancholy plan." If the verdant region had been "defaced," it might still be "mastered." A regional plan synergizing the power-generating capacity of the Bonneville complex would make it possible to reduce pollution in the central city and direct future development "into points of maximum advantage . . . without infringing upon the original beauties of nature."[69]

Mumford envisioned an "organic city" that "reforested" urban life and stemmed "social erosion." Greening the urban core and funneling suburban growth into a system of interconnected greenbelt towns would ease congestion and ensure that development spread around, not over, the Willamette Valley's fertile soil and scenic venues. Over time, the chaos of the previous decade would yield to stability, and the return on the public's investment would be significant. Urban rehabilitation would reduce population outflow, while suburban expansion would flow into an efficient network of interurban communities. Greenbelt towns with affordable housing and transit options would "provide a special invitation to settlement to new industries." Equally important, harmonizing the growth of the city and region would limit "the grandiose engineering experiments to which we are all, by sheer inertia and fashion, too easily committed."[70]

Mumford proposed establishing a regional authority with the power to plan, zone, and purchase land. "Collective democratic controls" to procure "the proper distribution of the urban, rural, and primeval environments" would draw fire, but a vested authority had to override "short-sighted local opposition."[71] *Laissez-faire* property rights had brought the region ruin and "disorder . . . foul building practices, duplicated railroad systems, abandoned logging towns, and dead mining camps."[72] Centered on ecological relations, *Regional Planning in the Pacific Northwest* cast Portland as a green city that secured stability rather than rote speculation and future dividends rather than cyclic downturns.

The NRC printed 1,500 copies of the report and circulated all but twenty. Mumford anticipated returning to Portland in 1940 to deliver the commencement at Reed College, but the threat Hitler imposed made planning seem, he wrote, "the most pusillanimous act in the world." With times "growing blacker," he devoted his energies to stopping the barbaric force bent on destroying Western Civilization.[73]

Mumford did not return to Portland, and the immediate impact of *Regional Planning in the Pacific Northwest* was negligible. The NRC ceased operations after failing to gain private-sector support in 1943; the same year officials hired Robert Moses to plan Portland's postwar transition. Moses had labeled Mumford "an outspoken revolutionary"[74] and, not surprisingly, the idea of a regional city gave way to plans drafted by those Mumford considered "the most active enemies of the city—the over-budgeted highway engineers who riddled metropolitan areas with gaping expressways and transformed civic cores into parking lots."[75]

Mumford's Vision Takes Form

After World War II, city planning rarely moved beyond traffic engineering and public works. Portland was no exception. Its rapid suburban growth paralleled the national experience, but there was uneasiness. In 1947, future Oregon Senator Richard Neuburger saw Portlanders recoiling at the idea of becoming a "swashbuckling industrial giant." Seeking to inhabit an "undisturbed Eden," they gave the city a "split personality."[76]

This predilection intensified over time. After a surge of suburban expansion in the Willamette Valley in the late 1960s, Governor Tom McCall made land use planning a statewide and not just a

