

THE ROLES AND LIMITATIONS OF URBAN DESIGN IN SHAPING CITIES AND THEIR PRECINCTS IN A GLOBALIZING WORLD

Jon LANG*

Cities and their precinct are shaped by many hands within the capital web of public capital investment policies and the invisible web of the laws that shape the operations of the real estate market place and establish what is and is not equitable within a society. Urban design intervenes in the political arena to shape capital investments decisions (particularly with reference to the infrastructure of cities) and in the legal process by establishing guidelines within which design decisions are made. The objective is to shape the public realm of cities to maximise the benefits, explicitly or implicitly, for particular sets of people within some concept of the public interest.

THE NATURE OF THE PUBLIC REALM

The *public realm* is an ambiguous term. It deals with both the public aspects of the physical world that one inhabits and with the world of ideas that is subject to public scrutiny. Thus the debate about cities, socially and physically are concerns of the public and while the focus of urban designer's attention is one the physical world, it has also to be concerned with the social and the interrelationship of the physical and social.

While a significant portion of cities – much of its infrastructure and open spaces – is in public ownership and might be considered to simply be *the* public realm, it is not quite as easy as that. The interior of public buildings and places such as school playgrounds are not necessarily open to the public and there is much quasi-public space (such as the interiors of shopping arcades and shopping malls) that is.

While the narrower focus of urban design is on the ground floor of cities, its use and appearance, much is affected by the uses of the adjacent buildings and of the third (and, indeed, the fourth) dimensional quality of built environments. While the façades and entrances of buildings are privately owned in capitalist societies, their location and appearance very much affects the public's perception of the world and so are frequently deemed to be subject to public control. Extending the concept even further, access to light and sunlight very much affects the quality of life of people and it is deemed to be in the public interest to provide access to them. What then is 'in the public interest'?

THE NATURE OF THE PUBLIC INTEREST

Urban designers have taken the stance that their work is in the public interest (Barnett, 1974). Certainly, the public has been interested in urban design issues and, in general, has been more supportive of urban design than many design professionals. Yet one can differentiate between the *public interest* and the public's interest. The former is deemed to be based on some model of what is good for people and the second is based on what people say is good for themselves. Using the former definition it is easy if one, as many designers have done, falls into the trap of a 'give-'em-what-I-think-is-good-for-them attitude'. An alternative position that has been taken is 'to-give-'em-what-they-say-they-want'. The latter tends to be the politician's attitude.

The position taken here is that neither approach is satisfactory. It is in the public interest to bring to the public's attention ways of doing things that they had not thought of before. Such knowledge must, however, be based on an empirical understanding of the range of human behaviors and values. It must also represent the interests of diverse segments of the community – young and old, rich and poor – within different geographic and cultural settings. Urban design decisions are ultimately made in the political arena and the power of an urban designer's arguments depends on the quality of the evidence used. Claiming professional expertise and possession of the 'right stuff' is not a viable alternative (see: *Daubert vs. Merrell Dow*, U.S. Supreme Court, No. 92-102, decided 28 June 1993).

* Faculty of the Built Environment, University of New South Wales, Sydney, NSW, Australia 2052,
JonL@unsw.edu.au

THE NATURE OF URBAN DESIGN: THE LESSONS FROM EXPERIENCE

In recent times, the term *urban design* has come to mean almost anything as various design fields try to claim the field as their own. It is now being used loosely to refer to individual buildings and landscape designs built in cities (see, for example, Broto, 2000). As such it signifies almost nothing. Perhaps it is wise to go back to the original usage of the term as established by those who first used it at Harvard and at Pennsylvania during the late 1950s at a time when both the traditional professions of architecture and city planning fled the field rather than engage in responding to the criticism of the Modernists' efforts in city and precinct design.

