

ENVISIONED CITIES: MODERNISTS RESPONSES TO TECHNOLOGICAL INNOVATION

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ABSTRACT

This paper explores the modernist vision of urban development in response to technological advancements, comparing classic modernist writings with contemporary perspectives on the influence of the internet on urbanism. Drawing on iconic texts from the late nineteenth and early twentieth centuries alongside a contemporary analysis by William Mitchell, the paper identifies common themes and critiques of modernist planning. Through a comparative analysis, it examines the shortcomings of modernist projections in addressing the complexities of urban life, including technological innovation, historical and contemporary contexts, the practicalities of realizing vision, entrenched behavior and human nature, conflict and control, and critiques from scholars like James Holston. By contrasting the abstract, idealized visions of modernists with the ambiguous and poetic descriptions of urban life in Italo Calvino's *Invisible Cities*, the paper argues for a more nuanced approach to urban planning that acknowledges the multidimensional nature of cities and incorporates diverse stakeholder perspectives. It concludes that while modernist planning provides a valuable starting point, a comprehensive vision for urban development must embrace the complexities and contradictions inherent in urban life to inspire meaningful action towards improvement.

Key words: Modernist vision, Urban development, Technological advancements, Contemporary perspectives, Internet influence

INTRODUCTION

“And yet I have constructed in my mind a model city from which all possible cities can be deduced,” Kublai said. “It contains everything corresponding to the norm. Since the cities that exist diverge in varying degree from the norm, I need only to foresee the exceptions to the norm and calculate the most probable combinations.”

“I have also thought of a model city from which I can deduce all the others,” Marco answered. “It is a city made only of exceptions, exclusions, incongruities, contradictions... But I cannot force my operation beyond a certain limit: I would achieve cities too probable to be real.”

-from *Invisible Cities*, Italo Calvino

Modernist planners present an ideal image of a potential city made possible by advances in

technology. Though these images do not correspond to the norm, as Kublai depicts, representing current urban conditions. Neither do they align with Marco's vision of incongruous urbanism; exception and contradiction are anathema to their vision. Instead, their unilateral projections are simply that: abstract prognostications that accommodate neither actuality nor inconsistency. Inspired by innovations in transportation and long-distance communication, and encompassed in the belief that technological solutions can be found for social problems, modernist visions provide a poor basis for actual urban intervention.

In this paper three iconic modernist writings from the late nineteenth and early twentieth century will be compared to a contemporary text responding to the internet's predicted influence on urbanism.

Though all texts differ in depth and direction of analysis, and employ a range of rhetorical strategies, all fail to provide a realistic “way forward” for urban settlements responding to technological innovations. The authors’ discussion of five common topics will be contrasted, and the findings will then be compared to James Holston’s criticism of modernist planning.

Research methodology:

The research for this paper begins with a comprehensive literature review to identify existing scholarship on modernist visions of urban development and their responses to technological innovation. The process involves a critical examination of classic modernist writings from the late nineteenth and early twentieth centuries, along with the contemporary views on the influence of internet on urbanism. In order to understand the theoretical foundations and practical implications of modernist planning, key texts by Ebenezer Howard (1898), Frank Lloyd Wright (1935), Le Corbusier (1929), and William Mitchell (1999) are reviewed. Additionally, Italo Calvino's (1974) "Invisible Cities" is analyzed for its poetic and anti-rational descriptions of urban life, contrasting with the rationality of modernist visions.

Comparative Analysis: The methodology used in this research involves comparing classic modernist writings with contemporary perspectives to identify shared themes, criticisms, and implications of modernist planning in light of technological advancements. The analysis is made based upon five key attributes: technological innovation, historical and contemporary contexts, practicalities of realizing vision, entrenched behavior and human nature, and conflict and control.

Incorporation of Critiques: The analysis is elaborated through integration of James Holston's (1989) critique of modernist planning to provide a significant understanding of its limitations and shortcomings. This involves evaluating how modernist planners address or fail to address the paradoxes and complexities of urban life.

Synthesis and Conclusion: Finally, the findings from the comparative analysis and critiques were synthesized to propose a more nuanced approach to urban planning. This led to the acknowledgement of the multidimensional nature of cities and incorporation of diverse stakeholder perspectives.

Discussion and Analysis

1. Technological innovation

The Modernist movement emerged in response to the Industrial Revolution's impact on society. Historical modernist planning responded to improvements in railroad and automobile technology transportation. Ebenezer Howard was optimistic about modern society's capacity to evolve and was particularly interested in technological innovation and advancements, describing his 1898 Garden Cities, depicts a logically laid-out network of avenues radiating from the city center in a system of rings and spokes. At the city's circumference, production facilities and rail infrastructure were strategically located to ease transportation. Howard thought that the solution to overcrowding and difficult living conditions in modern industrial towns was to build new planned communities that formed a 'joyous union' of town and country. The garden city's purpose was to incorporate the benefits of city life with nature and a healthy lifestyle. This imagined model posed a significant counterpoint to the traditional industrial city, whose streets had been laid out over the decades to accommodate non-motorized transportation. Frank Lloyd Wright and Le Corbusier made similar arguments for infrastructure designed and built for trains, trams, and automobiles.

