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**Future Directions in Urban Design as Public Policy:
Reassessing best practice principles for design review and development
management**

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Abstract:

This paper reassesses John Punter's 'Best Practice Principles for Design Review and Development Management' that were published in this journal in 2007. Placing a focussed lens on British and North American practice, the paper argues that design control and review has been profoundly reshaped since 2007 by three contributing factors: the challenges associated with climate change, the growing role that communities can play in local decision-making, and the impacts of the global economic crisis upon public sector finances and property development. In light of these trends, the paper uses a review of recent literature and design practices to argue for a series of amendments to the best practice principles. These focus on: (1) the potential for design control and review to be more fully informed by ecological design theory and practice, (2) the need for more rigorous multi-stakeholder collaboration in the design decision-making process, and (3) the opportunity for urban designers to become more competent 'market actors' with the necessary abilities to confidently shape property development decisions.

Keywords:

Urban design policymaking; design control; design review; best practice

Introduction

The term 'urban design as public policy' was first used by Jonathan Barnett (1974) to describe a suite of tools employed in New York during the late 1960s and early 1970s to encourage more design-sensitive real estate development. The practice exemplified what Tiesdell and Adams have termed a "tools approach" (2011, 11) to urban design, whereby a variety of instruments, mechanisms and actions – both regulatory and discretionary – are judiciously employed during the planning process to generate better design outcomes.

Since Barnett's foundational work, urban design researchers have sought to evaluate the effectiveness of design control and review measures adopted by various planning jurisdictions around the world. In North American cities, where the regulatory system of zoning predominates, municipalities have typically looked to enhance design quality by introducing discretionary measures like expert peer review into the planning approval process (Lai 1989; Scheer and Preiser 1994; Nasar and Grannis 1999; Kumar and George 2002; Punter 2003). By contrast, planners in the UK and Ireland, who operate in a more discretionary decision-making environment, have tended to focus on the application of additional control mechanisms, using tools such as detailed design guidance and masterplans to encourage better outcomes (Hall 1996; Punter and Carmona 1997; Carmona 2009).

John Punter distilled much of the research on this topic in a 2007 *Journal of Urban Design* paper titled 'Developing Urban Design as Public Policy: Best Practice Principles for Design Review and Development Management'. Drawing from the literature and examples from practice, Punter outlined a series of twelve 'aspirational' principles (see Figure 1). These were grouped into four themes: 'Community Vision', 'Design, Planning and Zoning', 'Broad, Substantive Design Principles' and 'Due Process'. The Community Vision principles (1 and 2) focussed on the need for governing authorities to develop clear and coordinated urban design visions and design-focussed planning frameworks. The Design, Planning and Zoning principles (3 – 5) highlighted the ways in which urban design could be integrated into existing planning processes. The Broad, Substantive Design Principles theme (principles 6 – 8) identified the importance of establishing a clear definition of urban design as the basis for successful design review. And, the Due Process principles (9 – 12) addressed the need for effective implementation and management of design review that, in particular, could regularise any new discretionary mechanisms while

supporting better design. Punter concluded that the pursuit of design quality in planning practice has blurred the “distinction between....regulatory and discretionary systems” (2007, 168), and that an international convergence of design control has occurred as planners have adopted a range of measures to suit local bureaucratic norms, development cultures, political temperaments and design sensibilities. He envisaged that researchers and practitioners might use the twelve principles to both assess existing design processes and develop improved systems of design control and review.

INSERT FIGURE 1 HERE

In the relatively short time since Punter’s paper was published, the role of urban design within planning has been profoundly reshaped. The 2007/08 global financial crisis caused a severe retraction in many housing markets and almost halted commercial property development in Europe and North America (Barth 2009; Parkinson et al 2009). The US sub-prime mortgage disaster led to a dramatic increase in residential foreclosures and over 1.3 million American families lost their homes between late 2006 and mid 2008 (Barth 2009). In the UK and Ireland, the housing market was also badly hit; banks halted lending and property developers stopped building. The construction of new houses in the UK dropped by 51% between early 2007 and the first six months of 2008, while the number of mortgages issued by banks and building societies fell by 43% during the same period (Parkinson et al 2009).

The government bailouts that followed squeezed public finances. In the US, the already fragile balance sheets of many municipal governments were over-exposed. Some declared bankruptcy, while many others committed to dramatic spending cuts on local services and urban infrastructure (Peck 2014). Local authorities in the UK have faced similar dilemmas. Austerity policies pursued by central government have hit local authorities the hardest and have led to similar cuts (Lowndes and Pratchett 2012). Opportunities for sustained investment in urban design under these conditions have been bleak. However, as the economy begins to recover, a renewed focus on the potential of urban design as public policy is required, not least because there remains the very real possibility that good design will be confined to prosperous towns and cities where the economic crisis has had the least impact (Punter 2010).

The global economic crisis is not the only factor to have reshaped urban design in the past decade. Government policies and regulations related to sustainable building and energy reduction have developed in breadth and sophistication and debates about climate change and the ability of the built environment to withstand major weather events have intensified (Palazzo and Steiner 2011; Wheeler 2013) . A cluster of devastating winter storms that precipitated widespread flooding across the south of England in early 2014, for example, led local communities to scorn the government's response to the crisis and argue that a stalled programme of river dredging by the Environment Agency was largely to blame (Merrill 2014). This precipitated a heated public debate about climate change, flood mitigation and the planning and design of the built environment (Bates 2014). In an open letter to the British prime minister, the Landscape Institute cautioned the government against making a sole commitment to river dredging and stated that the crisis should be addressed as a regional design problem. The Institute voiced support for resilient settlement planning and design and the introduction of Sustainable Drainage Systems (SuDS) in new and existing communities (Landscape Institute 2014). Similarly, in the United States the devastation wrought by Hurricane Sandy in 2012 demonstrated the vulnerability of many oceanfront communities in New Jersey and New York. In an effort to address the enormous challenges that are faced in these towns and cities, the US federal government launched a design competition in June 2013 called Rebuild by Design which aims to find innovative design strategies that will protect residents from future weather events, while adding to the wider public discourse on resiliency (Hurricane Sandy Rebuilding Task Force 2013).

Since Punter's paper was published in 2007 the role that local people can play in decision-making about the future of their towns and cities has also changed. Public participation has long been a core component of planning and design processes, but the methods now available continue to broaden in depth and sophistication. The 'charrette', for example, has fast emerged as the *de facto* participation method in North America, as well as in parts of Europe (Roggema 2014). And, in the UK, the localism (England) and community empowerment (Scotland) agendas are enabling neighbourhoods to make more of their own planning and design decisions (Local Government Association 2012; Scottish Government 2014).

