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Developing Urban Design as Public Policy: Best Practice Principles for Design Review and Development Management

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ABSTRACT *This paper develops and discusses some 12 principles for best practice design review internationally. It seeks to embed these principles in plan making, design policy and guideline formulation and development control in planning systems at various stages of development. The principles are derived from critiques of review practices in the USA and Western Europe in both regulatory and discretionary planning systems. The principles are grouped under four headings: community vision, integration of planning and zoning, substantive urban design principles and due process in review. Each principle is discussed separately with examples of best practice and identification of common problems and solutions. Particular attention is paid to the incorporation of sustainable development perspectives, and the need to construct substantive and place-responsive design principles and forms. A conclusion discusses the ambition of these principles, their implementation in difficult economic and political contexts, and the tensions between design and diversity.*

Introduction

Any international consideration of the design dimension of planning must commence with some discussion of the differences between regulatory and discretionary planning systems. In his comparison of Anglo-American, French and Hong Kong planning systems Philip Booth notes that development control predates plans per se, and that at the outset, "everywhere appeared to follow the pattern of establishing regulatory norms in the form of measurable dimensions" (Booth, 1995, p. 5). However, he notes that by the 20th century, when land-use planning emerges, two different types of planning system had emerged, reflections not of different traditions or understandings of urban development, but rather of different legal and administrative systems.

The first of these two systems is the regulatory system that is associated with most of Western Europe and North America, and is based on administrative law and a written constitution. It delivers clear development rights and floor space limits and often building envelope controls. Under such systems development control is "based on a complete statement of what is permissible made in advance" (Booth 1995, p. 6) and the dimensional controls are spelt out in plan or zoning regulations. This creates a high level of certainty for all parties, whether

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developers, controllers or the affected public. More detailed design considerations can be added to either the plan or the zoning system.

The second of these two systems is the discretionary system which is associated with Britain and Ireland, and is much more pragmatic. Based on case law it does not spell out the full basis of decision making in advance, although the plan, if there is one, sets some basis, which is largely locational and land use, for decisions. However, while control decisions have to be plan-based, they are always susceptible to 'other material considerations' (embracing the full range of planning matters). Such systems are noted for their flexibility, their lack of certainty, and the trust they place in professional planners who advise on, and the politicians who take, the decisions and utilize this discretion. Design is one such material consideration in a discretionary system, but one that has assumed greater importance over time.

In the matter of design the distinctions between the regulatory and discretionary systems have become blurred, particularly with the invention of design review as an additional control process overlaid on the regulatory permitting process. From the Aesthetic Advisory Committees established in the Netherlands in 1922 to the Design Commissions and Review Panels established in numerous American cities from the mid-1970s on, regulatory systems have recognized the need to consider the design quality of development in a more detailed and expert way. Meanwhile, in discretionary systems there has been the progressive development of design guidance and plan policy, much of the policy very general but some of the guidance quite prescriptive, in a bid to make control less reactive, and to give developers clearer ideas about how to make their developments more acceptable to the community. There is undoubted convergence in approaches to design control internationally in both regulatory and discretionary planning systems. The former seeks more discretion and the latter seeks greater certainty, while both aim to achieve higher design quality (Nelissen, 1999). These trends have had their critics, particularly within the development industry and the architectural professions, who see their commercial judgement/opportunities and professional skills, respectively, threatened by imprecise design policies, design illiterate controllers, lay taste and municipal politics (Punter, 1987). Design control everywhere is repeatedly challenged by these critics, and from time to time the state intervenes to set legal limits to or reduce intervention, although, paradoxically, this can result in an increase of procedural rules to achieve substantive deregulation (e.g. the Netherlands: Nelissen, 2002).

The Evolution of Design as Public Policy

It has taken urban design a long time to establish a major role in planning practice in developed countries. Jonathan Barnett first coined the notion of urban design as public policy in 1974, reflecting on the instruments he used to manage the redevelopment of New York from the late 1960s onwards (Barnett, 1974, 1982). Other American cities developed sophisticated plans and review processes in the early 1970s, notably San Francisco and Portland (see Figure 6) on the west coast of the USA (Jacobs, 1980; Punter, 1999a). Through the 1980s design review took root across many American cities. Discretionary processes were overlaid upon traditional zoning and generally rather vague comprehensive plans, and both were rarely integrated into a coherent, future-oriented planning framework (Habe, 1989, Shirvani, 1981, 1992; Onaran & Sancar, 1998). In Europe design

concerns have a much longer history, but significantly deepened in response to post-war development and renewal practices, and increased support for the conservation of the historic urban fabric in the face of large-scale redevelopment and suburban expansion. These concerns were expressed in a range of new approaches including a more sophisticated hierarchy of development plans, the invention of design guidelines, stronger conservation controls and additional design review processes. However, progress was often interrupted as property developers, investors, landowners and architects lobbying for quicker planning decisions and less onerous planning requirements sought to reduce levels of design intervention. The development of more sophisticated design control in Britain was reversed in the 1980s for more than a decade by a Conservative Central Government committed to deregulation, and similar pressures were experienced in Germany, Sweden and the Netherlands in the 1990s (Punter, 1999b; Schaller, 1999; Nelissen, 1999) and again in 2006 in the latter.

In general, by the mid-1990s, design was consolidated as a major concern in planning, and several new agendas were driving its development in both policy and control. These included greater public concern with the protection of a sense of place and local distinctiveness in a globalizing world, greater environmental concern with the sustainability of development at the macro and micro scale, a more strategic view of urban design as a shaper of urban form citywide, and greater concern with urban regeneration (particularly reversing the loss of population from major cities). There was a desire to improve the attractiveness of urban settlements as places to live and work, and this was reinforced by the recognition of the role of cities in initiating and driving forward economic development. City image enhancement and place marketing went hand-in-hand and urban design initiatives were seen as important means of attracting economic investment both in employment and property, especially in the international tourist and convention markets (Harvey, 1989a; Gospodini, 2002; Madanipour, 2006). The notion of promoting 'urban renaissance' as a fundamental plank of economic and social policy at local, regional and even national levels became commonplace in the UK (Urban Task Force, 1999) and elsewhere in the western world (Harvey, 1989b).

At present 'urban design as public policy' is tending to be driven by the imperatives of 'the entrepreneurial city' and by urban competitiveness strategies, as cities respond to globalization and neo-liberalism (Cuthbert, 2006). This is most visibly expressed by flagship property regeneration projects, iconic buildings and spectacular spaces, events and festivals (Hannigan, 1998; Miles & Miles, 2004). Urban design is often complicit in the 'serial repetition' of regeneration strategies (Harvey, 1989a), in public-private partnerships that serve the interests of capital at the expense of the local citizenry and in the delivery of unsustainable development. While local authorities selectively apply urban design practices to aestheticize megaprojects, or deliver improvements to the public realm in the areas of highest real estate value, more democratic, egalitarian and sustainable design practices are being eclipsed by resource and skill shortages, by an emphasis on the speed rather than the quality of decision making, and an unwillingness to threaten any inward or indeed indigenous investment. As Reinier de Graaf of OMA architects recently commented, in the particular context of Dubai and the other Emirates, the increased power of private initiative to shape all cities places an ever-greater importance on the public authority to develop appropriate judgment criteria and to apply these rigorously in the review process (de Graaf, 2006).

Developing a Set of Principles for Best Practice Review

Substantive critiques of design review practices were developed by academics and practitioners in the late 1980s and early 1990s, mainly in the USA but also in the Netherlands (Nelissen & de Vocht, 1988) and the UK (Punter, 1987). Richard Lai (1988) studied practices in New York and San Francisco and came up with a very useful set of practice recommendations. As a lawyer he was able to articulate the ends and means of design control and to unravel their contradictions in practice in a particularly penetrating way. James Schuster (1990) and Brenda Scheer (Scheer, 1994) researched planners and architects' experience of design review in the USA, and the latter turned this into a trenchant critique of current practice, emphasizing a range of problems of power, freedom, justice and aesthetics. In 1991 Scheer and Preiser assembled a wide range of critical reflections on international practice by means of an international conference in Cincinnati (Preiser & Lightner, 1992; Scheer & Preiser, 1994). Integrating and extending these critiques it has been possible to develop a set of principles for best practice that can work both as an international framework for assessing existing systems (see Punter, 2002, 2005), and as a means of developing better systems of design regulation in the round (Punter & Carmona, 1997).
There are four groups of principles. They embrace questions of:

- how the community might develop a vision, and the local authority a corporate programme, to develop a strategic role for urban design and provide the context for the exercise of design review;
- how planning, zoning, housing and fiscal instruments might be harnessed to help develop a comprehensive and coherent approach to design review and deliver better designed projects;
- what types of substantive urban design principles might underpin design policy, guidance and intervention; and
- what types of review processes might be adopted to ensure fairness, efficiency and effectiveness within the decision-making process.

The 12 principles are set out in Box 1 to provide a basis for evaluating, reforming or developing review processes. However, they can also play a wider role in developing urban design as public policy, stressing both its strategic and localized role, bringing all stakeholders into a closer relationship, and utilizing the full range of design and planning instruments to achieve more democratic and effective development management processes. The paper will discuss each principle in turn, reviewing both the way that each has been interpreted and implemented in cities where good design is a political priority, and exploring some of the complexities that have inhibited their implementation elsewhere, particularly in those countries which are seeking to develop such practices for the first time.

Community Vision

The first two principles deal with the necessity for the regulation of design to be based on a coherent, community-derived vision of what it means by good design or a suitable future form for urban development. This requires some type of design plan that can set out this vision and the policy and guidelines that support it, a plan that can be regularly reviewed and updated to stay abreast of market conditions and community sentiments. In Lai's critique (1988) these two ideas are treated as a single principle, but experience shows that plans are frequently quite

Principles for Progressive Urban Design Review

Community Vision

1. Committing to a comprehensive and coordinated vision of environmental beauty and design (Brennan's Law) (Lai, 1988, p. 426).
2. Developing and monitoring an urban design plan with community and development industry support and periodic review (Lai, 1988, p. 429).

Design, Planning and Zoning

3. Harnessing the broadest range of actors and instruments (tax, subsidy, land acquisition) to promote better design (Lai, 1988, p. 430–431).
4. Mitigating the exclusionary effects of control strategies and urban design regulation (Lai, 1988, p. 430)
5. Integrating zoning into planning and addressing the limitations of zoning (Lai, 1988, pp. 431–432).

