

Robert Moses and Lewis Mumford: competing paradigms of growth in Portland, Oregon

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Portland boosters invited Lewis Mumford and Robert Moses to Portland to comment on the growth of the city and the region in the years surrounding World War II. Mumford emphasized regionalism and a dispersal of the population to new towns, which would be satellites to the central city, strengthened as a regional centre. Moses, coming to Portland just five years later than Mumford, stressed freeway, bridge and park development, with a mind toward girding the city for post-war growth. In the mid-century, Portlanders were more inclined to adopt Moses' suggestions, almost all of which were eventually implemented. A shift in political culture in the 1960s and 1970s, however, brought a renewed commitment to the ideals Mumford had espoused and, today, the Portland area's regional planning agency, Metro, has adopted a Regional Framework Plan that embraces the Mumfordian vision, with an almost blatant rejection of Moses' commitment to freeways, bridges and other types of massive investment in auto-accommodating infrastructure. This paper discusses the difference between the two paradigms of planning and provides some explanations for the shift in the Portland region from a Mosesian to a Mumfordian ideal.

Introduction

Lewis Mumford and Robert Moses came to Portland five years apart, Mumford in 1938 and Moses in 1943. Each came to the city at the behest of a different group of interested parties and each had a different assignment. The resulting recommendations from each man were very different in nature and scope. The importance of their visits to Portland lies not so much in the specific details of their recommendations as in the general philosophy of planning each man represents. In the mid-century, Portland embraced the ideas that Moses set forth much more enthusiastically than it did the ideas of Mumford, which held less promise for the young city than did the ambitious visions of the Master Builder. But now, more than half a century later, a new generation of Portlanders is embracing a vision of planning that is much more Mumfordian than anything else. What has changed and how is this new vision manifesting itself?

This paper describes both Moses' and Mumford's visits to and visions for the Portland region and offers explanations for why, in the mid-century, the planning paradigm Moses

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represented held more appeal for Portlanders than did that of Moses. The paper then recounts the shift in gears that started in the 1960s and 1970s, but took off full force in the 1990s, with the adoption by Metro, the region's planning agency, of the Regional Framework Plan – a very Mumfordian blueprint. Because the shift is such a radical one – from a culture that built infrastructure to accommodate the automobile, for example, to a culture that strives now to restrict it – this article also attempts an explanation for why the Mumfordian ideal has emerged triumphant in the Portland region. It cites a new breed of political actors, a legacy of regional government, new federal mandates and funding and grassroots activism as key factors that explain the new paradigm.

Lewis Mumford comes to Portland

A planning theorist, historian and prolific writer, as well as founding member of the Regional Planning Association of America (RPAA), Lewis Mumford came to Portland at a time when the idea of regional planning was just beginning to take hold, in part because of the New Deal emphasis on 'national planning'. Political interests had created state and regional planning entities in some parts of the country to lead their participation in the implementation of New Deal programmes. Although a federally sponsored Pacific Northwest Regional Planning Council was in place on the West Coast, the Portland area did not yet have a formal regional planning agency, like the regional planning commissions of New York and Los Angeles County. It did, however, have the Northwest Regional Council (NRC), a private advocacy group dedicated to the dissemination of information about the social, economic and governmental problems of the Northwest.

It was the NRC that brought Lewis Mumford to Portland in 1938. Philosopher, writer, architectural critic, urban planner and social commentator, Lewis Mumford had, at the time, just completed the second in his 'Renewal of Life' series of books. Heavily influenced by the Scottish planner and 'ecological sociologist' Patrick Geddes, the first book in the series, *Technics and Civilization* (1934), was one of the earliest critiques of the modern metropolis at the height of the industrial age (what Mumford, after Geddes, referred to as the 'paleotechnic period') [1]. Here, Mumford offered a scathing critique of how many recent technological advances ('mutations') threatened to destroy the precarious balance of the urban-rural ecosystem. Mumford was no Luddite; he did not reject technological advances, but rather what we might call today unsustainable technological advance (that depletes but does not renew the natural environment). In *Technics and Civilization*, he suggested an alternative form of integrating technology with urban society – neotechnics – that would not sacrifice ecological balance.

A prolific writer, Mumford published his second book in the series, *The Culture of Cities*, in 1938 [2]. In this work, Mumford articulated his suggestions for reining in urban growth (sprawl) through regional planning. The context in which Mumford wrote this book involved his association with the RPAA, which he founded, along with architect Clarence Stein and others, in 1934. In the beginning, the RPAA had espoused principles of regionalism and constrained urban development within garden cities, based on the ideas set forth by both Geddes and British journalist, social critic and town planner Ebenezer Howard. As the RPAA became increasingly focused on the garden city-new town concept, Mumford became

frustrated with what he perceived to be a de-emphasis on regionalism and the balanced ecosystem – which he felt lay at the heart of Geddes' teachings. He thus broke with the RPAA in the 1930s, and began his 'Renewal of Life' series. In his second piece in that series, *The Culture of Cities*, Mumford re-emphasized his belief in the profound importance of regionalism – a concept he felt that the RPAA had begun to downplay in favour of promoting new town development.

In *The Culture of Cities*, Mumford focuses on the city as an organic member of a larger natural ecosystem, an economic hub within a river valley, for example. The city is not an isolated entity, but rather an element within a larger region – including the natural landscape – whose various components are all interdependent. Mumford placed special emphasis on the role of hydroelectric power generation as a means of disseminating electricity throughout a large geographical region, which allowed for a deconcentration of population. It is important here to emphasize that Mumford's notion of deconcentration was not equivalent to decentralized sprawl, but rather controlled development beyond the older urban core – specifically in satellite garden cities.

The NRC was interested in Mumford's work in part because of hydroelectric power developments in the Pacific Northwest. In 1937, just one year before Mumford published *The Culture of Cities*, federal legislation created the Bonneville Power Administration (BPA). The legislation came after years of political contention regarding the primary beneficiaries of electric power generated by BPA, which consisted at the time of several dams in the Columbia River Basin, including the Bonneville Dam on the Columbia River separating Oregon and Washington, as well as two dams in Idaho. The Federal Bureau of Reclamation had also begun construction of the massive Grand Coulee Dam on the Columbia River in central Washington during this period.

