M. Christine Boyer and Recent Debates over Virtual Public Space

Liang-yi Yen

Urban public spaces—plazas, parks, streets, and public buildings, among others—have long been essential settings for activities of urban public life, including those related to communication, entertainment, identity framing, and political participation. However, as advanced communication technology has gradually invaded our daily life in the past two decades, a great portion of urban public life has increasingly migrated from the physical space to the realm of virtual space, i.e., media and computer

networks. The emergence of this new virtual public life, especially after the rise of computer technology, has not only produced new forms of public space, (e.g., internet chat rooms), it has also challenged urban public space in the material world by competing for users. In response to this new dynamic, many urban theorists have turned their attention to the issue of the impacts of virtual public space on urban public life. Among others, architectural historian and urban critic M. Christine Boyer has made some of the most insightful critiques of the transformation of public space in the age of electronic communication, including the tensions between public space and private space, and virtual space and real space.

Linking the experiences of virtual space and material space by looking at the visual perception of the urban landscape in cities, Boyer's interpretation of virtual public space is theoretically insightful to the current debates on urban public life. Boyer theorizes the complicated relation between the physical urban space and the virtual space characterizing the experience of the contemporary cities. As images and fantasies are rapidly transmitted with the aid of electronic communication instruments, blurring the distinctions between the material city and the immaterial city, Boyer's pioneering works are highly pertinent to

the research agenda of critical urban studies.

Recent debates about virtual public space have focused on two questions. Is physical space still significant for contemporary urban public life? Will the newly emerging virtual space be the promised land for the revitalization of urban democracy? In general, two opposing viewpoints relate to these issues: technological utopianism (which celebrates the coming of the new virtual space), and, technological dystopianism (which harbors skepticism about the future of virtual space). For technological utopians who look to public spaces in terms of privatization or commodification by corporate bureaucracies, cyberspace is seen as very appealing for the construction of genuine public space that is open to different social groups (see Benedikt 1991; Rheingold 1994). In contrast, for the technological dystopians, virtual space can even further undermine the larger public sphere since it can *more* easily be censored and controlled by the state and corporations (see Dewey 1997; Graham and Aurigi 1997; Graham 1998).

This essay presents Boyer's critiques of virtual public space and situates her critiques within the recent debates of virtuality and public space. Through a critical assessment of Boyer's position, we can arrive at a better understanding of the potentials and limitations of the virtual public space. I will first review Boyer's academic project on urbanism over the past two decades and illustrate her theories on public space and cybercities. Then, I will examine the different perspectives of virtual public space in recent debates and compare them with Boyer's perspective. Finally, I will examine contributions and limitations of Boyer's model of virtual public space, concluding with a discussion of the implications on urban public space debates.

Boyer's Project: Critiques of the Visual Perception of Urban Landscape

Boyer has written extensively on the history of city planning in the United States, preservation planning, and the influences of communication technology on cities. A brief review of her career reveals that her interests have shifted back and forth between virtual space and physical space. In her early scholarship, Boyer was devoted to computer science, focusing on the development of programming languages. Witnessing the dislocation and eruption of many subaltern communities as the result of federal policies on urban renewal and interstate highway construction in the 1960s, Boyer abandoned her work on computer programming because there was "something missing from the cool abstractions and symbolic processes of computational theory" (Boyer 1996: 7). For Boyer, the abstract computer programming languages had little to do with the social issues developing in the material urban space, and since these social issues were important to her, she decided to dedicate herself to the field of architecture and urban history.

Since 1983, Boyer has published a series of books on city and planning history, including *Dreaming the Rational City: The Myth of American City Planning* (1983), *Manhattan Manners: Architecture and Style 1850-1900* (1985), and *The City of Collective Memory: Its Historical Imagery and Architectural Entertainments* (1994). These books have increasingly become influential in the field of architecture and planning history, particularly *The City of Collective Memory*, which has won the Lewis Mumford Price for the Best Book Published in American City and Regional Planning

History 1993-1995. Interestingly enough, almost thirty years after Boyer abandoned her programming work constructing the virtual world, she returned to this topic once again in 1996, although in a very different manner, by publishing *CyberCities: Visual Perception in the Age of Electronic Communication*.