Broad, Substantive Design Principles

6. Maintaining a commitment to urban design that goes well beyond elevations and aesthetics to embrace amenity, accessibility, community, vitality and sustainability (Scheer, 1994, p. 9).
7. Basing guidelines on generic design principles and contextual analysis and articulating desired and mandatory outcomes (Blaesser, 1994, p. 50).
8. Not attempting to control all aspects of community design but accommodating organic spontaneity, vitality, innovation, pluralism: not over-prescriptive (Lai, 1988, p. 428; Blaesser, 1994, p. 50)

Due Process

9. Identifying clear *a priori* roles for urban design intervention (Lai, 1988, p. 425; Scheer, 1994, pp. 6–7).
10. Establishing proper administrative procedures with written opinions to manage administrative discretion, and with appropriate appeal mechanisms (Lai, 1988, 427; Scheer, 1994, pp. 3–4).
11. Implementing an efficient, constructive and effective permitting process (Scheer, 1994, pp. 5–6, 7).
12. Providing appropriate design skills and expertise to support the review process (Scheer, 1994, pp. 4–5; Lai, 1988, p. 431).

Box 1. Best practice principles for the development of design review. These principles are largely derived from academic critiques of American design review practices developed between 1988 and 1994, and have been refined in studies of actual planning and design review processes in case studies across the world

weak instruments to guide corporate governance. Many interventions in the built environment are undertaken by different professionals with very different design philosophies and departmental agendas and frequently conflicting notions of what constitutes 'good design'. Both these issues have to be addressed independently to build effective control systems.

Principle 1: Committing to a Comprehensive and Coordinated Vision of Environmental Beauty and Design

The first principle derives from important legal challenges to the exercise of design review in the United States in the early 1990s. The United States Supreme Court Justice W. J. Brennan concluded that "any authority wishing to impose design review on individuals must demonstrate a community 'commitment' and a 'comprehensive, coordinated effort' to raise design quality as a precondition of regulation" (Lai, 1988, p. 426). Therefore, in the USA, local government needs to be

able to demonstrate that its pursuit of design quality not only embraces all of its planning activities but also its other regulatory functions such as building control, highways and housing, as well as its own development activities, its provision of infrastructure, parks and landscape and public realm. Coordination of these inputs and initiatives is required so that the authority can bring all of its powers to contribute to raising design standards and promoting environmental quality *before* it expects private developers to play their part by improving the design of private development. 'Community commitment' implies that the local authority is able to demonstrate that it has widespread community support for such an initiative, and that the community itself is contributing to the enhancement of design quality. Such commitment needs to emerge from public participation in plan making or other forms of community visioning. The UK has attempted to develop community strategies through extensive public consultation in order to focus corporate policy, but their relationship to development plans and thus design policies continues to be vague and remote.

The exemplars of such comprehensive and coordinated visioning include the cities of Portland (Oregon, USA) and Barcelona. Both have achieved worldwide recognition for their participative planning and urban design, and both have been able to consistently achieve design excellence in most facets of their planning and development. In Portland there is a long-established tradition of both neighbourhood and business participation in planning, and strong corporate commitment to environmental, public transport and public realm programmes and policies (Abbott, 1991, 2001; Punter, 1999a). It has been supported by the deployment of highly skilled planning staff and the development of a very coherent set of urban design plans and design guidelines (see Figure 6) that have stood the test of time. Barcelona has many similar attributes forged in totally different circumstances, the city awakening from 40 years of (Fascist imposed) development inactivity in 1976, and initiating a public space programme that transformed the liveability of the city (Marshall, 2003; Rowe, 2006). The Mayor of Barcelona attributed their success to close working relationships between City Hall and the local School of Architecture, a building of consensus with citizens through neighbourhood activism, and a focus on the quality rather than the quantity of development (Urban Task Force, 1999, pp. 5–6; see also Marshall, 2003).

Principle 2: Developing and Monitoring an Urban Design Plan with Community and Development Industry Support and Periodic Review

Fulfilling the first principle requires some form of urban design plan capable of setting out the local authority's intentions with regard to the form and quality of development expected in the locality, and a range of design policy and guidance capable of delivering it. As Lai (1988) states:

> A community design plan … serve(s) to make design review less a piecemeal and negative reaction to private development initiatives and more a part of an affirmative public process toward purposeful community design. (p. 426)

Such a plan has to be capable of attracting the support of both the community and the development industry. Obtaining developer assent to urban design plans is a considerable challenge and plans must embody realistic assessments of economic return, market demand and appropriate development entitlements (densities), as well as acceptable levels of design regulation. But community assent can be

equally difficult to obtain when there is a requirement for significant physical change, whether it be the intensification of older neighbourhoods or urban expansion into the surrounding countryside.

Arguably, design ambitions are best imbedded in a statutory plan such as a comprehensive, municipal structure or local development plan. Then they can become mainstream strategic planning objectives, can shape development in a more profound and constructive way, and be regularly monitored and updated. However, because design review is implemented through development control/permit processing functions, detailed policy and guidance might well be simply attached to the plan or cross-referenced to it. In cases of large-scale change or wholesale redevelopment in a particular part of the municipality there may well be the requirement for more detailed plans (masterplans) at the district, neighbourhood or project level to express the community's design aspirations (what Sancar & Onaran, 2001, call 'middle scale' plans) and for further policy, guidance or regulation to implement it. In inner-city contexts Vancouver's masterplanned waterfront mega-projects stand out as exemplars of consultative and collaborative planning that have consistently delivered high quality design. They formulate in sequence policy broadsheets, official development plans, re-zonings and design guidelines to develop the design in increasing detail and to provide unequivocal, effective implementation devices (Punter, 2003a, pp. 186–240). Such plans can be developed with thoroughgoing community involvement and with innovative participative techniques such as design charettes and planning for real exercises. New Urbanist, charette-based approaches to large-scale suburban development have been developed in Western Australia with a state-wide design code (see Figure 5) to guide developers and controllers (Morris & Kaufman, 1998; WAPC, 2000; Curtis & Punter, 2004), and similar approaches are being tried on large residential development sites in the UK following American models and developing various approaches to design coding (ODPM, 2003; DCLG, 2006).

It is difficult to identify exemplars of comprehensive urban design plans. US researchers have noted that the first generation of citywide design led plans in the 1970s remain unsurpassed in their thoroughgoing public participation and the depth of their contextual analysis, and that the second and third generation of plans were much more business-oriented with largely elite group participation (Southworth, 1989). Seattle's 1992 Comprehensive Plan is of particular interest because of its clear design strategy to create a network of urban villages across the city, reinforcing a hierarchy of sub-centres through investments in bus transit and public services, and reinforcing them with residential intensification implemented by re-zonings (Figure 1). Each urban village/community was required to produce a Community Plan to work out the detail, and given the opportunity to write and administer their own design guidelines working within the new zonings (Punter, 1999a, pp. 38–54).

Germany has an elaborate hierarchy of plans that express the desired form of urban development at citywide, district, neighbourhood and site levels with increasing precision and a clear and generally unambiguous relationship between each. Berlin is a particularly good example with the development of its exemplary citywide, statutory strategic development plan (*Flachennutzungsplan*) through the 1990s. This has been given clear three-dimensional expression in the development of the Planwerk Innenstadt completed in 1999, a declaration of intent for the reintegration of the eastern and western inner cities approved by the

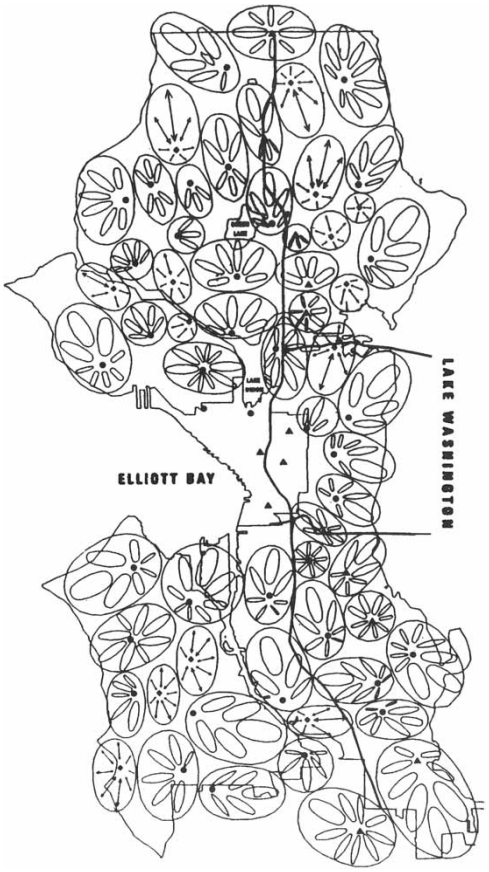

Figure 1. Seattle Comprehensive Plan: proposed neighbourhood structure and transit links 1992. This plan set out a vision of a city of urban villages, a hierarchy of urban centres, which would become the foci of residential intensification and infrastructure investment. The plan prescribed the pattern of rezonings to facilitate intensification but localized community planning processes would develop the detailed plans and associated design guidance and execute design review.

Berlin Senate and Parliament after prolonged public debate (Figure 2; see Senaltsverwalterung, 1998; Kahler, 2000).

Singapore provides another useful model with a very clear state-wide spatial vision expressed in simple strategic concept plans which are now translated into five regional masterplans (previously 55 detailed guide plans). These have increasing (but not high) levels of citizen participation, and a stronger design orientation than previously, and are backed by a range of Urban Design and Identity Plans (URA, 2002). Finally, Stockholm has very comprehensible citywide policies that respond to different eras and forms of development in order to respect the fabric of the city (Nystrom, 1999).