These economic, environmental and social shifts mean it is timely to reflect on the role of design control and review. Offered as a platform for discussion rather than a panacea, this paper proposes a series of amendments to Punter's best practice

principles that draw from a review of recent literature and examples from contemporary planning and design practice. The first amendment explores the emergence of ecological urban design and argues for a deeper ecological underpinning of urban design control and review. The second amendment responds to critiques of public participation in design decision-making (Grant 2006; Bond and Thompson-Fawcett 2007) and argues for a framework to help governing authorities introduce more collaborative processes as well as evaluate existing engagement techniques. The third amendment considers the skills that public sector design actors need to acquire to be effective, and argues that urban designers should become 'market actors' with the necessary abilities to bring about higher standards of design in the property development sector (Adams and Tiesdell 2010).

Ecological Urban Design

In his sixth principle, Punter notes the growing importance of "ecological thinking" (2007, 185) in urban design, especially the closure of energy, food, water and waste cycles and the role that local communities might play in shaping sustainable futures. The unpredictability of seasonal weather and the intensity of storm events over the past decade have precipitated an increasingly sophisticated discourse on 'urban ecology' and settlement resiliency (e.g. Palazzo and Steiner 2011; Newman et al 2009; Hester 2008). *Ecology*, in this context, is understood as the multi-scalar relationships that exist between organisms and their physical environments. *Urban ecologists* argue that cities are "jointly biological, social, built and geomorphic" (Pickett et al 2013, 10) and propose that human settlements are, like their natural counterparts, *ecosystems*. This conceptualisation has led to a parallel concern about the 'resiliency' of human settlement. *Resilience* has long been used to describe the capability of a system to return to normality after a major shock or disturbance. "[A] resilient city" is therefore "...able to retain the essence of its form even after it has been deformed" (Hester 2008, 139). Urban ecology supports the resilient city thesis by binding socio-cultural and natural flows together and allowing them to co-develop and flourish – a process that Ellin describes as 'integral urbanism' (2006).

The convergence of urban design and ecological resilience highlights the need for design-led responses to climate change. Without losing sight of human-focussed design principles, such as urban legibility, permeability, mixed-use and density (e.g. Bentley et al. 1985; Jacobs 1961), governing authorities should aim to identify ecology design principles at the heart of visioning and plan-making exercises, and as

the basis for development control decision-making. Ecological design principles might then be used to address the adaptability of buildings and the natural landscape, as well as providing a foundation for increased biodiversity and support for wildlife in urban areas, or 'biophilia' (e.g. Bentley 1990; Farr 2008; Hester 2008).

Rethinking design policy and implementation

Securing a commitment to ecological urban design requires that governing authorities first pledge to a new way of thinking about design control and review. This approach has been taken by the City of Chicago through its *Green to Urban Design* plan. The plan aims to extend the scope of environmentally-friendly design strategies for new building structures, already established by the City, to wider urban design concerns, including streets and other public spaces. The primary objective of the plan is to provide direction to the Chicago City Council and the Chicago Planning Commission about how to develop green urban design regulations, review development projects through a green lens and make sustainable investments in the public realm (City of Chicago 2008).

INSERT FIGURE 2 HERE

The *Green to Urban Design* plan focuses on four themes: water, air, land and quality of life, and proposes various planning strategies and technological approaches to achieve greener urbanism. These include using sustainable urban drainage to reduce stormwater run off, encouraging the construction of green roofs to reduce surface temperatures, widening the city's pedestrian and cycle infrastructure to improve non-car accessibility, and expanding the number of vegetation species used in landscaping (*ibid.*). In addition, the plan sets out an implementation strategy that details how the various proposals should be integrated into existing planning and design control processes, such as regulating requirements like green roofs and green alleyways through amended zoning by-laws, enhancing mandatory energy targets for new buildings and green spaces, and integrating sustainability more consistently into the development application process (*ibid.*). The plan further stipulates that developers should receive clearer guidelines on the City's green aims and objectives, and that cross-department and inter-agency agreements should be developed within the public bureaucracy to ensure that all relevant parties are working to the same agenda. Chicago's 2008 *Green to Urban Design* plan has received numerous professional accolades, including the 2011 Professional Award

from the American Society of Landscape Architects (ASLA 2011), and continues to be supported by the city's powerful mayor's office, despite a change in leadership.

Implementing ecological infrastructure

Ensuring that ambitious visions and plans for ecological design are implemented will likely prove challenging for many governing authorities. Ellin (2006) notes that funding some ecological infrastructure, notably soft permeable surfaces, can be cheaper than relying on traditional methods. However, on balance, the skills and technologies that are required tend to be more expensive in the short- to medium-term. Developers and local governing authorities will have to source new materials from their suppliers and train staff how to install and manage new ecological technologies. Moreover, direct funding for sustainable urban drainage or green roofs, for example, is unlikely to be found in tight local government budgets. Therefore, it is probable that property developers will be expected to deliver ecological infrastructure through traditional planning obligations and negotiations. In 2009, for example, the City of Toronto became the first North American municipality to introduce strict ecological requirements for green roofs. A new zoning amendment requires all commercial, institutional and residential buildings in excess of 2,000m² to have a green roof (see Figure 3). The policy has since been extended to include industrial developments and, in all cases, must be funded by the developer (City of Toronto 2009). In an effort to encourage the introduction of green roofs on existing buildings and new buildings exempt from the by-law, the city also launched a parallel 'Eco-Roof Incentive Program' through which applicants can apply for government funding to support the costs of installing a green roof.

INSERT FIGURE 3 HERE

In England there has been some success using the *Code for Sustainable Homes* to obligate developers to build more energy efficient houses. Based on the earlier 'EcoHomes' criteria developed by the Building Research Establishment (BRE), the *Code for Sustainable Homes*, which was introduced in 2006, has a star-rated system ranging from 1 to 6 that measures sustainability over nine characteristics: energy, water, materials, surface water runoff, waste, pollution, health and well-being, management and ecology (DCLG 2006). The key target is that all new houses will be zero carbon by 2016 and, although the Code is not mandatory, the parallel building regulations are non-negotiable and have been updated to ensure that all new

dwellings are built to at least Level 3 standard (25% zero carbon). Local authorities can also demand higher rated construction in their own planning policy. The Coalition Government aims to ensure that the zero carbon target is met by 2016 (i.e. Level 6). However, it is currently considering flexible measures such as off site abatement to ensure that compliance occurs under the agreed timetable, and is looking to establish a streamlined standard that condenses the various national and local regulations and policies into one document (DCLG 2014).

Efforts to extend the scope of the policies contained in the *Code for Sustainable Homes* in England have tended to focus on ecological infrastructure for the public realm and, in particular, sustainable urban drainage systems (SuDS). SuDS 'copy' natural process and are used to slow water runoff, reduce flooding and encourage greater species diversity in urban areas (Kirby 2005). Methods include using water storage ponds and vegetation channels to slow the flow of water and planting densely vegetated wetlands to treat water naturally before it re-enters existing rivers and streams (susDrain 2012). SuDS reduce the need for piping and, while having a demonstrable environmental benefit, can also enhance urban design quality. The wetlands, vegetation channels and other soft drainage infrastructure associated with SuDS allow people to engage closer with nature as well as creating more green spaces for leisure and play.