Urban designing is indeed an activity that overlaps many others but can one can identify a number of types of design that, if nor unique amongst the professional design fields, are central to what can be regarded as urban design practice. It is possible to distinguish amongst urban design as: 1) *Urban Physical Policy Formulation*, 2) *Infrastructure Design*, 3) *Piece-by-Piece Urban Design*, and 4) *Total Urban Design* (see also Lang, 1997).

Urban Physical Policy Formulation

Many urban planning, land use and zoning regulations have consequences for the three- and four-dimensional quality of cities and their components. Sometimes these impacts are intended but others not (Craighead, 1991). For instance many of the building set-back requirements specified in zoning ordinances in order to obtain more open space in cities have found to have had a deleterious effect on the quality of a city's streets. They have reduced the possibilities of obtaining continuous façades and entrances to shops at the street level and thus without intending it have inhibited the liveliness of the streets. Similarly, land use and transportation decisions made in the name of efficiency by planners have had great effect on the day-to-day quality of human interactions.

Many city planning decisions are made from the top down – from the large scale to the small scale and in terms of land uses. The quality of life of people, however, depends on the range of behaviour settings available for them to use (Barker and Schoggen, 1973). Decisions about the nature of the good environment for people of different cultures and at different stages in their life cycles should have an impact on land use decisions at a much finer grain of analysis than city planners usually think. Thus there needs to be a collaboration amongst city planners concerned with social and land use policies and other design professionals working at a diverse range of urban scales.

One type of urban design is thus concerned with the broad issues of zoning to achieve public benefits. It is applicable to the city and precinct design on green-field, brown-field and urban renewal sites. The concerns are not only with controlling development but also with providing developers with incentives to build in particular ways and to provide specific facilities. It may involve the formulation of standard land use zoning ordinances, incentive zoning and/or the creation of special zoning districts such as tax increment zoning areas and business improvement districts (Houstoun, 1997).

Infrastructure Design

Urban design as infrastructure design has also been referred to as 'plug-in urban design'. The public infrastructure of cities is vast. Not only does it consist of the open space between buildings – streets and footpaths – that provide for movement channels, but also for public facilities such as museums, schools and more mundanely sewage farms and fire stations. The infrastructure has a catalytic effect on the investments that individual developers make. It shapes the locational decisions developers make but leaves them with the freedom of choice about what they actually plug into the infrastructure network.

In much recent urban design work, the concern is with the 'global city', 'the information city' and the provision of the telecommunications infrastructure that provide systems for the developers of buildings to plug into. More traditionally, in developments such as that for the new city center of Naples in Italy, the infrastructure provided has really to do with pedestrian and vehicular systems. Electricity, water and sewage infrastructure systems can be made to work almost anywhere. In the case of Naples, however, the building designs to be plugged into the infrastructure system had to follow specific design guidelines so the scheme ends up being a piece-by-piece private development with the infrastructure provided by the public sector. Often today it is the private sector that has to build the public infrastructure in order to have the right to build the buildings that it desires to build.

Piece-by-Piece Urban Design

To many people who regard themselves as engaged in urban design, piece-by-piece urban design is the heart of urban designing endeavors. Whether one is designing a new town or an urban renewal project, the design process is one of establishing goals, developing a conceptual design and then designing use specifications and guidelines for the components – buildings and landscaped spaces – to be developed and designed by a number of developers and their architects while retaining some overall behavioral and visual coherence. The goal is have the parts orchestrated to add up to a whole (or alternatively, if it is deemed in the public interest, to not to).

Total Urban Design

Much urban design, particularly in socialist countries, but also in large-scale housing developments in capitalist societies, has involved not only infrastructure design but also building design. It has thus covered designs from a new towns scale, to precinct scale, to building scale, and where fixed features are concerned, to room design. Thus this type of urban design can justifiably be called *Total Urban Design* when one team of design professionals carries it out. It is the closest type to large-scale architecture. It involves the type of control – freedom of actions – that architects, in particular, want to have at their command. They seldom have it today.