Integrating Design into Planning and Zoning

The next three principles explore how improved design might be promoted in planning through the use of a wide range of instruments and practices. They emphasize the importance of addressing the seemingly inevitable exclusionist

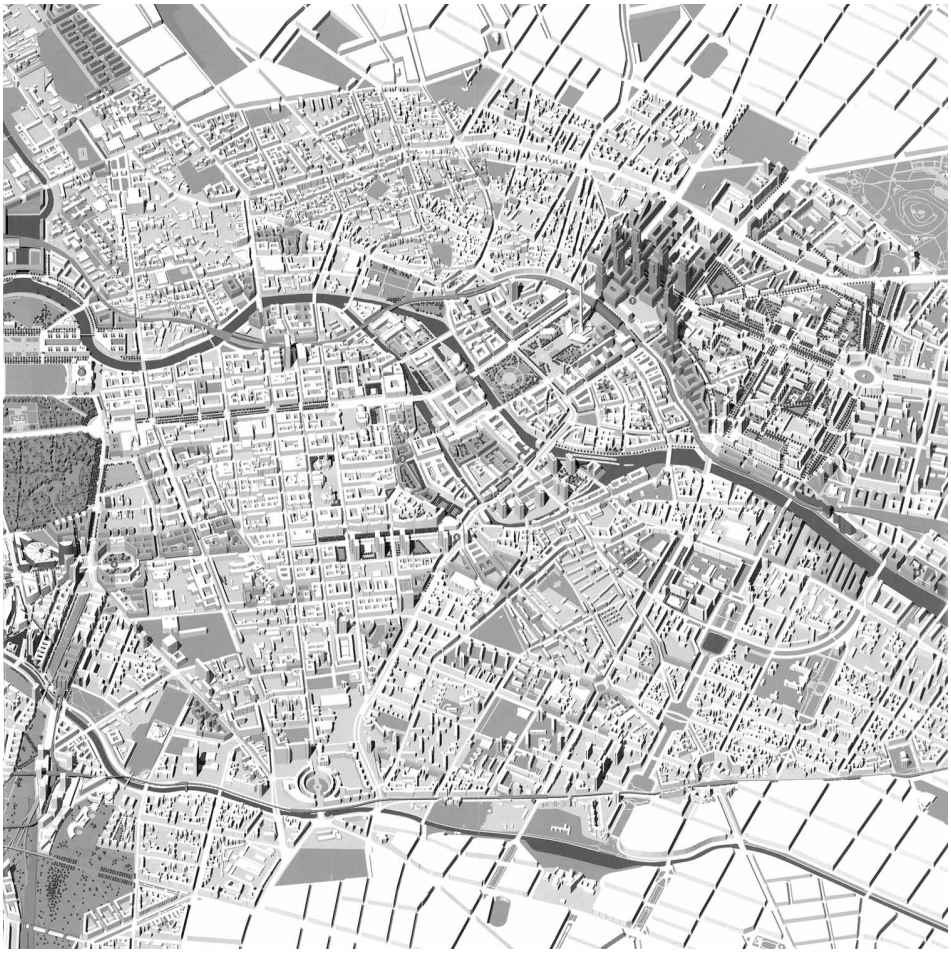

Figure 2. The Berlin Planwerk Innenstadt. This 'reconnection' plan for central Berlin was developed in 1996 and approved by the Senate and Parliament in 1999 after prolonged public debate. Its three simple rules of 22 metre cornice lines, at least 20% residential and 'straight stonework' were combined with the reassertion of the importance of historical perimeter blocks, much to the disgust of critics like Liebeskind and Koolhaus. A less historicist approach has subsequently emerged with a greater variety of urban forms and typologies.

tendencies of many design interventions with compensatory measures that can accommodate those less able to compete in urban housing markets. They embrace a wide range of potential policy initiatives to deliver a quality public realm and community facilities. They attempt to harness the advantages, and address the limitations, of zoning as a design control device.

Principle 3: Harnessing the Broadest Range of Actors and Instruments to Promote Better Design

Lai (1988, pp. 431–432) emphasizes the importance of harnessing a broad range of instruments to promote better design. He is particularly concerned with the potential of compensable regulation, eminent domain, public subsidy and tax policy as methods of influencing the physical form and social character of

development. However, he recognizes that these are often beyond the influence of local planning officials and frequently require concerted national political programmes to deliver them. Among the most important local instruments are the powers to levy impact fees and development taxes, or to insist upon particular planning requirements to ameliorate development externalities and to deliver a range of local benefits/facilities. The creation of community centres, libraries and day/health care facilities are crucial to complement what Oldenburg (1989) describes as the "third place… the core settings of informal public life" (p. 16) that constitute the essence of a quality public realm.

Vancouver has developed Major Public Facility Benefit Provisions for its downtown edge mega-projects specifying engineering standards and a wide range of requirements for schools, libraries, community centres, child care facilities, parks, cycle/walkways, public art and, most importantly, sites for social housing. It has now recognized the need to develop citywide fiscal mechanisms to deliver such facilities in association with all new developments, and this is proving a much bigger political challenge (Punter, 2003a, pp. 307–316). Much depends upon the creation of a coherent, consistent and transparent approach to the financing of infrastructure, and with the general withdrawal of central government finance from local government in the western world in recent years, local authorities have had to become ever more entrepreneurial to achieve this. In discretionary systems there is a particular danger that negotiated financial contributions subvert the pursuit of design quality as the funding of other corporate goals take priority.

There are the opportunities for public authorities to act as designers/developers themselves through land acquisition/disposal, enhancement measures and design initiatives. Positive examples include Barcelona's programme of derelict industrial land acquisitions and their redevelopment to accommodate community facilities and create public spaces (Busquets, 2006), or Bilbao's urban regeneration programme developed around the Guggenheim Museum (Gomez, 1998). On a more prosaic level, local authorities can do much more corporately to ensure the achievement of design quality. Of particular importance are Streetscape Manuals (e.g. City of Toronto, 1997; Figure 3) that specify consistent, sensitive highway engineering, and well-designed traffic and street furniture and signage, or Landscape Manuals that set out appropriate landscape standards and guidance on species selection guidance to be operated across the locality (e.g. City of San Diego, 1989).

Principle 4: Mitigating the Exclusionary Effects of Control Strategies and Urban Design Regulation

One of the strongest criticisms of urban design initiatives is that they frequently result in social exclusion through adding costs to development, promoting gentrification (deliberately or inadvertently), or diverting public funds towards higher order needs like culture and aesthetics at the expense of the provision of affordable housing or access to social services and education. Lai (1988, p. 430) argues that all planning controls effect some form of exclusion, but that urban design initiatives have a particularly direct effect on development costs. Urban renewal efforts of the 1960s were notorious for their often explicit 'poor removal' objectives, but the recent promotion of design-led regeneration has been similarly linked to gentrification as either an explicit or covert strategy (Lees, 2003), while Smith sees gentrification as *the* urban strategy of neo-liberalism (Smith, 2002). Design review must carefully consider its social impacts, and policies have to be

formulated to directly mitigate social exclusion. Among the most obvious of such policies are those that protect or require the replacement of low-cost housing, requirements for substantial levels of social or affordable housing, mixed use and tenure developments, and an emphasis on walking/cycling and public transport provision. Key urban design principles such as permeability, accessibility and continuity of the public realm support the principles of social inclusion and allow the wider public to benefit from better streets and new amenities (see Table 1). Making subsidized housing indistinguishable from market housing aids social inclusion (e.g. Irvine, California: Punter, 1999a). Similarly, resisting gated communities, or ensuring that they respond positively to the public realm, are also important policies, even in China where gated communities are considered socially desirable forms of development (but where they are becoming increasingly 'one class'; Miao, 2003). Such instances emphasize the need for cultural adaptation of generic design principles and policies when developing local review practises.

Principle 5: Addressing the Limitations of Zoning and Integrating it Better into Planning

Of all the instruments of planning, zoning has the reputation of being the most overtly exclusive in its land use restrictions and its building envelope requirements. Its role in segregating settlements and protecting the living environments of the rich are well known, especially in the USA. Zoning is frequently antithetical to positive planning in its tendency to freeze the physical character of large tracts of the built up area, thus preventing necessary social and economic adaptation, and in its disregard of necessary infrastructure provision (Talen, 2002). However, zoning can be adapted to become a much more flexible and design-sensitive instrument, and over the years inclusive, incentive, special district and performance zoning have been developed to address these deficiencies (Wakeford, 1990; Cullingworth & Caves, 2003). In some localities zoning has been made more responsive by a linkage between growth management thresholds, performance standards and feedback systems that can better respond to changing development conditions and impulses (Kwartler, 1998). These innovations have created more opportunities for good urban design to flourish, and helped the protection of historic character and the provision of public space and residential amenity. However, sometimes they have been abused, and distorted both design and development objectives.

Zoning is a valuable device for levelling out land values and prescribing maximum density. It can also be a particularly useful mechanism for managing conversion and effecting intensification, but of course it can be used to subvert both. Many cities have developed very design-aware, but often very complex to operate, zoning systems which are used to ensure the maintenance of particular local architectural and urban design traditions (e.g. San Francisco: Wakeford, 1990). These have spread from historic suburbs to many single family areas where there is pressure for housing conversions, often to address the problem of 'monster homes' maximizing their zoning entitlements and thereby eroding neighbourhood character. The dangers of incentive zoning are now well understood following experience in cities such as New York (Whyte, 1988) and Seattle (Cullingworth & Caves, 2003, pp. 115–116), but both Vancouver (Canada) (Figure 4) and Portland have developed incentive zoning as a way of encouraging