SuDS are supported by the national governments in England and Wales. Yet, despite the widespread flooding that effected areas of the south of England in 2014, guidance from the Department of Environment, Food and Rural Affairs (DEFRA) has been subject to numerous delays since the publication of draft guidance in 2011 (DEFRA 2014). These delays, reports the *New Civil Engineer*, are due in part to the reluctance of volume house builders to incorporate SuDS into new housing schemes (NCE 2014). In contrast, SuDS have been a part of government policy in Scotland since the early 1990s (Kirby 2005). The *Water Environment (Controlled Activities) (Scotland) Regulations* require that all water from new developments, excluding individual houses, must be discharged through a SuDS system (SEPA 2014). Detailed research in 2001 found there to be approximately 4000 SuDS projects on over 700 development schemes in Scotland (Wild et al. 2002). Kirby (2005) argues that the success of SuDS in Scotland can be attributed to the successful partnership that has emerged between the agencies involved in implementation. In particular, he notes that "...the water authorities [in Scotland] have remained in the public sector

and this has allowed SEPA to have more influence than the EA [Environment Agency] in the installation of SuDS” (2005, 119).

INSERT FIGURE 4 HERE

Establishing a regional perspective

An ecological approach to design control and review also requires neighbouring governing authorities to work together across city and regional boundaries. In his seventh principle, Punter argues that governing authorities should complete citywide and district level contextual analyses that identify the distinctive qualities of places and spaces. However, if ecology is to be incorporated into the design control and review process, local governing authorities should aim to extend the geographical reach of contextual analyses in collaboration with adjacent towns and cities. This would allow governing authorities to jointly explore the linkages between hydrology, topography, wildlife corridors and built form, and agree a ‘collective sense’ of regional character and resiliency (Scheer 2011) – without losing sight of the particularities of local design.

The concept of a wider geographical focus for urban design is well established in certain jurisdictions, particularly in continental Europe (CABE 2010) and notably in metropolitan Vancouver, Canada where sustainable development through urban containment, green infrastructure and multi-modal transportation are core components of the region’s regional growth strategy, *Metro Vancouver 2040: Shaping our Future* (Metro Vancouver 2011). Similarly in Scotland, strategic development planning has recently been applied to the four major city regions in Scotland: Aberdeen, Dundee, Edinburgh and Glasgow and the local authority districts that surround them (Scottish Government 2014a). Since 2009, the local authorities in each designated region are required to work together to prepare a Strategic Development Plan (SDP) through a Strategic Development Planning Authority, with the aim that decisions about major infrastructure, housing and the environment can be coordinated regionally.

In a 2010 document that explored the potential for ‘strategic’ urban design in England, the Commission for Architecture and the Built Environment (CABE), argued that cross-boundary collaboration could play a decisive role in design control and review. It noted that people increasingly move in networks that extend beyond

neighbourhood boundaries and that decisions impacting the design of the built environment should reflect this reality. CAFE claimed that regional urban design could have positive social and economic outcomes and also contended that strategic design might enhance ecological decision-making, noting that “Many environmental challenges – such as water management, flood prevention, increasing biodiversity and generating low carbon energy can be addressed most effectively by cross-boundary action” (CAFE 2010, 9). The strategic urban design report was published in 2010. However, only a few months later, CAFE was dismantled as part of the coalition government’s drive to reduce the number of quasi non-government organisations. The potential for regional design collaboration in England was further diminished by the coalition government’s decision to abolish Regional Spatial Strategies and regional development agencies as part of the Localism Bill, both of which had been established by the previous government.

Collaborative Decision-Making

Developing appropriate participation tools remains one of the biggest impediments to effective design control and review. In his second principle, Punter identifies the need for governing authorities to adopt participation processes that allow communities to actively determine design aspirations. And, in principle seven, he adds that a gap often exists between the preferences of design professionals and the general public, and argues that highly visible design tools, such as design competitions and education programmes, might be used to combat this problem. The recent trend towards local control in the UK, as well as the growing popularity of charrettes in North America, might be viewed as a positive step towards more collaborative design decision-making. Yet, at the same time, this shift also serves as a reminder to governing authorities that inclusive participation opportunities must be made available for all members of a community.

The challenge of local planning and design control

The challenges associated with local control are well illustrated by the example of neighbourhood planning in England. The 2011 Localism Act gave local communities the power to develop their own local neighbourhood plans (DCLG 2014a), and recent statistics from the Department for Communities and Local Government (DCLG) suggest that the legislation has empowered local people to take responsibility over planning and design in their neighbourhoods. Close to 1,000 communities have

begun initial community planning processes and 80 draft plans are currently under consultation (*ibid.*). However, a recent report by the planning consultants Turley suggests that the distribution of neighbourhood planning is very uneven. The report found that a disproportionate number of plans have been produced in Conservative-controlled local council districts (73%) and that the majority of plans are for more affluent areas. Moreover, so far, 75% of the total number of plans have been produced in the south of England. In their conclusions, Turley note that the statistics confirm that “areas of below average affluence are less likely to enter into the neighbourhood planning process” (2014, 13) and, despite the housing shortage in the south England, the majority of the plans produced so far have adopted ‘preservationist’ agendas that seeks to curb development. These findings, notes *The Guardian*, appear to suggest that “The well-off are not only protecting their areas from new homes, they are also pushing undesirable developments into poorer neighbourhoods” (Wiles 2014, 1).

The role of charrettes

As the example of neighbourhood planning demonstrates, introducing robust forms of participation that serve a common purpose as well as respond to local needs and wants remains a challenging prospect for governing authorities to address. Over the past ten or fifteen years the participatory tool known as the ‘charrette’ has emerged as one of more progressive collaborative methods for actively cultivating synergies between design professionals and the general public. Charrettes focus on developing a shared design vision and proposal for a site or district and typically conclude with the production of a brief or draft masterplan. A charrette usually lasts between two or three days and involves some combination of group design work, site visits, expert presentations and community feedback. The majority of charrettes are also preceded by a lengthy period of promotion, publicity and information gathering by the charrette organiser (Bond and Thompson-Fawcett 2007). Expert design professionals play a key part in charrettes but, rather than assuming a leadership role, they normally facilitate discussions between other stakeholders and use this knowledge to draw up final drawings and plans either during the charrette or soon afterwards. In theory, a charrette will aim to integrate “intuitive, rational and emotional knowledge” (Rogemma 2014, 19) in a creative environment and lead to a final product that is the shared work of all the participants.