The NRC brought Mumford to the Portland area 'in order to observe and critically appraise the growth and development of the region', duly impressed with the 'penetrating examination of America's culture and regional planning' that Mumford had articulated in *The Culture of Cities*, thus finding it fitting that he should bring his judgement to bear on the Northwest [3].

A year after coming to the Northwest to observe and comment on the region, Mumford produced *Regional Planning in the Pacific Northwest*, a more formal version of his original memorandum to the NRC outlining his findings. *Regional Planning* contained little in the way of recommendations or even commentary specific to the Northwest.

Nevertheless, *Regional Planning in the Pacific Northwest* represents Mumford's philosophy of planning at the time. As he had already articulated in his books, Mumford felt that the ideal unit of planning should be the region; indeed, he foresaw the region as the primary unit of government and of economic strength. In its best form, the region would centre around a river valley. He applauded the existence of the NRC as one step toward correcting the 'original mistake made' of laying out Oregon and Washington as two distinct states, separated only by the Columbia River. '... [R]ivers with obstructive rapids and only occasional fords or bridges or navigable waters are dividing lines from only one point of view: military attack. From every other standpoint the river basin as a whole is a unit'[4].

Mumford's feelings about population in the Northwest appear at first glance to contradict his general attitude that populations should be limited. Like many thinkers, from Plato to Ebenezer Howard, Mumford felt that the ideal urban population should be small enough to allow for full democratic participation by all inhabitants. In general, then, Mumford approved

of the slowdown in population growth around the country. For the Northwest, though, he considered this trend to be only a mixed blessing. What the Northwest needed, he felt, was a greater diversity among its populace, and he feared that diversification could not occur if the population did not grow and if selective immigration were not allowed to contribute to this population growth.

Mumford acknowledged that what he called a ‘melancholy plan’ was in place to increase Portland’s population from 300 000 to 3 million. But this plan, he concluded, had succeeded only in ‘disordering and unfocussing’ Portland’s growth. There was much left to do, he felt, to transform Portland and other cities in the area to true ‘regional centers’.

Mumford based much of his thinking about regional centres on the ideas of both Patrick Geddes, particularly with respect to the notion of the ecological – or organic – region and Ebenezer Howard, with respect to the latter’s concept of the garden city [5]. The key element in Howard’s thinking that Mumford associated with regionalism was Howard’s desire to marry the city and country through a system of new towns and greenbelts. For Mumford, urban growth should not occur within existing large cities, nor should it be spread out in a never-ending wave of suburbanization. Instead, new towns should be planned as satellite cities to the older metropolises, which should be strengthened as regional centres. All around these new towns and regional centres would be greenbelts.

To Mumford, the greenbelt is important for two reasons. Not only does it provide ecological balance to the region, serving as open space, but it also provides a limit or a boundary to the urban area. Mumford felt that limits on growth were crucial, not just in terms of population, but also in terms of the physical breadth of a city. Cities must have a specific size, form and boundary. As he frequently did, he pointed to the medieval city as an example for modern city planners to emulate. The notion of limits and boundaries also fit in which the concept of ‘human scale’, a concept very important to Mumford and one, again, present in the medieval town.

There is one additional element coming from both Geddes and Howard that Mumford felt was important: that of functional balance. Not only did Mumford see a balance between town and country in the garden city concept, but also a balance between home, industry and market. People should not have to travel a great distance from their homes to their work or to the market. This concept of functional balance also related to Mumford’s recommendation for diversity among Portland’s populace. Within the region there should be a variety of talents and a variety of services and opportunities. It also relates to his notion, based on the work of Geddes, of ‘neotechnics’ – hydroelectric power, the telephone and automobile – as ‘instruments . . . to enlarge the sphere of activity at the same time that they diminish the need for physical movement and close settlement’ [6]. This is advocacy for accessibility without requisite travel and dispersed settlement, which relieves the urban core of congestion.

Such was the philosophy of planning that underlay Mumford’s recommendations for the Portland region. A regional authority should be in place, he felt, to co-ordinate the planning on a regional level that transcended the artificial division between the two states bisected by the Columbia River; he suggested an entity – perhaps named the Columbia River Planning Authority – that could represent the two states, like the New York–New Jersey Port Authority did in the east. That authority could oversee the building up of the region, with planned greenbelt towns, low-cost housing, and incentives for industry relocation [7].

understanding portland's response to mumford: a legacy of expert advice

In his revised preface to *The Culture of Cities*, written in 1970, Mumford lamented that

despite a certain measure of popular success, the book exerted little influence in the United States. To many urban planners, administrators, and academic specialists, its constructive proposals seemed too remote from 'practical' financial and political requirements to be acceptable; . . . [8]

Mumford's comments about the 'practical financial and political requirements' well explain Portland's response (or, rather, lack thereof) to his philosophy of planning. In addition to this impediment of impracticality, two other explanations lie beneath Portland's intransigence. One is that Mumford's recommendations for the Portland area were much too vague to be translated into specific policy goals, at least at the time. The other is that Portlanders rarely acted upon the advice of the consultants they brought to town. Portlanders had always perceived their city to have just enough problems and to be just important enough to warrant the hiring of a special consultant, but these problems were never serious enough to warrant much in the way of action. Nearly every report city boosters commissioned ended up gathering dust on library shelves. Despite Portlanders' vision of their town as 'up and coming' – a viable competitor with San Francisco and Seattle – with few exceptions, their conservative nature led to a tight hold on the purse strings.

John Olmsted, stepson of Frederick Law Olmsted, had come to Portland in 1903, as the City Beautiful planning movement was sweeping the country. Part of the impetus for the invitation was the Lewis & Clark Exposition that Portland's city boosters were planning for 1905; they wanted to replicate the classical architecture forms, wide boulevards and open spaces of the Chicago Fair of the previous decade [9]. Abbott reports that Olmsted's plan, published in 1904, included the suggestion for a system of parks and city squares, connected by wide boulevards, or parkways, that were typical of City Beautiful plans during this period [10]. Olmsted's suggestions regarding parks included a recommendation for the creation of a large, linear park in Portland's west hills [11]. Olmsted's plan sat untouched until 1906, when it was revived. Voters even approved funding of the plan several years later but, by then, inflation had made full-scale implementation prohibitive. Meanwhile, the Civic League of Portland attempted to bring Daniel H. Burnham to town, hoping ambitiously to follow in the footsteps of Chicago and San Francisco. Burnham was unavailable, but his associate, Edward H. Bennett, did agree to fashion a City Beautiful plan for Portland. Bennett's plan contained a number of the elements that Olmsted's had, but it, too, sat on shelves, untouched [12]. As was the case with Olmsted's plan, economic conditions in the city made implementation impossible. By the time voters had approved Bennett's plan in 1912, Portland was in the throes of a recession.