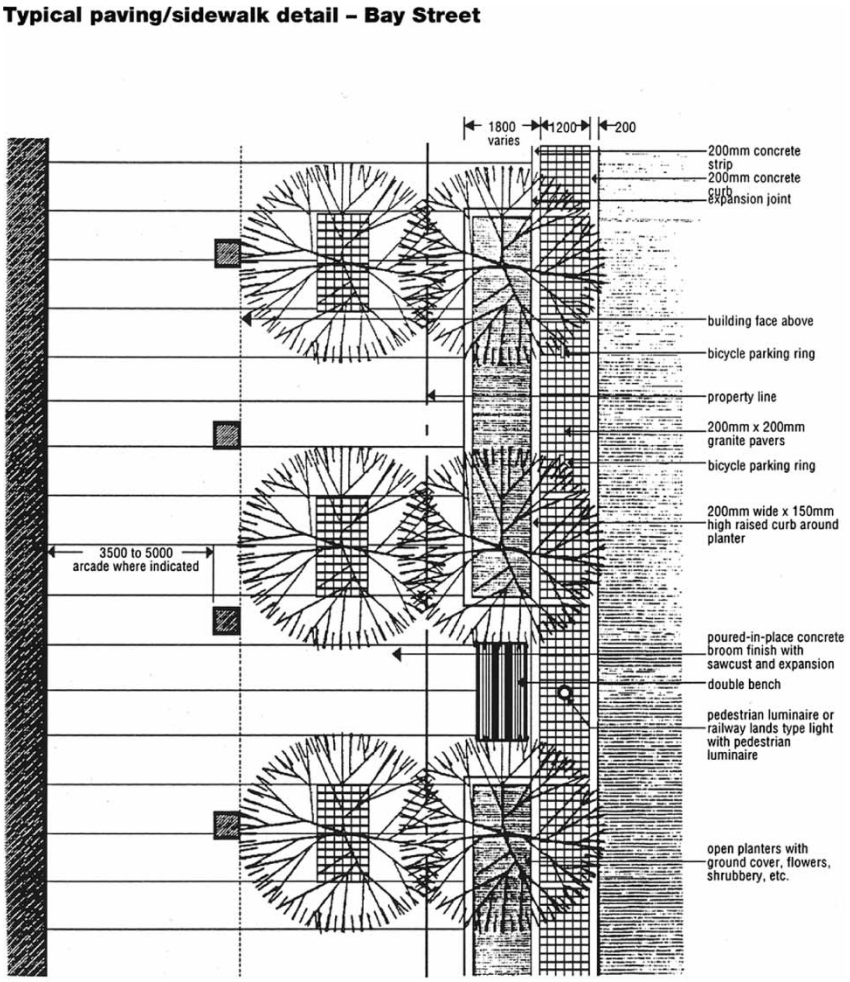

Figure 3. The City of Toronto Streetscape Manual. This manual systematized the design of streets developing a consistency and simplicity of paving, lighting, landscaping and furnishing that is unobtrusive and uncluttered. Emerging from an excellent appraisal of extant urban form and structure it developed both generic (hierarchical) street types but also individual responses to distinctive localities by varying some of the standard components.

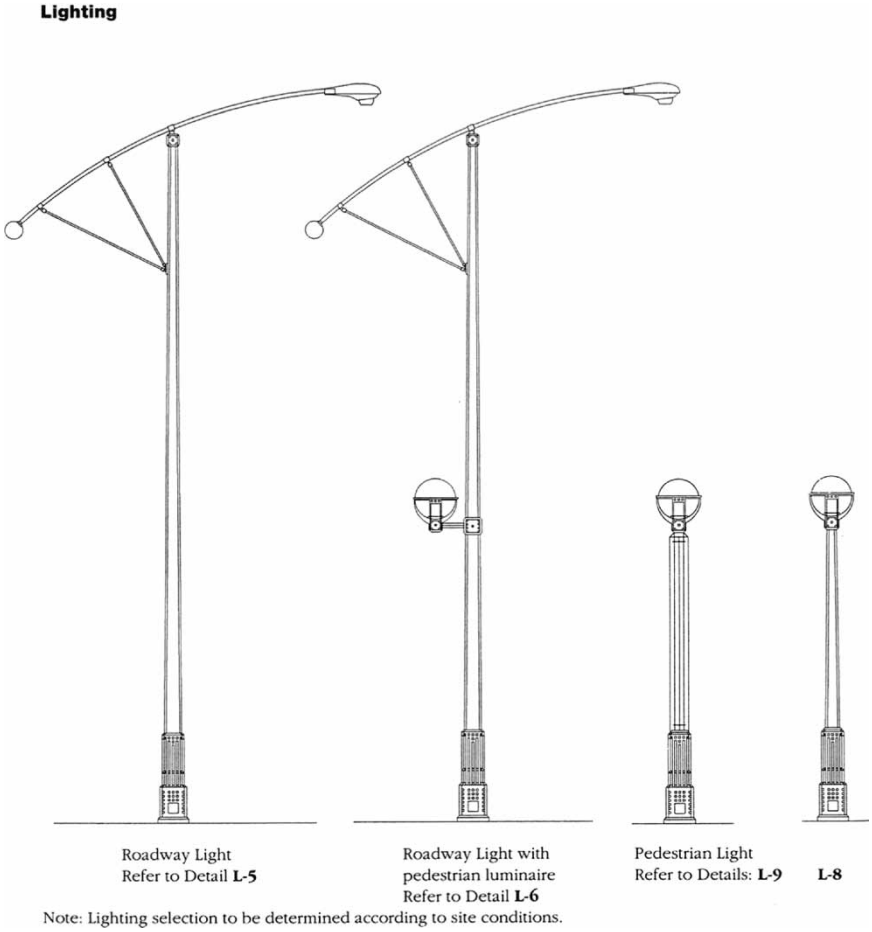

Figure 3. *Continued*

commercial and residential developers and householders to follow design guidelines (Punter, 2003a, p. 370, 1999a; see principle 7 below).

The New Urbanists in particular have confronted the constraints imposed by standard single family residential zoning and this has led them to use masterplans and design codes with build-to lines rather than setbacks, mixed rather than single uses, a full set of building typologies rather than a narrow set of envelope and siting constraints, and detailed landscape and layout provisions for the public realm in order to improve urban design (Duany & Plater-Zyberk, 2001). Such codes have been developed throughout the USA and more recently in Australia (Table 1) and the UK where they are being adapted to more discretionary planning systems (WAPC, 2000; DCLG, 2006). The notion of the transect has emerged as one means of writing codes for whole settlements, expressing a continuous rural to urban gradient that defines the transition from rural and exurban to inner and central city forms, and allowing the incorporation of local or regional typologies and morphologies. Each category within the transect/ density gradient (exurbia, outer suburbia, mature suburb, sub-centre, inner city etc) is expressed as a desired urban morphology with particular three dimensional attributes as opposed to an abstract land use and density allocation (Duany, 2002). This approach is much more prescriptive about urban design, and potentially much more socially and functionally inclusive than standard zoning. A good example is the now widely marketed and adopted Smart Code developed by Duany Plater-Zyberk in the USA (Krieger, 2001). In a parallel innovation the French have utilized the typo-morphological approach to analysis and prescription in their local development plans to encourage new development to respond to local vernaculars (Samuels & Pattacini, 1997; Samuels, 1999; Trache, 2001).

The Smart Code can be adapted to local traditions and preferred patterns of development as desired, and it contains the all-important means of implementation in terms of detailed design principles and standards, although usually it has to be imposed by the landowner, or adopted as a legal agreement between local authority and developer, to guarantee its effectiveness in discretionary systems. The main danger is one of over-prescription of design outcomes and obsessing over architecture at the expense of broader social and ecological issues (e.g. Urban Design Associates, 2002, 2003), and this stylistic preoccupation is often reinforced by private systems of design control which characterize many New Urbanist developments in the USA (Baab, 1994; see also Ben Joseph, 2004)

Developing Broad, Substantive Design Principles

Moving on to the broader design concerns with which to underpin design review, three general principles can be derived to underpin the development of a set of robust and substantive design policies. These include going beyond architectural control to focus on urban design and the spaces between buildings, giving full consideration to sustainable forms of development; basing guidelines on both generic principles and careful contextual analysis; and carefully selecting the level of intervention and not stifling innovation, spontaneity and pluralism in design and development.

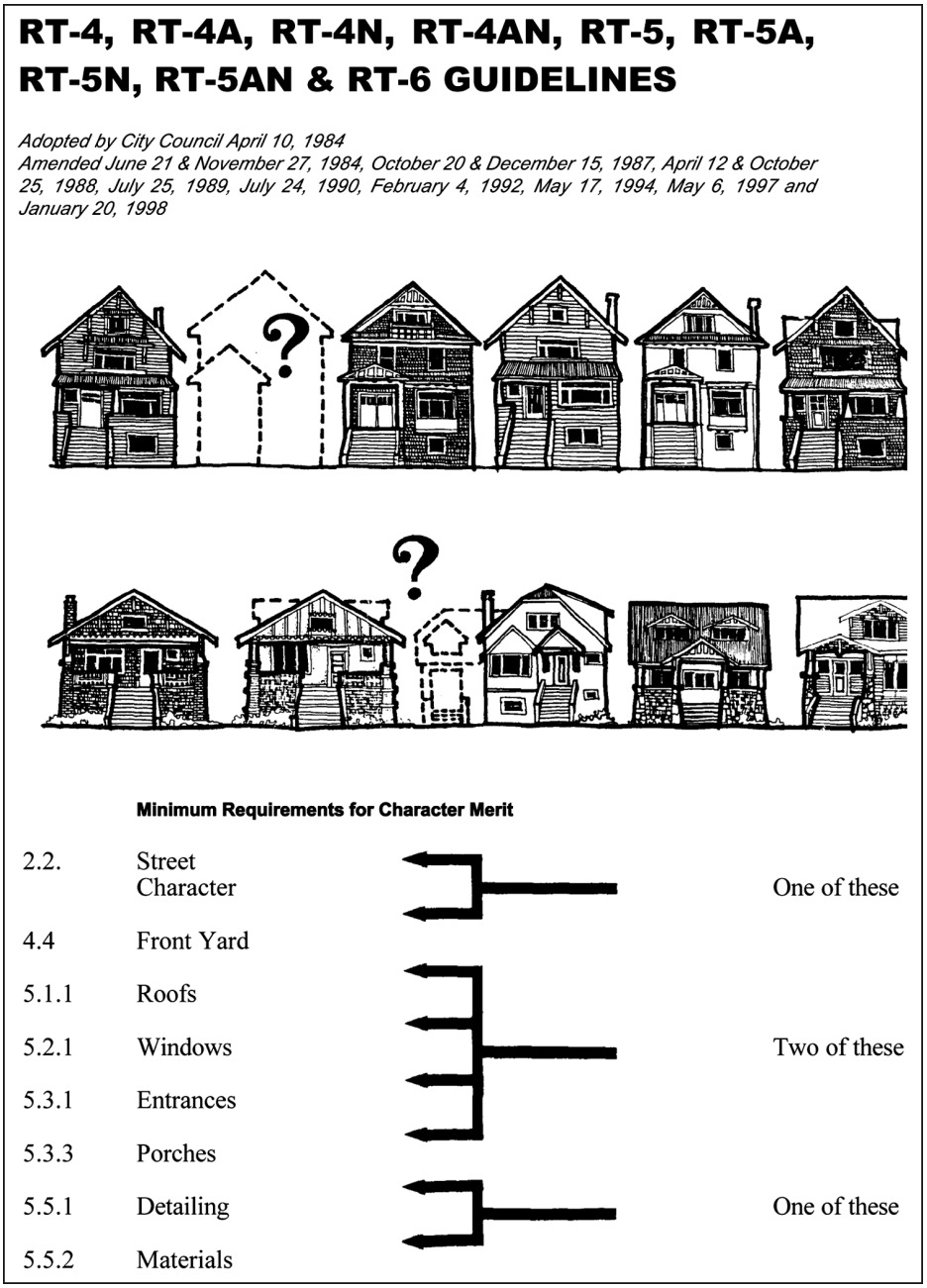

Figure 4. City of Vancouver RT zoning design guidelines (1997). One of a multiplicity of residential zonings supported by bespoke design guidelines. RT incentivizes conversion of houses into two self-contained units, provided that the proposal retains the character of the area. The guidelines offer a choice of means by which compatability might be achieved in the interests of simplicity and flexibility.