Throughout the world the experience with this kind of design, even in the hands of the architects and architectural teams considered to be the most creative in the world has been less than encouraging. The so-called failures of this type of project gave rise to the development of urban design as a professional field during the 1950s and 1960s in the first place. It is extremely difficult to replicate the diversity and richness of traditional cities when one pair of hands, collective or individual, is at the helm.

In capitalist societies today, total urban design projects are much more limited in size than during the early years of the second half of the twentieth century. Few Brasílias are being built now, but there are still large-scale mass housing developments taking place in countries as diverse as South Korea, the People's Republic of China and the United States. In the former two they tend to be government sponsored while in the United States, it is private enterprise that takes the initiative, particularly on the suburban fringes of cities. The types of design emerging in diverse societies are significantly different.

WHAT CAN AND CANNOT BE ACCOMPLISHED THROUGH URBAN DESIGN?

In all societies, economic forces and taxation policies are important in shaping cities. In highly capitalist societies this fact is particularly important to recognize. Urban designers can establish approaches to and policies for the design of cities and, more often, their precincts that intervene in the 'natural' process of urban development but they cannot swim against the economic tide. Their work is part of the development process.

The urban design process, at any scale, involves the setting of policies, the development/design of a conceptual, or illustrative, design, designing the guidelines to achieve it and overseeing the implementation process. One of the major decisions that have to be made and accepted by overseeing politicians and public officials has to do with how intrusive into private decisions should the guidelines go. Although the data are scarce it appears that the general public wishes the controls to be far-reaching – they see urban design activities to be on their behalf. Individual developers and architects, in contrast, want few restrictions. The reasons for developers and architect to want few restrictions is essential the same – they want to do things their own way. This usually means the way they are used to carrying out their activities. The perception of developers as people motivated only by the profit motive appears to be misleading; they are as much *prima donnas* and fashion conscious as most architects. Their values and those of most architects do, however, differ considerably.

In developing conceptual site designs whether for an empty site or for urban renewal, urban designers and the lay public both must realise that the physical arrangement of the built world is not determining in its control of individual or group behaviour. It is only determining if the *affordances* for an activity are not contained in the layout of the environment (Lang, 1987). At best the built world only provides a rich array of behavioral and experiential possibilities – possibilities for activity systems and for group identity. In the former case the milieu of the public realms of world are stages for actions and in the latter the milieu is a display.

Urban designs can thus provided the mechanism for people to attain their behavioral and aesthetic ends; they can enrich human experience. They cannot shape human behavior to any great extent; they can reinforce emerging

trends. As such urban designing efforts at the city or precinct level are important provided they recognize the motivations that guide behavior. Attempting to run contrary to human expectations is seldom successful.

The public realm as a set of behavior settings

Architects and landscape architects tend to look at the public realm as a geometry illuminated by light. They may have a generalized and, alas, simplified view of what that geometry can afford. A richer way of considering the public realm is as a set of interwoven and nested hierarchy of *behavior settings* – a standing (or recurrent) pattern of behavior in a fixed or adaptable milieu. There are two main types of behavior settings – 1) places of localized activities, and 2) the links between them. What is clear is that many links contain places and places also serve as links. The set of behavior settings that exist in a place define the culture of a society of which they are a part. We have learnt that taking physical forms from one culture to another do not necessarily afford the patterns of behavior that define the second culture.

What is important for urban designers to do is to identify the richness of the standing patterns of behavior carried out not only by adult males but also by all segments of the population that might be considered to be their clients. It is also necessary for them to think of those behaviors that might exist – that add to the richness of the world and serve as educative environments for children and adults alike. Too often in seeking a geometric purity or, alternatively the opposite, visual richness of places as a works of art, designers have lost sight of what the public realm can afford. They think of it primarily as a display that photographs well in certain lights at certain times of the year. Hence the behavioral dullness of many so called ‘signature-designs’ by architects and landscape architects of high repute! We have the knowledge to do better now.