Another reason, though, that Portlanders implemented neither Olmsted's nor Bennett's plan is that each was, like Mumford's coming a quarter century later, too visionary and without practical, tangible benefits. Portlanders were reluctant to be on the cutting edge in any matter, least of all the physical shape of their town. Unless there were specific problems of near-crisis proportions, Portlanders were content simply to hear what experts had to say and then go about business as usual.

In this vein, city leaders brought Charles H. Cheney to town in 1917. Although he came to Portland as a war housing expert, Cheney soon became involved in helping the city address its

growing problem of traffic congestion. He and a newly created city planning commission came up with a 'Major Traffic Street Plan, Boulevard and Park System for Portland, Oregon' in 1921. This report devoted many pages to the subject of core-area congestion, suggesting comprehensive land-use zoning and street widening as the primary solutions [13]. This was one report that did lead to some results: Portland entered a period of street widening and 'boulevard' building, undertaking construction of several limited-access 'highways' to provide more convenient, direct access from the city centre outward.

Then, in 1930, Portlanders again brought another well-known expert to town, St Louis consultant, Harland Bartholomew. Bartholomew presented his 'Report on the Proposed System of Major Streets and Development of Waterfront' to both the city and the county in early January 1932. He devoted much of his report to recommendations regarding Portland's blighted waterfront area [14]. He also stressed the need for a comprehensive plan to encompass aspects such as main traffic thoroughfares, parks, zoning and transit line routings, criticizing the city for having failed to act on previous recommendations in these areas. Proponents of Bartholomew's plan hoped to see it go before the voters in November of 1932, but the plan never made it to the ballot. Proponents blamed the Depression for the inactivity with respect to Bartholomew's report but, even in a better economic climate, Portlanders would likely have been just as hesitant to implement some of the more sweeping recommendations. They did implement Bartholomew's call for one-way streets and the re-routing of transit lines downtown (much to the transit company's ire) to address the immediate problems of traffic congestion.

Thus, by the time Mumford came to Portland, the city had already established a tradition of engaging expert consultants, implementing a little of this and a little of that, and then quietly shelving the more visionary proclamations, relying instead on the advice of local civil engineers and law enforcement officers. To Portland's boosters, business interests and public officials in the first half of the twentieth century, the city's biggest problem was not the ultimate destiny of its urban form, but rather day-to-day traffic and congestion. They saw these as problems requiring rational or bureaucratic solutions – traffic-control mechanisms such as street lights and parking prohibitions enforced by police officers. Thus, while business interests set the agenda, traffic engineers and, to a lesser extent, police department captains, played a central role in the planning process in Portland for at least the first half of the 1900s.

Consulting engineer J. P. Newell made many recommendations to the Portland City Council and planning commission. He suggested, for instance, segregated parking zones and a downtown beltline reserved for automobiles only [15]. But Portlanders considered Newell's suggestions with no greater enthusiasm than those of the outside experts such as Bartholomew, Cheney and Olmsted. Part of the reason for this complaisance was, as noted, the city's tight purse strings. The other was that a sense of urgency was simply lacking. Newell himself concluded that 'congestion, as it is found in large cities, does not exist in Portland' [16].

Robert Moses: big plans for a big city

Portland's situation had changed dramatically as a result of World War II. Carl Abbott notes that 'World War II made the quiet town of Portland into a homefront problem with official recognition'. The city experienced 'extraordinary' growth during the war years as a result of its

shipbuilding and maritime industries, which ‘pitched Portland headfirst into prosperity’. The city’s population, which had seen just over a 1% increase in the past 10 years, suddenly grew by 10% between 1940 and 1942. By May of 1944, the population had grown another 7% [17].

The wartime boom prompted city leaders to begin to contend with post-war Portland. There was a great fear that the end of the war would bring devastating recession and unemployment. At the insistence of Portland’s – and the Northwest’s – premier wartime shipping contractor, Edgar Kaiser, the Portland Area Postwar Development Committee invited Robert Moses to come to Portland to help the city prepare for the end of the war.

Many consider Robert Moses to be the most powerful official in America never to have been elected to office. Indeed, Lewis Mumford, ‘the man who was for thirty years [Moses’s] bitterest critic’, had this to say about Moses: ‘In the twentieth century, the influence of Robert Moses on the cities of America was greater than that of any other person’ [18]. The acknowledgement was mutual, though with less flattering overtones: Moses called Mumford ‘an outspoken revolutionary’, referring to his ability to persuade ‘the masses’ [19].

Known as the ‘master builder’ because of the incredible amount of infrastructure built under his leadership, particularly in the New York area, Moses was at the time of his visit to Portland the head of the Parks Department, the Triborough Bridge Authority and the Tunnel Authority for New York City. In the years immediately prior to Moses’ coming to Portland, he had presided over the construction of the Triborough Bridge (when he consolidated his power as head of the Triborough Bridge and the Tunnel Authorities), the opening of the Northern State Highway in 1938 and, of course, the World’s Fair in 1939. He was at the peak of his power.

World War II was profoundly changing the/American landscape for planners – including the likes of Robert Moses – by funnelling new wealth into urban areas. Economic prosperity, coupled with changing settlement patterns and growing consumerism, rapidly increased automobile ownership by the end of the war and roads became increasingly congested. Moses advocated successfully for increased road building to accommodate the growth in automobile use, oblivious to any negative impacts that could potentially result. His advocacy on behalf of automobile users served to solidify the power of his position in New York and gain him further celebrity throughout the rest of the country.