Although some regional variations occur, charrettes are routinely conducted in much the same way. This is largely due to the commercial success of the New Urbanism movement and its key actors, such as Andreas Duany, who have promoted charrettes around the world. Their popularity is also evidenced by the widespread availability of practical guides that outline how to run charrette-type events (e.g. Wates 2014; Walters 2007; Condon 2008). As a result, charrettes are now commonly employed on a wide range of urban design and planning projects, and are by no means limited to New Urbanism. In the United States, for example, the National Charrette Institute (NCI) offers training in charrette facilitation using its trademarked NCI Charrette System™ (NCI, 2011) while, in the UK, the Prince's Foundation for Building Community – which has historical links to the New Urbanism movement (Thompson-Fawcett 2003) – employs a very similar process called 'Enquiry by Design' on a variety of neighbourhood masterplanning projects. At the government level, the Scottish Government has funded a charrette mainstreaming programme since 2010 in an effort to involve local people more effectively in the planning and urban design process (Scottish Government 2014a). This initiative is also supported by Planning Aid Scotland (PAS) – a charitable body that offers independent planning advice to communities in Scotland. PAS has trademarked a process it calls Charrette*plus*™ to assist local authority governments that wish to run charrettes using expert volunteers (PAS 2014). Numerous other examples of charrettes and design collaboration events can be found in both English and non-English speaking countries as their use continues to expand (see, for example, Rogemma 2014).

INSERT FIGURE 5 HERE

Uneven empowerment

It is important to recognise that, while popular, charrettes and other similar collaborative design process that governing authorities might choose to employ are not problem-free. New Urbanism charrettes, in particular, have faced criticism from researchers. Summarising some of these concerns, Grant writes:

In the charrette process, the rhetoric of local control encounters the reality of slick graphics, romantic watercolours, and celebrity designers... Although the participants may see local concerns in the outcomes, an outside observer may also read professional values in the plans...With the wide media interest in photogenic new urbanist communities, we cannot

easily separate fashion fad, consumer preferences, expert opinion, and democratic choice (2006, 183-184).

Grant (2006) further notes that, while the organisers of charrettes tend to use the language of collaborative planning theory (e.g. Healey 1997), it is not always clear that charrettes effectively “accommodate diversity” (*ibid.*, 183). This claim is supported by the results of a case study conducted by Bond and Thompson-Fawcett (2007) on a charrette process in Wanaka, New Zealand. In their analysis the authors argue that the charrette was a “fairly good example of an inclusive process” (*ibid.*, 465). Many local people felt included and numerous participants noted how much they had learned, not only about planning and design issues, but also about the views of other residents. Nevertheless, their findings also demonstrated that the charrette workshop format appeared to suit participants that were comfortable being involved in a debate-style discussion about existing planning policies and new design solutions. The authors argue that the format helped to attract a larger proportion of middle-class participants with post-secondary qualifications and, as a result, the process excluded many of the community’s more diverse voices.

Charrettes and other similar design collaboration methods provide governing authorities with the means to extend participation in the design process beyond the limits of traditional consultation. During a charrette local people have the option to meet all the various experts and stakeholders involved in the design and planning process, witness how design ideas are produced, and play a role in determining the form and organisation of new and existing neighbourhoods. However, as both Bond and Thompson-Fawcett’s research and the findings of the Turley report on neighbourhood planning highlight, it is important to ensure that *all* members of the public feel comfortable participating, and have access to the process. This can often be hard to achieve because of the emphasis that is typically placed on making mutually acceptable decisions amongst diverse stakeholders in a condensed time period. There is the potential that deeper and sometimes conflict-ridden local design issues, such as social mix, urban density or future greenfield housing targets, fail to get the time and attention they deserve (Bond and Thompson-Fawcett 2007).

It does not always help that collaborative design processes are often organised and facilitated by dedicated consultants who market proprietary decision-making models. In one sense, this might be helpful as the consultants are likely to be interested in achieving a successful end result. However, another perspective is that dedicated

consultants might bring a particular planning and design ideology with them to the table which is then promoted, subtly or otherwise, during the course of the charrette (Grant 2006; Bond and Thompson Fawcett 2007). Moreover, a further concern that governing authorities must tackle rests with the distribution of community-led plan-making. As the Turley report on neighbourhood planning attests, the more power local communities have to plan for themselves, the more that problems of access and diversity increase. Areas that might require planning and design support could lose out to neighbourhoods where active citizens have the time to either invest in plan-making or have the resources to propose 'protectionist' plans that react to on-going development proposals, such as areas for new housing. Plans that emerge in this type of scenario have the potential to purposefully undermine broader regional or national planning goals that might have considerable benefits to the wider public, such as access to affordable housing or new public green space. Together these problems raise the spectre that high quality urban design will continue to remain something to be enjoyed by affluent people in high-income neighbourhoods who have the necessary resources to protect and enhance their own communities at the expense of wider planning and design objectives.

Achieving shared ownership

Overcoming some of the conflicts in the planning and design participation process demands a long-term commitment to participation by the governing authority and a visible demonstration that community ideas are being taken into account throughout the duration of plan-making and property development. The example of Toronto's waterfront in Canada offers an instructive lesson in this respect. In contrast to the direct local control provided by neighbourhood planning in England, a public-private corporation funded through a tripartite agreement of the local, regional and national governments has led the planning and design process on Toronto's waterfront since 1999. When the corporation began its initial planning work in the early 2000s it adopted a traditional consultation approach, whereby local people were asked to comment on ready-made plans. Over time, however, and in response to criticism from local neighbourhood associations about the extent and value of local involvement, the corporation has deepened its commitment to public participation.

The corporation now employs a combination of open public forums (typically convened in a charrette format) and stakeholder advisory committees (with representatives from local neighbourhood associations, waterfront businesses and

other interest parties). Together, the public forums and stakeholder advisory committees provide iterative feedback on the emerging master plans for the waterfront, as well as the form and organisation of any new buildings and public spaces. The corporation's planning events typically attract large numbers of participants and many of the neighbourhood associations that take part admit to a 'sense of ownership' over the new buildings and spaces that have emerged on the waterfront. Nevertheless, the corporation still struggles to attract a truly diverse cross-section of local people to their planning and design meetings – particularly those residing in poorer inner-city neighbourhoods located close to the waterfront (Lehrer and Laidley 2008).

An ethic for communicative participation

As the foundation for their analysis of the Wanaka charrette, Bond and Thompson-Fawcett devised an evaluative framework to understand the many challenges associated with collaborative design practices (see Figure 6). Drawn from collaborative planning theory and termed 'An Ethic for Communicative Participation', the framework emphasises the need for equal and fair access to collaborative activities, while minimising power distortions and accommodating difference. It further states that the outcomes of a collaborative process should always lead to a sense of shared understanding and local ownership, as seen to some extent on Toronto's waterfront, and that every effort should also be made to resolve conflict, even if this is hard to achieve. The framework has broad applicability beyond academic enquiry and provides a strong basis for governing authorities to both reflect upon their existing participation process as well as aiding the introduction of more rigorous means of participatory practice into new or established design review processes.

INSERT FIGURE 6 HERE

Skills in the Urban Design Review Process

Punter argues in his twelfth principle that attracting and retaining urban design expertise in the public sector remains one of the most significant challenges faced by governing authorities trying to deliver an integrated approach to urban design as public policy. Similar observations have been made in a recent review of architecture and urban design in England led by the architect Sir Terry Farrell, which proposes

that key built environment decision makers, such as local politicians and highways engineers, should receive better training in design literacy (Farrell Review 2014).