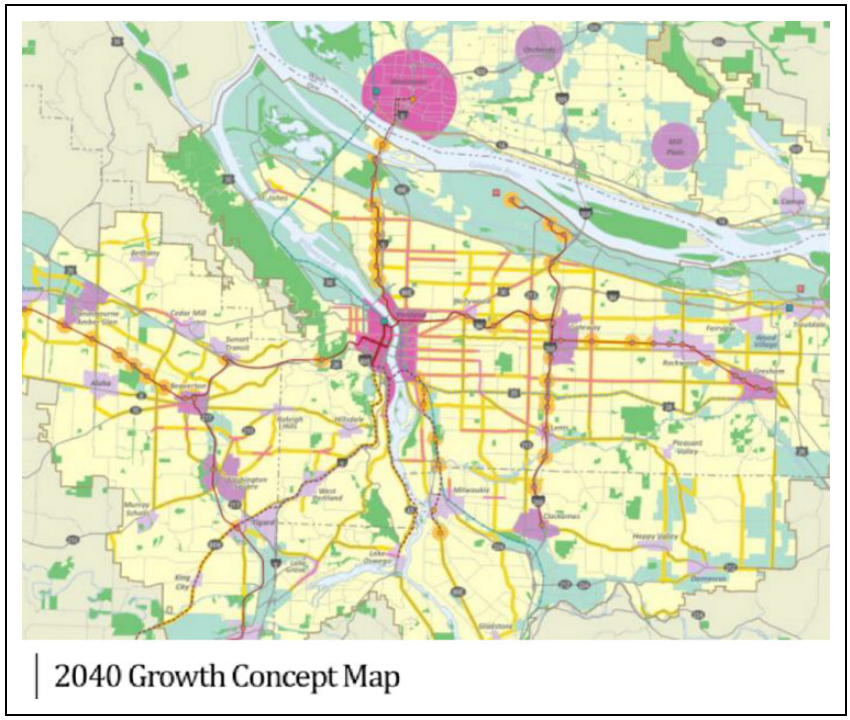

Figure 4. Metro 2040 growth plan.

local concern. By the mid-1970s, Oregon was ground zero for the "Quiet Revolution in Land Use Controls."[77] The state planning act's most radical reform required local governments to establish urban growth boundaries "to provide an orderly and efficient transition from rural to urban land use."[78] In Portland, the Metropolitan Services District (Metro) created and managed an urban growth boundary encompassing 24 municipalities, three counties, and 364 square miles.[79] This unique institutional reform set the stage for Portland to become, critic James Kunstler writes, "the one American city where Lewis Mumford's dream came true."[80]

In Portland, the regional consciousness Mumford envisioned took root in a "moralistic political culture" that valued the public good over individual interests.[81] This commitment to civic virtue revived the long-dormant summons for a green, regional city. Activists rallied to ensure state-mandated planning goals were met and Mumford became a rallying call.[82] "Portland is a better city due to the wisdom and foresight of Lewis Mumford," former mayor and Oregon Governor Neil Goldschmidt declared in 1982.[83]

A decade later, Portland was a premier green city. It had limited sprawl, invested in rail rather than a freeway, turned a highway into a grand park, and created a model greenspace system.[84] In 1995, Metro's *2040 Region Plan* (Figure 4) recalled Mumford's regional city. To lessen auto dependence, it funneled development into pedestrian-oriented centers and transit corridors that tied into open space and bicycle networks.[85]

Skeptics abounded, as this new tactic contradicted the belief that Americans were wedded to their automobiles. Portlanders, however, proved that investments in livability—providing safe pedestrian access to transit, daily shopping, parks, and schools—had an instinctive lure. The *Region 2040 Plan*'s goal of reducing vehicle miles traveled (VMT) was met. After the metropolitan area's VMT per person peaked in 1996, it dropped for twenty consecutive years. During that time, Portland topped national indexes of sustainability as it evolved into a green, pedestrian-oriented city.[86]

Walkable urbanism, as opposed to drivable suburbanism, makes the car an option, which is key to sustainability.[87] "The real problem with cars is not that they don't get enough miles to the gallon," David Owen, author of *Green Metropolis*, writes. "It's that they make it too easy for people to spread out, encouraging forms of development that are inherently wasteful and damaging."[88] Cities dominated by drivable suburbanism intensify the consumption of land, energy, and water, the production of greenhouse gases and smog-related emissions, and the flow of stormwater pollution (due to extensive paving for roads and parking). In addition, the economic outlay is staggering. Highway construction is cost-prohibitive without charging tolls, while funds to maintain bridges and overpasses are scarce. The indirect costs are cold-hearted and the price staggering: more driving and pedestrian deaths, higher indices of road rage and obesity, less walking and biking, and the impairment of the human-scaled public realm.[89] "It is not possible to solve sustainability in cities without addressing automobile dependence," according to sustainability experts Peter Newman and Jeffrey Kenworthy.[90]