The Portland Area Postwar Development Committee was impressed with the post-war planning Robert Moses had been carrying out in New York City. He was known as a champion of great public works projects not only for their ability to employ thousands, but, equally, for their ability to make a city appear to be a thriving, growing, vital centre of gravity. His ‘build up and out’ philosophy promoted both central city densification and suburban decentralization. His entourage of engineers and planners arrived in Portland in September of 1943 and, two months later, he presented his report, *Portland Improvement*, to the public [20].

Moses’ report recommended potential public works projects in Portland to employ up to 20 000 post-war workers. The emphasis was on projects related to transportation infrastructure. In part, this was because congestion continued to be a growing problem in the Portland area; Moses himself noted that ‘free traffic movement [in Portland] is impossible’ [21]. He attributed Portland’s traffic woes to the fact that 80% of the population lived on the east side of the Willamette River and most of these people converged daily upon the westside

business district over six bridges. But Moses' emphasis on transportation projects in the recommendations for Portland was, of course, also due to his commitment to transportation projects in general.

To Moses, the remedies for traffic congestion were 'modern expressways right through and not merely around and by-passing cities [and] offstreet parking facilities of all kinds' [22]. Unlike Mumford, who considered the modern city to be in grave danger, Moses championed the city as 'the center of gravity of modern civilization' [23]. Again, unlike Mumford, who preferred a focus on the development of regional centres and new towns, Moses wanted to rebuild big cities and feed the growing suburbs. The centrepiece of his idea of the Great City was the road, whether it be a highway, a parkway, or a bridge. To Mumford, it was human scale that was important; to Moses, the monument was what mattered. If the sorts of huge transportation projects he recommended were implemented, Moses promised that, in the future, congestion would no longer exist. By 1999, he predicted, traffic in New York City 'will flow freely in 95 per cent of the city and suburbs' [24].

It was thus with his characteristic proclivity toward large-scale public works projects emphasizing transportation infrastructure that Moses made his recommendations to Portlanders. Moses and his engineers proposed the construction of an inner belt throughway enclosing the central business district – not unlike the beltline Portland consultant J. P. Newell had suggested in 1925. He also suggested an additional high-level bridge – he criticized the existing pattern of bridge locations, with six bridges dumping travellers into the centre of downtown – at the northern end of the city centre. Other suggestions included widening and improving existing bridges.

Moses made other recommendations that were not related to transportation projects, but that still fell squarely within his big-project approach toward city building. He suggested \$US 6.2 million worth of park and playground improvements, including the establishment of a park along the waterfront, to replace the blighted dockside area (echoing Bartholomew's 1932 suggestion) and, like Olmsted in 1904, a publicly owned 'Forest Park' along 'the steep wooded hillsides located on the westerly border of the City' [25]. He also considered Portland's historic Union Station to be 'old and obsolete', an example of 'unnecessary ugliness' that marred Portland's otherwise 'magnificent surroundings and rather orderly development' [26]. Thus, in *Portland Improvement* he recommended a new Union Station, along with a bus station plaza, that would 'afford an impressive entrance to the City' [27].

implementing moses' plan

Portlanders implemented nearly all of Moses' recommendations – although not until 15 to 30 years after he had made them. In the 1970s, the state's Department of Transportation completed the inner belt throughway in the form of the current I-5 and I-405 freeway loops encircling the downtown core. The state also built the Fremont Bridge – Moses' northern high-level bridge – in 1973. True to Moses' spirit, this newest of Portland's bridges weighs 6000 tons and was lifted 170 feet – the heaviest lift ever made at the time, according to the *Guinness Book of World Records*. Engineers from all over the world travelled to Portland to watch the 902-foot-long tied arch span floated up the river and hoisted into place [28].

The first of Moses' recommendations to be implemented was the City's dedication of Forest Park in 1948 [29], with the next being the rebuilding of the Morrison Bridge in 1958. The City

of Portland replaced the blighted waterfront area with Tom McCall Waterfront Park, dedicated in the 1970s. The City and other public agencies built a new bus station plaza (adjacent to the original historic Union Station) in the 1980s – although by then a sense of historic preservation prevailed over any earlier sense of the Union Station as old and obsolete and the structure still stands today.

Moses' suggestions were the kind that appealed to many Portlanders between the 1950s and 1970s. This was a city that was accustomed to planning by engineers, and large-scale public works projects fit the city's style and wishful self-image. But the price tag did not. More than anything, Portland was a conservative, cautious, penny-pinching city. Moses' projects – particularly the freeway and bridge building – may never have been implemented had not the federal government intervened. Federal policies, particularly the Interstate Highway Act of 1956, facilitated much of the road building in the Portland area.

Perhaps as important as federal aid in explaining why Portlanders finally implemented many of Moses' projects is that they were concrete and tangible – unlike the visionary ideals Mumford had espoused. In addition, some of his ideas were not new to Portland's engineering community, which had been toying with ideas such as the inner belt throughway for decades. Perhaps, most importantly, though, Portlanders implemented Moses' suggestions because city leaders finally felt the urgency that had been lacking in previous years *and* they finally had the financial assistance they needed. At the mid-century, city boosters promoted many of the projects that Moses had suggested because they saw them as absolutely essential to the revitalization of the downtown core. The availability of federal moneys only made it more likely that those projects could be pursued. In addition, in the 1960s and 1970s, a new breed of politician at both the state and local level was more inclined to take risks in the name of not only central city economic vitality, but regional environmental stability, as well. The building of Waterfront Park embodied both goals: it enhanced the central city's appeal while at the same time replacing a dockside highway with linear greenspace.

Ecological balance in the 1990s

Moses remained oblivious to the environmental and political ramifications that his projects would have in the future. Insofar as he did understand them, he defended his actions:

I have, with many others, been falsely charged with neglect, lack of vision, and general obtuseness in road building and with failure to anticipate the march of population to the suburbs. . . . There will be squawking no matter what we do. We must face at once the demands of those impatient for new facilities and the anguished cries and curses of those who want to be left alone, who, like Canute, can command the waves to halt on the beaches and, like the Indians, keep the new settlers in the blockhouses [30].