Design skills

Farrell's emphasis on interdisciplinary urban design skills highlights that integrating holistic urban design thinking into built environment decision-making remains an unfulfilled aspiration for many governing authorities. Nevertheless, awareness of urban design and the positive role that it can play in the planning process has undoubtedly risen since the publication of Punter's principles. Graduate education in urban design is now more widely available at universities around the world (Carmona 2014), and professional networks like the Academy of Urbanism (UK/Europe), the Urban Design Group (UK), the Congress for New Urbanism (North America) and the Institute for Urban Design (USA) continue to extend their reach, particularly online, as they advocate for more design-aware planning. In certain jurisdictions, government and non-government organisations also provide professional urban design skills training. For example, in Scotland, both Architecture and Design Scotland (the national design advocate) and the Scottish Government's Architecture and Place division hold regular skills training for local authority employees and post-graduate built environment students (Scottish Government 2014b; Architecture and Design Scotland 2014). These events encourage elected officials, development control officers, highways engineers and other related professionals to learn more about the role of design in the Scottish planning system and develop spatial literacy skills, such as sketching (see Figure 7).

INSERT FIGURE 7 HERE

Designers as actors in markets

An equally significant skills-gap is the extent to which urban designers understand local real estate markets and know how to operate within them effectively to promote progressive urban design principles. In his second principle, Punter argues that governing authorities should develop economically realistic urban design plans, and as part of his second group of principles, 'Design, Planning and Zoning', he emphasises how important it is for governing authorities to utilise financial mechanisms to help fund public realm improvements. Furthermore, he argues that design review policies must aim to address the social exclusion that can result from

higher quality urban design, like gentrification. Of particular importance is ensuring that high quality affordable housing is sought during planning negotiations, and that the amenities that result from new development, such as new public spaces, are accessible to all members of the community.

Convincing real estate developers to make investments in design quality and social infrastructure is challenging because the pursuit of design excellence is generally more expensive (Tiesdell and Adams 2011). Despite evidence showing that higher quality urban design can increase the long-term value of real estate (Carmona et al. 2002; Hack and Sagalyn 2011), developers aim to keep costs to an absolute minimum due to the considerable short-term financial risk they assume when delivering new development. As a result, developers typically employ skilled negotiators, such as planning lawyers and consultants, to reduce the amount of money or resources they have to commit to public infrastructure during the planning negotiation process. Moreover, developers are often wary of regulations and policies that aim to encourage greater social mix, as they fear that homebuyers will not wish to purchase units in mixed residential communities. In London, for example, like most jurisdictions in the UK, developers are obligated to include social housing on housing projects if they wish to be granted planning permission. Yet, evidence from a 2014 investigation by *The Guardian* reports that developers are increasingly using design to reinforce social exclusion (Osborne 2014). On many new high-rise developments different entrances are provided for market purchasers and social housing tenants – so called ‘poor doors’ – and, *The Guardian* notes, “Even bicycle storage spaces, rubbish disposal facilities and postal deliveries are being separated” (Osborne 2014, 1).

The various problems associated with both the amount and the nature of urban design investment have been complicated by the austerity measures imposed on governing authorities as a result of the global financial crisis. The slow economic recovery has increased the pressure on private and public sector developers to speed up the delivery of new housing in pressured real estate markets. If planning negotiations are shortened in pursuit of other goals, governing authorities run the risk that already poor design standards might very well get worse (Punter 2010; Adams et al 2013). Similarly, in those jurisdictions where the levels of private sector investment in new development is traditionally low, the governing authority tends to be trapped in a balancing act between attracting ‘any development’ to boost economic development and encouraging high quality design and associated social

infrastructure investments during planning negotiations. In such scenarios, governing authorities are likely to be less inclined to apply strict design standards or planning obligations lest potential developers are dissuaded from investing. The reality is that power in the urban design process typically rests with those who assume financial risk (Carmona 2014).

Recognising that the built environment is constructed and funded primarily by the private sector, Adams and Tiesdell (2010) argue that public sector planners – into which group can be added public sector urban designers – are too often detached from the operation of property markets. In Adams and Tiesdell's estimation, this situation causes many public sector planners to merely accept or perpetuate current market conditions. They argue that a truly effective planner can acquire the skills to influence decisions that property developers make by developing a deep understanding of how property markets operate. Adams and Tiesdell propose that planners be recast as “market actors” (2010, 188) and contend that such a reconceptualisation will give planners the tools to “frame and re-frame land and property markets” (189).

The authors ground this idea in an emerging view of economics that classifies markets as being ‘socially constructed’. Terms such as supply and demand, efficiency and competition are questioned and, instead, the social and power-laden character of the marketplace is emphasised (Smith et al. 2006). The financial transactions that ordinarily take place in markets are re-imagined as *social* transactions that are vulnerable to dominant power structures and, in this context, the authors argue, “it becomes fallacious to place planning and the market in a dichotomous relationship” (Adams and Tiesdell 2010, 194). In fact, according to Adams and Tiesdell, public sector planners are *already* actors in the market but do not necessarily act as such. The many regulatory tools at their disposal provide them with formidable power to shape and reshape local conditions, as well as stimulate particular areas of the economy. As mentioned above, urban designers often exercise their regulatory power through financial and legal tools, including bonusing and public amenity agreements. These tools can bring certainty and structure to a local property market because they allow the development community to ascertain where investment might be directed in the future and how risk-laden a long-term financial decision might be (Madanipour 2006).

Shaping planning and design outcomes

Understanding the operation of property markets and using this knowledge to shape planning and urban design outcomes is well illustrated by the example of Vancouver on Canada's West Coast. Many planners and urban designers consider Vancouver to be an "exemplar of a modernist city that attempts to be socially inclusionary while adapting new urbanism principles for urban design" (Grant 2009, 359), and extensive research shows that Vancouver has employed a suite of urban design policies and implementation tools to transform its post-industrial waterfront and instil a design-sensitive and collaborative planning culture citywide (Punter 2003; Hutton 2004; Berelowitz 2005; Grant 2009). In the late 1980s, and throughout the 1990s, under the leadership of the city's co-director of planning, Larry Beasley, Vancouver planners focussed on a large-scale waterfront development. Employing a planning strategy called 'Living First' that promoted denser residential development in the downtown, the city established a role for urban design as a place-making tool (Grant 2009). The Living First strategy was underpinned by a discretionary design-and-build process that required the planning department to work closely with developers and engage consistently with the local community on issues relating to planning and design. Major development applications were also required to undergo peer design review (Punter 2003).