The critique of the visual perception of the urban landscape is a fundamental theme underlying Boyer's entire academic project. Boyer's analysis has dealt with the perception of cities at different historical stages ranging from the early nineteenth century to the late twentieth century. By paying attention to the way people look at the city instead of just the morphology of the city itself, Boyer has produced unique and compelling perspectives on understanding the relationships between cities and their residents. In her earlier works, Dreaming the Rational City and Manhattan Manners, Boyer examines the structure of planning thought from the late nineteenth century to the 1940s through a critical assessment of the production of urban landscape. She argues that planning theory and practice failed to recognize the "humanistic order" in cities, imposing upon them a visual order of streetscape based on the principle of abstract rationality dominated by the ideology of "a technical utilitarianism and functional organization" (Boyer 1983: 282-3). Furthermore, under the guise of a rational city plan and regulatory controls, early twentieth century planning ideas have been a major facilitator of the "maintenance and reproduction of capital accumulation within the city" (62). Through an historical analysis of the urban landscape, she reveals the desire of planning discourse to regulate visual perception of the city and demonstrates the power and necessity of visual perception.

In The City of Collective Memory, Boyer extends her critique of the visual perception of city space to both modern urbanism and postmodern urbanism. Boyer identifies three major prototypes by which urban publics compose their images of cities: the City as a Work of Art, the City as Panorama, and the City as Spectacle. Until the late nineteenth century, cityscape was designed and viewed as a theatrical stage for displaying monuments that "spoke of exemplary deeds, national unity, and industrial glory" (Boyer 1994: 34). The traditional city was conceived as a work of art. In contrast, the modern city of the early twentieth century was impacted by developments in transportation systems; the "new experience of moving through the city tended to erase the traditional sense of pictorial enclosure as the cityscape was transformed into a series of fleeting impressions and momentary encounters" (40-41). Thus, the modern city was conceived not as a static image, but as a panorama. Finally, a new form of the city emerged in the 1980s in which appropriations of historical styles and restaged scenographic allusions now became bounded nodes within an urban composition crisscrossed by highways and invisible electronic circuitry (47). In the City of Spectacle, the "collective memory" of the city is replaced by manipulated historical images that only articulate messages of consumer culture. It is mostly with this last type of city that The City of Collective Memory is concerned, and Boyer sets out to "recall, reexamine, and recontextualize memory images from the past until they awaken

within us a new path to the future" (29).

Adopting a similar theoretical framework, Boyer explores the issue of urban public life in the new information age in her CyberCities. She tackles the problem of the visual representation of the city by linking city images to the rise of new information technologies, maintaining the primacy of technology in determining the way we perceive the city—including what she calls the modern Machine City and the postmodern CyberCity. Boyer contends that "by distributing bodies/uses in space, allocating each individual/function to a cellular partition, [and] creating an efficient machine out of its analytical spatial arrangement," the Machine City of modernism deployed disciplinary control of modern subjects (Boyer 1996: 17). In the CyberCity, however, modern disciplinary spaces are being broken down by the global network of computers, and "disciplinary societies that molded behavior are being replaced by numerical societies of modulating control facilitated by computer technology" (18). Boyer argues that the evolution of the metaphor from machine to computer has affected the way we think, imagine, and organize information in the city. As a result, the major focus of modernism is gradually disappearing from critical debate as "cyberspace pulls the user into the receding space of the electronic matrix in total withdrawal from the world" (11). As our bodies become distanced from the material world, our sense of social responsibility dissolves into cyberspace.

Throughout Boyer's academic project, visual perception of urban landscape has been her analytical process of uncovering urban history. She sees visual per-

ception of the city (the mental construct of the built environment) as a determining factor in the production of spatial organization and urban social life. While Boyer's approach might have placed too much stress on the discourse and perception of the city, therefore neglecting solid analysis of the material socio-spatial world, she has nonetheless developed a particular perspective on virtual public space. What follows is an exploration of Boyer's thoughts on the issue of the public space in the new information age and her contribution in the recent debates over virtual public space.

Public Space, Democracy, and CyberCities

Urban public space is generally considered as an essential spatial element of the realization of democratic social life. Public space has traditionally been seen as a meeting ground where people congregate, exchange, and share with each other, thereby expanding on their personal experiences and overcoming their private isolation (Arendt 1958; Sennett 1977; Brill 1989; Lofland 1989). In an ideal public space, people with different viewpoints would sit side-byside and freely interact in a manner that no individual viewpoint or philosophy would dominate or outweigh another. An ideal public space is also an important arena for political participation in a democratic society. Jürgen Habermas contends that the deliberation of public affairs in a public sphere is physically and socially independent of the supremacy of both the state and the market is essential to modern democratic society (Habermas 1989). A final way in which public space is vital to urban life is that it

functions as a visual representation of the city, which in turn shapes the definition of publicness in the city (Zukin 1995).³ Thus, an ideal public space is of substantive importance for achieving a democratic urban public life.