The internet poses similarly revolutionary options for present day cities. For his contemporary analysis of technological influence on urbanism, William Mitchell discusses the potential for working remotely. He primarily sidesteps considering the need to transmit physical goods and services, making only blanket generalization that regions of the country previously devoted to recreation and entertainment may now attract more telecommuters. As the train and automobile expanded the city and opened the suburbs for middle class residents, so the internet has expanded “the city” again. Now, anywhere with a reliable web connection can provide the urban amenities of diversity and access to human capital and robust markets for exchange. Mitchell's vision of the internet-urban is decidedly positive. Like Howard's Garden Cities, though one hundred years their senior, the e-topia offers the best of all worlds.

In critique, modernist planning's rational street organization seemed clearly superior to previous urbanism. During the 1950s and 1960s, transportation policy prioritized expanding automobile capacity on the roads. Analytical tools

focused solely on highways and autos, leaving out communal design approach and public transportation challenges. Engineers constructed infrastructure to support expected traffic trends rather than deciding on development areas. However, designing for motorized transit ignores that most people also at times get out of their cars and walk. Walking straight across a 6000-acre Garden City or four square miles of Broadacre City would require at least an hour; one assumes sidewalks would have been included in the cities despite being excluded from the authors' notice. Le Corbusier's city is based on a 400 yard grid, requiring between five to ten minutes walking between street intersections. Mitchell's teleworkers may decide to settle at the bottom of a ski lift in Vail, miles away from providers of goods and services.

Despite devoting attention to creating rational means of accessing pleasant driving or browsing experiences, modernist and contemporary focus on transit left no attention available for pleasant in person walking experiences. Arguably, there was no need for such accommodation: as driving/surfing would surely emerge as the most desirable transportation option, there was no need to account for alternatives. Modernist planning deals in absolutes, not alternatives, and its emphasis on idealized rationality ignores many aspects of actual urbanism.

2. Historic and contemporary context

Modernist planning likewise deals in the present day "here and now", with little attention to contemporary or historic contexts. Though finding industrial cities unsatisfactory places to live, Howard flatly dismisses any impulse to examine why residents continue to flock to urban areas, content to say they arrive because of "attractions". These attractions are assumed to be logical and universal, capable of being overthrown in one fell swoop by the Garden City. Corbusier likewise discounts context, flatly stating, "My object was not to overcome the existing state of things." Meanwhile, Wright asserts that three technological inventions are "already at work building Broadacres, whether the powers that over-built the old cities otherwise like it or not" (emphasis added). These historical modernist writings placed no value on the "unscientific" study of history and the drivers that created their contemporary cities. The projected future, depicted

on an anonymous blank slate, trumps any concern for context.

To slightly modify the theme, Mitchell acknowledges that past technological innovations have had an effect on urban form, but declines to analyze how and why this has occurred. As distant, poorly-documented history is essentially ambiguous and indeterminate, it is not an appropriate concern for modernist planners. This ethos stands in contrast to many historic preservation planners, for whom overemphasis on the past without forward-thinking vision can also prove limiting. The United States is littered with historic buildings facing one of two fates: their conservators have either settled for limited adaptation of the structure as a "museum piece", visited for a two dollar admission on Saturdays, or not adapted at all (owing to the lack of funding for appropriate rehabilitation) and left to languish. Though many compromises from both modernists and historians have succeeded, clinging only to one, "pure" vision of the city is dangerously limiting.

3. Practicalities of realizing vision

Despite dismissing historic precedent, modernist planning was not entirely theoretical; planners were concerned with the feasibility associated with achieving their visions. Though no planners went so far as to decree plating designs, Howard, Wright, and Corbusier all provided specific guidelines regarding lot size, street dimension, and similar concerns. Wright and Corbusier also emphasized the importance of modern building technologies in enabling affordable, technologically sound housing to be provided. Howard discussed financing options for Garden City developments, and Wright proposed appropriate governance structures for the Broadacres. Overall, the modernist planners provided support for their visions' implementation.

However, their visions remained inchoate in terms of defining specific social and physical aspects of the city. As Kevin Lynch's *Image of the City* argues, cities are a series of experiences, not a set of plats and street plans. Beyond short vignettes of streetscape or skyline, the modernist depictions chose to remain abstract, idealized, and inconsequential. When interactions of specific neighbors and/or neighborhoods, firms, or politicians are not considered, the modernist city can continue to be depicted as a pure vision of an urban solution

to problems that are in truth more about ground-level perspective that aerial overlooks.