Unfettered freeway building displaced thousands, upset political balances and facilitated suburbanization and sprawl, with attendant automobile dependency and environmental degradation. Unlike Moses, Lewis Mumford did understand these threats, and his writings expressed fear and anger at the idea of the sort of civilization that was emerging in America.

mumford's organic idolum

For his theories regarding the evolution of cities, Mumford drew heavily on his close friend and mentor, Patrick Geddes [31]. Mumford saw city development as passing through six stages, which were modifications of Geddes' original six stages – from polis to necropolis – to which Mumford added an earlier stage and combined Geddes' 'parasitopolis' and 'pathopolis' stages. Mumford's resulting scheme has the city passing through the **eo**polis, or the village community; the **polis**, a protoindustrial city; **metropolis**, the more mature industrializing city; **megalopolis**, the 'beginning of decline', with the ethos of capitalism and bureaucracy dominant; **tyrannopolis**, with an ethos of predatory consumptive parasitism dominating; and, finally, **necropolis**, the fully decayed and collapsed city [32].

Mumford also referred to these phases as **idola**. By the 1950s, he saw the modern American city as all but on the verge of necropolis – the dying city. He believed, however, that in the declining phase of each stage lie the seeds of bloom for the next stage. He referred to the potential emergent stage as the ecological or organic **idolum** [33].

Mumford's urban ideal is captured in the way he sees the organic idolum. It consists of neighborhoods, small towns, agricultural areas, small cities, the use of a river valley region as the primary unit of planning analysis, moderate-density communities, emphasis on human-scale garden cities as centres for new growth, creation of economies balanced between capitalist and socialist models, revival of historic parts of cities, new, smaller, human-scale technology [34].

portland's present planning framework

Mumford's organic city is, at the turn of the twentieth century, the ideal of neotraditional urban planners, like Peter Calthorpe and Robert Cervero, whose ideas have become realized in formal plans for the Portland region [35]. No longer cautious and conservative, the planning community in this region has become a trendsetter in promoting ideas that are on the cutting edge of planning practice and theory, and many of these ideas are overtly Mumfordian in nature.

The *Region 2040 Framework*, which Metro, the regional governing and planning entity, adopted in December 1997, along with documents that the land use watchdog group 1000 Friends of Oregon produced between 1990 and 1997 as part of its LUTRAQ (Land Use Transportation Air Quality) proposal, articulates the current planning goals for the Portland metropolitan area [36].

These goals emphasize the following ideas, which share many characteristics with Mumford's description of the organic idolum:

- mixed-use design, allowing for a combination of land uses (residential, commercial, services);
- compact, human-scale architecture and street design (narrow streets, back alleys, sidewalks, smaller buildings);
- central common areas (plazas and parks);
- planned greenbelts between urbanized areas and greenspaces within;
- pedestrian- and transit-orientated design;
- medium to high densities (as opposed to low-density sprawl);

- limits on urban growth (through the Urban Growth Boundary);
- greater reliance on alternative modes of transportation (walking, bicycling, mass transit, etc.)

One very important aspect of these planning goals is the formalized and institutional context in which they are set – that is, Metro’s *Regional Framework Plan*. In 1992, Oregon voters approved a new charter for Metro – the country’s only elected regional government – giving the regional planning agency jurisdiction ‘over all matters of “metropolitan concern”’ and requiring the agency to adopt a ‘Future Vision statement’ by July 1, 1995, and a *Regional Framework Plan* by December 31, 1997 [37].

The *Regional Framework Plan* addresses the three counties and 27 cities that fall within Metro’s jurisdiction. A major impetus behind the regional planning effort was the fact that planners had forecast that, by the year 2040, the metropolitan area would see an increase in population of approximately 800 000 people, with most of the population growth expected to take place in the western suburbs of Washington County. Another impetus behind the regional planning effort was the implementation of the Regional Urban Growth Goals and Objectives (RUGGOs), which the Metro Council, in partnership with local governments, had adopted in 1991. The RUGGOs expressed certain values, goals and objectives regarding growth for the Portland metropolitan region, but they were not very specific. In 1990, Metro launched its ‘Region 2040’ planning project as a way of imbuing the RUGGOs with concrete specificity.

Through a process of citizen participation on task forces, Metro developed four alternatives: a ‘base case’ (what would happen if the region did nothing), Concept A, Concept B and Concept C. Table 1 presents the basic elements of each of these scenarios.

Metro surveyed every household in the region regarding the four scenarios, receiving 17 000 surveys in response. From the analysis of this survey and other studies, Metro fashioned its ‘Recommended Alternative for the 2040 Growth Concept’, which has now become the basis of the *Regional Framework Plan*.

The elements of the *Regional Framework Plan*, adopted in 1997 – which are listed and described below – are squarely in line with Mumfordian ideals [38]. The one Mumfordian element glaringly absent in the final plan is the inclusion of true satellite cities, present in Concept C. There are three primary reasons the satellite city concept did not make the final cut. One is that Metro’s modelling suggested that, by 2040, this concept would result in only a minor decrease in vehicle miles travelled (VMT) from 1990 levels. Transportation planners worried about how state-mandated reductions in VMT levels could be met in a plan that emphasized inter-urban travel. Another voice of criticism came from the proposed satellite cities themselves, some of which did not want the densities, jobs–housing balances and other features that Metro was proposing. In addition, they were uncomfortable with the notion of being considered mere ‘satellites’ to the central city of Portland. They wanted to be considered autonomous creatures, with no institutionalized link to Portland as a subordinate that the term ‘satellite’ seemed to imply. Thus, the label of ‘neighbour cities’ was politically more palatable, and the development within these cities would be less dense and more individualized than Concept C had envisioned.