Principle 6: Maintaining a Commitment to Urban Design that Goes Well Beyond Elevational Control to Address the Issues of Community, Vitality, Accessibility and Sustainability

Design review has a long history of being conceived as aesthetic control, focused almost entirely on visual appearance and obsessed with the control of elevations (see English experience in Punter, 1986, 1987). In the process it has antagonized large sections of the architectural community who should have been the planners' natural allies in the drive towards better design. Brenda Scheer (1994) is particularly critical of the superficiality of much American design review and regulation because of its focus on the external appearance of development. She argues that:

> … To the extent that the government is allowed to think that it is "taking care" of the "ugly" problem through the institution of design review, it is a diversion of political energy from environmental, social and economic problems, and not insignificantly, … from the necessity for genuine urban design … (Scheer, 1994, p. 9)

Preiser (1994) sees design review practice as frequently being diverted into "hiding or tidying up environmental offenses" (p. xvi). These authors and others (Punter & Carmona, 1997) are anxious to assert the necessity for a set of thoroughgoing urban design principles on which to base design intervention, principles which can embrace social and environmental dimensions of design and matters of amenity, accessibility, community and vitality in the round. There has been considerable consensus developed about key Anglo-American urban design principles such as permeability, legibility, mixed use/tenure, robustness (see Bentley *et al.*, 1985), and these have been incorporated into many cities' design guidelines first in the USA (Shirvani, 1992) and more recently into national design guidance in England (DETR, 1999) (Table 1). How these principles might vary cross-culturally, and how they might be developed to manage conditions of extremely rapid urbanization and urban change such as those in China, is an important research question.

As sustainable development has come to occupy centre-stage in planning, these principles have been modified to embrace matters of biodiversity, energy efficiency and pollution. In addition, the importance of community has been reasserted as both a design objective/principle and a vehicle for the delivery of more sustainable patterns of development through greater local participation and self-management (Bentley, 1990; Barton *et al.*, 1996, 2003; Wates, 2000). Government guidance in the UK has embedded the pursuit of design quality within the drive for sustainable settlements, particularly emphasizing compact development, the development of accessible, public transport-served, brownfield sites, and the protection of environmental capital (see Table 1).

Much urban design thinking on sustainable development is predicated upon the old idea of the neighbourhood as the focus of community life and the locus of many services and facilities, including employment. In a globalized and highly mobile world where people have wide interaction patterns and dispersed communities of interest the notion of the neighbourhood is highly contested (Madanipour, 2001). However, the neighbourhood ideal offers the potential for residents to have greater engagement with the immediate locality, and more access to, and choice of, local employment opportunities and services (especially

Table 1. English urban design principles (2005), as enshrined in official guidance as objectives, and framed by national planning policy. The environmental dimension of urban design has not yet been fully incorporated into English national design guidance. Principles 7, 8 and 10 would be better re-titled as community involvement, minimize pollution minimization and biodiversity protection; each needs to be further developed in guidance and policy

Urban Design Principles (Academic)	English Government Design Guidance	English Government Planning Policy
Bentley *et al.*, (1985) (pp. 1–7) Bentley (1990) (pp. 8–10)	DETR (1999) *By Design: Urban Design in the Planning System: Towards Better Practice*	ODPM (2005) *Planning Policy Statement 1: Delivering Sustainable Development*
1 Richness Cullen (1961); Alexander *et al.*, (1977)	See *Character* and *Diversity* below	
2 Visual appropriateness Cullen (1961); Tugnutt & Robertson (1987)	*Character: a place with its own identity* Consider land form and character Integrate into the landscape/reduce impact on nature Respond to existing layouts with streets and spaces Respond to local building forms Use local materials and details Appropriate scale, massing, height	Integration of urban form Improve character of the area Designs appropriate to context Reinforce local distinctiveness
(See *Permeability* and *Robustness* below Appleyard (1981); Gehl (1987); Whyte (1988)	*Quality of the Public Realm:* Attractive and successful open spaces Open spaces that respect natural features Ground floor uses that reinforce pedestrian activity Spaces that relate to surrounding buildings Natural surveillance of spaces Micro-climatic comfort Public art, street furniture that create identity	High quality public and private spaces
3 Permeability Lynch (1960); Jacobs (1980); Hillier (1996)	*Ease of movement:* Easy to get to and move through Connected space and route network for all modes Fine grain of connected routes within and without site Encourage low traffic speeds Layout and density reinforce public transport Integrated transport interchanges	Access policies Reduce need for car travel Connect people and places

(*continued*)

Table 1. (*continued*)

Urban Design Principles (Academic)	English Government Design Guidance	English Government Planning Policy
4 Legibility Lynch (1990)	*Legibility*: a clear image and easy to understand layouts Enhance views and vistas Use key buildings to reinforce identity and character Use corner buildings to aid identity Use details and materials to reinforce legibility	
	Continuity and enclosure: Common building lines to the street Primary access from the street Differentiate designs for fronts and backs Enclose private space for security and privacy	Safety: design against crime
5 Robustness Jacobs (1980); Alexander *et al.*, (1977); Lynch (1990)	*Adaptability: A place that can change easily* Use simple robust building forms Places should accommodate a range of uses Create flexible layouts and design (see also *Continuity and enclosure*)	Safety
6 Variety Jacobs (1980); Lynch (1990)	*Diversity: A place with variety and choice* Mix uses to attract people Get a compatible and inclusive mix Mix form and tenure	Social cohesion and inclusive design Well-mixed development
7 Personalization Cooper Marcus (1986); Becker (1973)	(Collaboration and community engagement)	Community involvement Community vision
8 *Cleanliness* Royal Commission on Environmental Pollution Reports		Reduce emissions Avoid significant adverse effects on the environment
9 Energy efficiency Newman & Kenworthy (2001); Barton *et al.*, (2003)	(see *Ease of movement*)	Reduce energy use and carbon emissions
10 Wildlife support McHarg (1969); Spirn (1984); Hough (1995)	(see *Character*)	Protect landscapes, wildlife, habitats and natural resources Minimize use of new resources

for the less affluent and mobile). It is also reinforced by much ecological thinking which seeks to reduce environmental impacts and close all eco-cycles (energy, food, water, waste) at the smallest appropriate scale (see Barton *et al.*, 2003). It can promote the development of community, and the widening of life choices as well as the promotion of health, safety and equity objectives. These objectives can be delivered in part through a set of design processes that emphasize stakeholder involvement and seek an increase in local autonomy. These can be placed alongside the conventional urban design principles of connectivity (permeability), diversity (variety), response to place (visual appropriateness), and adaptability (robustness). Such an approach is exemplified in the Liveable Neighbourhood Code in Western Australia (WAPC, 2001), and it manages to embody a number of these best practice principles in one manual (Figure 5).

Principle 7: Developing Both Generic and Contextual Design Principles and Distinguishing Between Mandatory Requirements and Design Guidance

The generic design principles discussed above can provide the basis for a much more profound and objective assessment of design quality. But both context and site analysis are vitally necessary pre-requisites of any successful piece of urban design, and are necessarily prior to the application of the generic principles. It is the task of those writing policy and guidelines, and those implementing them, to clearly identify the characteristics of the locality that need to be addressed, and to suggest ways in which to adapt the generic principles to the particular local circumstances. Such a process needs to begin at the strategic, citywide visioning level but then be rooted at the district level where it can respond to the particularities of place and local distinctiveness. The kind of design thinking required is exemplified by the Dutch Visual Quality Plans (VROM, 1997; van der Weert, 1999), but while such careful appraisal is fundamental to good control practice, in reality very few control systems have found the resources to undertake them (see Hall's work (1996) on design areas).

As a lawyer Blaesser (1994, p. 50) argues that local authorities should clearly distinguish between those controls that are mandatory (usually dimensional controls such as height, bulk, build-to and setback lines, open space, daylight and sunlight regulations), and those which are advisory and are only guides for development. It is his contention that both mandatory and advisory controls should be detailed and precise rather than visionary. Then they can be readily interpreted and understood by developer/designer, controller and the affected community. Many cities now operate typology specific design guidelines alongside conventional zoning codes to allow them to realize more sensitivity to context, and they are proving particularly useful in managing the boundaries between zones where different densities and uses come into contact, and where conversion and intensification are taking place. They are especially effective when adherence is incentivized by a lighter control mechanism or the granting of extra floor space (see, for example, Vancouver: Punter, 2003a, pp. 135–148; Figure 4).

Principle 8: Accommodating Organic Spontaneity, Innovation and Pluralism to Allow Design Skills to Flourish

One of the persistent criticisms levelled against design control is that it stifles design innovation, creativity and a pluralist townscape and tends to create safe

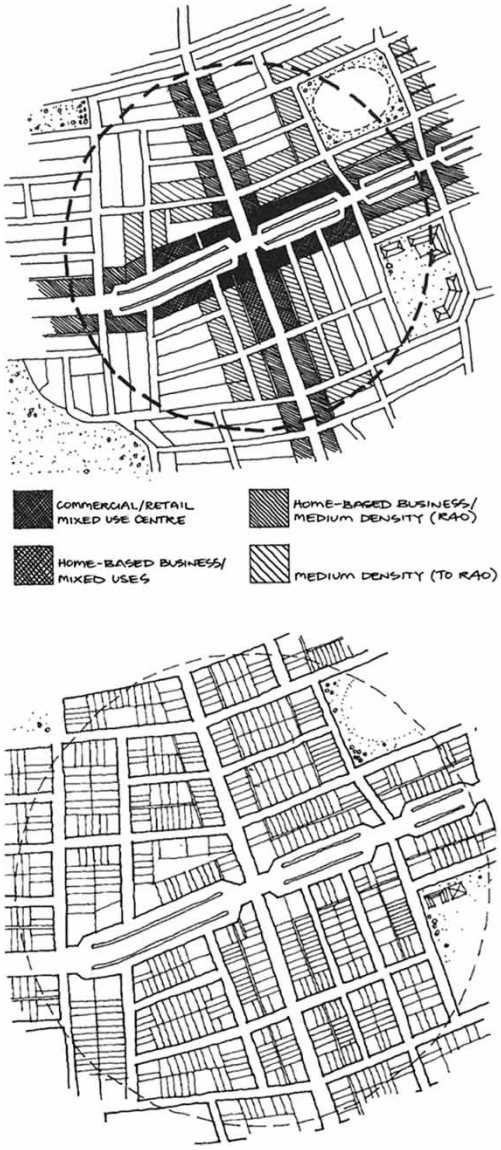

Figure 5. The Liveable Neighbourhoods Code for Western Australia (2001). The 88-page code sets out how to develop a residential subdivision, of which these are the last four steps. The emphasis is upon the creation of walkable neighbourhoods with local service centres, a mix of house types and sustainable drainage systems. It offers no architectural guidance except on solar orientation and shading.