In much the same way, Mitchell has absorbed the generalities associated with modernist writings. He provides general zoning guidelines, pointing out that digital workers no longer require the Industrialization-era separation of workplace and residence. In terms of actual depictions of daily life, he remains vague, disclosing only that in new digitally-driven settlements “there will still be some place we call ‘home,’” and that we may see a reinvention of live-work spaces. This collective oversight / under-prescription may be excused in “Manifesto” genre writing, but it revealed many of the inadequacies of modernist planning and laid the groundwork for the most common critique of modernist cities.

4. Entrenched behavior and human nature

Similar to their impulse to avoid discussing subjective experiences of the city, modernist planners did not engage with ideas about essential characteristics of human beings. It is almost as though their cities will not be inhabited by actual people but by idealized approximations of people. For example, Howard asserts that men cannot “stifle their love for human society...to forgo almost entirely all the keen and pure delights of the country”, ignoring that for much of history human settlements took place in primarily non-urban areas, and that many of his contemporaries also lived relatively isolated existences in the countryside. Wright disparagingly characterizes all human success as mere “excess”, and Corbusier refuses to touch on human nature at all.

Mitchell alone is willing to take up the topic, recognizing that human behavior changes very little over short periods of time, and that the investment represented by existing urban structures likely indicates that change to the digital city will come slowly, when it does come. This may be depicted as the first “break” in a depiction of historic and contemporary urban theorists offering similar rhetorical responses to changing technologies. However, it is at least equally likely that the change reflects not a shift in methodology but a shift in definition—acknowledgement of human characteristics is much more strongly supported by social scientists and the general consciousness today than it was at the turn of the twentieth century. In this, modernist rationality is context-dependent, founded

in the intellectual understanding of the era—and this despite its studied rejection of circumstance.

5. Conflict and Control

Primarily, modernist theorists in history and present-day conditions avoid addressing an essential aspect of human nature: human beings engage in conflict. They suffer, struggle, and they emerge victorious or turn tail to lick their wounds. Even scientists would be hard pressed to challenge the idea that war is a powerful impetus for technological innovation, and many of the communication and transportation technologies driving urban change were developed in part with potential use in nation-state conflict in mind. Yet the Broadacre resident does not go to war—with a nation state or his neighbor. Le Corbusier’s park-like settings are never the scene of muggings or beatings, or even peaceful permitted protest marches. There is no competition between Garden Cities for residents or resources. Hackers do not invade to disrupt the peaceful function of Mitchell’s e-topia. (How could such a scenario even be considered in an electronic paradise?) The ideal cities are even sited so as to avoid conflicts with terrain, waterways, or harsh climatic conditions. Rather than follow the seemingly random and imprecise patterns found in nature, modernist planning follows the strict regimentation of grids, offsets, and lineally-linked server architecture. In controlling the physical real and imposing ideal form, the social realm and an ideal social order are imposed almost by default.

6. Holston and critiques of modernist planning

James Holston provides a primary critique of modernist planning, arguing “that it does not admit or develop productively the paradoxes of its imagined future...It fails to include as constituent elements of planning the conflict, ambiguity, and indeterminacy characteristics of actual social life.” Elements of this critique have been shown to exist in both classic modernist writings, as well as contemporary treatments.

It is, however, perhaps because of the clarity and single-mindedness of expression that modernist visions have been pursued. Though inaccurate, depictions of a choate and conflict-free urbanism are compelling. It should be noted that Corbusier, Wright, and Howard all received significant public attention for their writings. (Mitchell, a professor of architecture and urban design whose career

culminated at the Massachusetts Institute of Technology, did not.) There is, thus, an incentive for urban theorists to present a slightly skewed but popularly palatable and/or provocative image of the future city.

Present-day planners, who operate in cities more bound by reality, nevertheless attempt to engage in many of the same rhetorical strategies employed by the modernist writers. Glossy comprehensive plans present a single vision of the city on the cover. If a messy “public engagement process” has been included as part of the plan development, it is rarely delved into in detail in the plan itself. Instead, attention centers on the resulting urban vision, with great detail devoted to carrying out specific components of the plan.

7. **Envisioned and Invisible Cities**

In contrast to the crystalline, technologically-driven urban visions presented by modernist and contemporary planners, the poetic descriptions Marco Polo offers to Kublai Khan in Italo Calvino’s *Invisible Cities* revel in ambiguity and incomplete depiction. Calvino describes of a city entirely coated in signage, a city composed only of two-dimensional facades obscuring degraded support systems, a city whose defining feature is its residents’ repression of lascivious desires. The images are anti-rational and contradictory, yet represent a great variety of urban experiences. As with the modernist theorists’ writings, they are compelling and accessible texts.