The public realm as a display

Much attention has been paid in recent years to the public realm as a display. Physical forms and patterns communicate messages about the nature of a society and its people to habitués and tourists alike although the messages may well be very different. They communicate through the associations that people have with different forms and materials and the quality of workmanship. The meanings evoked depend on what people know from their day-to-day experiences with the world or what they see in magazines and, perhaps, above all in advertising – the products of image makers.

The function of the built environment as a display has often over-ridden other considerations in its design. The appearance of the built environment is an important contributor to a people's sense of identity and their feelings of self worth – of who they are (see Lang, 1987 and Lang, 1994 amongst many other sources). Indeed people often take a pride in the newness, modernism, of the appearance of the world, even if it does not meet their needs on other dimensions. They are prepared to give up on many dimensions of environmental quality in order for its symbolic aesthetics to fit their self-image of who they perceive they would like to be. They want to be fashionable and the architectural profession as a whole is quite willing to go along with this attitude. How long this situation will persist is open to question.

The New Urbanist movement is, perhaps, a reaction to the world aesthetic situation that evolved during the 1980s and 1990s. It seeks an identity in the past – not copying the past but drawing from it. While the name evolved in the United States, it has parallels elsewhere in the neo-traditional attitudes towards design displayed in many countries, including Asian countries such as India (Lang, 2001). The goal has been to select past types as the basis – in direct or abstract ways – for establishing a regional identity.

URBAN DESIGN IN AN ERA OF INTERNATIONAL CAPITAL INVESTMENT MARKETS

There are many expressions of fear that the world is becoming homogenised because the aspirations of international capital investment providers is similar. It is perceived that the demand is for a ‘modern’ architecture, however, inappropriate it is to the climate and the culture of a place. In this view, ‘modern’ architecture follows one of two approaches to what architects would consider ‘post-modern’ styles. The first approach is for buildings to be of shiny materials – marble, steel and glass and the second is for the buildings to contain elements of classical architecture – pediments and columns of various types mixed with local referents. Often the two styles are mixed (Lang, 2001).

Several hundred large-scale design projects and proposals have been proposed for the Asia Pacific Rim region alone. In Vancouver, there is the Concord Pacific Plaza; in Bangkok, Muang Thong Thani has risen from rice

fields since 1990; The Pudong Development area in Shanghai is transforming the center of that city; luckily Kula Lumpur's Linear City stretching for twelve kilometers in the air-rights over the Klang River is moribund; the Amano proposal Tokyo suggested major projects for the Tokyo Central Station area, the Shodome Station area and the massive redevelopment of the waterfront of Tokyo Bay – the Rinkai Funu-Toishin (Rainbow) Town development. All these developments, while each is unique, have the aesthetic character of a theme park as much as anything else. Their architectural expression is within a universal post-modernist exuberant mode.

There is a certain truth to this stereotype if one looks at such schemes and others being executed around the world, but the picture is flawed. Despite similarities in approaches to design each city has so far retained its own character partly because of the structure of open spaces it has inherited from the past and partly because the detailing of designs and signage is unique to each. Nevertheless, the fears expressed, often by architectural tourists, need attention. Urban design policies can make a major difference to the retaining of a unique sense of place by different cities provided they are based on an understanding of a culture and its aspirations, the economics of the market place and how architect think.

Architectural and urban designs are often the products of a process of *mimesis* – a process of adapting standard solutions, or paradigms, to the situation at hand. This is clear in looking at the mass housing projects in various countries around the world. The process has not been one of really examining local problems and attempting to deal with them directly. This does not have to be the case.