Committed to sustainability, Portland officials adopted the nation's first *Climate Action Plan* in 1993. Reducing automobile dependency centered the effort, and councilman Charles Hales championed two crucial projects: extending the light rail system and building the first urban streetcar line in the United States in nearly half a century. Since then, the city's population has grown 33 percent while its carbon emissions have dropped 21 percent.[91] In 2015, Pope Francis invited Mayor Hales (elected in 2012) to the Vatican summit on climate change. One of the sixteen mayors from around the world to journey to Rome, Hales attendance at this global event marked a milestone for Portland's inimitable experiment in urban planning.

Mumford's vision of a regional city remains a work in progress. Walkable urbanism has costs as well as benefits. Housing is more expensive in neighborhoods near transit, and traffic congestion is the trade-off for transportation options. Nevertheless, forgoing the automobile affords substantial savings and it is key to securing social equity and mitigating climate change.[92]

Portland's Pearl District, a prototype urban renewal project, epitomizes how sustainability can procure a profitable mix of private capital and civic enterprise. Once a blighted industrial area, the eminently walkable neighborhood's mix of shops, parks, and multi-unit housing embodies Mumford's legacy.[93] Far from affluent, 25 percent of its residents live in subsidized housing and the median income is below the city average.[94] At the same time, the demand for affordable and market housing requires constructing structures at a scale Mumford would have questioned (Figure 5).

Originally, four to five stories was the norm, but Leadership in Energy and Environmental Design–certified buildings now rise as high as twenty-two stories. If the scale of development has changed, sustainability is breaking new ground in the Pearl District. The twelve-story *Framework*, slated to be the tallest wood building in the United States, is located at a streetcar stop. With easy access to transit, the need to provide on-site parking was negated, a cost savings that made it feasible to provide affordable housing. In addition, the timber structure will sequester more carbon than conventional buildings, and its wood is sourced from Oregon forests and processed in the region's depressed rural communities.[95] Sustainability is evolving, but it remains rooted in the history Mumford wrote and the Utopian vision he bequeathed.

John Nolen: Utopia Enough

The rediscovery of John Nolen also fueled the building of green, pedestrian-oriented communities. His Florida new towns inspired Andres Duany and Elizabeth Plater-Zyberk's plan for Seaside, Florida, the iconic New Urbanist community. "Seaside was a modified neo-classical grid straight out of John Nolen," Kunstler writes.[96] A patron saint of New Urbanism, Nolen is esteemed for practicing town planning as an art and producing landmark pedestrian-scaled neighborhoods.[97] His legacy of harmonizing the machine and humanity lives on as well. "New Urbanists seek a return to

Figure 5. Pearl District, Portland, OR.

dense, urban neighborhoods characterized by mixed-use buildings and a vibrant sidewalk culture," sustainability historian Jeremy Caradonna writes. "They value pedestrian-only zones, abundant open spaces for leisure and social gathering, land-use strategies that prevent sprawl, bike lands, and integrated transportations systems that reduce reliance on the automobile."[98]

New Urbanism has also advanced the concept of resiliency.[99] When Hurricane Opal devastated the Florida Panhandle in 1995, Seaside, which sits behind a beach dune system, came through almost unscathed. Strict construction codes ensured no roofs were lost or buildings compromised. The town's native landscape buffered the category-3 winds, and sandy soils allowed stormwater to drain at a faster rate than the typical pavement-laden subdivision. Within days of the hurricane, the town was operating at a normal pace. It was the only place for miles to escape the clutter of destruction.[100]