However, the *Invisible Cities* would be entirely inadequate motivations for urban developments or improvements. Were such a project to be proposed, who could be found to stand in for the Garden Cities financiers’ role in constructing an actual urbanism primarily composed of advertising signs (never mind that such a city is constructed only as a metaphor)? What citizens would flock to a neighborhood depicted as an ideal community intended to subjugate passions? Though Calvino’s poetic, irrational (un)vision of the city actively admits and thoroughly “develop[s] productively the paradoxes of its imagined future,” a text of similar structure would stand no chance of mainstream acceptance as an urban policy document.

Both the modernists’ *Envisioned City* and Calvino’s *Invisible City* pose serious problems when substituted as surrogate visions for the *Actual City*. Though both contribute aspects of understanding that

can be helpful in crafting future urban developments, neither is sufficient as a solitary model. Modernist planning’s premises will continue to form an important “starting place” for urban developments. Meanwhile, modernist planning is countered by strengthening of diverse and divergent stakeholder groups to address inadequacies of projections that plan for a single idealized populous. “Guerilla urbanism”, bordering on “public art”, represents individual reactions against rationalized modernist cities. Within Mitchell’s e-topias / the emerging digital urbanism, communities of affinity organize through social networks, user-generated content communities, and collectives intent on translating online affiliations into action “IRL”; relevant examples include the hacker group Anonymous, or, more benignly, “Carrot Mobs” organized to patronize businesses that take socially desirable actions.

Urban areas are composed of the interweaving of innumerable separate stories. Rationality represents one narrative thread, while irrationality represents another. Still others are driven by technology, psychology, romance, sociology, stormwater drainage, political economy, natural systems, and physical infrastructure. The challenge of planning city futures is to identify the salient features of a multi-dimensional urban environment and encapsulate them in a comprehensive vision capable of inspiring action towards improvements. Rationality and irrationality, cities solely of “the norm” and cities solely of contraction, are inadequate models for urban advancement.

Calvino concludes:

...I think that, setting out from there, I will put together, piece by piece, the perfect city, made of fragments mixed with the rest...If I tell you that the city toward which my journey tends is discontinuous in space and time, now scattered, now more condensed, you must not believe the search for it can stop...seek and learn to recognize who and what, in the midst of the [present] inferno, are not inferno, then make them endure, give them space.

Conclusion:

Modernist urban visions, despite their emphasis on technological progress and rationality, have proven inadequate in capturing the complexities of urban life. From Ebenezer Howard to William Mitchell, these visions overlook historical context, human behavior, and conflicts inherent in cities. In contrast, Italo Calvino's "Invisible Cities" offers a poetic exploration of urban diversity and contradiction.

Moving forward, urban planning requires a more nuanced approach that embraces diverse perspectives and acknowledges urban complexity. While modernist planning provides a starting point, it must be supplemented with inclusive, adaptable strategies to address the multifaceted nature of cities. By celebrating urban diversity and evolving with dynamic urban environments, meaningful progress towards sustainable, resilient cities can be achieved.

References

- Calvino, Italo. 1974, *Invisible Cities*. William Weaver, Trans. Orlando, FL: Harcourt.
- Howard, E. 1898. "Author's Introduction" and "The Town-Country Magnet." In *The City Reader: 4th Edition*, LeGates, R.T. and F. Stout (Eds.). New York, NY: Routledge. (pp. 314-321).
- Le Corbusier. 1929. "A Contemporary City." In *The City Reader: 4th Edition*, LeGates, R.T. and F. Stout (Eds.). New York, NY: Routledge. (pp. 322-330).
- Lynch, K. 1960. "The City and Its Elements." In *The City Reader: 4th Edition*, LeGates, R.T. and F. Stout (Eds.). New York, NY: Routledge. (pp. 438-447).
- Mitchell, William J. 1999. *e-topia: "Urban Life, Jim—But Not as We Know It."* Cambridge, MA: MIT Press. (pp. 70-83, 98-111).
- Wright, F.L. 1935. "Broadacre City: A New Community Plan." In *The City Reader: 4th Edition*, LeGates, R.T. And F. Stout (Eds.). New York, NY: Routledge. (pp. 331-336).
- Schubert, D., 2004. "Theodor Fritsch and the German (völkische) version of the Garden City: The Garden City invented two years before Ebenezer Howard. *Planning Perspectives*", 19(1), pp.3-35.
- Howard, E., 2010. *To-morrow: A peaceful path to real reform.* Cambridge University Press.
- Eliot, T. S. (2006). "Tradition and the Individual Talent." *The Norton Anthology of English Literature Volume B*. Ed. Stephen Greenblatt. New York: W.W. Norton & Co.
- Holston, J. (1989). "The Modernist City: An Anthropological Critique of Brasilia." Chicago: Chicago University Press.
- Ilechukwu, V.U., 2016. *Modernism.*