The creation of a sense of place – the aesthetic dimension

In the criticism of much that is going on around the world today, the concern is what the world should look like – its visual aesthetics. Tentatively one can offer three interwoven reasons for the similarity of what has been designed. Partly, it is due to designers – architects and landscape architects – striving to bolster their own self-esteems and their efforts to capture a niche in the market place for their services. Partly, however, it is what city officials and citizens themselves desire, as they seek to express their own self-esteems by have fashionably modern cities. They perceive that they have to get on the early twenty-first century fashion bandwagon to tap into the flow of global capital. Thirdly, the international players in the real estate market seek environments that enable them to have advanced tele-communications facilities and a computer literate work force housed in skyscraper towers that are spectacular in design.

There is some evidence that both architects and their clients are tiring of the search for visual novelty and that, around the world, people are looking at their own traditions as the basis for design (Lang, 2001). This position is, in many ways, the one promoted by the New Urbanists (Katz, 1994). Interestingly enough, the values of the new urbanists who advocate an empiricist approach to design are so at odds with much architectural thinking their views are barely discussed in architectural schools. Yet their ideas are very much in tune with the evolution of architectural ideology as it is emerging from much of the mainstream of the profession itself.

The advantage of looking back at one's own traditions is that the aesthetic quality of the environment emerged over time in dealing with local climatic and cultural conditions. The problem is simply that the world has changed and the introduction of automobiles and the spatial requirements of driving and parking make the old tight-knit urban environments poor exemplars to follow. This said, the patterns of traditional worlds can offer much to the designers of the future provided their limitations are fully understood. Many New Urbanist (now often referred as Smart Growth) ideas are based on a highly simplified model of people and human behavior (Lang, 1987; O'Toole, 2001)

There are two approaches that urban designers can follow in setting policies for the aesthetic effect of cities and their precincts in the future. The first is to make policies and design guidelines that are climatically appropriate with visual elements that pick up on traditional patterns, and advocate the use of local building and plant materials, including the recycling of materials. The second approach is to follow the first but to use the traditional patterns that carry symbolic meaning figuratively and not literally as advocated by Robert Venturi almost forty years ago (Venturi, 1966). The problem with this latter approach is that few lay people can identify with the architecture. They can, nevertheless, as they travel around, see that their own worlds are visually unique. A third approach is not to worry too much about the theatrical character of the milieu. Rather designers should worry when developing design policies on whether it is better to strive to achieve visual uniformity or diversity in the future precincts, or districts, of cities or not.

The case of Battery Park City, New York is instructive (Gordon, 1997). The decision made, whether one agrees with it or not, was to create a precinct with a New York rather than an international character. The aesthetic

model chosen for the buildings in Battery Park was based on buildings in the areas of Manhattan much loved by New Yorkers: the Gramercy Park neighborhood and other 1920s and 1930s type environments such as Morningside Heights. The design was broken into two aesthetic parts – a foreground building (which is international postmodernist in character) and background buildings that are New York in character. The former consists of the World Financial Center and the latter the rest of the buildings. The decision was made to make each building unique but of the same general character by specifying the building volumes, the ratio of window to solid walls on the facade, the location of string courses, and the nature of materials. What has been achieved, again whether one admires it or not, is a uniquely New York environment. Similar design policies can be developed for many other situations. It is nevertheless the ground floor of cities – their public realms that determine their character. This character is indeed partly due to the aesthetic effects created, but it is also due to the behaviour settings that exist and thus the people and behaviors involved, and the way the milieu affords those behaviors and aesthetic values.

The creation of a sense of place – the behavior settings

While most attention in the globalization debate has focused on the appearance of buildings, it is the ground floor of cities, the nature of shops and houses and how they and their entrances meet the street, and the nature of signs and signage that gives an identity to a place. Much new design eliminates the richness of the small grain richness of the built environments that have grown in a piecemeal way in the past. This simplification is sometimes done purposefully in the name of progress and tidiness. Sometimes it reflects the changing scale of economic activity where small-scale operations give way to the large in the name of economic efficiency. Often, however, it is simply due to designers' failure to understand the full range of functions of the built world.