New Urbanism, however, is the exception not the rule in urban planning. Thus, Nolen's legacy is as disquieting as it is hopeful. His plan to make St. Petersburg a city awash in the "glories of nature" quickly fell away, as building commenced on land shaped and reshaped by natural disasters. By the mid-1950s, the barrier islands Nolen sought to preserve were the most intensely developed areas in Pinellas County (Florida's most densely developed county) and, with coastal real estate scarce, developers began dredging and filling Boca Ciega Bay for subdivisions. To prevent such "illogical building out into the water," Nolen had instructed municipal officials to limit fills to areas contiguous with the coastline. The recommendation went unheeded and, by 1970, 25 percent of Boca Ciega Bay had been either dredged or filled. It took a federal legal precedent, *Zabel v. Tabb,* to end what Florida Governor LeRoy Collins called a "monstrous desecration."[101]

Fictional accounts, scientific studies, and computer simulations offer cataclysmic projections of a hurricane descending on Pinellas's barrier islands and fills.[95] These low-lying lands are the first to

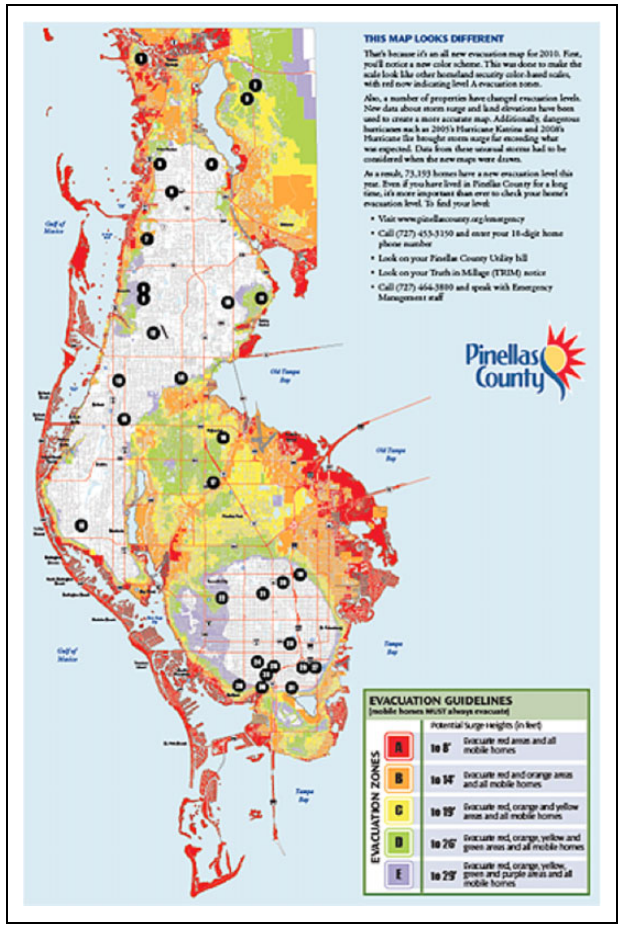

Figure 6. Prioritized hurricane evacuation zones, Pinellas County.

evacuate and the last to insure (Figure 6). John McDonald made a literary career illustrating the machinations of wanton miscreants who trade a future paradise in Florida for easy money. His best-seller *Condominium* exposed the foibles of ignoring the limits to growth, as it describes in excruciating detail a hurricane decimating buildings sited on the earth's most unstable landforms.

St. Petersburg will tell a similar story. In a republic founded on the ideal of civic virtue, the city might have prefigured a sustainable urban civilization. Instead, virtue vanished as the city's natural gifts were sacrificed to lure of copious profits: a heedlessness that will be bared when a hurricane renders an amoral reckoning.

Sustainability grew out of the Utopian aspirations of Lewis Mumford and John Nolen. Late in life, Nolen considered balancing the public good and land speculation to be "Utopia enough in this commercial world."[102] His words still resonate, as planning for sustainability confronts the existential question he faced a century ago: do a free people have the virtue to secure a future generation's welfare or will they desecrate their own habitation?

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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