In the last few decades, however, as the ideology of privatization has become dominant in discourses of the city, the concept of "public" is in crisis, and most cities are experiencing what Boyer calls "the inversion of public and private space" (Boyer 1994: 7-8). 4 City space is gradually becoming controlled by the corporate culture as corporations increasingly "sponsor museum exhibitions, theatrical performances, sports events, national celebrations, and ... media entertainment and the news" (65). Additionally, corporations "control many architectural spaces of the city, theme parks, and shopping malls, in short they have underwritten the very sites of cultural expression" (65.). Consequently, most projects seeking to improve city space have resulted in inner city gentrification, creating privatized "public spaces" that only allow "a select group of people to stroll unimpeded along their corridors and spaces of power" (9). At the same time, the city's public is "fragmented into marginalized groups, many of whom have no access to or voice and representation in the public space of revitalized and gentrified cities" (9). Moreover, "[a]s attention is focused on the upscale urban environment, it is simultaneously withdrawn from impoverished and abandoned territories, abandoning them further and making them even more impoverished" (Boyer 1995: 107).

Under the current conditions of prevaling corporate culture in the city, some commentators have proclaimed that cyberspace harbors the potential to become a space in which a genuine public life can be created. Howard Rheingold contends that the building of virtual community is due to "the hunger for community that grows in the breasts of people around the world as more and more informal public spaces disappear from our real lives" (Rheingold 1994: 6). Rheingold sees virtual space as a new world where undesirable social problems, social hierarchies, and social controls can be eliminated. As Michael Benedict puts it, virtual space is a

realm of pure information, filling like a lake, siphoning the jangle of messages transfiguring the physical world, decontaminating the natural and urban landscapes, redeeming them, saving them from...all the inefficiencies, pollution (chemical and informational), and corruption (1991: 3).

In other words, thanks to the advance of communication and information technology, democratic public life can be realized in virtual space, space that is independent of the forces of control and degradation that operate in physical urban space.

According to the technological utopians, in the new virtual space created by computer networks, individuals or groups can freely exchange ideas and information, thereby challenging the hegemonic discourses circulated in by the existing traditional media and revitalizing citizen-based democracy (Rheingold 1994). Virtual space can offer new interactive public spaces, especially for the most marginalized groups in society who have been most negatively impacted by economic restructuring and increasing urban pri-

vatism (Schuler 1995). Above all, technological utopians contend that by carefully designing and planning telecommunication networks, we can build what Rheingold calls an "electronic agora" controlled by a variety of citizens (Rheingold 1994).

In contrast to the technological utopians, other commentators are less optimistic about the promise of new communication technology in bringing about democratic public life. From this counter point of view, the rise of virtual space will lead to uneven geographical development, therefore exacerbating existing problems of unequal distribution of social resources. In their empirical study, Graham and Aurigi point out that those who could most benefit from building a public space in the virtual world—the economically and culturally marginalized—often have the least access to it (1997).5 Consequently, cities and regions are becoming divided along the lines of "homes that have access to the information highway, and those that do not... Thus the city, the region, and even the world can be grouped into information-rich or information-poor societies" (Boyer 1996: 229).

Moreover, far from being a public space for dialogue and debate, technological dystopians see virtual space, like real space, as being rapidly privatized and commercialized as communication networks become dominated by global corporations and markets. In this regard, virtual space does not necessarily lead to a more democratic city; rather, it makes social control and surveillance even more efficient (Graham, 1998). As the transfer speed and quantity of information dramatically increases in virtual space, the ideology of market and consumer culture can travel faster and

further than ever before. Thus,

[w]e are...witnessing the growth of a global system of mediated communications—an increasingly privatized and commercialized information society....The privatization of public television, school systems, research institutes, and communication networks means that market profitability becomes the sole criterion for the production of culture (Boyer 1996: 229).

Both technological utopians and dystoypians have tried to provide a glimpse of the future of virtual public space. While the former group celebrates the potentials of virtual space as alternative democratic public space, the latter attacks virtual space for its tendency to increase spatial inequality and facilitate social control. What both technological utopians and dystoypians share, however, is a neglect of the dialectical relations between virtual space and physical space. It is on this issue that Boyer has made her most prominent contribution to the debate.