INSERT FIGURE 8 HERE

Vancouver's success, argues Punter (2002), is "the result of its sophisticated planning and urban design policies and guidelines, processes and procedures" (p. 267). Yet at the core of this success, reflects Larry Beasley, are the skills of the city's planning staff (Grant 2009). Beasley emphasises the need for planners and urban designers to have knowledge and understanding of effective urban design, as well as skills in mediation and negotiation. The City of Vancouver therefore established a budget to support staff training and skills development in these areas. In addition, Beasley points to the importance of strong political leadership to support planners in their work and allow them to negotiate with both real estate developers and communities. Governing authorities should therefore recognise that the delivery of higher quality urban and ecological design outcomes requires market skills and an ability to negotiate with diverse and often powerful financial stakeholders. Summarising the idea of 'planners as market actors', Figure 9 illustrates that the capacities of urban designers to operate as market actors can be enhanced by obtaining market-rich information and knowledge, developing market-relevant skills

and becoming part of market-rooted networks. Ultimately, public sector urban designers must realise that they are *already* market actors engaged in the “framing and reframing of local land and property markets” (Adams and Tiesdell 2010, 198).

INSERT FIGURE 9 HERE

Amended Principles for Future Urban Design as Public Policy

This paper has reflected on John Punter’s twelve ‘Principles for Progressive Urban Design Review’ that were published in this journal in 2007. The original principles crystallised some of the more significant contributions to the literature and practice of ‘urban design as public policy’ since the late 1960s drawing, in particular, from the work of Lai (1989), Blaesser (1994) and Scheer (1994). Punter developed the principles as he undertook evaluative case studies of urban design review and control in US West Coast Cities (1999), Vancouver, Canada (2003) and Sydney, Australia (2005).

Many of the ideas and recommendations contained in the twelve principles remain relevant to the practice and evaluation of design control and review today. Yet, governing authorities looking to enhance the role of design within the planning and development process continue to face myriad new social, economic and environmental challenges. The global financial crisis has changed the financial priorities of local governments and caused real estate developers to become ever more resistant to investing in higher quality urban design. Climate change means that governing authorities are having to learn more about the relationship between human settlement and the natural realm, while also managing local debates about the ‘correct’ policy and technological responses to storms, flooding and other major weather events, as well as methods of energy production. And, at the same time, decision-making practices in many towns and cities are changing as governing authorities look for new and innovative ways to give more ‘power back to the people’ and involve local communities in decisions about the economic, social or environment changes that will impact their lives.

This paper has explored what these changes will mean for the future of design control review and, through an appraisal of new practices and recent contributions to the literature, examined some of the strategies that governing authorities might

consider adopting in response. The core recommendations that emerged are summarised below:

Ecological Urban Design

- Develop a governing authority-wide commitment to ecological design principles.
- Use financial measures and other planning mechanisms to make targeted investments in ecological infrastructure and require real estate developers to meet similar standards.
- Extend urban design contextual analyses to the regional level in collaboration with neighbouring governing authorities.

Collaborative Decision Making

- Establish a commitment to design collaboration that extends beyond participation at all stages of the design decision-making process.
- Continually evaluate design collaboration efforts to ensure that all members of the public have equal and fair access to the planning and design process and feel comfortable participating in it.

Acting in Real Estate Markets

- Ensure that urban design staff have the necessary market skills and negotiation abilities to actively shape the outcomes of the real estate development process.

These recommendations lead to an updated series of fifteen Best Practice Principles for Design Review and Development Management (see Figure 10) that combine the ideas contained in Punter's original work with the advances in the literature and design practice discussed in this paper.

INSERT FIGURE 10 HERE

Conclusion

Advocates for better urban design control and review will need to provide strong and consistent advice if they are to persuade decision-makers in the public and private sector about the positive value of ecologically sensitive and participatory urban

design. Moreover, it is crucial that governing authorities also recognise the social value of urban design and the role it can play in improving community wellbeing while, at the same time, ensuring that high quality design is not restricted to those who live in prosperous enclaves or have time to invest in participatory planning and design processes.

Faced with tight budgets, many governing authorities will find it difficult to adopt even one or two new urban design tools and mechanisms, let alone a comprehensive new system of review and control. The updated principles therefore aim to be both ambitious – encouraging governing authorities to push the boundaries of their current practice – and pragmatic – demonstrating how best practices have been employed in various jurisdictions. Nevertheless, complexity reigns in the urban design process much of the time. Priorities are typically shaped by short-term political objectives, by financial imperatives and, less often, by an agreed masterplan or design framework. The number of stakeholders involved in decision-making can be daunting and the outcomes often so mediocre that skilled design practitioners and communities alike are left jaded by the experience. As Punter (2010) notes, “So much poor design is the result of lack of thought, dialogue and positive collaboration between all parties in both design and delivery” (261). Yet, where it does work, a successful process of urban design policymaking and delivery can very often be traced to a combination of inspirational leadership and judicious management, whether by an elected official or senior bureaucrat – as shown in the example of Vancouver; someone with the necessary skills and powers to make decisions and enable others to act within a clear and consistent policy framework and decision-making environment (Davies and Adams 2011). A culture shift is needed to establish urban design as a long-term concern for governing authorities and property developers. Therefore, as a primer for future research, it is argued that further evaluative case studies are needed that explore how, and *by whom*, different tools and mechanisms are employed in the planning process to bring about consistent and lasting urban design improvements in the built environment.

Bibliography

Adams, D. and S. Tiesdell 2010. “Planners as Market Actors: Rethinking State/Market Relations in Land and Property.” *Planning Theory & Practice* 11 (2): 187-207.

- Adams, D. et al. 2013. "Smart parcelization and place diversity: reconciling real estate and urban design priorities." *Journal of Urban Design* 18 (4): 459-477.
- ASLA. 2011. "2011 ASLA Professional Awards." ASLA. Accessed 19th August 2014. <http://www.asla.org/2011awards/index.html>.
- Architecture and Design Scotland. 2014. *Design Skills Symposium 2014*. Edinburgh: Architecture and Design Scotland.
- Barnett, J. 1974. *Urban Design as Public Policy: Practical Methods for Improving Cities*. New York: Architectural Record.
- Barth J.R. 2009. *The Rise and Fall of the U.S. Mortgage and Credit Markets: A Comprehensive Analysis of the Meltdown*. New York: John Wiley & Sons.
- Bates, P. 2014. "Flood crisis: dredging is a simplistic response to a complex problem." *The Guardian*, 12th February 2014. <http://www.theguardian.com/environment/2014/feb/12/flood-crisis-dredging-climate-change>
- Bentley, I., A. Alcock, P. Murrain, S. McGlynn and G. Smith. 1985. *Responsive Environments: A Manual for Designers*. Oxford: Architectural Press.
- Bentley, I. 1990. "Ecological urban design." *Architects' Journal* 192 (24): 69-71.
- Berelowitz, L. 2005. *Dream City: Vancouver and the Global Imagination*. Vancouver: Douglas & McIntyre.
- Blaesser, B.W. 1994. "The abuse of discretionary power." In *Design Review: Challenging Urban Aesthetic Control*, edited by B. C. Scheer and W. F. E. Preiser. New York: Chapman & Hall.
- Bond, S. and M. Thompson-Fawcett. 2007. "Public Participation and New Urbanism: A Conflicting Agenda?" *Planning Theory & Practice*, 8 (4): 449 - 472.
- Carmona, M. 2009. "Design Coding and the Creative, Market and Regulatory Tyrannies of Practice." *Urban Studies*, 46 (12): 2643-2667.
- Carmona, M. 2014. "The Place-shaping Continuum: A Theory of Urban Design Process." *Journal of Urban Design* 19 (1): 2-36.
- Carmona, M., C. De Magalhães and M. Edwards. 2002. "Stakeholder Views on Value and Urban Design." *Journal of Urban Design* 7 (2): 145-169.
- City of Chicago. 2008. *Adding Green to Urban Design: A City for Us and Future Generations*. Chicago: City of Chicago.
- City of Toronto. 2009. *Toronto Green Roof Construction Standard: Supplementary Guidelines*. Toronto: City of Toronto.
- CABE. 2010. *Large scale urban design: getting the big picture right*. London: Commission for Architecture and the Built Environment.