Figure 5. *Continued*.

but bland design solutions that are 'in keeping' with local character, but often demean it. Blaesser (1994), Lai (1988) and Scheer (1994) are all concerned to avoid over-prescription in both policy and guidance to obviate this problem. In particular, they are keen not to stifle the creativity of designers, and to encourage innovative design that can advance the range of design solutions, enrich human settlements and promote sustainable building. There is also a widespread recognition that design review should respect minority taste cultures.

Furthermore, design review has to acknowledge the possibility that a particular design could violate all the guidelines but still be an acceptable, even brilliant, solution that will uplift the locality. Many guidelines carry caveats to this effect, and these are often aimed as much at the design conservativism of many local communities and politicians as at planners' commitment to contextualism.

The tensions between professional and lay taste have to be constructively managed, and need to be explored through a variety of collaborative, consultative, educational and cultural programmes. European experiments with national architecture policies and programmes can provide useful models, e.g. Sweden, (Nystrom, 1999), the Netherlands (van der Ploeg, 1999), especially the French councils for architecture, urban planning and the environment (Conseils d'Architecture, Urbanisme et Environnement (CAUE)), which have both advisory and educational roles locally (Loew, 1994). The Europeans, especially the French, are particularly keen on the use of architectural competitions as a device to ensure both innovation and creativity (Cerclet, 1999), and this has been used to good effect in Amsterdam in the masterplanning and subsequent redevelopment of the eastern Docklands, under the supervision of an 'architectural supervisor'.

One of the more innovative applications of this idea has been the Design Excellence Programme in Sydney, Australia. Here the Mayor, dissatisfied with the mediocrity of much recent city centre redevelopment, introduced the notion that developers of the largest schemes should use competitive design processes in order to select the best design solution for the site in question (Box 2). This mechanism has worked to the benefit of the local architectural community who now have new opportunities to win commissions, and develop more innovative design solutions (including those that countermand pre-established guidance; Punter, 2005). However, in much of Europe, particularly Germany, competition fatigue has set in because all public tenders over a certain value are subject to EU competition rules (Schaller, 1999).

Establishing peer review mechanisms (design panels) where design professionals are consulted on development proposals, avoids part of the problem of stifling of design innovation. Although they are not always effective, these are flexible and economical vehicles. Such panels have operated throughout the Netherlands since 1922, and their opinions have been given legal force, and the idea is now being copied in Antwerp and Cologne. Advisory design panels are being reinvented in the UK (Architectural Advisory Panels have existed since 1926). Although the role of the panels is generally advisory, in some circumstances they have become decision takers, notably in Singapore. Such panels need to be fully embedded in the control system, and then they can play a vital role in making design review an accepted part of development and design practice in a locality (e.g. Vancouver: Punter, 2003b).

City of Sydney, Australia: Design excellence and competitive processes Development Control Plan Amendment No. 15 (2001) (Section 12 of DCP)
Consent authority is **required to consider whether the proposed development exhibits design excellence: where a development plan is in force it must consider whether the design is the result of a competitive process.**

Competitive process **can be a design competition *or* alternative designs compared on a competitive basis**: exceptions if the design meets plan objectives, has demonstrated feasible design options, and exhibits design excellence.

Promoter must organize the competition from initiation to competition, the brief, jury, decision and award of prizes (it is independently documented by the Royal Australian Institute of Architects).

Can be an open or invited competition: brief requires a statement of compliance with the City's planning and conservation controls, and sets out submission requirements, contextual studies, jury composition, copyright, disclaimers, deadlines and drawings.

Jury includes three promoter nominees and three nominees of the consent authority: represents the public interest and design and construction expertise.
Consent authority is not part of the judging process, is not fettered by the jury's decision as regards determining applications, and may require a public exhibition of the proposals. **Jury will rank the submissions**.

Jury prepares a competition report including the brief, assessment of design merits **and rationale for their preferred choice**. Report must be lodged prior to any development application: consent authority may endorse the outcome through a pre-development plan or pre development advice.

Promoter is expected to appoint the winning architect, but they in turn may work with other architectural practices. The winning architect is expected to prepare the development application and undertake full project design and supervision through to project completion. Further consultation will be required if the jury does not reach a decision and the promoter or consent authority object to the winning design.

A subsequent development application by a winning architect will **require a design integrity assessment to assess whether the development application is equivalent to, or an improvement on, the competition winning scheme**.

Development applications that result from proper competitions, exhibit design excellence and pass the integrity assessment will be awarded a reduction in the allocation of Heritage Floor Space of up to 50 per cent (a tax to encourage conservation).

An alternative to competitions is a competitive design process where at least three design alternatives must be prepared, each by a different design practice, each of which must be able to demonstrate the capability to produce high quality design.

The consent authority will review the brief and nominate at least **one independent person to observe the selection process**. The promoter is required to submit a Competitive Design Alternatives Report assessing each scheme, and the rationale for the choice of preferred design prior to the lodging of any subsequent development application. The consent authority may endorse the process by issuing a pre development plan or pre application advice.

Box 2. The design excellence through a competitive processes approach in the City of Sydney in 2001. This process, developed from an idea of the Mayor, was introduced for all large-scale development projects (> A$50 million) and has had a positive effect on design quality while also improving the prospects of commissions of local architectural practices

Due Process

The four remaining principles focus upon the creation of due process as a necessary prerequisite for any system of design review. They reflect the resistance of the development industry to such controls and sustained lobbying against them, at both local and national levels, including numerous legal challenges, particularly in administrative, zoning-based planning systems. The first three of these principles are aimed at the need to establish clear rules for intervention; to establish proper administrative principles with which to manage discretion; to institute full records of decisions and their rationale; and develop appropriate appeal mechanisms. These are all part of a need to regularize the discretionary processes in their adaptation to administrative planning systems. The fourth principle is to create a review system that is efficient and effective, with the latter most likely to be delivered by control/review staff with appropriate design skills and expertise.

Principle 9: Identifying Clear a priori *Rules for Urban Design Intervention*

The requirement that design review be based upon clearly established rules is an obvious but not unproblematic requirement. Lai (1988) notes that this is really the first principle of any public regulation, and is what distinguishes a free society governed by the rule of law from that of a dictatorship or other arbitrary form of governance. He argues that it is important to establish "the line between control of private architecture by the owner and its regulation by the public" (p. 426). As Scheer (1994) notes, even the most 'objective' design review rests on discretionary judgement but it is the "degree to which these discretionary judgements are made consistent and non arbitrary" (p. 6) that is at issue. She concedes that guidelines help in this matter providing they are relatively precise, are founded upon established principles of urban design, and are carefully related to their context in application, all points dealt with above. All policy (mandatory elements) and guidance (advisory elements) needs to be published and formally adopted by councils, and many systems require prior consultation with the community and the development industry to ensure its acceptability and to give it weight in decision making (e.g. UK: ODPM, 2005).

Such 'rules' are partly a matter of due process, and partly a matter of consistent application of principle. Portland's long-standing Central City Design Guidelines provide an exemplar in this regard. They work as a checklist for controllers who first have to decide whether the guideline applies and then whether the development conforms or not (Punter, 1999a; Figure 6). This approach has been driven by an Oregon State planning requirement that all planning decisions have to be based on 'findings', imposing a valuable discipline on the control process and requiring systematic consideration of all guidelines. Seattle has adopted a similar checklist approach in its community based design guidance. However, in reality design judgements are not black and white, and the design process always requires certain elements or advice to be prioritized over others. So there is always an issue over the application and interpretation of principles, and decisions over these have to be made as explicit as possible and carefully recorded so that they can, if necessary, be challenged and appealed.

Principle 10: Establishing Proper Administrative Systems to Manage Discretion

To a considerable extent proper administrative procedures can compensate for the absence of precise rules, policies and design guidelines and the necessary exercise of discretion in decision making. Lai (1988, p. 427) emphasizes the importance of written opinions that fully explain and justify judgements made on design matters within the review process. He considers that these could form the basis of a kind of 'common law' of design review to guide both designers and reviewers. So there is a need for records to be kept of all design deliberations and decisions by advisory panels, commissions and planning committees. Planning officers' reports must contain the essence of all relevant consultations and the consideration and interpretation of advice received.

At the heart of any design review process must be the opportunity for those aggrieved by the process to appeal on both substantive and procedural grounds. Discretionary systems tend to allow only aggrieved developers to appeal refusals or permits/planning permissions, forcing the general public or other affected individuals to use other legal avenues, but regulatory systems fully accommodate third party appeals if decision-making processes or regulations have not been observed. Making the appeal process more accessible, less intimidating, quicker and cheaper is particularly important in this regard. The Dutch have developed Conciliation Boards for this purpose (Punter, 1999b) and the British informal hearings and written appeals.

Principle 11: Implementing Efficient, Constructive and Effective Permitting Processes

Design review must respect the need for efficiency in the permitting/development control processes and not add unduly to the time required for taking decisions. Where design review is an integral part of the control process, as it is in the more discretionary planning systems of Britain and Ireland, then this problem is reduced, although both central governments have continually expressed concerns that negotiations on design unnecessarily delay decisions. Where the design review process is a separate part of the permitting process, and often administered at a fairly late stage, the dangers of expensive re-designs and delays are particularly pronounced. It is widely recognized that to be effective and constructive design review needs to operate at the formative stages of design development, preferably through pre-application negotiations, although hard-pressed local authorities often cannot resource such meetings. Certainly negotiations need to take place prior to the detailed design stage to avoid abortive design development. Second, design advice should be constructive, not simply providing criticism of proposals, but making positive suggestions as to how acceptable solutions might be derived.