According to Boyer, the essential element of cyberspace lies in its power to mediate public life in both virtual space and material space. Virtual cities threaten the existence of urban public life because they turn away our perception from real cities toward virtual life, thus blinding us to the urban social problems taking place in the physical world. According to Boyer, in the age of electronic communication our perception of the city is not coherent but fragmented. Therefore, "we have to develop new nodes of perception that enable us to navigate between, to explore and question, the framework of pre-digested

and pre-selected nodes of data that represent highly mediated forms of communication" (Boyer 1996: 8).

Whether traveling in the material city space (e.g., highway, shopping mall, and supermarket), or navigating the virtual space (e.g., television, video games, and computer networks), we are constantly forced to choose between pre-programmed nodes. Moreover, because our everyday experience of the city is disconnected and disrupted, representation of the city becomes very similar to a computer matrix, where the disjunctions between the columns and rows are natural. In other words, in CyberCities, the unprogrammed nodes—the abandoned and impoverished spaces that surround gentrified commercial spaces of the urban core—are out of our sight, absent because our perception of the city is largely pre-edited by the representations of it circulated in virtual space. Thus, as Boyer maintains,

[t]hese partitions, cuts, and interruptions in urban imaginary allow us to deny our complicity in the making of distinctions between the well-designed nodes of the matrix and the blank, in-between places of nobody's concern...Disavowed, overlooked, marginalized, left out of our accounts, these are the center's truly invisible spaces...that have been rendered absent and forgotten (1996: 20).

Thus, Boyer concludes that in the information age,

...the city and its public sphere become increasingly virtual as we move toward interpersonal systems of communication and the netropolis at the expense of face-to-face communication in physical and public space (Boyer 1996: 229).

Consequently, city residents are absorbed into their private spaces, rendering the outside physical space empty and invisible from their sights. "Cyberspace," as Fred Dewey puts it, "for all its novelty, represents the suction of the impeding world away into nothingness. By convincing us to turn away from our own world, cyburbia throws us into an infinite regress" (1997: 271). Therefore, in the current historical condition, it is too optimistic to anticipate that the expansion of virtual space will necessarily bring about opportunities for all social groups to freely communicate and become empowered.

A Critical Assessment of Boyer's Model

From the technological utopian point of view, the rise of virtual space has provided cities with a new territory in which a genuine democratic public space can be built. From the technological dystopian perspective, on the other hand, virtual space is less democratic than the "old" material urban public space because social activities in the virtual space can be more easily censored and controlled by the state and corporations. While Boyer's position is closer to that of the technological dystopians, her unique contribution is to get at the relationships between virtual and material space: becoming overwhelmed by the former, the latter is being expelled from the visual representation of the city. By looking at the issue of virtual public space and virtual public life from this angle, we can understand the nature of public space in the new information age in two ways. First, since social inequality is still firmly embedded in material cities, any virtually-based democratic public space is

an illusion that can only obscure social reality from our perception. Second, conversely, since the perception of the city is highly mediated by information technology, the discussion of democratic public space and public culture in the city cannot ignore the powerful and, for Boyer, often negative influences of the images and messages that travel through virtual space.

There is, however, a major limitation inherent in Boyer's analysis of virtual pubic space—her failure to come up with progressive strategies to improve virtual space. Like most technological dystopian thinkers, Boyer's understanding of virtual space often stems from a mistrust in the advance of new information technology. However, it seems apparent that virtual space is here to stay. Given this, simply to reveal the negative side of virtual space and reject the possible virtues of a virtual public life does not deal with the complex relationship between virtual world and real world. Instead, it seems far more constructive to think critically about how we can take advantage of the space created by new informational technology. Through a technological dystopian perspective, however, Boyer tends to see the virtual world only as an obstacle in the struggle for urban publicness, unable to recognize the potential ways in which virtual space might facilitate and enhance democratic public life.

To be sure, without a concern for material space and its preservation, the utopia of virtual public space is merely an illusion. However, it is equally true that communication technology is becoming significant to struggles for democracy taking place in material

public spaces, since it has the potential to enlarge the scope of public space from local to city to region to nation and even to the world. For example, in the protest over Tompkins Square in New York City in 1988, through the medium of television, the site of a local park became a public space for all New York residents to debate the issue of homelessness (see Smith 1993). Likewise, in the student protests in China's Tiananmen Square in 1989, through intensive television reporting and the mass of information spreading across the internet, the square became a global public space for struggles over democracy and freedom (see Hershkovitz 1993). These two events illustrate that it is important for theorists of public space to see both the limitations and potentials of virtual space. Only in this way can they properly theorize the rising phenomenon of information technology and propose efficient strategies that might lead to a democratic public realm in the city.