- Condon, P. 2008. *Design Charrettes for Sustainable Communities*. Washington, DC: Island Press.
- Davies, T. and D. Adams. 2012. *Places Need Leaders*. Edinburgh: Architecture and Design Scotland.
- DCLG. 2006. *Code for Sustainable Homes*. London: DCLG.
- DCLG. 2014. *Next steps to zero carbon homes – Allowable Solutions. Government response and summary of responses to consultation*. London: DCLG.
- DCLG. 2014a. “Giving communities more power in planning local development.” DCLG. Accessed 15th August 2014. <https://www.gov.uk/government/policies/giving-communities-more-power-in-planning-local-development/supporting-pages/neighbourhood-planning>
- DEFRA. 2014. “Sustainable Drainage Newsletter, July 2014.” DEFRA. Accessed 13th August 2014. http://www.susdrain.org/files/News/defra_july_suds_newsletter.pdf
- Ellin, N. 2006. *Integral Urbanism*. London: Routledge.
- Grant, J. 2006. *Planning the Good Community: New Urbanism in Theory and Practice*. London: Routledge.
- Grant, J. 2009. “Experiential Planning: A Practitioner’s Account of Vancouver’s Success.” *Journal of the American Planning Association* 75 (3): 358-370.
- Farr, D. 2008. *Sustainable Urbanism: Urban Design with Nature*. New York: Wiley.
- Felson, A.J. 2013. “The Design Process as a Framework for Collaboration Between Ecologists and Designers.” In *Resilience in Ecology and Urban Design: Linking Theory and Practice for Sustainable Cities* edited by S.T.A. Pickett et al. New York: Springer.
- Hall, A. 1996. *Design Control: Towards a New Approach*. Oxford: Butterworth Heinemann.
- Hack, G. and L. Sagalyn. 2011. Value Creation Through Urban Design. In *Urban Design in the Real Estate Development Process*, edited by S. Tiesdell and D. Adams. Chichester: Wiley-Blackwell.
- Healey, P. 1997. *Collaborative Planning: Shaping Places in Fragmented Societies*. Vancouver: UBC Press.
- Hester, R. 2008. *Design for Ecological Democracy*. Cambridge, MA: MIT Press.
- Hutton, T. 2004. “Post-industrialism, Post-modernism and the Reproduction of Vancouver’s Central Area: Retheorising the 21st-century City.” *Urban Studies* 41 (10): 1953-1982.

- Hurricane Sandy Rebuilding Task Force. 2013. "What is Rebuild by Design?" Hurricane Sandy Rebuilding Task Force. Accessed 19th October 2014. <http://www.rebuildbydesign.org/what-is-rebuild-by-design/>
- Kirby, A. 2005. "SuDS: innovation or a tried and tested practice?" *Proceedings of the Institute of Civil Engineers Municipal Engineer* 152 (ME2): 115-122.
- Jacobs, J. 1961. *The Death and Life of Great American Cities*. New York: Random House.
- Kumar, S. and R.V. George. 2002. "Fallacious argumentation in design review." *Journal of Urban Design* 7 (2): 239-263.
- Lai, R. T. 1988. *Law in Urban Design and Planning: The Invisible Web*. New York: Van Nostrand Reinhold Company.
- Landscape Institute. 2014. "Open letter with regard Water Management in England and Wales." Landscape Institute. Accessed 18th May 2014. <http://www.landscapeinstitute.org/PDF/LettertoPrimeMinisterFeb14.pdf>
- Lehrer, U., and J. Laidley. 2008. "Old Mega-projects Newly Packaged? Waterfront Redevelopment in Toronto." *International Journal of Urban and Regional Research* 32 (4): 786–803.
- Local Government Association. 2012. "Practical ways to engage with your community." Local Government Association. Accessed 23rd June 2014. http://www.local.gov.uk/localism-act/-/journal_content/56/10180/3510950/ARTICLE
- Lowndes, V. and L. Pratchett. 2012. "Local Governance and the Coalition Government: Austerity, Localism and the 'Big Society'." *Local Government Studies* 38 (1): 21-40.
- Madanipour, A. 2006. "Roles and Challenges of Urban Design." *Journal of Urban Design* 11 (2): 173-193.
- Merrill, J. 2014. "'Worse than useless': Flood-affected locals on the Somerset Levels blame plight on Environmental Agency." *The Independent*, 4th February 2014. <http://www.independent.co.uk/environment/nature/worse-than-useless-floodaffected-locals-on-the-somerset-levels-blame-plight-on-environmental-agency-9107642.html>
- Metro Vancouver. 2011. *Metro Vancouver 2040: Shaping Our Future: Regional Growth Strategy Bylaw Number 1136, 2010*. Burnaby, BC: Metro Vancouver.
- Nasar, J.L. and P. Grannis. 1999. "Design review reviewed: administrative versus discretionary methods." *Journal of the American Planning Association* 65 (4): 424-433.

- NCI. 2011. "The National Charrette System™." NCI. Accessed 10th June 2014
<http://www.charretteinstitute.org/charrette.html>
- NCE. 2014. "Delays dog sustainable drainage standards." *New Civil Engineer*, 10th January 2014. <http://www.nce.co.uk/news/water/delays-dog-sustainable-drainage-standards/8657472.article>
- Newman, P. T. Beatley and H. Boyer (Eds.) 2009. *Resilient Cities: Responding to Peak Oil and Climate Change*. Washington, D.C.: Island Press.
- Osborne, H. 2014. "Poor doors: the segregation of London's inner-city flat dwellers." *The Guardian*, 25th July 2014.
<http://www.theguardian.com/society/2014/jul/25/poor-doors-segregation-london-flats>
- Palazzo, D. and Steiner, F. 2011. *Urban Ecological Design: A Process for Regenerative Places*. Washington, DC: Island Press.
- Parkinson, M., M. Ball, N. Blake and T. Key. 2009. *The Credit Crunch and Regeneration: Impact and Implications*. London: DCLG.
- Peck, J. 2014. "Pushing austerity: state failure, municipal bankruptcy and the crises of fiscal federalism in the USA." *Cambridge Journal of Regions, Economy and Society* 7 (1): 17 - 44.
- Pickett, S.T.A., M.L. Cadenasso and B. McGrath. 2013. "Ecology of the City as a Bridge to Urban Design." In *Resilience in Ecology and Urban Design: Linking Theory and Practice for Sustainable Cities* edited by S.T.A. Pickett, M.L. Cadenasso, and B. McGrath (eds.). New York: Springer.
- PAS. 2014. "Charretteplus™." Planning Aid Scotland. Accessed 10th June 2014.
<http://www.planningaidscotland.org.uk/charretteplus/>
- Punter, J. 1999. *Design Guidelines in American Cities: A Review of Design Policies and Guidance in Five West Coast Cities*. Liverpool: Liverpool University Press.
- Punter, J. 2002. "Urban Design as Public Policy: Evaluating the Design Dimension of Vancouver's Planning System." *International Planning Studies* 7 (4): 265 - 282.
- Punter, J. 2003. *The Vancouver Achievement: Urban Planning and Design*. Vancouver: UBC Press.
- Punter, J. 2005. "Urban design in central Sydney 1945-2002: Laissez-Faire and discretionary traditions in the accidental city." *Progress in Planning* 63 (1): 11-160.