Third, design review has to be effective, and be seen to deliver tangible benefits that outweigh the time and resources devoted to its operation and the costs imposed on developers and designers. This demands monitoring of design outcomes and user/consumer assessment of the utility and validity of the process. This is one of the least well-developed aspects of design review, and there are remarkably few examples of successful monitoring activities that have been maintained over any significant period of time. An exception is the City of Westminster in London where both government and the local community have

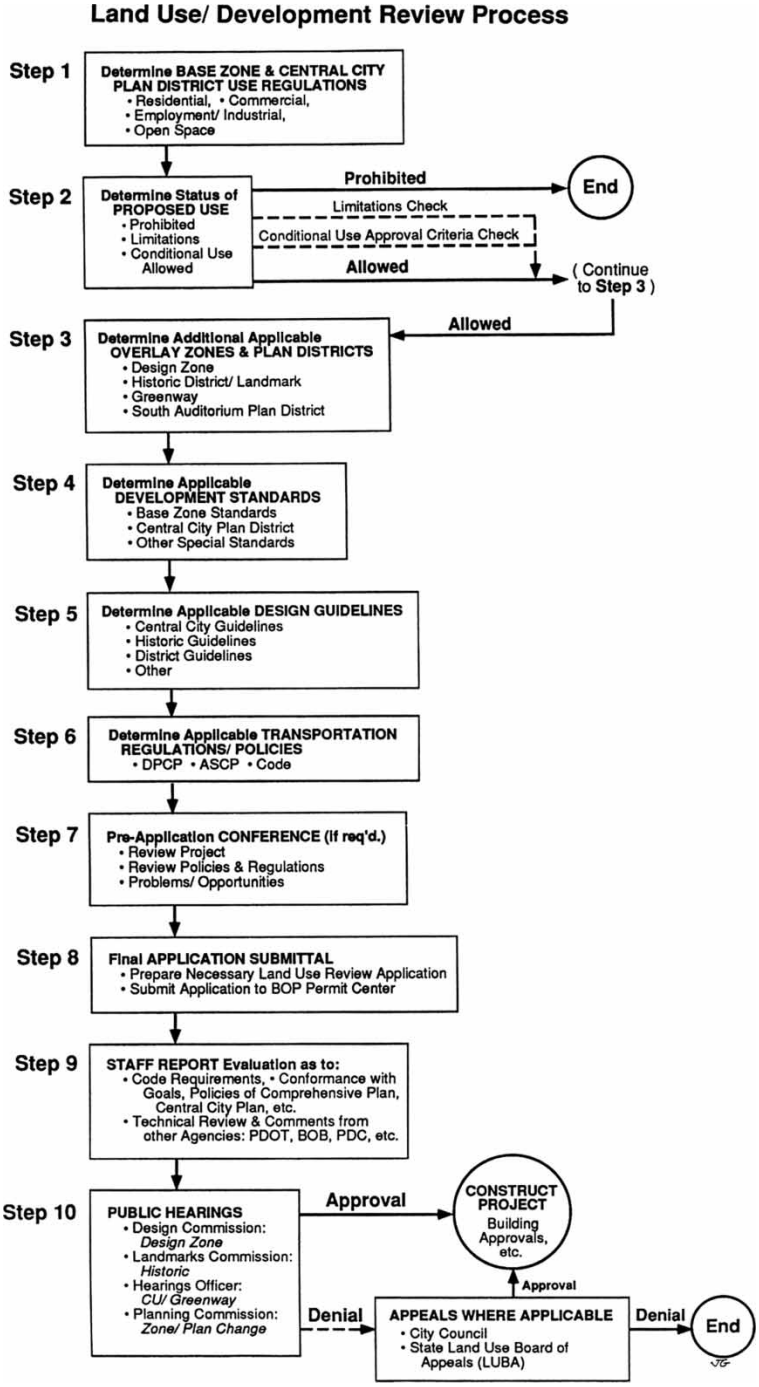

Figure 6. The Portland Development Review Process and Fundamental Design Checklist. These diagrams, taken from the Central City Developer's Handbook, itself a fine innovation, explain how design fits in to the development permitting process, while the guidelines can be reduced to a simple checklist to ensure they are properly administered.

Central City Fundamental Design Checklist

Project: _____

Case File No.: _____

Date: _____

Applicable	Does Comply	Does not Comply	
			A. PORTLAND PERSONALITY
☐	☐	☐	A1 Integrate the River
☐	☐	☐	A2 Emphasize Portland Themes
☐	☐	☐	A3 Respect the Portland Block Structures
☐	☐	☐	A4 Use Unifying Elements
☐	☐	☐	A5 Enhance, Embelish, and Identify Areas
☐	☐	☐	A6 Re-use/Rehabilitate/Restore Buildings
☐	☐	☐	A7 Establish & Maintain a Sense of Urban Enclosure
☐	☐	☐	A8 Contribute to the Cityscape, The Stage, & the Action
☐	☐	☐	A9 Strengthen Gateways
			B. PEDESTRIAN EMPHASIS
☐	☐	☐	B1 Reinforce & Enhance the Pedestrian System
☐	☐	☐	B2 Protect the Pedestrian
☐	☐	☐	B3 Bridge Pedestrian Obstacles
☐	☐	☐	B4 Provide Shopping & Viewing Places
☐	☐	☐	B5 Make Plazas, Parks, & Open Space Successful
☐	☐	☐	B6 Consider Sunlight, Shadow, Glare, Reflection, Wind & Rain
☐	☐	☐	B7 Integrate Barrier-Free Design
			C. PROJECT DESIGN
☐	☐	☐	C1 Respect Architectural Integrity
☐	☐	☐	C2 Consider View Opportunities
☐	☐	☐	C3 Design for Compatibility
☐	☐	☐	C4 Establish a Graceful Transition between Buildings & Public Spaces
☐	☐	☐	C5 Design Corners that Build Active Intersections
☐	☐	☐	C6 Differentiate the Sidewalk Level of Buildings
☐	☐	☐	C7 Create Flexible Sidewalk Level Spaces
☐	☐	☐	C8 Give Special Attention to Encroachments
☐	☐	☐	C9 Integrate Roofs & Use Rooftops
☐	☐	☐	C10 Promote Permanence & Quality in Development

JE

Figure 6. *Continued.*

taken an intense interest in design decisions and where strong control over design has been long established (Westminster CC, 1997).

Academic empirical studies of design review have demonstrated that its products may not be significantly superior to those developments which were not subjected to the process (see for example Nasar & Grannis, 1999). However, what design review prevents remains largely invisible to the wider public, and yet often is its greatest contribution to the quality of the urban environment. An alternative to systematic monitoring is regular exchanges of view (perhaps informal annual reviews and site visits) between the control and development communities, between private and public designers, and between the public and the politicians, preferably in an open forum where the gaps between professional and lay taste that often bedevil design interventions can be understood and addressed. Welcome developments are larger-scale evaluations of particular development types such as those commissioned by the English Commission for Architecture and the Built Environment (see CABE, 2005; DCLG, 2006), or the reporting and inventory of prize winning designs (Biddulph *et al.*, 2004).

Most control systems have periodically examined ways in which their decision making might become more efficient and constructive, but frequently the process has proved very resistant to reform, not least because it is almost invariably under-skilled and under-resourced. The UK has been long obsessed with the eight-week decision rule as a key performance indicator, with the result that the focus of many local authorities is on the speed not the value added by the process, often with dire consequences for design (Shillam, 2006). Even exemplar systems are frequently challenged by the development industry. For example, Vancouver has conducted at least six reviews and reforms of its control systems since 1984, but has struggled to implement its latest, very ambitious reforms (ongoing since 1991), which include holding third party appeals at the concept stage, and developing 'facilitated' (specialist officer-managed) processes for its most complex schemes (Punter, 2003a, pp. 291–307).

Principle 12: Providing Appropriate Design Skills and Expertise to Support the Design Review Processes

If monitoring is a neglected area of design review then the absence of appropriate design skills and expertise to support the review process remains the key weakness of many design review systems, even in those countries with very well developed and long-established system (e.g. USA and Britain). The greater the reliance upon the exercise of discretion, the greater the requirement for the existence of design skills within the control function. Scheer (1994) concludes that most "design review is performed by overworked and inexperienced staff" (p. 3). Recent inventories of design skills available to development controllers in England have emphasized this (CABE, 2004a), and led to a renewed emphasis on the use of expert design panels, both local and national, to reduce the skills deficit. However, these are no substitute for in-house skills that can be made available for all control decisions. Again Vancouver demonstrates best practice having progressively built up a team of six architect-planners with extensive private sector experience, each capable of conducting very complex design negotiations on major projects, and of reshaping complex zonings and guidelines to improve effectiveness (Punter, 1993a, pp. 377–378). Another exemplar is the French Government's deployment of highly skilled and authoritative *Architectes Batiments de France* to manage development in

individual conservation areas and decide listed building applications (Cerclet, 1999). Generally, however, the increasing pressures exerted on local authority budgets and staffing levels, and the de-emphasis on the planning function under neoliberal governance, make it very difficult for most local authorities to recruit the necessary expertise to upgrade their design review practices.

Conclusion

Clearly, the 12 principles outlined above are a very challenging agenda for any planning system, whether viewed centrally or locally. It is clear that even the most developed systems attempting to develop urban design as an effective arm of public policy continue to struggle on several fronts. These include: to adequately resource their control teams with appropriately skilled staff; to develop appropriate visioning or participation processes for establishing public aspirations; to invent efficient appraisal techniques to formulate design policy and guidelines; to establish efficient control processes that allow developers predictable and speedy decisions; and to effectively monitor and evaluate design outcomes and adjust policy, guidance and processes accordingly.

In fast developing countries it will be difficult to develop anything but the most basic form of public participation (information), or to promote social inclusion. There may be opportunities to connect land administration and planning functions to exercise more effective strategic design and infrastructure provision, and to develop national and regional codes to promote basic design and sustainability principles such as building orientation, sustainable drainage, mixed uses and units, and pedestrian accessibility to services and public transit. Similarly, the hierarchy of development plans can embody increasing design content as they become more local, and such policy/guidance can be derived from local area appraisal and development control experience. This can provide the basis for more refined approaches to development management, moving from a checklist approach towards more sophisticated assessments, albeit always very time-limited. These conditions seem to prevail in the larger eastern Chinese cities where urban design is moving rapidly up the agenda in response to a complex mix of very rapid growth, increasing urban economic competitiveness, growing consumer demand for a higher quality environment and a governmental recognition of sustainability imperatives. In many Chinese cities there is a good deal of innovation in both comprehensive and detailed plans and more design-aware development control is emerging (Figure 7).