- **Neighbour cities:** These only approximate the ‘satellite cities’ originally envisioned in Concept C – and the closest thing to Mumford’s and Howard’s garden cities. Metro seeks a

Table 1. Elements considered during Metro's 'Region 2040' planning process. (Source: Metro, *Regional Framework Plan*. Portland, OR, 1997)

Expectations regarding:	Urban Growth Boundary (UGB)	Transit	Roads	Density	Congestion	Vehicles Miles Travelled (VMT)	Key features
Base case	Continue past trends, resulting in an increase in the UGB of 70%.	266 920 daily riders, transit serving 47% of households.	10 780 total miles of roads, including three new freeways.	7.9 people per acre.	Slightly less than 9% of roadways having significant peak-hour congestion.	Worst case: increase of 5% per capita over 1990 levels.	Development according to present patterns (1985–90).
Concept A	Expand UGB by 25%.	372 390 daily riders, transit serving 49% of households; includes a radial high-capacity transit system.	10 190 total miles of roads, including three new freeways.	9.8 people per acre.	Worst case: 12% of roadways having significant peak-hour congestion.	No change in VMT per capita within UGB.	<ul style="list-style-type: none"> • Outward growth through expansion of UGB • Expanded transit service • Radial transit corridors • Expanded roadways
Concept B	No UGB expansion.	527 758 daily riders, transit serving 61% of households. Radial transit corridors and increased light rail lines.	9820 total miles of roads; no new freeways.	12.4 people per acre.	More than 11% of roadways having significant peak-hour congestion.	Best case: Decrease of 12% per capita over 1990 levels.	<ul style="list-style-type: none"> • 'Upward' growth through increased densities • Transit centres & radial transit corridors • Mixed-use areas • Regional & town centres • 'Main streets'
Concept C	Expand UGB by about 10%.	437 178 daily riders, transit serving 58% of households. Radial transit corridors and increased light rail.	10 327 total miles of roads, some new freeway development.	9.2 people per acre.	Best case: slightly more than 8% of roadways having significant peak-hour congestion.	Decrease of 4% per capita over 1990 levels.	<ul style="list-style-type: none"> • 'Satellite cities' • 'Green corridors' between satellite cities • Transit centres & transit corridors • Mixed-use areas • Regional & town centres • 'Main streets'

‘cooperative policy’ with cities outside Metro’s boundaries. Metro desires that this cooperative policy emphasize four key goals:

- ◆ rural land separating urbanized areas;
 - ◆ jobs–housing balance within each neighbour city;
 - ◆ a unique identity within each neighbour city, with its own mix of commercial, retail, cultural and recreational activities;
 - ◆ consideration of a ‘green corridor transportation facility’ (e.g. light rail) running through rural reserves, to link the metropolitan area and neighbouring cities.
- **Rural reserves:** These are rural areas into which the Urban Growth Boundary (UGB) cannot be extended. One of their purposes is to separate urban areas.
 - **Open spaces and trail corridors:** These are formally designated parks (such as Forest Park), stream and trail corridors, wetlands and floodplains.
 - **Centres:** These higher density centres of housing and employment should ‘provide citizens with access to a variety of goods and services in a relatively small geographic areas, creating an intense business climate’. There are three types of centre:
 - ◆ **The central city:** This is Portland, which serves as the major regional centre, home to 20% of the region’s employment.
 - ◆ **Regional centres:** There are nine potential regional centres, serving a total of four market areas outside of the central city market area. Many of these have developed as ‘edge cities’, and the *Regional Framework Plan* envisages more compact development, a light rail ‘backbone’ connecting all regional centres to the central city, and multimodal street networks to hook up with mixed-use light rail transit centres.
 - ◆ **Town centres:** These are smaller than regional centres, with populations in the tens of thousands. But Metro also envisages these centres as having higher densities and mixed-use transit centres. Some would become more traditional town centres, while others would continue to develop as more auto-dependent suburbs.
 - **Corridors:** These are not as dense as any of the centres, but are places where development is located along good-quality transit (bus or rail), where densities have the potential of becoming higher, and where mixed-use development could occur around transit stations.
 - **Station communities:** Encompassing an area of approximately a one-half-mile radius from a transit stop, these are nodes of development around a light rail or high-capacity transit station, featuring a high-quality pedestrian environment, higher densities and mixed-use development.
 - **Main streets and neighbourhood centres:** These are characterized by good transit service and vibrant business activity, often a focus of revival efforts. They may also take on a ‘regional specialization’ – boutiques, antique shops and fine dining, for instance – that makes the area a destination for outside visitors, as well as home to residents and employees.
 - **Neighbourhoods:** There are two types in the 2040 Concept, inner neighbourhoods and outer neighbourhoods, with the primary difference between the two being better street connectivity, pedestrian amenities and transit access in the inner neighbourhoods than in the outer.
 - **Industrial areas and employment areas:** These include areas designated as ‘industrial sanctuaries’; ‘land-intensive employers’, such as the Portland International Airport; and areas of ‘high agglomerative economic potential’, such as the region’s high-tech industry located in the suburbs west of Portland.

- **Urban reserves:** These consist of land set aside outside of the present Urban Growth Boundary to accommodate future urban growth.
- **Transportation facilities:** The Growth Concept does not prescribe or limit transportation facilities, but it does have a vision of a multimodal transportation system, with a light rail transit backbone and high-density, mixed-use development at light rail and other high-capacity transit stations.

accounting for the mumfordian ideal in the portland region

A variety of forces account for the fact that these Mumfordian ideals have become concrete goals in a real plan and that implementation has, to a large extent, already begun. As noted earlier, beginning in the 1960s, a new breed of political actors took office, holding a different set of values and visions about city growth than the politicians of the previous eras. Regional institutions also began taking root, laying the foundation for truly regional planning, governing and service provision. A third force was federal legislation that funded and facilitated the types of decisions being made in the Portland area. And, finally, there was significant support at the grassroots level for Mumfordian ideas.

A new breed of political actors. During the 1960s the political culture of Portland and of Oregon began to shift from highly conservative to progressive and risk-taking [39]. The new breed of politicians began to stress a controlled economic growth – development that revitalized the central city while, at the same time, harnessing out-of-control growth in the suburbs. One of the first cracks in the undergirding of the old regime had come in the 1957 election of Terry Schruck as Portland’s mayor. Devoting much of his energy to the cause of urban renewal, Schruck created the Portland Development Commission in 1958, with support from a broad base of conservatives and progressives concerned about Portland’s economic competitiveness.

At the state level, Governor Tom McCall (R, 1967–75) was at the vanguard of a new generation of political actors in the Northwest committed not only to a progressive and liberal political agenda, but also to improving and maintaining the Northwest’s quality of life. These actors saw the Northwest’s environment as a precious resource and potentially powerful investment attraction. ‘There is a shameless threat to our environment and to the whole quality of life’, said McCall in a now-famous 1973 address to the state legislature,

– the unfettered despoiling of the land. Sagebrush subdivision, coastal condomania, and the ravenous rampage of suburbia in the Willamette Valley all threaten to mock Oregon’s status as the environmental model for the nation. We are in dire need of a state land use policy, new subdivision laws, and new standards for planning and zoning by cities and counties. The interests of Oregon for today and in the future must be protected from grasping wastrels of the land [40].