- Punter, J. 2007. "Developing Urban Design as Public Policy: Best Practice Principles for Design Review and Development Management." *Journal of Urban Design* 12 (2): 167-202.
- Punter, J. 2010. "The Recession, Housing Quality and Urban Design." *International Planning Studies* 15 (3): 245-263.
- Punter, J. and M. Carmona. 1997. *The Design Dimension of Planning: Theory, content and best practice*. London: E & FN Spon.
- Roggema, R. 2014. The Design Charrette. In: R. Roggema (Ed.), *The Design Charrette: Ways to Envision Sustainable Futures*. New York: Springer.
- Scheer, B. C. 1994. "Introduction: The Debate on Design Review." In *Design Review: Challenging Urban Aesthetic Control*, edited by B. C. Scheer and W. F. E. Preiser. New York: Chapman & Hall.
- Scheer, B. 2011. "Metropolitan form and landscape urbanism." In *Companion to Urban Design*, edited by T. Banerjee and A. Loukaitous-Sideris. New York: Routledge.
- Scheer, B.C. and W.F.E. Preiser. (Eds.) 1994. *Design Review: Challenging Urban Aesthetic Control*. New York: Chapman & Hall.
- SEPA 2014. "Sustainable Urban Drainage Systems (SUDS)." SEPA. Accessed: August 12th 2014. http://www.sepa.org.uk/water/water_regulation/regimes/pollution_control/suds.aspx
- Scottish Government. 2014. "SSCI Charrette Mainstreaming Programme." Scottish Government. Accessed 23rd August 2014. <http://www.scotland.gov.uk/Topics/Built-Environment/AandP/Projects/SSCI/Mainstreaming>.
- Scottish Government. 2014a. "Strategic Planning." Scottish Government. Accessed 13th August 2014 <http://www.scotland.gov.uk/Topics/Built-Environment/planning/Development-Planning/Strategic-Planning>.
- Scottish Government. 2014b. "Skills: Drawing Places." Scottish Government. Accessed 25th August 2014. <http://www.scotland.gov.uk/Topics/Built-Environment/AandP/Skills>
- Smith, S., Munro, M. and Christie, H. 2006. "Performing (Housing) Markets. *Urban Studies*." 43 (1): 81-98.
- susDrain. 2012. "Sustainable drainage". susDrain. Accessed 13th August 2014. <http://www.susdrain.org/delivering-suds/using-suds/background/sustainable-drainage.html>

- The Farrell Review. 2014. "The Farrell Review of Architecture and the Built Environment." The Farrell Review. Accessed June 26th, 2014. <http://www.farrellreview.co.uk>
- Thompson-Fawcett, M. 2003. "A New Urbanist Diffusion Network: The Americo-European Connection." *Built Environment*, 29 (3): 253-270.
- Tiesdell, S. and D. Adams. 2011. Real Estate Development, Urban Design and the Tools Approach to Public Policy. In *Urban Design in the Real Estate Development Process*, edited by S. Tiesdell and D. Adams. Chichester: Wiley-Blackwell.
- Turley. 2014. "Neighbourhood Planning: Plan and Deliver?" Turley. Accessed 15th August 2014. http://www.turley.co.uk/sites/default/files/uploads/news/Turley_%20Neighbourhood%20Planning_March_2014.pdf
- Walters, D. 2007. *Designing Community: Charrettes, Masterplans and form-based Codes*. Oxford: Architecture Press.
- Wates, N. 2014. *The Community Planning Handbook (2nd Edition)*. Abingdon, Oxon: Routledge.
- Wheeler, S.M. 2013. *Planning for Sustainability: Creating livable, equitable and ecological communities (2nd Edition)*. Abingdon, Oxon: Routledge.
- Wild, T.C., C. Jefferies and B.J. D'Arcy. 2002. *SUDS in Scotland – the Scottish SUDS database*. Edinburgh: Scotland and Northern Ireland Forum for Environmental Research (SNIFFER).
- Wiles, C. 2014. "Why the NIMBY's are winning the UK's housing battles." *Guardian Professional*, 22nd April 2014. <http://www.theguardian.com/housing-network/2014/apr/22/nimbys-winning-housing-battles>

Acknowledgements

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Figure Captions

Figure 1: Best Practice Principles for Design Review and Development Management (Reproduced from: Punter 2007, 171).

Figure 2: Adding Green to Urban Design: A City for Us and Future Generations. Extract demonstrating potential design strategies for reducing the volume and rate of

run off (City of Chicago 2008, 11). Reproduced with kind permission of the City of Chicago.

Figure 3: Toronto Green Roof Construction Standard Supplementary Guidelines. Extract demonstrating the green roof requirements for high-rise buildings (City of Toronto 2009, 19). Reproduced with kind permission of the City of Toronto.

Figure 4: Sustainable Urban Drainage System. Commonwealth Games Village, Glasgow (photographs by the author).

Figure 5: Illustrations and photographs from the Planning Aid Scotland (PAS) pilot *Charretteplus*TM process held in Levenmouth, Fife, UK in 2013. The event was developed in partnership with Fife Council and funding was provided by the Scottish Government. The charrette focussed on exploring options for improving the city through mini design projects (PAS, 2013, 2). Reproduced with kind permission of PAS.

Figure 6: An Ethic for Communicative Participation (Reproduced from: Bond and Thompson-Fawcett 2007, p. 452).

Figure 7: A 'Drawing Places' event for planning and urban design students at the Lighthouse, Glasgow hosted and funded by the Scottish Government (March 2014). Participants spend a day learning visual literacy skills through sketching, plan drawing and other basic drawing techniques. Reproduced by kind permission of the Scottish Government.

Figure 8: Design-led planning on Vancouver's waterfront (photographs by the author).

Figure 9: Capacities for Acting in the Market. (Summarised from: Adams and Tiesdell 2010, 198-203).

Figure 10: Amended best practice principles for design review and development management (Amended from: Punter 2007, 171); amendments in italics.