Each design review system will have its own priorities which will be strongly influenced by long-standing cultural conditions, the local politics of the development process, the perceived design failings of contemporary development, and particularly the sheer power of the market and the level of demand for accommodation. Richard Lai (1988), drawing conclusions from detailed studies of New York City and San Francisco, noted that:

> The appropriate degree of regulation … [is] … dependent upon prevailing economic conditions and social considerations, not to mention the political climate prevailing in the community. (p. 429)

Certainly market conditions, such as the demand and supply of property and the prospects for rental and capital growth and profit taking, are major influences on both developers' willingness to negotiate on, and invest in, design quality. Design

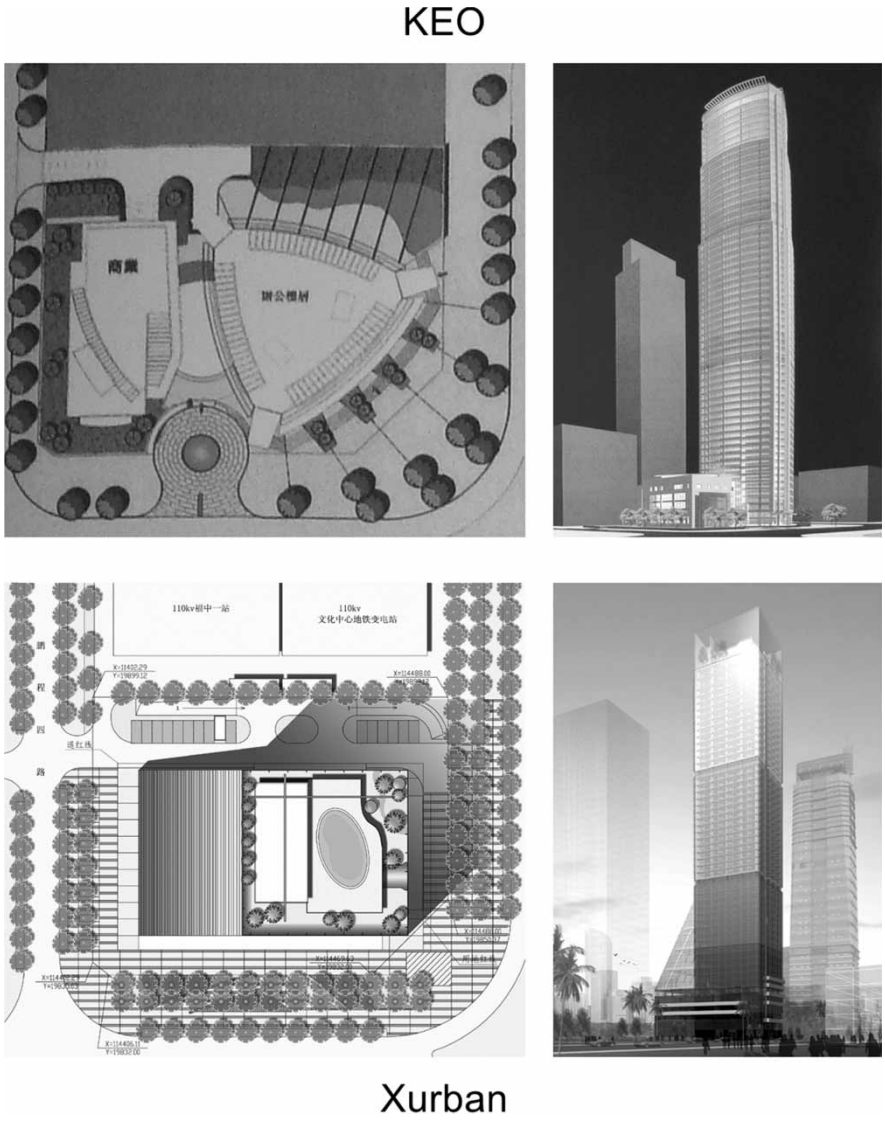

Figure 7. Competition entries for a new commercial building adjacent to the new government building in Shenzhen, China. The developer ran the competition under the Shenzhen Urban Planning Bureau's guidance and the winning entry (by SOM) is being built exactly to this design with no amendments required. This is now common practice for large-scale commercial developments in major Chinese cities (taken from forthcoming doctoral thesis of Deng Zhaohua).

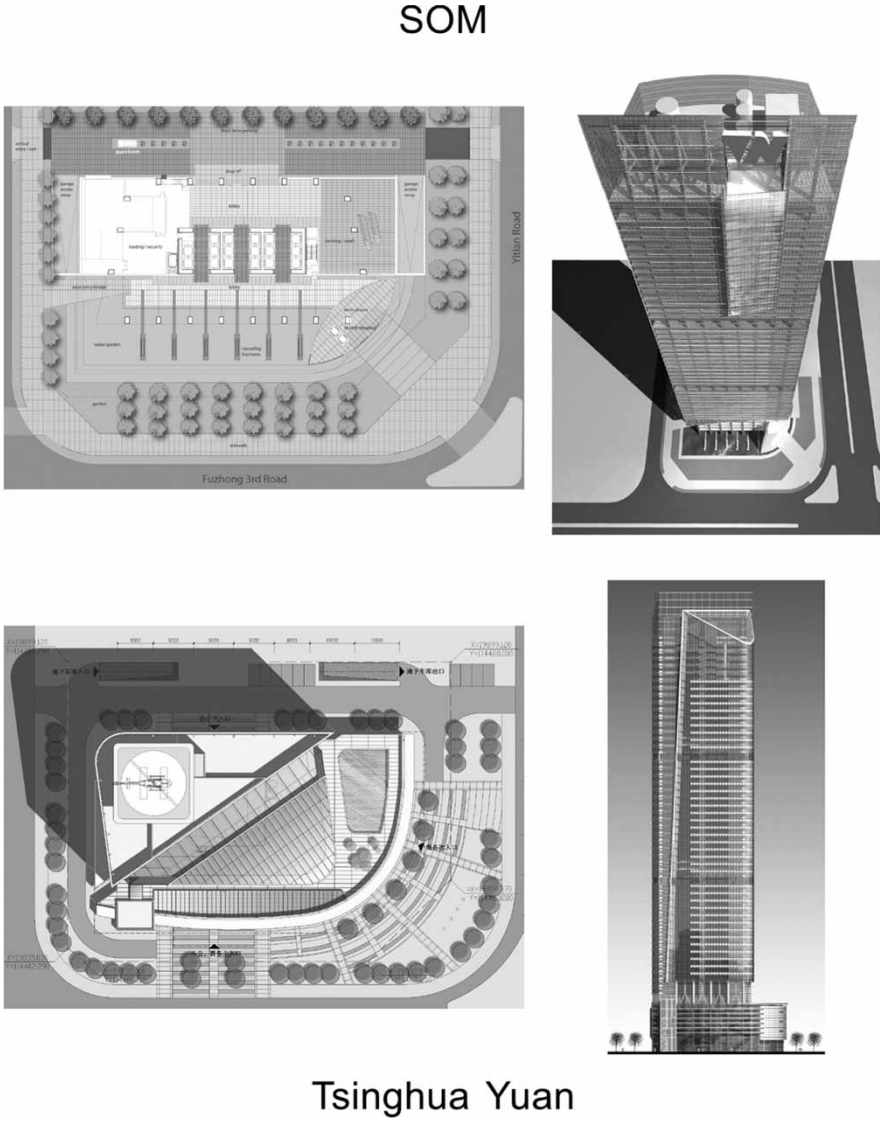

Figure 7. *Continued*.

regimes in prosperous cities and regions tend to be very different from those in less prosperous areas where capital and rental values and profit margins are small, where development is more difficult to stimulate, and where local politicians are afraid to negotiate improved design for fear of driving away prospective developers. In such circumstances the argument must be repeatedly made that better design does not have to cost more money, and can in fact often reduce costs. It can improve both the quality and quantity of accommodation and reduce both construction and lie-cycle costs. Design excellence will often cost more in the short term (for example, improving British Ecohome ratings from very good to excellent is thought to add between 2 and 5% to construction costs), but over the life cycle of the building it can allow occupiers to reap the benefits of significant economies and environmental benefits.

In both the UK (CABE, 2002) and Australia (PCA, 2001) significant efforts have been made to convince land owners, investors and developers of the commercial 'value of urban design' or the 'design dividend' respectively, and in the UK similar campaigns are directed at house-buyers (Ely, 2004). A direct appeal to pecuniary interest is complemented by arguments that design quality and innovation can offer a premium and/or unlock development potential on difficult inner-city sites (Tiesdell & Adams, 2003). Similarly, the argument is made that good design can help to make development much more acceptable to local communities, in particular in overcoming some aspects of NIMBYism, the not-in-my-backyard mentality that seeks to protect amenity (and often property values and social homogeneity) and which is such an impediment to necessary development in advanced economies. The principles of sustainable urban design can be particularly significant in such circumstances (Barton *et al.*, 2003).

The 12 principles of urban design review can be regarded as aspirational principles for developed and developing countries or cities alike, for there are few cities in the world where the design dimension of planning responds fully to the challenges these principles pose to practice. Perhaps Portland USA (Abbott, 1991) and Vancouver Canada (Punter, 2003a) come close, as do practices in key Dutch, German and Swedish towns and cities. Meanwhile, for those rapidly developing cities seeking to introduce design guidelines and review practices into a more basic planning system, there are questions about where to start and with what level of intervention and sophistication of instruments. Lai goes to the heart of the issue (1988, p. 353) and provides a fitting end piece to this paper with a general rallying call for proponents of urban design. He argues for:

> … a dynamic and ever-fluid balance between public controls and pluralist economic determination, each vigorously advocating its legitimate ends and values in the forum provided by the law. The same dichotomy exists also in the ideal urban design: a city whose beauty and efficiency bespeak the vision and influence of the planner and urban designer yet whose vitality, diversity and vigour are the inimitable products of a pluralist and free society … (p. 353)

Note

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