During his first term, 1967–70, McCall helped usher in legislation that instituted a state department of environmental quality; created Oregon’s bottle bill, which required minimum deposits on beverage containers; ensured public ownership of beaches; and prohibited unsightly billboards. During McCall’s second term, the state legislature passed Senate Bill 100, the state’s ground-breaking land use law, spurred into existence after McCall’s ‘grasping wastrels’ speech. This law eventually established 11 land use goals, created urban growth

boundaries and required all cities and counties to formulate comprehensive plans in accordance with statewide land use guidelines.

Meanwhile, at the city level of government, the character of the Portland city council had continued to change, with the elderly, long-time commissioners making way for new, younger blood. For example, Lloyd Anderson, who in the late 1950s had been involved with setting up the first regional planning organization, the Metropolitan Planning Commission, became city commissioner of public affairs in 1970, filling a vacancy created by the death of William A. Bowes, who had been a commissioner since 1939 (and a long-time admirer of Robert Moses). Thirty-year-old Neil Goldschmidt, a legal aid attorney, became a city commissioner in 1971 and was elected as mayor two years later.

Under this new city council, Portland implemented an economic-growth strategy with a 1972 Downtown Plan that called for a revitalized downtown, improved transportation and stronger central city neighbourhoods. In 1972, in an attempt to relieve downtown congestion and meet federal air quality standards by limiting the number of automobiles in the downtown core, the city also placed a cap on the number of parking spaces in the central business district.

A legacy of regional government and consensus building. As Portland's mayor, Goldschmidt represented the city in the area's regional governing body, the Columbia Region Association of Governments, CRAG, which was in name and spirit not unlike the Columbia River Planning Authority that Mumford had recommended 30 years earlier. CRAG was one of several regional organizations coming into existence in the late 1960s and early 1970s. There were two primary motivating forces behind the creation of regional planning and governing entities in this area [41]. One was the mandate for comprehensive planning by the federal government as a prerequisite for receiving federal funds: CRAG became the federally mandated agency that reviewed all grant applications from the region.

In 1978, voters in the three counties that make up the Portland metropolitan area approved the creation of the nation's only elected regional government, the Metropolitan Service District – Metro, as it became known. As noted earlier, in 1990, Oregon voters amended the state constitution to give Metro 'home rule status', which, subject to voter approval, would give the agency substantial regionwide planning authority. In 1992, the voters approved Metro's new charter, leading to the *Regional Framework Plan*, described above.

An ongoing impetus behind the support for regional planning was the central city's desire to exert some restraint over out-of-control suburban growth. To central city business and political actors, the initial concern was the economic threat to downtown Portland; by the early 1970s, however, suburban growth also came to be seen as a threat to the metropolitan area's ecology and aesthetic attractiveness. Regional governing organizations could help rationalize growth and economic development in a way that would benefit not only the central city, but (and this was obviously necessary if there was to be regional consensus) neighbouring suburbs, as well.

Thus, regional agencies served as the formulators and implementers of rational, progressive policy. For instance, the state created Tri-Met as a regional transit agency, which built one of the nation's first transit malls, with dedicated lanes for transit vehicles, in the downtown core. Prior to the existence of Metro, CRAG, with Neil Goldschmidt at its helm, fought successfully to divert federal funds from building the widely protested Mt Hood Freeway to building the nation's first project that combined light rail transit with freeway improvement: the eastside

MAX line, completed in 1986, ran from downtown Portland eastward to Gresham, alongside a renovated Banfield Freeway.

Federal mandates and funding. It is doubtful that all of the various ground-breaking projects and policies could have been implemented throughout the 1970s and 1980s, had it not been for the existence of federal mandates and the availability of federal funding. Indeed, the freeway building and bridge improvement, which Moses recommended, has also been dependent upon federal funding. In the 1960s and 1970s, however, federal funds came packaged with federal mandates, particularly with respect to air quality. Together, the federal funds and mandates provided the catalyst for realizing the progressive visions of the new breed of political actors and the plans of the regional agencies. The Federal Highway Act of 1962 required that all transportation projects within urbanized areas be based on what has been known ever since as the '3C' process – continuing, comprehensive and co-operative transportation planning – and the creation of Metropolitan Planning Organizations (MPOs). In the Portland metropolitan area the MPO requirement is met through Metro and its transportation-planning arm, the Joint Policy Advisory Committee on Transportation (JPACT).

The creation of the Tri-Met mass transit agency in 1969 was due, in large part, to passage of the federal Urban Mass Transportation Act of 1964 and subsequent amendments, which, by 1966, provided for a two-thirds matching federal grant for urban mass transit projects. The Federal-Aid Highway Act of 1973 allowed for funds previously dedicated to a state's interstate highway projects to be diverted to mass transportation projects; this was in large part responsible for the building of Portland's first light rail line.

The federal government has also served as a catalyst for the region's progressive policies through the passage of federal environmental legislation: the Air Quality Control Act of 1955 and, in 1969, the National Environmental Policy Act (NEPA), which required the first environmental impact statements. One year later the Office of Environmental Quality was established in an effort to centralize environmental decision-making at the federal level (around the same time, Gov. Tom McCall established Oregon's Department of Environmental Quality). Also in 1970 the Clean Air Act Amendments established the federal Environmental Protection Agency (EPA), responsible for setting ambient air standards at the local level.

Federal environmental legislation continued throughout the 1970s, supplemented by transportation legislation that came increasingly to emphasize a multimodal and reduced-emissions approach to mobility. As noted, the Federal-Aid Assistance Act of 1973 allowed for the diversion of federal freeway funds to mass transit projects. Five years later, the US Congress passed the Surface Transportation Assistance Act, integrating highway, public transportation and highway safety. Energy conservation concerns had already emerged in 1975 as a result of the Arab oil embargo through the enactment of requirements that the corporate average fuel economy (CAFE) be raised so that average miles per gallon increased from 18 in 1978 to 27.5 in 1985. Energy conservation continued to be present as an explicit goal of urban transportation planning requirements, as was the requirement that transportation plans consider alternatives to the automobile [42].