Conclusion

After a discussion of the strengths and limitations of Boyer's critique of virtual public space, I conclude this essay with two implications for the future of studies of public space. First, virtual space is neither a new world where a genuine democratic public life can be constructed, nor a fantasyland that only distracts our attention from real social issues taking place in tangible material space. Rather, virtual space extends the battlefield of struggles over the democratic public realm from material cities to cybercities. It is a terrain that cannot be embraced or rejected outright, but one that requires our imagination and effort in order to affirm the public good in the city. Second, because

of the growing ambiguity between the material and the virtual in our visual perception of the city, critical urban theorists have to develop new discourses for comprehending and theorizing the nature of public life in the new information age. Boyer has introduced a possible agenda for future research of public space, but it will require greater efforts in order to fully develop sufficient knowledge and strategies to realize democratic public space in the new information age.

Endnotes

¹According to Boyer, the City Beautiful movement—a planning narrative that aimed to regulate cityscape through Beaux-Arts classicist architecture and urban design—was introduced to the United States in the early 1920s and radically changed the urban landscape of New York. Thus, by returning to Beaux-Arts classicism, architecture in New York "retreated backward, utilizing the representational images of sovereign power that it believed could be localized in and deduced from scenographic ensembles inserted into the order of the city" (Boyer 1983: 62).

²In his review of *Dreaming the Rational City*, Christopher Silver points out that planning discourse was not the only element that influenced urban practices in the twentieth century. Silver argues: "In some respects, planners were far less influential than is suggested by Boyer. At the same time, they operated from an ideological base that lay beyond the bounds of the rational city's model" (Silver 1989: 345-46). Likewise, Mark Bouman also criticizes that the social history is missing from Boyer's analysis in *The City of Collective Memory* and therefore the history of the

city is reduced to her own "view" of the city. In his discussion, Bouman contends that "one will not find much social history at play in her notion of what the "collective" is; her tendency is to use the first plural and to assume that some sort of collectivity exists although it is obviously plural in nature" (Bouman 1995: 487).

³Sharon Zukin has represented her idea about public space this way: "Public spaces are the primary sites of public culture; they are a window into the city's soul. As a sight, moreover, public spaces are an important means of framing a vision of social life in the city. As both site and sight, meeting place and social staging ground, public spaces enable us to conceptualize and represent the city to make an ideology of its receptivity to strangers, tolerance of difference, and opportunities to enter a fully socialized life" (Boyer 1995: 260).

⁴According to Boyer, the concept of democratic space arises in the late nineteenth century, however, it is being altered in the late twentieth century. Before the end of nineteenth century, urban public space is usually designed as a ceremonial place to represent the power and sovereignty of the ruling class. After the political revolutions of the eighteenth and nineteenth centuries, however, the conception of urban public space is transformed from space that symbolizes authority into space that symbolizes authority into space that symbolizes democracy, a place where public gathering and debate become possible. At this time, however, users of the public sphere were restricted to the bourgeois class, who dreamed of building a "rational bourgeois public sphere." At the end of late nineteenth century, the

bourgeois notion of public space is challenged by the unrest of the working class, who demand public access to the political process and redistribution of social resources by the state. Thus, public space came to be regarded as the "public sphere of the welfare state," accessible not only to the middle class but to other social classes in the city. By the early twentieth century, cities in the Western world had established civic space by constructing municipal buildings, public libraries, railroad stations, public parks and parkways, bridges, and statuary, for these were seen as embodying the ideal of democratic public sphere (Boyer 1994: 7-8).

⁵In their research, Graham and Aurigi (1997: 28) found that there are three different groups using computer networks: the elite groups, the less affluent and powerful urban consumers, and the marginalized groups facing poverty and structural unemployment. Among the three groups, only the first can take full advantage of the interactive nature of the Internet; the middle group tends to passively accept information available on the Internet, whereas the latter is altogether excluded from access.

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LIANG-YI YEN, a doctoral student in the Department of Urban Planning at UCLA, is interested in urban public space and its relation to globalization. He holds a masters degree in planning and has engaged in several historic preservation and community building projects in Taiwan.