For instance, what makes an educative environment for children (other than the provision of schools and playgrounds) falls outside the scope of concern of most architects and landscape architects. True children can learn much from television and the Internet, but it is the first-hand experiencing of the world that enriches childhood experiences. They need to be consciously considered by designers. The information is there to be had and has been for the last twenty years. The same issues arise in thinking about other groups of the population, particularly those who either because of economic reasons, stage in life cycle concerns or health do not have the mobility of most designers themselves to seek behavioral opportunities. Many designers continue to model ideas for the future the world on themselves.

There is often indeed perceived to be a clash between the attainment of behavioral richness and the attainment of what are deemed to be middle or upper-class environments visually. This clash arises because the behaviorally rich environments are often associated with low-income areas and their sanitary and visual qualities. There is often also a clash between children's needs and adults'. With many societies regarding children as a commodity and increasingly many adults resenting the presence and sound of children playing, there is indeed a clash that falls outside the capacity of urban designers to resolve except through the establishment of highly segregationist policies. The increasing segregation of activities by age group is, perhaps, a social issue of worldwide concern. It correlates highly with the increase in anti-social behavior of adolescents.

CONCLUSION

The potential role of urban design in an era of when global zing forces, intellectual and financial, seem to be shaping cities and/or their precincts in the future should be neither exaggerated nor denied. It is a political activity and there will be many debates about what behavior settings should exist and what the aesthetic nature of cities should be. These debates can take a rational nature if the research of the past fifty years is heeded. We have learnt that pure Rationalist dreams about the future behavior of people have had many shortcomings yet the Empiricist tradition seems to trap us in what we are doing now.

There is still reluctance on the part of the traditional design professions – architecture in particular – to adopt a problem solving rather than a product copying approach to designing. Those who developed urban design as a discrete professional activity in the past were well aware of the difference between generic and particular design solutions. If, however, the design professions are reluctant to change their modus operandi, then it is up to the academic community to present to the design professions generic designs of cities and their precincts making sure that their logical basis is clear and the geographic and cultural context in which they are applicable is also clear.

If urban designing is an argumentative process then such generic solutions can be the basis for debating what the future of a particular city or its precinct should be. As such arguments can be heated, it is tempting to fall back on a laissez faire approach to design. If this is done, cities will rue the opportunity costs involved.

REFERENCES

- Roger BARKER and Phil SCHOGGEN (1973). *Qualities of Community Life*. San Francisco: Jossey-Bass.
- Jonathan BARNETT (1974). *Urban Design as Public Policy*. New York: Architectural Record Books.
- Carlos BROTO (2000). *New Urban Design*. Barcelona: Arian Mostaedi.
- Paul M. CRAIGHEAD, ed. (1993). *The Hidden Design in Land Use Ordinances*. Portland, Maine: The University of Southern Maine.
- David L. A. GORDON (1997). *Battery Park City: Politics and Planning on the New York Waterfront*. New York: Gordon and Breach.
- Lawrence O. HOUSTOUN, Jr. (1997). *BIDs – Business Improvement Districts*. Washington: Urban Land Institute.
- Peter KATZ (1994). *The New Urbanism: Towards an Architecture of Community*. New York: McGraw-Hill.
- Jon LANG (1987). *Creating Architectural Theory: The Role of the Behavioral Sciences in Environmental Design*. New York: Van Nostrand Reinhold.
- Jon LANG (2001). *A Concise History of Modern Architecture in India*. Delhi: Permanent Black.
- Jon LANG (1994). *Urban Design: The American Experience*. New York: Van Nostrand Reinhold (now John Wiley).
- Randal O'TOOLE (2001). *The Vanishing Automobile and Other Urban Myths*. Brandon, Oregon: The Thoreau Foundation.
- Robert VENTURI (1966). *Complexity and Contradiction in Modern Architecture*. New York: The Museum of Modern Art.