During the Reagan years, the trend toward centralized decision-making in the realm of the environment and transportation slowed and in some cases was reversed. By 1990, however, the federal government had again assumed an authoritative posture. The two most significant

pieces of legislation, which have added impetus to the progressive environmental agenda, were the Clean Air Act Amendments of 1990 (CAAA) and the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), renewed in 1998 as the Transportation Equity Act for the 21st Century (TEA-21). CAAA formally identifies automobiles and other vehicles as a primary source of air pollution and calls for stringent new requirements in metropolitan areas. ISTEA and TEA-21 emphasize modal diversity, decreased reliance on the automobile, congestion relief and consideration of land use impacts by transportation projects. All of these federal funding and mandate packages helped legitimize Portlanders' environmental and auto-reduction agendas.

Grassroots activism. Another factor that has contributed to the Portland region's progressive land use, transportation and environmental policies was the emergence of strong grassroots activism. To some extent, this was also facilitated by policies at the federal level. In 1969 the federal government required a two-hearing process of citizen involvement in the freeway-building process, so that citizens could participate before routing decisions were made. Later that year, the federal government required citizen participation in all phases of each and every planning process. Even before this federal legislation, however, citizen activism had emerged in opposition to extensive freeway building; in fact, this activism helped spur the federal legislation mandating increased citizen involvement [43].

The earliest example of successful citizen antifreeway activism in the Portland metropolitan area was the neighbourhood fight against a proposed south-north I-205 freeway link on Portland's east side. Neighbourhood activists opposed this freeway for a number of reasons, but the important point here is that citizen activists were successful in effecting significant changes in transportation policy. Eventually, 12 neighbourhoods came together to form a Citizens Freeway Committee to protest not only the I-205 link, but the Mt Hood Freeway as well. Both projects were finally abandoned. As noted, the light rail line and improved Banfield Freeway replaced the Mt Hood Freeway project; a further-out 92nd Avenue route was eventually chosen instead of the 52nd Avenue route for the east side of the I-205 link.

Citizen activism with regard to transportation and environmental issues occurred on other levels, as well. The neighbourhood association movement started to become important in Portland metropolitan area in the 1960s and 1970s. The Portland city council, with Neil Goldschmidt as mayor, created the Office of Neighborhood Associations in 1974 (now called the Office of Neighborhood Involvement), to provide support for the neighbourhood associations. The neighbourhood associations present needs reports to the city council on an annual basis, and through these reports local citizens express their desires for a clean and safe environment.

Successful citizen activism in the area of transportation and land use has not been confined to central city neighbourhood residents. As Carl Abbott, Deborah Howe and Sy Adler explain in *Planning the Oregon Way* [44] the initial impetus for the state's land use legislation came from farmers within the Willamette Valley, who were afraid that spreading urbanization would encroach upon their land. They sought and won legislation that would promote the concept of exclusive farm use. They also lobbied successfully for the 1969 passage of Senate Bill 10, which was Oregon's first piece of mandatory statewide planning legislation and the precursor to the ground-breaking land use law, SB 100.

Another expression of citizen activism is 1000 Friends of Oregon, an independent land use watchdog organization formed in 1975, two years after the legislature passed SB 100. Since its creation, 1000 Friends has been actively involved in the acknowledgement process, whereby the state reviews local plans – which are mandatory – for conformance with land use guidelines. The group has also fought for implementation of Mumfordian goals, stressing mixed land use, constrained urban growth boundaries, affordable housing and pedestrian-friendly environments.

Conclusions

At the turn of the twenty-first century, Portland's image reflects the combined influences of both Lewis Mumford and Robert Moses. Particularly in terms of physical infrastructure, Portland bears the imprint of Moses' visit. The city's inner and outer freeway loops, the bridge construction and renovation, Forest Park, Tom McCall Waterfront Park, the convention centre and new sports arena, the transit mall in downtown Portland and, to some extent, even the light rail construction: all of these are transportation projects, parks, or other major developments that have the quality of the showpiece, large-scale project that Moses valued.

Today, the majority of those active in Portland's planning community, however, strive overtly toward the Mumfordian ideal. The city's image- and policy-makers eschew investment in auto-accommodating infrastructure, which was, for Moses, the key to a successful city. Instead, local policy-makers and planners emphasize Mumfordian visions: the regional institutions; the neighbourhood organization network; the emphasis on planning for mixed-use, transit-orientated human-scale design; the commitment to alternative modes of transportation; and the inclusion of greenspaces in the regional plan. Portland-area planners, however, strive for greater densities than Mumford advocated, and, as has been discussed, the satellite city concept has not proven popular.

Regional consensus regarding the Mumfordian ideal as articulated in the *Regional Framework Plan* is not unanimous. The tension among regional planners and policy-makers has even, on occasion, rivalled that of Moses and Mumford themselves. When Lewis Mumford said that 'Mr. Moses uses the word "regional planning" as a swearword, to indicate his abiding hatred of . . . comprehensive and forward-looking politics', he may just as well have been describing local opponents of Metro's *Regional Framework Plan* [45]. Such detractors align themselves with Robert Moses' pronouncement regarding 'planners in general': '[They] are "socialists", "revolutionaries", who do not reach the masses directly but through subversive activity. They teach the teachers. They reach the people in high places, who in turn influence the press, universities, societies learned and otherwise . . .' [46].

The battle for a dominant paradigm in the Portland metropolitan area is by no means won – although, for now, Metro's *Regional Framework Plan* represents the reigning (Mumfordian) vision. Both Moses and Mumford were alternately vehemently defensive of, yet realistic about, the limitations of the policies they espoused. Mumford, in particular, recognised that some of his recommendations were too visionary, too politically and financially infeasible.

In this regard, one is reminded of an 1898 interview of Ebenezer Howard's *To-morrow: A Peaceful Path to Real Reform* that appeared in the London *Times*: 'an ingenious and rather entertaining attempt – the only difficulty is to create it' [47]. Whether the Mumfordian ideal

will, in fact, be reified through the implementation of new plans – or, at worst, accumulate dust on library shelves, at best remain ‘ingenious’ and ‘entertaining’ – is for future planning historians to judge.

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